



**Co-operation with national judges in the field
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Training module

**HOW TO HANDLE COURT PROCEEDINGS
INVOKING NON-COMPLIANCE WITH EU
AIR QUALITY AND NOISE LEGISLATION**

Organised by Academy of European Law



Ambient Air Quality Directive 2008/50/EC

**Limit and target values for certain pollutants in
Article 13(1)**

European Commission, DG Environment



History in brief

- *Air Quality Framework Directive (96/62/EC) → basic principles as to how air quality should be assessed and managed in Member States, list of pollutants*
- *"Four Daughters" (1999/30/EC, 2000/69/EC, 2002/3/EC, **2004/107/EC**)*
- *Council Decision 97/101/EC → "EoI Decision"*
- *Commission Decision 2004/461/EC → questionnaire for annual reporting on ambient air quality assessment*
- *AQD proposal adopted parallel to the Thematic Strategy on Air Pollution (2005)*
- *Adopted 21 May 2008 after 3-year long co-decision, 2 years for transposition*

The early generation of Air Quality Directives, merged in Directive 2008/50/EC, had already established a range of ambient air quality standards which differ in terms of legal consequences and binding nature. The distinction has major legal consequences, and even more so after Directive 2008/50 introduced new categories and obligations.

Directives merged into the existing Directive 2008/50 are :

Council Directive 96/62/EC of 27 September 1996 on ambient air quality assessment and management

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

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

Directive 2002/3/EC of the European Parliament and of the Council of 12 February 2002 relating to ozone in ambient air 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

This merger was justified by the need to substantially revise the provisions 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 was therefore appropriate that those five acts be replaced by a single Directive and, where appropriate, by implementing measures.

1. Council Directive 96/62/EC on ambient air quality assessment and management is commonly referred to as the **Air Quality Framework Directive**. It describes the basic principles as to how air quality should be assessed and managed in the Member States. It lists the pollutants for which air quality standards and objectives will be developed and specified in legislation.
2. Council Directive 1999/30/EC relating to limit values for sulphur dioxide, nitrogen dioxide and oxides of nitrogen, particulate matter and lead in ambient air. The directive was the so-called "**First Daughter Directive**". The directive describes the numerical limits and thresholds required to assess and manage air quality for the pollutants mentioned. It addresses both PM10 and PM2.5 but only establishes monitoring requirements for fine particles.

3. Directive 2000/69/EC of the European Parliament and of the Council relating to limit values for benzene and carbon monoxide in ambient air. This was the **Second Daughter Directive**.

4. Directive 2002/3/EC of the European Parliament and of the Council relating to ozone in ambient air. This was the **Third Daughter Directive**. Ozone is a secondary pollutant formed in the atmosphere by the chemical reaction of hydrocarbons and nitrogen oxides in the presence of sunlight. As such the directive also describes certain monitoring requirements relating to volatile organic compounds and nitrogen oxides in air.



Key elements

- *Merging most of existing legislation into a single directive (except for the Fourth daughter directive) with no change to existing air quality objectives*
- *New air quality objectives for PM_{2.5} (fine particles) including the limit value and exposure-related objectives*
- *The possibility to discount natural sources of pollution when assessing compliance against limit values*
- *The possibility for time extensions of three years (PM₁₀, up to 2013) or up to five years (NO₂, benzene, up to 2015) for complying with limit values, based on conditions and the assessment by the COM*
- *Where limit values and target values are exceeded → air quality plans*

-Existing legislation: Framework Directive 96/62/EC, 1-3 daughter Directives 1999/30/EC, 2000/69/EC, 2002/3/EC, and Decision on Exchange of Information 97/101/EC

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5. 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. This is the **Fourth Daughter Directive** and completes the list of pollutants initially described in the Framework Directive. Target values for all pollutants except mercury are defined for the listed substances, though for PAHs, the target is defined in terms of concentration of benzo(a)pyrene which is used as a marker substance for PAHs generally. Only monitoring requirements are specified for mercury.
6. Council Decision 97/101/EC establishing a **reciprocal exchange of information** and data from networks and individual stations measuring ambient air pollution within the Member States. This "**Eol Decision**" describes the procedures for the dissemination of air quality monitoring information by the Member States to the Commission and to the public.
7. Commission Decision 2004/461/EC laying down a **questionnaire for annual reporting on ambient air quality**

assessment under Council Directives 96/62/EC and 1999/30/EC and under Directives 2000/69/EC and 2002/3/EC of the European Parliament and of the Council. This decision specifies the format and content of Member States' Annual Report on ambient air quality in their territories.



