

Draft standardisation request as regards modelling quality objectives for assessment purpose in ambient air in support of EU ambient air quality legislation

DG Environment

Unit C.3 – Clean Air and Urban Policy

#### **1. LEGAL FRAMEWORK**

- Directive 2008/50/EC and Directive 2004/107/EC (the **Ambient Air Quality Directives**) require Member States to undertake air quality assessments, and to report the findings of these assessments to the European Commission on an annual basis.
- In October 2022, the European Commission has put forward a proposal for a Directive of the European Parliament and of the Council on ambient air quality and cleaner air for Europe (recast) merging Directive 2008/50/EC and Directive 2004/107/EC. Once adopted it will also serve as the legal framework.
- As per Article 6 (2), (3) and (4), Article 7(3), Article 9, Article 10(3) and Article 14 of Directive 2008/50/EC, as well as, Article 4(2), (3) and (4) of Directive 2004/107/EC, modelling techniques may be used for air quality assessment.
- Unlike for fixed and indicative measurements, there is *currently no European standard for modelling quality objectives*.



### 2. WHY STANDARDISATION?

- A standard is a *technical document* designed to be used as a *rule, guideline or definition*.
- It is a consensus-built, repeatable way of doing something.
- Standards are created by bringing together all interested parties such as manufacturers, consumers and regulators of a particular material, product, process or service.



### **3. OBJECTIVES**

- Ensure better data quality, reliability and comparability of air pollution data from modelling
- Improve the quality of information on air quality provided to the public
- Improve the implementation of the Ambient Air Quality Directive(s)
- Achieve the objectives of the European Green Deal and the Zero Pollution Action Plan to better monitor, report, prevent and remedy pollution of air, including the development of an integrated zero pollution monitoring and outlook framework



#### 4. SCOPE

The requested European standard shall in particular:

- be applicable to modelling of all pollutants covered by EU ambient air quality legislation, and focus in particular on the following particulate matter (PM<sub>2.5</sub> and PM<sub>10</sub>), nitrogen dioxide (NO<sub>2</sub>), sulphur dioxide (SO<sub>2</sub>), ozone (O<sub>3</sub>), carbon monoxide (CO); and apply to all concentration ranges that may occur in ambient air and apply to both short- and long-term pollutant-specific time averages,
- specify the requirements, in the form of **modelling quality objectives (MQO)** that should be attained for validation of air quality modelling for assessment purposes,
- detail the method to determine modelling quality objectives; and shall establish a method by which measurement uncertainty is used as a benchmark.



#### **5. TIMELINE**

Done:

- Consultation with the JRC involved in the drafting of the request
- Presentation to the Committee on Standards May 2023
- Launched regulated consultation: Member States (AAQEG 13/7/23), ESOS (CEN/CENELEC, ETSI), Stakeholder organisations (ANEC, ECOS, ETUC, SBS)
- New drafts following comments received

Next steps:

- Launch Commission inter-services consultation
- Positive opinion of the Committee on Standards



#### **5. TIMELINE**

- ....continuation:
- Adoption of Commission Implementing Decision on standardisation request (foreseen for mid 2024)
- Notification of Decision to CEN (N)
- Acceptance of request by CEN (N + 1 month)
- Draft work programme by CEN (N + 2 months)
- CEN to provide the first annual report (N + 6 months + annually)
- CEN to provide final report (N + 52 months)



### 6. CONCLUSIONS for the MQO

- MQO (Modelling Quality Objectives) = defines whether a model is suitable for the intended application and specified objectives
  - MQO from <u>FAIRMODE</u> (see *Guidance document* (2022)) = existing recommendation defining concept and methodology for modelling quality objectives and modelling performance criteria
  - MQO from <u>revised AAQD</u> (Annex V) = obligation for modelling applications for the assessment of current air quality when reporting exceedances (AAQD limit and target values); does not refer to other modelling applications, such as planning or forecasting
  - 3. MQO from <u>standardisation process</u> = definition of MQO for assessment purpose in ambient air.





Services to support the development of technical guidance documents in the field of air quality monitoring and modelling

Update

DG Environment

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#### **1. Technical guidance document**

- Service contract to support the development of technical guidance documents in the field of air quality monitoring and modelling
  - a) Technical guidance document on the use of reference methods and demonstration of equivalence, and the assurance of relevant data quality objectives (including for established and additional air pollutants) for air quality monitoring
  - b) Technical guidance document on the use of modelling for various application domains under the Ambient Air Quality Directive, and the assurance of relevant data quality objectives for air quality assessments.

➤ Time frame: March 2025.

Contractor: NILU, VITO, and Ricardo Nederland B.V plus group of 5 experts on the field.



### **1. Technical guidance document**

#### • Process

- Team of consultants and external experts
  - each expert working as main author on specific chapters; together on entire document
- DG ENV, JRC
  - Involved in drafting process (reviewers)
- FAIRMODE and MS
  - Involved through meetings (FAIRMODE, AQEG) and comments on draft versions in writing
- Main objective
  - Technical guidance document compiling the latest available knowledge on AQ modelling
  - Intended audience AQ modelling experts and non-modelling experts implementing the AAQD

### 2. TIMELINE SR9

Envisaged date	
Summer 2023	Official start of SR9
October 2023	Presentation of draft outline to FAIRMODE and possibility for early comments
February 2024	Decision on revised AAQD
April 2024	First draft version of Technical guidance document to COM
June/July 2024	Draft version of Technical guidance document to FAIRMODE (ddl for comments early September 2024)
October 2024	Presentation to FAIRMODE and AAQ EG (+ possibility to comment)
February/March 2025	Publication of Final Technical guidance document (End of SR9)



# Thank you



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## **3. LEGAL IMPLICATIONS to be checked**

#### • For COM

- Need to draft Implementing Act(s) in time, based on obligation(s) from revised AAQD
- For the Technical guidance documents (COM SR9)
  - Basis for Implementing Act(s), <u>not</u> the Implementing Act(s);
- For MS (experts)
  - Implementing Act(s) will be **binding legislation** for MS
  - Contributions to **Technical guidance document** possible through FAIRMODE and AAQ EG
  - Contributions to Implementing Act(s) possible through Comitology Committee

