Update on EU clean air policy

8th Air Quality IPR Technical Meeting – 28 April 2021

European Commission
Clean Air Unit

6th IPR meeting – 6 November 2019

Some concluding remarks

- COM(2018)330 emphasizes urgent need to improve air quality through **full implementation** of air quality standards – for now, compliance gaps remain.
- The European Commission continues to **support implementation** by Member States – such as via Clean Air Dialogues, or via funding opportunities.
- With the on-going Fitness Check we are seeking to understand what works well, and what could work better: **whether the Directives are fit for purpose**.
- **EU Court of Auditors** have recommended an update of the AAQ Directives, e.g. advance dates of reporting, precision of requirements for monitoring, …

European Commission

Fitness Check of the AAQ Directives

In 2019, an **evidence-based, retrospective evaluation** offered a number of **lessons learnt**:

- Air quality remains a major **health and environmental concern**;
- Air quality standards have been instrumental, and **partially effective**, to reduce pollution;
- Current EU standards are **less ambitious than scientific advice**;
- **Limit values** have been more effective than other types of air standards;
- Legal **enforcement action** by European Commission, and civil society, works *(with some caveats);*
- Scope to further harmonise **monitoring, modelling**, and **air quality plans**;
- Not all reported data equally useful, **e-reporting** allows for further efficiency.

A decade of air data
For period 2008 to 2018
from all Member States

Stakeholder feedback
Open public consultation
and expert questionnaires

Seven case studies
BG,DE,ES,IE,IT,SE,SK
each with specific focus

Literature & analysis
600 scientific sources
& a cost-benefit model

"The Commission will draw on the lessons learnt from the evaluation of the current air quality legislation.

It will also propose to strengthen provisions on monitoring, modelling and air quality plans to help local authorities achieve cleaner air.

The Commission will notably propose to revise air quality standards to align them more closely with the World Health Organization recommendations."

Communication on the European Green Deal (COM/2019/640 final)

#EUGreenDeal

European Commission

Five shortcomings

Health outcome shortcomings

Implementation and enforcement shortcomings

Governance shortcomings

Assessment shortcomings

Information shortcomings

European Commission

Health outcome shortcomings

Premature deaths due to air pollution halved during last two decades, but …

Health outcome shortcomings

EU Standards are not fully aligned with scientific advice …

Exceedances above WHO Air Quality Guidelines and negative health impacts persist

Lack of flexibility to adapt to evolving science and new recommendations

Pollutants	2005 WHO AQ Guidelines	EU Air Standards	EU Exceptions
PM_{10} (year)	**20 µg/m³**	**40 µg/m³**	-
PM_{10} (day)	**50 µg/m³**	**50 µg/m³**	**(35d a year)**
$PM_{2.5}$ (year)	10 µg/m³	25 µg/m³	-
$PM_{2.5}$ (day)	25 µg/m³	-	-
NO_2 (year)	**40 µg/m³**	**40 µg/m³**	-
NO_2 (hour)	**200 µg/m³**	**200 µg/m³**	**(18d a year)**
SO_2 (daily)	20 µg/m³	125 µg/m³	3d a year
O_3 (8-hour)	**100 µg/m³**	**120 µg/m³**	**(75d in 3yr)**

WHO Air Quality Guidelines are being revised in 2021

Source(s): Fitness Check of the Ambient Air Quality Directive SWD(2019) 427

Implementation & enforcement shortcomings

Frequency, extent and magnitude of exceedances has declined, but …

Enforcement shortcomings

Exceedances are not always addressed sufficiently and/or on time …

Air quality plans and measures have often proven ineffective

Insufficient penalties and damages linked to exceedances

As of 5 Feb 2021, still **31 cases** addressing 18 Member States (+ 1 vs UK) related to bad application:

- 15 particulate matter (PM_{10} and/or $PM_{2.5}$)
- 13 (1) nitrogen dioxide (NO_2)
- 1 sulphur dioxide (SO_2)
- 2 monitoring problems

Of these, 13 cases (i.e. 9 Member States + 1 vs UK) have been referred to the Court of Justice of the EU.

6 cases have seen rulings: BG, PL, RO, IT, HU (for PM_{10}) and FR (for NO_2) .

These cases address both exceedances of air quality standards and not keeping these as short as possible.