EU legal framework on air quality

Addressing air pollution at level of zones:

- Ambient Air Quality Directive 2008/50/EC (+ 4th daughter directive) – concentrations of pollutants

Addressing total emissions:

- National Emission Ceilings Directive 2001/80/EC

Addressing point source emissions:

- stationary sources => Directive 2010/75/EC

- mobile sources (traffic)

Pollution of air, land and water is an issue not only of environmental quality but also of human health.

Harmonisation on this issue is a direct result from establishment of the internal market in that all installations should be confronted with similar costs related to pollution prevention and reduction.

Over time several directives addressed the issues from somewhat different angles: stationary sources, mobile sources or from the perspective of individual sources compared to general, national maximum ceilings.

The Directive 2008/50/EC on ambient air quality covers in particular nitrogen dioxide (NO₂) and particulate matter or fine dust (PM₁₀) which is emitted by traffic and combustion engines. It lays down limit values to be respected by Member States (MS) in their zones and agglomerations from 2005 onwards.

The NEC Directive 2001/80/EC covers substances sulphur dioxide (SO₂), nitrogen oxide (Nox), ammonia (NH₃) and volatile organic solvents (VOCs).

Industrial emissions can be (but are not necessarily) the reason for non-

compliance with air quality limit values (e.g. in certain heavily industrialised zones) and/or non-compliance with national emissions ceilings (which apply at MS level).



Basics of directive 2008/50/EC (I)

- *Various limit and target values on specific pollutants in the ambient air (Annex XI)*
- *Values established on hourly, daily or yearly basis*
- *MS identify the zones and agglomerations and the responsible authorities (Articles 3 + 4) where values need to be respected*
- *Standardised monitoring of these pollutants in the ambient air zones and agglomerations (Articles 5 - 11, Annex III) - fixed measurements and modelling*

In a nutshell: the Ambient Air Quality rules provide for various limit and target values on specific pollutants in the ambient air. These pollutants need to be monitored according to standards specified in EU law. A breach of these values triggers obligations to improve ambient air quality. To this effect Member States must adopt clean air plans setting out appropriate measures.

Annex XI: The limit and target values (the difference will be explained later on in this presentation) can be based on an hourly, a daily or a yearly exposure to a concentration of a pollutant. (see the first presentation setting out the risk to human health of short and long term exposure to air pollution).

Zones and agglomerations: they are identified by the Member States and it is at this level that limit and target values have to be respected.

Monitoring: see last slide.



Basics of directive 2008/50/EC (II)

Maintain air quality where compliant (Article 12)

Breach of limit values (Article 13 + Annex XI) triggers obligations to improve ambient air quality by way of clean air plans (Article 23)

Specific provisions on $PM_{2.5}$ (in force since 1/1/2015) – limit value in Article 16

Specific provisions on target values for ozone in Article 17

Information and alert thresholds (Article 19)



Basics of directive 2008/50/EC (III)

Specific provisions on natural sources and winter sanding (Articles 20 + 21) and transboundary air pollution (Article 25)

Article 22: time extension (no longer relevant)

Article 23: *air quality plan if limit (or target value) is exceeded. Authorities must adopt appropriate measures ensuring that the period of exceedance is kept as short as possible*

Transparency: information to public (Article 26) and reporting to the Commission (Article 27)

Art 20: During the debates on the Directive Member States successfully pleaded for a mechanism allowing to consider that non-compliance with limit values as a result of contributions from natural sources express does not constitute an exceedance of those limit values. In other words, where a Member State has successfully invoked that provision it will not face infringement action by the Commission based on non-compliance with Art 13 and 23.

Art 21: Winter sanding or salting of the roads crates PM10 emissions. The Directive foresees that the Member States inform the Commission about the zones and agglomerations where limit values for PM10 are exceeded as a consequence of such sanding or salting. The obligation to adopt an air quality plan according to Art 23 then only applies where the non-compliance with the PM10 limit value is due to other important sources of emissions as well (industrial installation, domestic heating etc.)

