

CONVENTION ON LONG-RANGE TRANSBOUNDARY AIR POLLUTION  
Cooperative Programme for Monitoring and Evaluation of the Long-range  
Transmission of Air Pollutants in Europe, EMEP

**Meeting of the extended Bureau of the EMEP Steering Body  
6-7 November 2002**

**MINUTES**

**Participation**

1. The meeting was attended by:
  - (a) The following Bureau members: Mr. J. SCHNEIDER (Austria) as Chairman, Mr. S. DOYTCHINOV (Italy), Mr. J. SANTROCH (Czech Republic), Ms. S. VIDIC (Croatia) and Ms. M. WIECHMANN-FIEBIG (European Community);
  - (b) Representatives from the four EMEP Centres: Mr. M. AMANN from the Centre for Integrated Assessment Modelling (CIAM), Mr. K. TORSETH from the Chemical Coordinating Centre (CCC), Mr. S. DUTCHAK and Ms. M. VARYGINA from the Meteorological Synthesizing Centre-East (MSC-E), and Mr. A. ELIASSEN and Ms. L. TARASSON from the Meteorological Synthesizing Centre-West (MSC-W));
  - (c) Mr. M. WOODFIELD (United Kingdom), Chairman of the Task Force on Emission Inventories and Projections and Mr. H. WUESTER from the secretariat.

**I. Adoption of the agenda**

2. The provisional agenda was adopted without change.

**II. Preparation for the implementation of the work plan adopted at the 26th session of the EMEP Steering Body (subject to adoption by the Executive Body)**

*Background material:* - *EB.AIR/2002/4* and  
- *EB.AIR/GE.1/2002/2*

**A. Emissions (including the results of the Gothenburg workshop and the new reporting guidelines)**

3. M. Woodfield presented the main results of the workshop on validation and evaluation of air emission inventories held in Gothenburg (Sweden) on 14-16 October 2002. The Bureau agreed that a report on the workshop should be presented to the Steering Body at its twenty-seventh session.
4. The Bureau discussed how the work to review and improve the quality of emission data could be advanced on the basis of the workshop conclusions. It recognized the importance of linking this work to the requirements of the Implementation Committee. M. Woodfield offered to participate at the next meeting of the Implementation Committee to discuss this issue.
5. The Bureau suggested taking a stepwise approach aiming at establishing a review process over the coming years. A simple data checking system could be developed to become operational in 2003. The Bureau noted with interest the

readiness of the European Environment Agency (EEA) and the European Commission's Joint Research Centre (JRC) to support the work in this field. A decision had to be taken on who would actually perform the different tasks required in examining data quality. The Bureau invited Mr. Woodfield to develop a detailed work programme that would define objectives and concrete steps to move this work forward. Ms. Wiechmann-Fiebig offered to host an informal meeting for that purpose in Brussels.

6. MSC-W informed about work under way on gridded emission data. Given the importance of a good spatial allocation of the major emission sources, it needed to update the database used for the spatial allocation of emissions from different sectors as well as pertinent technical and technological parameters. The recent improvements of the Eulerian were made on the basis of emission height calculations for different sectors undertaken by Croatia. These data demonstrated the importance of the correct emission heights and space allocation for the quality of model results. In view of their importance, countries should be strongly encouraged to provide these data. As a contribution in kind, the Oil Companies' European Organization for Environmental and Health Protection (CONCAWE) had prepared gridded emission data for power plant emissions based on a map showing the location of installations. The result of this work would be used for future modelling work at MSC-W for those Parties that had not reported any recent data on gridded sector emissions.

7. The secretariat informed briefly about the work on the legal status of the draft emission reporting guidelines that were to be presented to the Executive Body for approval.

**B. Monitoring (including preparing for a proposal for establishing national focal points and development of the monitoring strategy)**

8. K. Torseth of CCC presented a note concerning the development of the EMEP monitoring strategy setting out the network requirements. The note outlined the functions to be performed by "EMEP core sites". It reviewed the existing set of sites reporting to EMEP and highlighted some apparent gaps.

9. The Bureau reviewed the note and made a number of comments. It suggested to separate technical criteria from feasibility concerns and to take an "ideal" monitoring network as the starting point. The new strategy needed to spell out specific minimum requirements for each Party within EMEP. It should also set out the rationale for the distribution of the existing and planned superstations within the network. The strategy should take account of the envisaged work at the hemispheric scale and links to North American monitoring activities and those of EANET. It should also acknowledge the role of other relevant programmes (AMAP, OSPAR, HELCOM, WMO GAW, etc.) and encourage cooperation.