Air quality governance shortcomings

To limit exceedances, competent authorities develop plans, but …

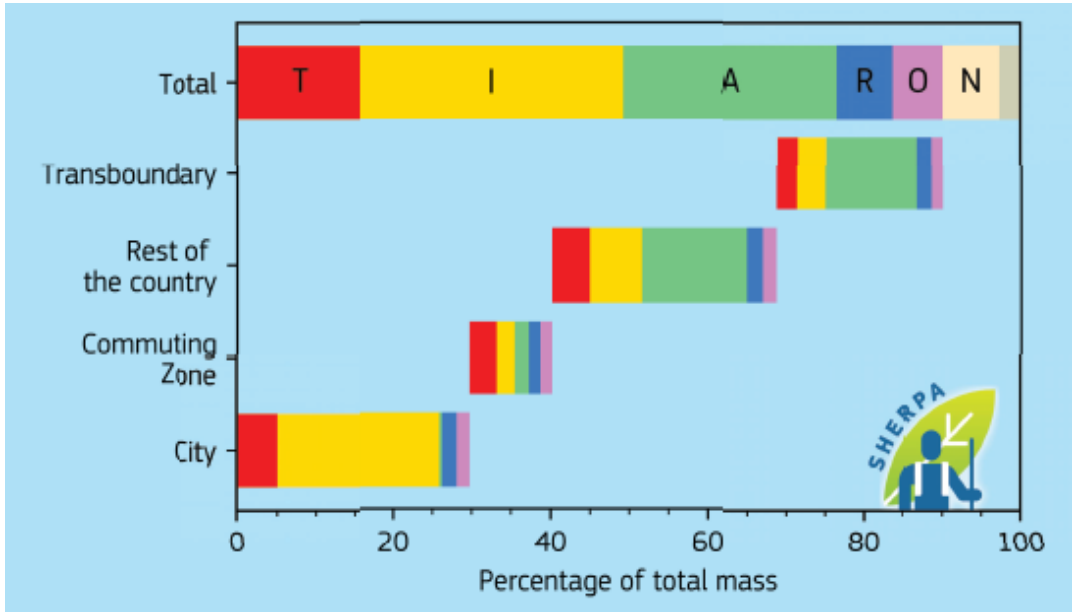
Governance shortcomings

Air quality plans do not always address all sources effectively ...

Local air quality is impacted by emissions outside local control

Some measures may be ineffective, or seem disproportionate

Example: Air pollution (here: $PM_{2.5}$) in Frankfurt (DE) is a combination of emissions in the city, its surroundings, the rest of the country and from other parts of Europe:



This combination requires air quality plans to address all sectors & all scales – in a coherent manner (!)

Source(s): Urban PM2.5 Atlas: Air Quality in European Cities (JRC, 2017)

Air quality assessment shortcomings

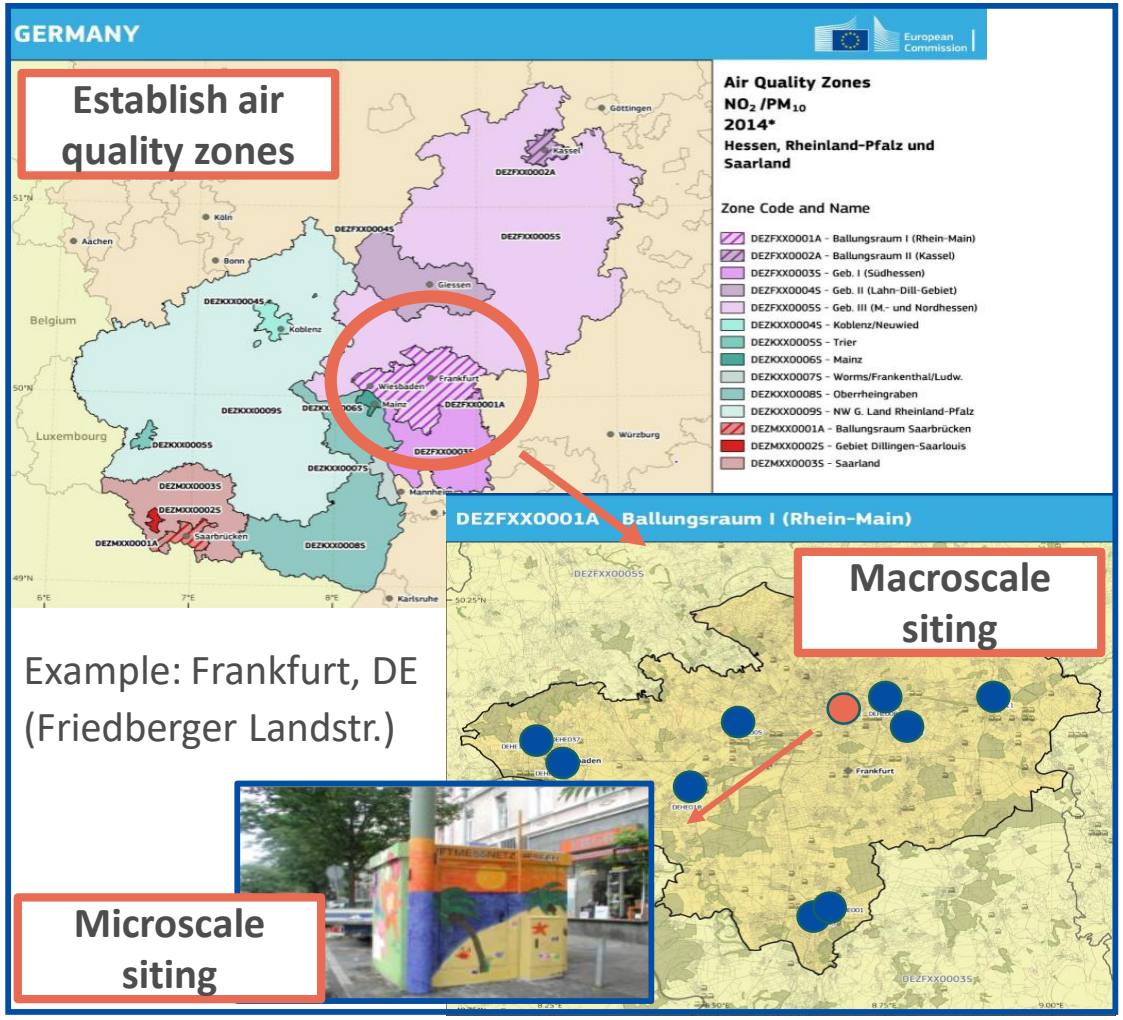
More than 4.000 air quality monitoring stations deliver robust data, but …

