

## EVALUATION AND FITNESS CHECK (FC) ROADMAP

TITLE OF THE EVALUATION/FC	Fitness check of the EU Ambient Air Quality Directives		
LEAD DG – RESPONSIBLE UNIT	ENV	DATE OF THIS ROADMAP	07 / 2017
TYPE OF EVALUATION	Fitness check (Interim evaluation)	PLANNED START DATE	Q3 / 2017
		PLANNED COMPLETION DATE	Q4 / 2019
		PLANNING CALENDAR	<a href="http://ec.europa.eu/smart-regulation/evaluation/index_en.htm">http://ec.europa.eu/smart-regulation/evaluation/index_en.htm</a>
<b>This indicative roadmap is provided for information purposes only and is subject to change</b>			

### A. Purpose

#### (A.1) Purpose

Air quality has improved across Europe over the past decades, as emissions of many pollutants were curbed successfully. Nevertheless, significant compliance gaps for some key pollutants prevail – most noteworthy exceedances are for particulate matter, nitrogen dioxide and to a certain extent the ozone target values.

This fitness check will look at the performance of the two complementary EU Ambient Air Quality (AAQ) Directives (Directives [2008/50/EC](#) and [2004/107/EC](#)). These Directives set air quality standards and requirements to ensure that Member States adequately monitor and/or assess air quality on their territory, in a harmonised and comparable manner. It will also consider the corresponding Implementing Decision [2011/850/EC](#) and Commission Directive [EU/2015/1480](#).

The fitness check complements and builds on the extensive analysis developed as part of the 2013 air policy review ([COM \(2013\) 918](#)) which informed the Clean Air Programme for Europe and the revised national emission reduction targets established under Directive [2016/2284/EU](#).

The findings of the fitness check will be used to inform further reflections on whether the AAQ Directives are fit for purpose and continue to provide the appropriate legislative framework to ensure protection from adverse impacts on, and risks to, human health and the environment.

#### (A.2) Justification

In line with the principles of Better Regulation, this fitness check will assess whether these EU actions have been designed to achieve their objectives without entailing disproportionate costs and continue to be justified. The AAQ Directives themselves do not include a formal requirement for a comprehensive evaluation at a specific moment. However, given there is over ten years of experience in implementing these Directives, an evaluation completed by 2020 is timely for several reasons:

- Despite decreases in emission of air pollutants over the last decades and improved air quality, the European Environment Agency estimates more than 400,000 premature deaths p.a. in the EU due to air pollution and poor air quality. The 'Clean Air Programme for Europe' ([COM \(2013\) 918](#)), put forward a strategic ambition to achieve full compliance with existing air quality standards across the EU as soon as possible, and by 2020 at the latest. However, significant compliance gaps remain to date (see Section D3 below).
- The air quality standards set in the Directives have been in place for almost two decades (because they were 'inherited' from predecessor legislation), and were last reviewed in 2005 in the context of the [Thematic Strategy on Air Pollution](#). Since their conception, the evidence base regarding health and environmental impacts has evolved significantly: WHO air quality guidelines are, in most instances, more stringent than EU air quality standards. Over the same period, the technical feasibility and implementation experience in Member States has also improved.

- The changing context should help deliver a sustained downward trend in emissions in the 2020-2030 perspective. Relevant developments include the major policy packages on Energy Union, Low Emission Mobility and climate objectives; the recently agreed national emission reduction commitments (Directive [2016/2284/EU](#)); and the implementation of new tools and instruments e.g. to reduce sulphur emissions of certain marine fuels, vehicle emission standards including Real Emission Driving testing, to utilise the full potential of existing source controls (related to industrial emissions, ecodesign, non-road mobile machinery).

## B. Content and subject of the evaluation

### (B.1) Subject area

The AAQ Directives set air quality standards i.e. maximum pollutant concentration levels for key air pollutants that have a significant bearing on human health and ecosystem services (notably vegetation including crops) and that are to be attained across the EU territory. As such, they are part of a three-pronged EU Clean Air policy framework aimed at protecting citizens across the European Union from significant adverse impacts; by which

(a) ambient air quality standards are established for twelve key air pollutants deemed to be most relevant; i.e. sulphur dioxide, nitrogen dioxide and nitrogen oxides, particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>), ozone, benzene, lead, carbon monoxide, arsenic, cadmium, nickel, and benzo(a)pyrene i.e. via the AAQ Directives;

(b) national emission limits for the most important trans-boundary air pollutants (set via Directive 2016/2284 on National Emission Ceilings, which has been recently revised to include 2020 and 2030 targets) are expected to put concentrations on a downward trend and closer to air quality standards; and

(c) emission standards for key pollution sources are established e.g. via legislation on fuel quality, vehicle emissions, industrial emissions, etc.

