

### WG1: ASSESSMENT

#### DELTA TOOL:

Most of the (technical) comments and suggestions listed in the “wish list” elaborated during the last Technical Meeting in Oslo have now been addressed by the JRC and are incorporated in a new version of DELTA which has been released at the beginning of October. Finalization of this “wish list” is foreseen together with another release by end of 2014. An updated user’s guide is released together with the DELTA tool.

#### GUIDANCE DOCUMENT

VITO is currently leading the drafting of a Guidance Document on model evaluation and benchmarking. This document will summarize the existing WG1 documents and publications and include best practice examples of the benchmarking and evaluation procedure. In a second phase this document will be circulated to a group of reviewers within the FAIRMODE community and finally presented during the Plenary Meeting.

#### CCA MODELLING & MEASUREMENTS

The University of Brescia presented a methodology for the evaluation of data fused or data assimilated modelling results. The methodology is currently being tested by a number of groups. Findings will be presented during one of the next meetings. We are still looking for more groups to test and evaluate the validation methodology.

#### MODEL QUALITY OBJECTIVES (MQO)

UK (AEA Ricardo) and NL (RIVM) are further working on the formulation of the Particulate Matter MQO for yearly averaged results, in particular on the assumptions behind the measurement uncertainty.

#### CCA FORECAST

During the Technical Meeting in Oslo, a number of groups expressed their concern about the DELTA methodology implemented for forecast. Since then, an update of the forecast evaluation methodology is being established and tested by INERIS and the JRC. In the near future, more groups will be asked to test the new methodology with their own forecast data and to provide feedback. Results will be presented during one of the next meetings.

#### CCA SPATIAL REPRESENTATIVENESS (SR):

During the Technical Meeting in Oslo, the diversity of the methodologies and datasets to assess SR was seen as the main challenge for a possible harmonization. CIEMAT is currently evaluating the feasibility of carrying out an inter-comparison exercise of these different approaches on a jointly used example case study. This analysis will hopefully lead to a better understanding of the concept and indicate how to move forward in this domain. The current survey will include the identification of possible participants which have the necessary expertise and would like to take part in the prospective intercomparison study. The outcome of this feasibility study will be discussed at the next FAIRMODE plenary meeting

## WG2: EMISSIONS

### FURTHER DEVELOPMENT OF THE EMISSION BENCHMARKING TOOL

The FAIRMODE WG2 technical meeting in Oslo proposed that a small tool development team should identify the priorities for the further development of the Emission Benchmarking tool. The team met as proposed on 8th October in Ispra. The meeting for the further development of the Emission benchmarking tool has identified the main priorities and prepared a plausible time schedule to make sure that the tool can be circulated for initial test by November 2014. The goal is to be able to analyze the first results from urban emission benchmarking for a selected number of cities at an ad hoc meeting before the plenary meeting in Baveno in 2015.

### COOPERATION WITH ERMES

Following the recommendations from the WG2 Technical meeting in Oslo, the co-Chair of FAIRMODE WG2 participated at the ERMES (European Research on Mobile Emission Sources) workshop in 17th September 2014. The cooperation with FAIRMODE was welcomed by the ERMES participants and it was agreed to identify concrete actions to strengthen cooperation between the two groups. After the meeting, a proposal has been sent by FAIRMODE WG2 to ERMES to include results from their models (TREMOVE, COPERT and HBEFA) in the Emission Benchmarking tool with the purpose to promote the use of their data and allow a feedback mechanism between the two groups.

### GOOD PRACTICE DOCUMENTS FOR TRAFFIC EMISSIONS IN URBAN AREAS

The compilation of methodologies to calculate exhaust and non-exhaust traffic emissions in urban areas has just been initiated. A small team from Norway, Italy and Spain is to produce a first draft that systematizes the current practices to compile bottom-up emission data from traffic and identifies common information sources to that end.

## WG3: SOURCE APPORTIONMENT (SA)

### DEVELOPMENT OF SA MODEL INDICATORS AND EVALUATION METHODS

The evaluation of the inter-comparison exercises for receptor models is finalized and the ad hoc methodology developed by JRC was tested. This work was presented at the International Aerosol Conference 2014. Two scientific papers are in preparation.

### REPOSITORY OF SOURCE PROFILES

The architecture of the Source Profile repository has been defined taking as reference SPECIATE (US EPA Source profile database). The repository is structured in a DataBase (DB) containing source profiles and factor profiles obtained in European studies. At present the DB includes about 100 entries.

## WG4: PLANNING

### DELTA PLANNING TOOL CODE

A first version of the Planning tool (referred as  $\Delta$ -Planning) has been finalized by JRC. This tool allows visualizing different benchmarking indicators in order to evaluate the impact of emission reductions produced by a specific model over a specific region.  $\Delta$ -Planning is available on the [DELTA web site](#). A user's guide is released together with the tool to support users with the installation and interpretation of the results.

During the last FAIRMODE technical meeting a number of participants (Barcelona Supercomputing center, NILU, MetNo, INERIS, VITO and Aveiro university) decided to produce new set of data to introduce in  $\Delta$ -Planning. These new set of data should be available by the end of the year.

## E-REPORTING

EEA sent to FAIRMODE a series of technical questions regarding the use of modeling results in the official reporting cycle. A small group of FAIRMODE experts is currently addressing the questions and will report to the EEA before the IPR meeting of November 12 & 13 in Copenhagen. A summary document will be circulated to the FAIRMODE community before the IPR November meeting for comment/suggestions.

Beside technical aspects, a general questionnaire about the use of models for e-Reporting has been sent out to all FAIRMODE national contact points. Responses are being collected and a summary of the feedback will be presented during the next FAIRMODE Plenary meeting.

JRC drafted the report "Reporting of Air Quality Plans and Programs in Europe" which contains guidelines for INSPIRE compliant data transmission mostly relevant for the data concerning plans and programs. WG3 chair (C. Belis) contributed to this report, especially on the source apportionment aspects.

## CEN INITIATIVE:

As reported earlier the suggestion for having FAIRMODE related working groups within CEN has been evaluated positively by the CEN TC264 secretariat. A first ad hoc meeting took place on 9 & 10 October in Ispra (IT) to prepare Work Item Proposals. Two proposals came out which will lead to two potential working groups:

- Definition and use of model quality objectives for assessment of air quality model applications
- Methodology for the Assessment of the Performance of Source Apportionment Model Applications.

These proposals will now be sent to the CEN secretariat and discussed further at the next Fairmode plenary meeting. If voted positively, the first working meetings could take place in spring 2015. Six member states are currently involved in the process but more are very welcome.

The third proposal items on "spatial representativeness, siting and classification" was discussed as well but judged not mature enough for a standardization process. It was however suggested to launch a joint AQUILA-FAIRMODE initiative on the "siting and classification" issue. This will be discussed at the next AQUILA and FAIRMODE meetings.