Art 22: the Directive introduced the possibility for Member States to ask for extra time in order to comply with the limit values for NO₂, benzene or PM10 set by the Directive per zone or agglomeration. If all conditions were met, the time extension could be granted (by Commission decision). Such time extensions have been granted (see also the discussion on the Client-Earth case C- 404/13), but they have all expired by now.

For PM 10 the extended deadline expired in 2013 and the one on NO₂ on 1/1/2015 (see first slide).

Art 23: this is a key provision, at least to the Commission. It will be discussed in more detail later (by Christoph Sobotta and Peter Vajda) but as you can see from the wording it raises many interesting and unsettled questions of interpretation. The Commission has invoked non-respect of this Article in the cases which it has brought against 17 Member States (AT, BE, BG, CZ, DE, EL, ES, FR, HU, IT, LV, PL, PT, RO, SK, SI, SE) for non-compliance with the limit values for PM10 (in force since 2005).

At present only one of them (AT) could be closed. By way of test case, Bulgaria is now before the Court (C-488/15).

Basic approach of the Commission: did the Member State sufficiently analyse the main sources of pollution (as required by Annex XV) and did it take sufficient measures in the light of the findings. If it did, are these measures likely to produce the expected result?

Question still open include: What is "appropriate"? Does proportionality (costs of measures, impact on organization of society) play a role in this assessment and if so, how?

What is "as soon as possible"? What relevance for the length of the period of non-compliance (PM10 limit values are binding since 2005 but now, 10 years later, these limit values are still not respected in all zones and agglomerations). Does the duration of non-compliance have consequences for the nature of the measures proposed (voluntary measures vs. binding measures directly aimed at the source of emission, tax incentives).

What relation with the discretion of the Member States to select the measures in the light of the analysis of main sources of PM10 emissions or concentrations? The COM and the national judge cannot impose specific measures but may be able to narrow down the margin of the discretion based on the circumstances of the case.

The Ambient Air Quality Directive provides for transparency with regard to the monitoring and the clean air plans. The public has a right to be adequately and in good time to be informed about – inter alia - ambient air quality and the air quality plans adopted under Art 23. They shall also receive the annual air quality report and so does the Commission.



Limit values – Article 2(5)

Article 2(5): reduce or prevent harmful effects for human health

Annex XI identified six pollutants:

- sulphur dioxide, PM₁₀, lead and carbon monoxide; nitrogen dioxide and benzene

Set on a scientific basis

Limit values are defined in Article 2(5):

"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".

Therefore, limit values must be complied with as from a certain date set in the directives (see Annexe XIV) and cannot be exceeded thereafter.

This creates an obligation of result, which is not subject to any exceptions according to the Directive. Member States are under the obligation to ensure that limit values are not exceeded and that obligation is unconditional: see Article 13.

Limit values at the EU level have been established only for six pollutants: sulphur dioxide, PM₁₀, lead and carbon monoxide (compulsory since 1 January 2005); nitrogen dioxide and benzene (compulsory since 1 January 2010).

(They are different from the ones recommended by the WHO, probably due to political choice)

Earlier legislation included limit values for the protection of vegetation and ecosystems on the one hand, and limit values for the protection of human health, on the other. The limit values for human health, according to the Court of Justice, create individual rights and as such can/should be enforced by national Courts (see *Janaček* and *Client-Earth* rulings).

To reflect this development in the EU Case law, Directive 2008/50 has maintained the wording "limit values" only for those binding objectives that have been laid down for the protection of human health.

Limit Values

Article 13(1) lays down two obligations:

- MSs **shall ensure** that, throughout their zones and agglomerations, levels of sulphur dioxide, PM_{10} , lead, and carbon monoxide [+ some instances of $PM_{2.5}$] 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



Limit values - legal characterisation

Create an obligation of result

Create individual rights – to be enforced by national Courts because about human health

Earlier legislation included limit values for the protection of vegetation and ecosystems on the one hand, and limit values for the protection of human health, on the other. The limit values for human health, according to the Court of Justice, create individual rights and as such can/should be enforced by national Courts. To reflect this development in the EU Case law, Directive 2008/50 has maintained the wording "limit values" only for those binding objectives that have been laid down for the protection of human health, while those which aim at the protection of vegetation and ecosystems are now defined as:

Critical levels – Article 2(6)

Limit values = protection of human health only

Critical levels = protection of vegetation and ecosystems

Critical levels are levels 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: Article 2(6).