Within the context of the above EU Clean Air policy framework, this fitness check will focus on the AAQ Directives and the corresponding Implementing Decision.

### (B.2) Original objectives of the intervention

The AAQ Directives are guided by a need to reduce air 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 and to provide information to the public.

Specifically, the Directives set common methods and criteria to assess air quality in all Member States in a comparable and reliable manner. Member States then designate zones and agglomerations throughout their territory and classify them according to prescribed assessment thresholds and provide air quality assessments underpinned by measurement, modelling and/or objective estimation, or a combination of these.

Furthermore the Directives define and establish standards for ambient air quality for key air pollutants to be attained by all Member States across their territories against timelines laid out in the Directives.

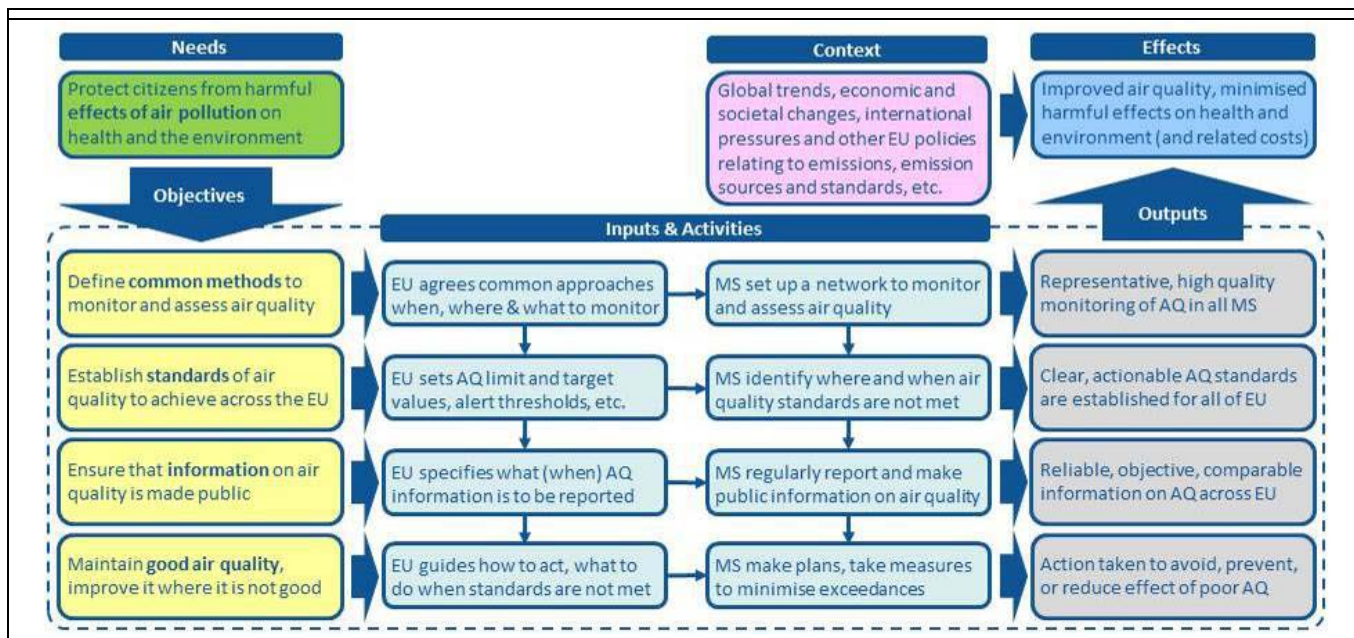
Where the established standards for ambient air quality are not met, the Directives require Member States to prepare and implement air quality plans and measures (for a given pollutant). Guided by the principle of subsidiarity, the Directives leave the choice of means to achieve these standards to the Member States, but do explicitly require that exceedance periods are kept as short as possible.

Finally, Member States are required to report 'up to date' air quality measurements, the results of air quality assessment on an annual basis, as well as information on the plans and programmes they establish in a harmonized manner – both to the Commission as well as to stakeholders and the general public.

It is the explicit responsibility of Member States to assess ambient air quality, approve the measurement systems required, ensure the accuracy of measurements, analyse the assessment methods used, coordinate related quality assurance programmes and cooperate with other Member States and the Commission.

### (B.3) How the objectives were to be achieved

The diagram below presents the (simplified) intervention logic of the EU Ambient Air Quality (AAQ) Directives. It will be elaborated further as part of the fitness check.