10. The Bureau requested CCC to present a first draft of the strategy to it at its next meeting. Such a draft should spell out the approach and identify the basic criteria (one station per Party, area, topography, etc.).

11. The Bureau discussed how to respond to the request by the EMEP Steering Body at its twenty-sixth session (EB.AIR/GE.1/2002/2, para. 62 (f)) concerning the nomination of national focal points for monitoring. It recognized that it was necessary

to have a person in each country responsible for technical questions on monitoring. An additional role of such a person would be to review monitoring data reports in line with the new guidelines for reporting (EB.AIR/GE.1/2002/3, annex). The focal point could have the responsibility for submitting monitoring data and should be able to respond to questions concerning the submitted data. In this connection, it would be important to clarify the difference between the role of a focal point for monitoring and that of the quality assurance manager. While the participation to the meetings of the Task Force on Measurements and Modelling (TFMM) should be open to a wider group, in particular to modelling experts, the focal points for monitoring should always be invited.

12. The Bureau requested the secretariat together with CCC to prepare a first draft for the terms of reference for national focal points for monitoring and send it to the extended Bureau prior to its next meeting together with the description of tasks for the quality assurance managers (which was adopted some years ago).

**C. Atmospheric modelling of acidifying and eutrophying pollutants, photo-oxidants and fine particles (the unified Eulerian model)**

13. L. Tarrasón of MSC-W presented an update of the work done on the unified Eulerian model since the informal meeting of the Bureau and other experts on 1 July. She outlined the work planned for the coming weeks.

14. The Bureau agreed that it was important to present clearly what the model can and cannot perform. Parties must understand that monitoring will be necessary for the validation of the model, but also to complete the information where the model cannot provide reliable estimates. Future modelling should be much more closely linked to measurements in order to constantly improve the model performance. This objective should also be taken into account when developing the monitoring strategy. The Bureau suggested that the centres discussed this issue further at their meeting in February 2003 in Moscow.

15. MSC-W also explained that ecosystem-specific deposition maps required by the Working Group on Effects had been produced based on the land-use map of the Stockholm Environment Institute (SEI). Cooperation was under way with the Coordination Center for Effects (CCE) on comparing and harmonising, as appropriate, the land-use maps. The CCE maps do not have the details on the stomatal uptake needed for the ozone level II approach.

16. The Bureau recognized that there was a need for a consistent population density map used by CIAM in health impact assessment and by MSC-W to allocate emissions in the EMEP grid. MSC-W will be in contact with CIAM and intends using the population map of CIAM in the future.

17. MSC-W also pointed out that the work on large points source (LPS) would be important to improve the model performance. There was especially a need for precise data on stack characteristics, including height. This work required cooperation with different institutes that have such data. It was also hoped that Parties would report data under the new emission data reporting guidelines.

18. The Bureau agreed that any such maps prepared at one centre should be made available for all centres working under the Convention. It requested the centres to discuss this further at their upcoming meeting in February 2003.

19. MSC-W announced that it had prepared the list of projects requested by the EMEP Steering Body (EB.AIR/GE1/2002/2, para. 39 (c)) and some Parties had already been contacted.

20. The Bureau discussed the possibility of a workshop on the review of the model to be organized under TFMM in October/November 2003. It agreed that the review of the Eulerian model should be planned in conjunction with the review of the RAINS model (see item E below). It requested MSC-W to draw up a precise plan for the model review for presentation at the next Bureau meeting.

#### **D. Atmospheric modelling of Heavy Metals and POPs**

21. S. Dutchak of MSC-E reported on recent developments and plans on modelling heavy metals. An emphasis has been the cooperation with the Working Group on Effects. Unfortunately, a clear definition for future requirements for MSC-E input to this work was missing. The mercury model intercomparison study was continuing with the next meeting to be held in Moscow from 12 to 14 March 2003. MSC-E was planning additional work on the validation of its heavy metals model and would report on progress at the next meeting of TFMM. Further work, to be finalized in early 2003, was also under way on transport to the Arctic region.

22. MSC-E also reported on its work on POPs, in particular the further development of the multi-compartment approach. Work continued to investigate the intercontinental transport and the 30-year trends. A workshop for the POPs modelling intercomparison study, which was to run for 3-4 years, would be held in November 2002. 15 models from 9 countries, including the two EMEP models, participated in the study. A similar exercise was under way within the OECD and MSC-E hoped to be able to cooperate in this work. There was also a need for cooperation with UNEP, in particular, on the global monitoring work.