Assessment shortcomings

Flexibilities may sometimes impact the comparability of data …

Monitoring rules offering flexibility are sometimes ‘stretched’

Modelling ability has improved, allows for much more detail



Source(s): https://ec.europa.eu/environment/air/quality/zones.htm

Air quality information shortcomings

Reliable air quality information is widely available, often even in real-time, but …

Information shortcomings

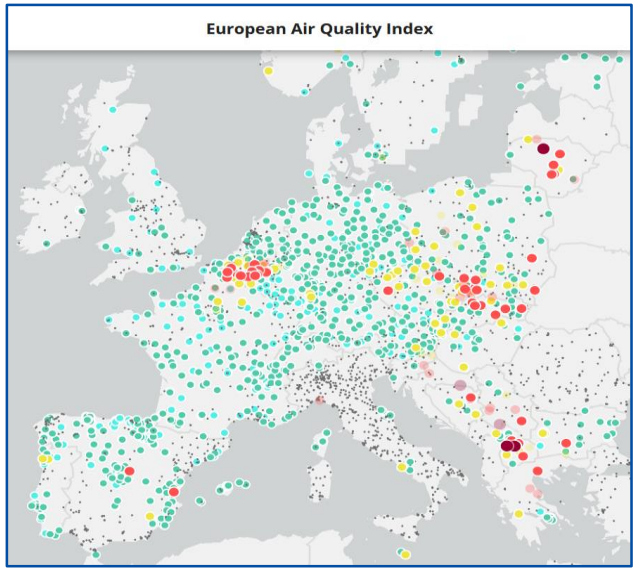
Public feels under-informed about poor air quality and its impacts …

Concerns about health impacts have increased

Public information is not always clear, and not harmonised

54%
MORE THAN HALF OF EUROPEANS SAY THAT THEY ARE **NOT WELL-INFORMED ABOUT AIR QUALITY PROBLEMS**

Real time data @ https://airindex.eea.europa.eu



Source(s): Special Eurobarometer 497 (September 2019) & Air Quality Index

The consequences

Air pollution continues to be a problem

Consequences for environment and health

Consequences for our economy (with direct and indirect costs)

Consequences for our society (not everyone impacted equally)

Administrative burden

The consequences of air pollution & air policy

Environment & Health

- **Elevated concentration levels of air pollutants,** both general exposure of population and at pollution hotspots
- **Health impacts**, more than 400.000 premature deaths each year across the EU, plus morbidity health impacts
- **Ecosystem impacts**, eutrophication limits are being exceeded in 62% of ecosystem areas across the EU territory
- **Links with climate change**, as higher temperature are associated with elevated ozone levels
- **Synergies with other EU policies**, and in particular with the goals of the (upcoming) EU Zero Pollution Action Plan
- **Administrative burden** of air quality management, in particular as relates to air quality assessment regimes