Critical levels – legal characterisation

Article 14 + Annex XIII: SO₂, NO_x

Create an obligation of result

Do not create individual rights

Like limit values, the critical levels create an obligation of result: Article 14.

Unlike limit values, however, they do not seem create individual rights or "*locus standi*" for individual members of the public defending air quality as such (*à contrario* derived from Janacek (C-237/07) and Client-Earth (C-404/13) rulings of the Court of Justice). But that is likely different where an action would be based on suffering of economic damage to his crops by a farmer.



Target values

Article 2(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.

*Not based on scientific knowledge
Not an obligation of result but of effort*

Because of the strong transboundary component of ozone, with ozone precursors carried by the wind over long distances, Member States have only very limited control of their ozone levels (the concentrations recorded on their territory when the sun triggers the chemical reactions leading to O₃).

This is the reason why, even before the entry into force of Directive 2008/50, the ozone Directive (so called "third daughter" Directive 2002/3/EC of the European Parliament and of the Council of 12 February 2002 relating to ozone in ambient air) did not set a limit value but a target value to be attained "where possible".

Target values are also found in the only surviving "daughter Directive " 2004/107/EC.

Directive 2008/50 simply confirmed that regime and the relevant definition, according to which (Article 2(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".

By way of comparison with the other definitions, one may immediately note that, contrary to limit values and critical levels, this definition does not include the words: "fixed on the basis of scientific knowledge".

Therefore, the creation of a target value reflects a political choice rather than a purely technical or scientific assessment. Further evidence of this can be found in Directive 2008/50 where, following the amendments tabled by the European Parliament, a "target value" was introduced for PM_{2.5} as from 1 January 2010 "in advance" of the limit value which entered into force on 1 January 2015.



Target values – example of PM_{2.5} (Annex XIV, points C + D)

- Target value from 1/1/2010 until 31/12/2014
- Limit value from 1/1/2015

Note text of Article 23(1), first and second subparagraphs: different obligations for limit values and target values.

In a sense the target value for PM_{2.5} worked as a "reminder" strengthening the function of the margins of tolerance as described under section 3 letter b) of this presentation. One may also appreciate that the notion of "where possible" is very open to interpretation (does it mean: "where not impossible" or does it include much more room for flexibility?), and harder to enforce compared to the one of "limit values" (which create an unconditional obligation of result). \

As a matter of fact, target values have not yet triggered any Court case, neither at the EU nor at the national (domestic Courts) level.

Finally, it is worth noting that while the 1st subparagraph of Article 23(1) makes no difference between limit values and target values as regards the general obligation to establish air quality plans, the 2nd subparagraph applies only to limit values and this is significant since this is the provision whereby Member States are under the obligation "to set out appropriate measures, so that (In the event of exceedances) the exceedance period can be kept as short as possible".



Alert and information thresholds (Article 19, Article 24, Annex XII)

*When risk because of brief exposure of ozone,
SO₂ and NO₂:*

*Article 2(11): alert threshold = immediate steps
needed*

*Article 2(12): information threshold = immediate
and appropriate information needed*

For certain pollutants only (namely: SO₂, nitrogen dioxide and ozone) scientific knowledge allows to determine:

- a) 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; under Article 2(10) of the Directive, this is called an "alert threshold";

- b) 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; under Article 2(11) of the Directive, this is called an "information threshold".

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;

Information and alert thresholds

Article 19: 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.



Alert thresholds

Article 24 on short-term action plans:

- risk that the levels of pollutants will exceed one or more of the alert thresholds specified in Annex XII,

- action plans indicating short term measures

- specific provision for ozone: MS's assessment of potential for reduction.

Article 24) only to the **alert thresholds**:

"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."

Ozone exception:

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 (Commission Decision 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).