23. The Bureau underlined the importance of close cooperation with OECD and UNEP. It was vital to show what EMEP could offer to the global processes in order to avoid duplication. The latter was particularly important with respect to UNEP's ambition to develop a global monitoring strategy. CCC was asked to follow this work closely and introduce, where relevant, EMEP's experience. The Bureau recognized that it was also important to establish such links at the national level.

24. The Bureau also recommended MSC-E to present in the future more clearly summary information on the changes in its models and an illustration of their impacts.

#### **E. Integrated assessment modelling**

25. M. Amann of CIAM reported on work to develop baseline scenarios under a 3-year contract by the CAFE programme of European Commission. A set of three baseline scenarios was to be prepared by end of 2003 and should include a scenario based on national forecasts. Ideally this scenario would be identical to the national scenarios developed by the Parties under the Convention. The contract also covered data review in collaboration with national experts. In order to develop the modelling

work on time, there was a need for rapid access to the 2000 emission data reported according to the new emission guidelines.

26. The Bureau agreed, in line with the decision by the Steering Body (EB.AIR/GE.1/2002/2, para. 69 (f)) that the secretariat include in its letter to Parties requesting them to report emission data a reference on the need for Parties to provide by early 2003 the necessary data for the development of integrated assessment modelling scenarios, especially data on projected activities up to 2020.

27. CIAM is also planning for the review of RAINS model. This work would also be funded by CAFE. Separately a model intercomparison exercise (probably including the MERLIN model) was planned.

28. CIAM announced that it was expecting a contract by CONCAWE that would enable it to present data on the Internet and prepare a model description.

29. CIAM also informed about preparations for a workshop on linkages and synergies in regional and global emission control to be held on 27-29 January 2003 at IIASA. On 20-21 January 2003, there will be a workshop at IIASA organized for EANET on a model intercomparison for atmospheric transport models for Asia.

#### **F. Hemispheric air pollution**

30. The secretariat reported on the workshop on hemispheric air pollution held in Bad Breisig (Germany) on 7-9 October 2002. The workshop had confirmed the tentative results of the previous workshop at Palisades in June 2001. While results had previously been qualitative, now a first set of quantitative estimates had become available. There was a clear interest in this work by Parties to the Convention in North America and in Europe and also Asian scientists had shown strong interest. The United States had announced its readiness to continue to sponsor the series of workshops. It was important in this connection to define the future scope of this work within EMEP.

31. CCC explained that NILU was involved in much of the work on this topic also within the framework of the International Global Atmospheric Chemistry (IGAC) project and of GAW. This work was mainly done on a scientific level. It could also be a source for substantial funding, e.g. through the European Space Agency (ESA). EMEP had a strong interest to cooperate in this work.

32. The Bureau recognized that, at least for ozone, EMEP could not ignore the hemispheric contribution. Also the numerous links to climate change were relevant in this connection. For instance, atmospheric modelling of fine particles relied on climate modelling.

33. In the discussion, it was noted that the results would have impacts on future policy discussions. EMEP was unique in the way it linked science and policy and best placed to help solve the problem at a hemispheric scale. The EMEP experience could be of substantial use to other regions. It was necessary to discuss how this would influence EMEP priorities. A vision should be developed for this, but this required a discussion involving participation beyond the EMEP Bureau. For such a strategy discussion the basic facts should first be agreed upon. EMEP should come up with a rough assessment of the importance of this work, including the quantification of the

problem. The report from the Bad Breisig workshop should together with the workshop on the links between air pollution and climate change provide a basis for discussion.

34. The Bureau recognized the need for a broader approach to developing a strategy, including the directions this work should take and on the role of EMEP in this context. It requested the centres to prepare, in time for the next Bureau meeting, an overview of the available knowledge (based on the reports of the two workshops) and to review EMEP's potential contribution in the future. The Bureau would discuss this material with aim to providing input to a broader discussion that could be led by the Chairman of the Executive Body.

### **III. Reporting by the Centres to EMEP: Implementing the new reporting guidelines**

35. The secretariat reminded the Bureau of the increased role of the task forces under the new reporting guidelines. It was intended to implement the new system starting with the next meeting of TFMM in April 2003. The secretariat reminded the centres that under the new system, reports needed no derestriction and could be sent right away to experts and posted on the Internet. They should, however, be marked as provisional. It suggested using a similar disclaimer as the one on documents for the Executive Body: "Reports prepared under the auspices of EMEP should be considered provisional until after the session of the EMEP Steering Body following their approval either by the Steering Body itself if they are status reports or by the responsible task force if they are data reports or technical reports." This would give the Steering Body the possibility to disagree with the content of a report and request further work on it.