### C. Scope of the evaluation/FC

#### (C.1) Topics covered

The fitness check will draw on experience in all Member State, focussing on the period 2008 to 2018 as this is the period when both Directives were in force ([2004/107/EC](#) and [2008/50/EC](#)). It will cover all articles and provisions of the two Directives, looking at the role they have played in meeting the objectives. In particular it will address the following overarching topics linked to the intervention logic:

- To what extent have the AAQ Directives successfully defined methods to monitor and assess air quality, to ensure that representative and high quality assessment regimes are in place in all Member States?
- To what extent have the AAQ Directives established clear and actionable air quality standards that are in accordance with scientific advice to minimise harmful effects on human health and ecosystems?
- To what extent have the AAQ Directives helped ensure that reliable, objective and comparable information on air quality and the attainment of air quality standards is made public and reported to the Commission?
- To what extent have the AAQ Directives facilitated action to avoid, prevent or reduce the adverse effects of poor air quality, and triggered air quality plans that have led to measurable improvements of air quality?

This evaluation process will also include identifying any excessive administrative burdens, overlaps and/or synergies, gaps, inconsistencies and/or obsolete measures which may have appeared over time.

Furthermore, the fitness check will address other related issues, such as to what extent provisions linked to reductions and time extensions have helped or hindered in meeting the objectives of the Directive, or to what extent the air quality governance between EU, Member State, regional and local levels, respectively, is coherent.

#### (C.2) Issues to be examined

This fitness check of the AAQ Directives will centre on the five evaluation criteria outlined in the Better Regulation agenda. As such the fitness check is expected to evaluate:

**Relevance:** including an assessment of extent to which the AAQ Directives still set appropriate objectives, address the most pressing air pollutants, and set meaningful air quality standards to protect human health and ecosystems in accordance with the evolving scientific understanding: do the objectives and approaches as laid out in the AAQ Directives (still) correspond to the (current) needs?

**Effectiveness:** this fitness check will evaluate to what degree the AAQ Directives acted as an incentive to implement effective measures to improve air quality, and thus reduce the adverse impacts of air pollution. It will also question to what extent factors influencing the observed achievements can be linked to the EU intervention, including any issues with non-compliance.

**Efficiency:** after identifying the main cost and benefit categories, the fitness check will evaluate to what degree the benefits of improved air quality justify the costs. It will also assess whether there have been significant differences in costs (or benefits) between Member States, and if so, what is causing them. Also, this fitness

check will evaluate whether the monitoring and reporting approaches mandated by the AAQ Directives (and their respective implementation) are fit for purpose.

**Coherence:** five levels of coherence will be considered, covering the extent to which the Directives are coherent: internally i.e. within each Directive; between each other; within the overarching EU Clean Air policy framework (including with the national emission limits via Directive [2016/2284/EU](#), and emission standards established for key pollution sources); with other EU legislation e.g. on transport, energy, agriculture or nature protection; and with international commitments.

**EU value added:** this fitness check will assess to what degree common EU air quality standards and comparable monitoring, reporting and assessment regimes have enabled Member States to take successful action to improve, beyond what would have been possible without EU action, and whether the current distribution of responsibilities between EU, Member State, regional and local levels respectively, is an effective one.

More explicit evaluation questions and an associated analytical framework will be elaborated and answered in detail during the fitness check. External contractors will be commissioned to support the fitness check. Their tasks will include gathering and analysing evidence (including from consultations) related to the performance of the Directives.

(C.3) Other tasks

N.A.

## D. Evidence base

(D.1) Evidence from monitoring

Under the two Directives, Member States make available the information they use for reporting and reciprocal exchange of information via and air quality data repository (<http://www.eionet.europa.eu/aqportal>), including:

- monitoring and assessment regimes, including assessment methods;
- primary validated assessment data and aggregated validated assessment data;
- primary up-to-date data (i.e. near real time data);
- attainment of environmental objectives, including information on exceedance situations;
- air quality plans and programmes (where and when required).
- information on source apportionment and air quality measures in zones and agglomerations.

In addition, Member States regularly make information available directly to the public, e.g.

- short term action plans (when specific alert thresholds are triggered);
- information regarding exceedance of the information and/or alert thresholds, including information on actions taken when the pollution sources are in neighbouring countries;
- air quality plans and programmes.

(D.2) Previous evaluations and other reports

The evaluation will make further use of other reports on state of air quality and air pollution, e.g.