That decision contains:

1. The guidance with regard to the drawing up of short-term action plans in accordance with Article 7 of Directive 2002/3/EC shall be as set out in Annex I to this Decision.
2. When developing and implementing the short-term action plans, Member States shall consider the relevant examples of measures set out in Annex II to this Decision in accordance with Article 7(3) of Directive 2002/3/EC.

3. The guidelines for an appropriate strategy for measuring ozone precursor substances in accordance with Article 9(3) of Directive 2002/3/EC shall be as set out in Annex III to this Decision.



Margins of tolerance

Article 2(7): the percentage of the limit value by which that value may be exceeded subject to the conditions laid down in this Directive.

Two situations covered:

- time extension under Article 22*
- introduction new limit value*

Today no longer relevant !

"Margins of tolerance" have one single definition but in legal practice it had two meanings, under Directive 2008/50:

a) when a time extension or postponement is granted by the Commission with regard to certain limit values under Article 22, the "margin of tolerance" aims at capping the health risks implied by the exceptional regime created by the time extension: Article 22(3) stipulates that the pollution levels, for the period of the time-extension, shall not exceed the margins of tolerance laid down in the relevant Annexes. In Article 2(7), margins of tolerance are defined as "the percentage of the limit value by which that value may be exceeded subject to the conditions laid down in this Directive".

b) when a new limit value is introduced at the EU level (such as for PM_{2.5}, with Directive 2008/50), the margin of tolerance is an annually decreasing addition to the limit value which reaches zero when the limit value becomes compulsory (entry into force of the limit value). What is triggered by the margin of tolerance, in this case, is the obligation to take measures when the margin of tolerance is exceeded, so that the limit values will be complied with when they finally enter into force; the "ratio" is that air quality cannot be improved overnight and, by creating the obligation to take early action when margins of tolerance are exceeded, EU legislation helps Member States in creating a kind of "roadmap" towards compliance, rather than waiting until the very last minute when the limit values become fully binding. For instance, for the PM₁₀ limit values that were introduced in 1999 (by Directive 1999/30/EC) the obligation to comply with the limit values entered into force only in 2005, while the obligation to take measures (air quality plans) was already triggered by any exceedance of the margins of tolerance (decreasing every year, to reach zero on 1 January 2005) and this led to a first wave of infringement procedures, for the failure to adopt such measures. The same happened with NO₂, where the limit values are legally binding since 1st January 2010 with a margin of tolerance defined in 1999, and the same logics was followed for PM_{2.5}, where margins of tolerance applied until 31 December 2014 (the relevant limit value is now legally binding since 1st January 2015). This is reflected in Article 23(1) of the Directive, which is wrongly seen as an "ex post" remedy while in fact the relevant obligations are already triggered by any exceedance of the margins of tolerance, even before the limit values enter into force.

This concept is no longer relevant but may turn up in cases already pending before the national judges.



Monitoring of air quality

Detailed technical rules in the Annex III

Rules on location to guarantee representative results

Expensive fixed measurements vs. cheaper modelling in three classes (most pollutants):

- **high levels of pollution > fixed measurements**
- **midlevel pollution > combination of both**
- **low levels of pollution > modelling**

Ozone: only two classes

Possible disputes? Polluters could criticize measuring nearby; inhabitants could require monitoring nearby

Monitoring air quality is the foundation of effective implementation. There are detailed rules on monitoring in the annex III of the directive, but they are very technical. Therefore, it is not excluded that technical experts need to be consulted in disputes about monitoring.

As a general principle, the monitoring rules aim to guarantee reliable and representative results. It should not be possible to manipulate the monitoring in order to avoid taking action on air.

Monitoring can be done by fixed measurements or by modelling on the basis of limited measurements. Fixed measurements are preferable where much pollution is to be expected, in low risk areas modelling can be sufficient.

Measuring air quality is about measuring **concentrations of pollutants**. These concentrations are always changing (due to wind, temperature). The Annex III prescribes how to monitor and the Annex XI prescribes how to interpret the monitoring results. also specify how to determine whether an hourly, daily or yearly limit value is respected or not. By way of example: if during 45 minutes a concentration of a pollutant is above the limit value set, the whole hour counts as an exceedance