

GUIDANCE ON THE USE OF MODELS FOR THE EUROPEAN AIR QUALITY DIRECTIVE: AN ACTIVITY OF FAIRMODE

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The Forum for Air Quality Modelling in Europe (FAIRMODE) was established in 2008. Its aim is to provide a forum for air quality modellers in Europe, promoting and providing guidance on the application of models as well as developing and providing structural support for the quality assurance of models used in applications related to the European air quality Directive. As part of this initiative (Working Group 1) a guidance document has been developed with the following aims:

- to provide guidance for the use of air quality modelling in regard to the European Air Quality Directive (2008/50/EC) and the Directive on heavy metals and polycyclic aromatic hydrocarbons in ambient air (2004/107/EC),
- to promote best practices in air quality modelling and assessment,
- to provide a central reference point and develop a harmonised understanding of model requirements in regard to the AQ Directive.

The guidance document has been developed over the past 2 years and includes contributions from over 30 authors. The document covers the following topics:

- Interpretation of the European Air Quality Directive in regard to the use of modelling
- Summary of reporting requirements to the European Commission when using modelling
- Description of model quality assurance and evaluation methodologies
- Chapters covering the use of modelling for reporting air quality assessment and for carrying out air quality planning
- Recommendations on a number of special topics in regard to the AQ Directive when modelling is applied, including assessment of non-anthropogenic contributions to air quality and contributions to PM from road sanding or salting

To illustrate many of these topics around 30 example case studies are included.

The presentation is intended to promote awareness of the document and to encourage contributions and discussion. It will highlight a number of aspects, e.g. spatial and temporal representativeness in regard to models, and select a number of points from the document that require further discussion, e.g. interpretation of the Directive quality assurance criteria for models. More recent updates of the document including recommendations on the modelling of local scale NO₂ will also be included.