Economic

- **Cost to society**, EUR 20 bn direct cost to health-care, lost work-days, crop losses, plus EUR 330-940 bn indirect costs
- **Measures needed to meet EU air quality standards,** with costs for industry, transport, energy, and agriculture sector
- **Impacts on the EU's international competitiveness,** with innovation potential, especially for clean air technologies

Social

- **Sensitive population groups** (children, pregnant women, elderly citizens) are more susceptible to air pollution
- **Inequalities and social sustainability**, as groups of lower economic status tend to be more negatively affected
- Measures to address air pollution may have effects on **employment**

→ *policy options will need to be assessed against their ability to address the consequences of air pollution (i.e. our 'impact assessment criteria')*

European Commission

Air quality – revision of EU rules

Air policy revision: focus on three policy areas

SR9: Air quality monitoring, modelling, plans

Our timeline – clean air milestones 2020 to 2023

European Commission

Air policy revision: focus on three policy areas

Augment the current Ambient Air Quality Directives for three policy areas

- **Policy area 1:** closer alignment of the **EU air quality standards** with scientific knowledge including the latest recommendations of the World Health Organization (WHO).
- **Policy area 2**: improving the **air quality legislative framework**, including provisions on penalties and public information, in order to enhance effectiveness, efficiency and coherence.
- **Policy area 3**: strengthening of **air quality monitoring, modelling and plans**.

→ *to be further developed into more detailed options/scenarios for each policy area, also based on inception impact assessment*

SR9: Air quality monitoring, modelling, plans

Support contract with a consortium comprised of Ricardo, VITO, NILU and Trinomics to formulate **technical suggestions** to strengthen air quality monitoring, modelling and plans.

Phase 1 - scoping, mapping and analysis

- Task 1: Literature review
- Task 2: Expert consultations and questionnaires
- Task 3: Mapping and analysis of established practice

Phase 2 - assessing the impacts of technical suggestions

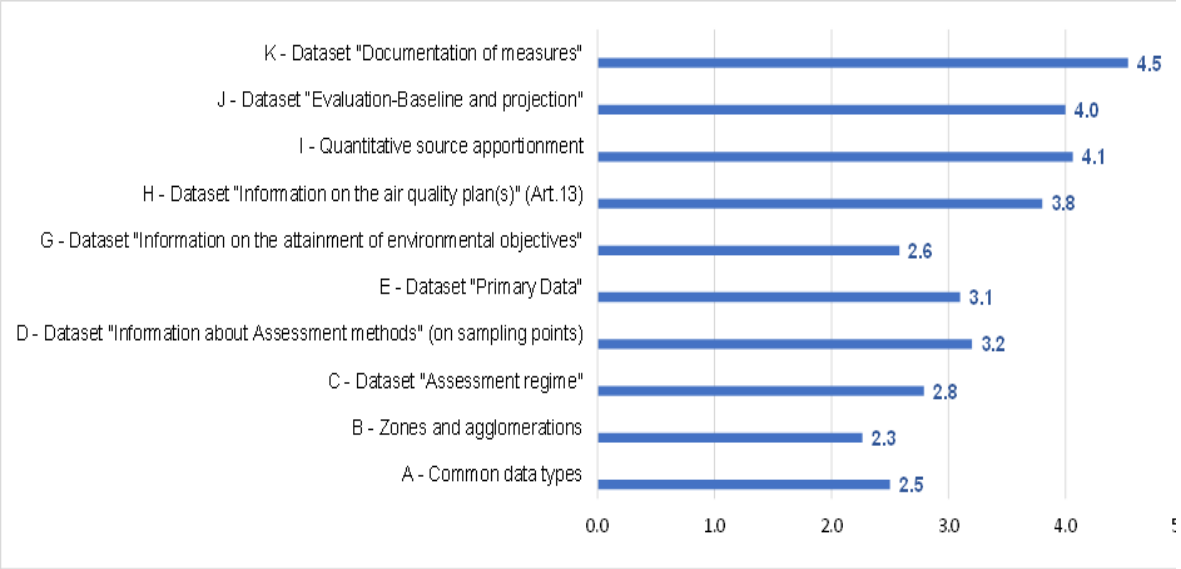
- Task 4: Formulation of technical suggestions
- Task 5: Assessment of impacts
- Task 6: Support to guidance and/or recommendation documents

