

Fitness Check of the EU Ambient Air Quality Directives

Support study for the European Commission

2nd Stakeholder Workshop



COWI



Sessions on evaluation criteria:

EFFECTIVENESS

1. Scope of the assessment

- **Effectiveness:** the extent of achievement of the objectives of the AAQ Directives:
 - Defining common methods to monitor and assess air quality
 - Assessing ambient air quality in order to monitor trends;
 - Establishing standards of air quality to achieve across the EU;
 - Ensuring that information on air quality is made public;
 - Maintaining good air quality and improving it where it is not good;
- Provisions of the AAQ Directives versus external factors.

NB: AAQ Directives refer to Directive 2008/50/EC and Directive 2004/107/EC

2. Methodology

- > Analysis of data on MS reporting
- > Literature review: scientific, grey literature, reports, and other information
- > Analysis of evidence from the targeted questionnaire
- > Analysis of results from Online Public Consultation
- > Cross-analysis of results from 7 case studies (BG, DE, ES, IE, IT, SE, SK)

3. Emerging findings

- > Varied level of achievement of objectives:
 - > Number of sampling points in line with the AAQ Directives in most MS. Approaches to using other methods to supplement fixed measurements varies among Member States
 - > The majority of Member States have reported exceedances for at least one pollutant in the evaluation period
 - > Information on air quality is widely available, but was found to be of mixed quality, detail and accessibility among the Member States
- > Factors identified
 - > Definition of common methods, setting of standards and obligation to take action
 - > Questions about the degree of detail and level of guidance
 - > Interaction with other EU policy (further detail in coherence discussions)
 - > Financing, governance issues

4. Questions

- > What are your reflections on the findings presented above?
- > Are there any other issues to be considered? Why?



Sessions on evaluation criteria:

EFFICIENCY

1. Scope of the assessment

- › **Efficiency:** the extent to which the implementation of the AAQ Directives is cost-efficient:
 - › Efficiency of monitoring and assessment regimes;
 - › Efficiency of air quality plans developed under the two Directives since 2008;
 - › Costs and benefits to Member States, citizens, sectors;
 - › Any significant cost differences between countries or sectors;
 - › Proportionality of costs to benefits;
 - › Effects on EU competitiveness;
 - › Effects on economic, social and environmental sustainability.

2. Methodology

- › Literature review: scientific, grey literature, reports, and other information
- › Analysis of evidence from the targeted questionnaire
- › Analysis of results from the Online Public Consultation
- › Cross-analysis of results from 7 case studies (BG, DE, ES, IE, IT, SE, SK)
- › Due consideration was given to:
 - › Basic quantification of benefits and of the costs of poor implementation
 - › Focus on ex-post data rather than ex-ante estimates
- › Data on costs and benefits specific to the AAQ Directives (as opposed to air pollution legislation generally) are limited.

3. Emerging findings: Costs

- > Data for air quality monitoring indicate a total annual burden across the EU in the order of €0.2 to 1/person/year.
 - > Given the requirements of preceding legislation, only part of this is attributable to the AAQ Directives.
- > A wide range of measures for air quality improvement have been adopted.
- > These measures are targeted at the pollution sources that are important in causing limit value exceedance and that are locally controllable, leading to justifiable differences in the distribution of costs by country and by sector.
- > Costs of poor implementation (failure to meet the limit values) are estimated at €100 to 500 billion for 2008-2016.

3. Emerging findings: Benefits

- > Indicative estimate of the (health) benefits of the Directives in the EU over the period 2008-2016: €25 to 76 billion
 - > Uncertainties in the estimates are acknowledged
- > Administrative burden of air quality monitoring is small compared to estimated benefits.
- > Based on theoretical assessment of competitiveness impacts: very low impacts of the AAQDs on EU competitiveness, and the Directives have some potential to promote innovation. The Directives seem to have enhanced economic, social and environmental sustainability.

4. Questions

- > What are your reflections on the findings presented above?
- > Are there any other issues to be considered? Why?



Sessions on evaluation criteria:

RELEVANCE

1. Scope of the assessment

- **Relevance:** The extent to which the objectives of the AAQ Directives continue to meet the needs at EU level:
 - Relevance of goals and objectives of the AAQ Directives to the needs of citizens;
 - Relevance of the pollutants, standards and obligations in the AAQ Directives;
 - Extent to which the AAQ Directives are adapted or adaptable to evolving technical and scientific progress;
 - Alignment of the AAQ Directives with key EU priorities;
 - Elements in the AAQ Directives that are essential to deliver on these priorities, and elements that have become redundant.

