COST 715

Minutes on the WG3 meeting 13 and 14 October 1999, Rouen, France

<u>Participants:</u> Jaakko Kukkonen (Chair), FIN, László Bozo (Rapporteur), HUN, Guy Schayes, BEL, Alix Rasmussen, DEN, Francois Bombay, FRA, Luisa Volta, ITA, Sandro Finardi, ITA, Leiv Havard Slordal, NOR, Rosa Salvador, SPA, Bernard Fisher, UK (observer), (the following on 14 October only:) Renato Carvalho, POR, Erik Berge, NOR, Antonio Viseu, Macau.

Missing: Ranjeet Sokhi, UK

1. Welcome

The chairman welcomed everybody and summarised previous activities of the WG. New members were welcomed: François Bombay (FRA, replaces P. Mestayer), Luisa Volta and Sandro Finardi (ITA), Leiv Havard Slordal (NOR), and Ranjeet Sokhi (not present, UK).

2. Previous minutes

There has been only one short meeting, in February 1999 in Hamburg. The minutes were accepted. These include, e.g., ideas for the working plan of this WG.

3. Status report

A Status Report has been compiled. The chairman thanked everybody for their contributions. All (previously) participating seven countries are included.

The status report will be extended and revised. UK, NOR and ITA (which have not been included so far) promised further contributions, and BEL corrections. Other participants are also encouraged to check their contributions (in relation to the rest of the report) and submit revisions.

The final form of the status report will be printed as an official COST document and also transferred to the web.

4. Discussion of the work plan

There was discussion concerning the definition of episodes, and the main factors causing episodes. The definitions vary from country to country. The WG should establish a consensus definition.

There was also discussion concerning the results of the status report. E.g., H. Slordal commented that the goals of FIN, NOR, DEN and SPA are similar, in the fields of the application of weather prediction models and dispersion models.

4.1. Focal points of future work

A rather lengthy discussion concluded in the following focal points for future work.

Validation of air quality forecasting (AQF) methods. Lack of systematic AQF model validation is a common problem for all countries using such models. The limits of validity of the methods should be investigated and more clearly stated. This should therefore be one of the focal points.

Meteorological processes in the course of episodes. Varying episodes in different parts of Europe were discussed (e.g., photochemistry/ozone episodes in summer, fine particles, resuspended particles in spring, nitrogen oxides in winter). The key meteorological parameters vary depending on the type of episode and the geographic location. It was suggested and agreed to compare meteorological data in different parts of Europe during episodes.

Practical measures in order to control air quality in episodes. Measures applied in different countries should be reviewed, and their efficiency evaluated.

The chairman and rapporteur will compile and circulate a draft work plan, according to the discussions.

4.2 Proposal for FP5

A. Rasmussen suggested to write a proposal for the 5th Framework Programme,"4. City of Tomorrow and Cultural Heritage - 4.1.2 Improving the quality of urban life" with deadline February 15th 2000. This was generally considered to be a good idea.

The background for the proposal should be based on the general desire/request from authorities on precise forecast of urban air pollution and that operational information systems on urban air pollution already are implemented in different cities in Europe and it foreseen that such systems will be more widespread in the future. The quality of these systems depend mainly on the mapping of emissions, the air quality model and the meteorological forecast data in urban areas. The proposal should focus on the quality of meteorological forecast data, and especially evaluate different schemes with focus on the boundary layer parametrisation for urban areas and the physical parametrisation. The project will require comprehensive analyses of the meteorological parameters during air pollution episodes in different regions in Europe.

H. Slordal presented the new information system to be implemented in Norway (for Oslo and Bergen). This system is based on air quality models from NILU and meteorological forecast data from DNMI. The forecast data are based on local scale forecast data from the non-hydrostatic model MM5 with a 1 km horizontal resolution (3 km resolution for outer areas). MM5 has been

nested into a mesoscale version of DNMI-HIRLAM with a 10 km resolution. Preliminary comparison with measurements showed good results for the wind velocity, while temperature forecasts were less good.

It was decided to make a proposal and to organise a WG3-meeting in due time before the deadline.

4.3 Working group website

FMI (FIN) will create a website for this WG. This will then be linked to the (main) COST 715 website. The functions of the website could be quick and easy dissemination of information, and to act as a discussion forum and a working tool.

The site should include relevant links to the home pages of all participants and other relevant links, supplied by the participants. The chairman prepares a draft home page and circulates to everybody; subsequent comments are welcome.

5. Next meeting

It was concluded that a more extensive (one and a half-day) meeting will be needed in near future.

The alternatives for the next meeting were Varese (ISPRA), late November and Copenhagen, 29-30 November. However, the place and time were still left open, until discussions in the management committee meeting.

10 January 2000

László Bozó

Jaakko Kukkonen