- EEA - [Annual air quality reports](#)
- EEA - [Annual reports on NEC Directive status and on EU emission inventory under the LRTAP Convention](#)
- EEA - [Air Implementation pilot: lessons learnt from the implementation of air quality legislation at urban level](#)
- WHO - [Air quality guidelines \(global update 2005\)](#)
- WHO - [Health risks of air pollution in Europe: HRAPIE project](#)
- WHO - [Review of evidence on health aspects of air pollution: REVIHAAP project](#)
- UNECE - [Trends in Ecosystem and health responses to long-range transported atmospheric pollutants](#)

Reports prepared to underpin earlier air policy related reviews (including those related to the air policy review of 2013), or as done in the context of the Thematic Strategy on Air Pollution of 2005, e.g.

- UBA & Ricardo - Review Of The Air Quality Directive And The 4th Daughter Directive
- Ecorys - Review of: Provisions for Air Quality Measurement, Air Quality Modelling, Management Framework, Assessment, and Public Information; and Stakeholder Consultation Support
- COM - Impact assessment Thematic Strategy on Air Pollution
- More reports on: [http://ec.europa.eu/environment/air/review\\_air\\_policy.htm](http://ec.europa.eu/environment/air/review_air_policy.htm)

<p>In addition, information which could be used to improve the existing evidence base includes the following, e.g.</p> <ul style="list-style-type: none"> <li>• WHO - Update of WHO Global Air Quality Guidelines</li> <li>• COM - Eurobarometer Survey on air quality</li> <li>• Update on co-benefits (and trade-offs) with climate change</li> </ul> <p>The evaluation will also make use of the analysis, findings and lessons learned from other relevant evaluations including the fitness check on monitoring and reporting of EU environmental policy (<a href="#">COM(2017)312</a>).</p>
<p>(D.3) Evidence from assessing the implementation and application of legislation (complaints, infringement procedures)</p>
<p>The challenge of ensuring that the AAQ Directives are effectively and consistently implemented across all Member States remains a continuous one. For the year 2014, 23 out of 28 Member States reported exceedances of at least one air pollutant, including in more than 130 cities.</p> <p>In July 2017, a total of 29 infringement cases are pending addressing 3 pollutants, i.e. particulate matter, nitrogen dioxide and sulphur dioxide, for which the limit values have been exceeded in 19 Member States. The analysis of these cases can offer additional insight into the implementation and application of legislation in Member States. The Commission is also continuously gathering information from Member States in relation to the implementation of provisions regarding monitoring and reporting and sampling points and in this matter has opened an infringement case that addresses one Member State.</p> <p>Examples drawn from national or regional administrative courts explicitly referring in their judgements within and against Member States to the provisions laid down by the AAQ Directives will also inform the evaluation.</p>
<p>(D.4) Consultation</p>
<p>Stakeholders will be consulted in line with the Better Regulation Guidelines of the Commission (a) to confirm the topics and issues covered by this fitness check (during the early stage of this fitness check via feedback to this roadmap), (b) gather factual information, data and knowledge about the implementation of AAQ Directives, and (c) to solicit views and opinions of stakeholders on the extent to which these Directives have successfully met, or are on track, to meet their different objectives.</p> <p>The fitness check will collect data from a wide range of sources. In line with the Commission's general principles and standards, a range of consultation tools will be used to collect the views of a range of stakeholders. The draft findings of the fitness check will be presented to Member States and key stakeholders at a dedicated workshop before finalisation of the fitness check staff working document.</p> <p>Stakeholders to be consulted include the Member States' competent authorities at all relevant levels i.e. national, regional and local, civil society and non-governmental organisations, organisations representing industry and trade, researchers and scientific community, international organisations (such as UNEP, UNECE, OECD, WHO), as well as citizens.</p> <p>The following consultation activities are foreseen:</p> <ul style="list-style-type: none"> <li>• A minimum 12 week online public consultation in several, or all, official EU languages (at least in English, French and German). Replies to this online public consultation can be provided in any official EU language.</li> <li>• Two stakeholder meetings – the first meeting will take place prior to, or during the public consultation and will assist in identifying and confirming the issues for the evaluation. A second meeting will take place before the finalisation of the fitness check with the aim to receive final feedback that would assist in its completion..</li> <li>• In addition, the Commission will explore opportunities to discuss with stakeholders on matters regarding the topics of this fitness check during related events, such as the Clean Air Forum in 2017 or Green Week 2018.</li> </ul> <p>The outcome of all stakeholder consultations carried out under this fitness check will be made available via the website of the European Commission.</p>
<p>(D.5) Further evidence to be gathered</p>
<p>Any other type of evidence needed to underpin the evaluation will be gathered during the consultation process of study work by the external contractors.</p>

### E. Other relevant information/ remarks

N.A.