2. Methodology


- › Desk research: EU and national legislation
- › Literature review: scientific, grey literature, reports, and other information
- › Analysis of evidence from the targeted questionnaire
- › Analysis of results from Online Public Consultation
- › Cross-analysis of results from 7 case studies (BG, DE, ES, IE, IT, SE, SK)

3. Emerging findings

- › Air quality is a major health and environmental concern for EU citizens.
- › Scientific evidence has grown on the harmful effects of the pollutants regulated.
- › The AAQ Directives have been helpful in stimulating Member States action and are a key tool to improve air quality. However, current standards are not fully reflective of robust scientific evidence suggesting serious adverse health effects at lower concentration levels. EU standards are less stringent compared to the WHO Air Quality Guidelines.
- › The AAQ Directives provide flexibility in relation to amending non-essential elements, but there is no obligation to carry out a periodic review of the AAQ Directives with a view of adapting them to the latest technical and scientific progress.
- › The AAQ Directives are found to be aligned with key EU air policy priorities in the Clean Air Programme and the 7th EAP, and to be generally aligned with the EU's climate and energy policies.
- › To achieve the short term priorities of the Clean Air Programme, the requirements to draw up air quality plans and short term action plans, monitoring of trends and laying down air quality standards are considered essential.

4. Questions

- > What are your reflections on the findings presented above?
- > Are there any other issues to be considered? Why?



Sessions on evaluation criteria: EU added value

1. Scope of the assessment

- › **EU added value:** the extent to which the AAQ Directives have brought added value beyond what could have resulted from action at local, regional or national level :
 - › Added value by enforcing harmonised air quality standards (target and limit values);
 - › Added value by ensuring a more harmonised measurement of concentrations and modelling;
 - › Added value by further streamlining air quality data collection and reporting;
 - › Added value by ensuring the enforcement of the provisions (legal action by EC and by affected citizens);
 - › Added value by ensuring synergies with other Community objectives;
 - › Added value by ensuring clear delineation of responsibilities at European and national levels.

2. Methodology

- › Desk research: EU and national legislation
- › Literature review: scientific, grey literature, reports, and other information
- › Analysis of evidence from the targeted questionnaire
- › Analysis of results from Online Public Consultation
- › Cross-analysis of results from 7 case studies (BG, DE, ES, IE, IT, SE, SK)

3. Emerging findings – EU added value

- › The binding nature of the target and limit values has been an important tool for driving pollutant reductions and harmonising air quality standards across the Member States.
- › The AAQ Directives brought added value by introducing limit values for PM_{2.5}, As, Cd, Ni, PaH.
- › The AAQD have streamlined the air quality data reporting and improved data collection. As a result of better data collection there was also improved access to information to the public.
- › The AAQD have brought added value enabling civil society and citizens to challenge in court when air quality standards are breached.
- › Challenges still remain in relation to the distribution of responsibilities within Member States in the implementation of air quality plans.

4. Questions

- > What are your reflections on the findings presented above?
- > Are there any other issues to be considered? Why?



Sessions on evaluation criteria:

COHERENCE

1. Scope of the assessment

- › **Coherence:** the extent to which the AAQ Directives are coherent with other EU, international and national measures:
 - › Coherence within each of the two AAQ Directives and between the AAQ Directives;
 - › Coherence within the EU Clean Air policy framework (in particular, with legislation on emissions);
 - › Coherence with international commitments (focusing on air pollution);
 - › Coherence with other EU environment and climate legislation;
 - › Coherence with EU sectoral legislation.

2. Methodology

- > Desk research: EU and national legislation
- > Literature review: scientific, grey literature, reports, and other information
- > Analysis of evidence from the targeted questionnaire
- > Analysis of results from Online Public Consultation
- > Cross-analysis of results from 7 case studies (BG, DE, ES, IE, IT, SE, SK)

3. Emerging findings (1)

- > The AAQ Directives are internally coherent and form a coherent system – but Directive 2008/50/EC is more stringent in several areas, including: limit values; air quality plans.
- > Strong coherence with other EU clean air legislation:
 - > National Emissions Ceilings Directive (and internationally with CLRTAP);
 - > Source legislation - Industrial Emissions Directive, Medium Combustion Plant Directive, Large Combustion Plant Directive, Sulphur Directive (and internationally with IMO obligations).

3. Emerging findings (2)

- > EU sectoral legislation:
 - > Agriculture
 - > Transport
 - > Energy and climate
- > At Member State level: extent of coordination varies between policy sectors and across government levels (national, regional, local)

4. Questions

- > What are your reflections on the findings presented above?
- > Are there any other issues to be considered? Why?