



The Forum for Air Quality Modelling in Europe (FAIRMODE): its role and interaction with the scientific community

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The European Environment Agency (EEA) and the European Commissions Joint Research Centre in Ispra (JRC), with support from the European Commission (DG-ENV), have recently initiated a forum for air quality modelling in Europe (FAIRMODE). This forum is intended to support, communicate and organise information and activities in regard to air quality modelling, with particular emphasis on their application in response to the EU Air Quality Directives. The activities of FAIRMODE will help provide input to the implementation, review and revision of the EU air quality directives.

The forum had its first plenary meeting in October 2008 and is currently undertaking two major tasks. The first is the preparation of a guidance document for the application of modelling in regard to the directives and the second task will deal with the quality assurance of air quality models. FAIRMODE is considered to be an open and community fed initiative that will benefit both users and modellers, but only if the needs and requirements of these groups are properly addressed. For this reason a high level of interaction with both of these groups is required. A range of electronic tools will be used to facilitate communication between users and stakeholders, including databases (MDS, Airbase etc.) and assessment tools, accessible through a dedicated website (<http://fairmode.ew.eea.europa.eu/>).

This presentation will take advantage of the presence of a wide range of air quality researchers from the modelling community to present the forum, to encourage participation and to stimulate debate and receive feedback on a number of topics. One of the important items that requires consensus within the community is the need for, or level of, harmonisation of models, particularly when reporting to the European Commission under the Air Quality Directives. Though it is widely accepted that diversity is beneficial for the development of models, both scientific and cultural, there is also a need for some form of harmonisation since the Air Quality Directives, for which these models are to be applied, have to be implemented in all EU Member States. Questions will be raised concerning the level and method of harmonisation, the portability of models, the need for and the type of 'calibration' datasets, the general quality assurance that should be required for models, and the implementation of 'certification' through some form of equivalence testing.

FAIRMODE also intends to carry out a range of intercomparison studies for purposes related to harmonisation and quality assurance. A number of such European studies have already been carried out (e.g. CityDelta, EuroDelta, COST732) and experience from these has proven the scientific benefit of such activities. Such intercomparisons need to be properly planned in order to obtain the required insight and to provide useable conclusions for the implementation of the Air Quality Directives. Methods for achieving this will be discussed along with the expected and intended outcome of such studies.