SR9: Expert survey

PRELIMINARY RESULTS

Administrative burden

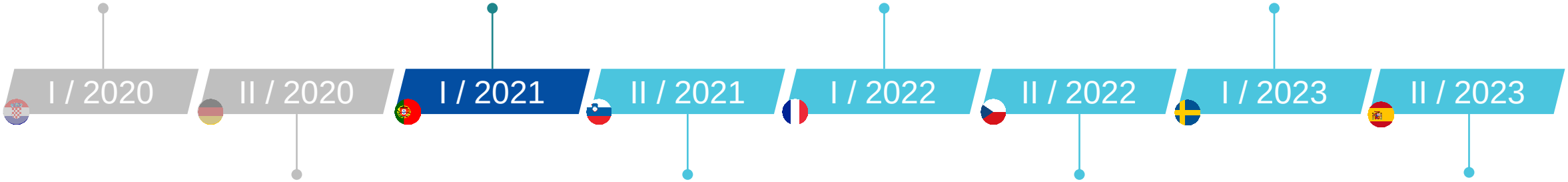
- The highest administrative burden result from dataflows K, I and J
- Various stakeholders perceive that not all data / parameters reported are necessary or being used by the EEA / Commission.
- Overall perception that neither national nor regional nor local level authorities understand their responsibilities regarding air quality ‘fully’.
- Albeit without consensus, results indicate that for some respondents the following are impacting efficiency / administrative burden:
  - **ineffective communication**
  - **availability of guidance** from national tiers of government to local tiers of government
  - **availability of funding** to support the devolution of the requirements of the AAQD to local level



Level of administrative burden resulting from the need to provide information in the e-reporting system
(1 - Very low; 2 - Low; 3 - Medium; 4 - High; 5 - Very High)

European Commission

Clean Air Milestones 2020 to 2023 (indicative)



Fitness Check
(note: published in Nov 2019)

Council Conclusions

NEC Implementation Report
(Commission Communication)

Expert consultation
(on monitoring, modelling, plans)

WHO Guidelines publication
(precise timing to be confirmed)

Zero Pollution Action Plan

Finalisation of
Impact Assessment (air quality)

Council discussions of
legislative proposal
(air quality - revision of EU rules)

Submission of Second
National Air Pollution Control
Programmes begins

EEA Air Quality Report 2020

Inception Impact Assessment
(revising the Air Quality Directive)

Second Clean Air Outlook
(Commission Report)

EEA Air Quality Report 2021

Public consultation: air quality
(air quality - revision of EU rules)

3rd EU Clean Air Forum
(in Madrid)

EEA Air Quality Report 2022

Adoption: legislative proposal
(air quality - revision of EU rules)

Review Gothenburg Protocol
(Air Convention)

Third Clean Air Outlook
(Commission Report)

EEA Air Quality Report 2023

4th EU Clean Air Forum
(location to be determined)

European Commission

Other updates

Assessing spatial representativeness of sampling points

European Commission

SR5: Spatial representativeness

- Complete results available online:
  - Presentation on Composite Maps
  - Report on Literature Review
  - Report on Composite Mapping Platform
  - Report on Sensitivity and Feasibility Tests for a Tiered Approach
  - Report on Meetings with Expert Stakeholders
  - Report on Application of Siting Criteria and Sampling Point Classification

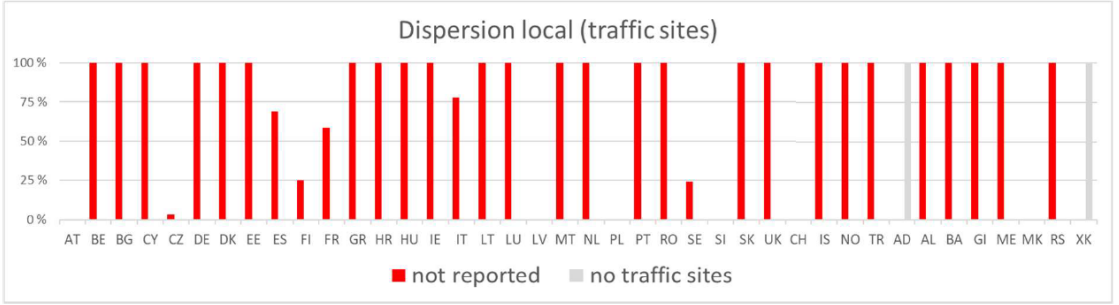


Figure 3.17: Percentage of missing data for "dispersion local" information at traffic sites. Red bars: percentage of sampling points for which no data. Grey bars: countries which have not classified any traffic-related sampling points.

SR5: Report on Application of siting criteria and sampling point classification

https://ec.europa.eu/environment/air/quality/spatial_representativeness.htm

European Commission

Contact us:

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Have your say:

https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12677-Revision-of-EU-Ambient-Air-Quality-legislation

Thank you