36. CCC indicated that it would prepare the draft monitoring strategy as a report. Monitoring data reports may not be ready prior to the TFMM meeting.

37. MSC-W welcomed the new system, as it would eventually relieve the centres from the squeeze of having to finalize all reports in the summer in time for the Steering Body session. It announced that would present a note on the Eulerian model validation to TFMM. Summary reports with new emission data would subsequently be prepared for the Steering Body. As TFEIP will also hold its meeting in September 2003, it would be able to review the newest emission data.

38. MSC-E indicated that it considered this year as a transition period. It offered to present to TFMM some aspects already presented in the technical reports prepared in 2002 for the twenty-sixth session of the Steering Body. It suggested that the centres discuss the division of tasks between centres for the preparation of the status reports at their meeting in February 2003.

### **IV. Financial and budgetary matters of EMEP: update and preparation for the Executive Body**

*Background material:* - *EB.AIR/2002/5 and*  
- *EB.AIR/GE.1/2002/2*

39. The secretariat presented an update on the status of contributions. It highlighted that the arrears of Yugoslavia dating back to the year when its succession

to the EMEP Protocol became effective (1992) had been fully paid. Yugoslavia had also paid its current contributions. What remained outstanding were contributions from the former Yugoslavia prior to 1992 amounting to US\$ 18,974. The Bureau decided to recommend to the Steering Body not to pursue these arrears and requested the secretariat to delete them from the summary table in the future.

40. The Bureau took note of the importance this year of the decisions by the Executive Body concerning financing of EMEP in view of the revision of the annex to the EMEP Protocol spelling out the scale of contributions and the proposed budget increase for 2004.

41. MSC-E informed the Bureau about the work on contributions in kind. It noted that the work to cover the outstanding contribution of Ukraine for the period 1992-1994 seemed not to have advanced. Hence, only the in-kind contribution by Belarus would be expected.

42. The Bureau took note with some concern that Ukraine seemed not to have taken further steps to cover its outstanding contributions. It asked MSC-E to continue to assist it in contacting Ukraine on its behalf to investigate plans to comply with its obligations under the EMEP Protocol. The Bureau also decided that, as in 2002, it would like Belarus to report on its contribution in kind to the relevant expert panel under TFEIP. It asked the Chairman of TFEIP to report back to it at its next meeting on whether TFEIP could recommend the Bureau to approve the contribution by Belarus.

## **V. Cooperation with the Working Group on Effects and other national and international programmes**

43. The Bureau discussed the progress in preparing the deliverables agreed upon in the joint meeting with the Bureau of the Working Group on Effects. MSC-W pointed out that there had been a misunderstanding. The work by MSC-W that could not be done during this year only concerned the validation of ecosystem-specific deposition maps.

44. The Bureau agreed that it would welcome to hold another joint meeting with the Bureau of the Working Group on Effects in 2003.

45. CCC informed the Bureau about its cooperation with GAW aimed at making EMEP a regional component of a global monitoring system. It also reported on a project funded by the EU on fine particles, which was conducted in cooperation with JRC.

46. MSC-W informed Bureau about the contract between HELCOM and EMEP centres (MSC-W, MSC-E and CCC) that had been reviewed and extended for another 3-year period.

## **VI. The spring meeting of the EMEP Bureau**

47. The EMEP centres will hold their annual meeting in the week of 10 February 2003 in Moscow. The meeting may require more than two days, as an editorial meeting for the EMEP assessment report will also be linked to it.

48. The Bureau agreed to meet on 26-28 February 2003. This would include a joint meeting with the Bureau of the Working Group on Effects that plans to meet during the same days.

### **Closing**

49. The Bureau noted the usefulness of the meeting. It agreed that a meeting in the autumn was more useful than to meet just prior to the session of the Steering Body. It also recognized that in order to perform its tasks the Bureau needed to meet at least twice a year. It decided to plan also in 2003 a second meeting in the autumn, possibly in conjunction with the workshop of TFMM.

50. The participants thanked Juergen Schneider for the warm hospitality.

51. The Bureau noted that it was useful to be outside Geneva to meet in a different atmosphere enabling more creative thinking. It invited other Bureau members or the centres to consider hosting the autumn meetings of the Bureau in future.