



**Economic and Social
Council**

Distr.
GENERAL

EB.AIR/1999/6/Add.1
29 September 1999

Original: ENGLISH

ECONOMIC COMMISSION FOR EUROPE

EXECUTIVE BODY FOR THE CONVENTION ON
LONG-RANGE TRANSBOUNDARY AIR POLLUTION

Seventeenth session, Gothenburg (Sweden)
(29 November - 3 December 1999)
Item 8 of the provisional agenda

PROGRESS IN SELECTED AREAS OF COOPERATION

Note by the secretariat

Addendum

**II. COOPERATIVE PROGRAMME FOR MONITORING AND EVALUATION OF THE LONG-RANGE
TRANSMISSION OF AIR POLLUTANTS IN EUROPE (EMEP)**

1. The Steering Body of EMEP held its twenty-third session in Geneva from 6 to 8 September 1998 (EB.AIR/GE.1/1999/2).

2. The EMEP Steering Body's twenty-third session was devoted to the further consideration of its strategic goals, its mandate and the organization of its work from 2000 onwards. These issues were considered bearing in mind the likely reorganization of the work under the Convention. A final draft strategy document will be presented at the twenty-fourth session of the Steering Body. It would then form a basis for the planning of concrete annual action-oriented work-plans. Some of the new elements, such as integrated assessment modelling, a task force on measurements and modelling and intensifying scientific cooperation between EMEP and Parties and other international organizations, would already be included in the work-plan for 2000. Strategic considerations are detailed in paragraphs 9-17 of the report of the Steering Body's twenty-third session.

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GE.99-23802

3. The Steering Body reviewed the status of the emission data for the Convention as reported by the Meteorological Synthesizing Centre-West (MSC-W) and the secretariat (EB.AIR/GE.1/1999/6 and MSC-W technical report 1/99). The reports detailed the officially submitted emission data and data used in model runs for each country in the EMEP area and the state of reporting for the period 1980-97. The number of Parties that had reported data for 1997 had considerably increased over the previous year. Emission data for SO₂ and NO_x were still better and more completely reported than other data. Several gaps still remained in NH₃, NMVOC, CH₄, CO, heavy metals (HMs) and persistent organic pollutants (POPs) data sets and in gridded data. The 1997 round of reporting had only been the third consecutive one to request data on HMs and POPs. The Steering Body decided to submit the emission report and an addendum including corrections and updates (EB.AIR/GE.1/1999/6 and Add.1) to the Executive Body at its seventeenth session. The Steering Body also considered the emission (and other) data needs of the Implementation Committee. Furthermore, it reviewed the progress achieved by the EMEP Task Force on Emission Inventories (EB.AIR/GE.1/1999/8) and decided to establish a list of designated national organizations/experts for emissions to improve communication on the national level. It also decided to draw the Executive Body's attention to the resources needed for expanding and updating the Atmospheric Emission Inventory Guidebook as well as for verifying emission data. The Steering Body derestricted the new Atmospheric Emission Inventory Guidebook material. It also decided to include in the reporting instructions or "guidelines" (EB.AIR/GE.1/1997/5) a request to report data at SNAP level 2. These "guidelines" are being re-revised and will be finalized for the twenty-fourth session of the Steering Body. Emission-related issues are detailed in paragraphs 18-25 of the report of the Steering Body's twenty-third session.

4. The Steering Body also considered progress in the modelling and monitoring activities in the five EMEP thematic areas: acidification and eutrophication, photo-oxidants, heavy metals, persistent organic pollutants, and fine particulates. As decided at the Steering Body's twenty-second session, the EMEP Centres had, for the first time, analysed subjects and issues of importance to the Convention together and prepared joint technical reports. Some results are annexed to the report on the twenty-third session. All results and reports will be posted on the EMEP homepage (<http://www.emep.int>) in a format that would make them easy to access, use and analyse at the national level.

5. The joint MSC-W/CCC report on acidification and eutrophication included a review since 1985 and presented 1980-1997 emissions, 1997 depositions and exceedances of critical loads, trends in sulphur and nitrogen depositions from 1985 to 1997, and 1997 transboundary source-receptor matrices and import-export budgets for the EMEP area. For the first time, MSC-W had used the EMEP Eulerian acid deposition model to produce updated estimates of air concentrations and depositions of sulphur and nitrogen and to quantify the significance of transboundary transport over Europe. This was a major step forward in attaining the operational goals of EMEP for its seventh phase. The Eulerian model performed as well as or better than the previously used Lagrangian model, which was to a large degree also related to the implementation of a new meteorological model. It was not yet possible to say

whether the variations in the transboundary fluxes of the two models were due to meteorological variability. Work on acidifying and eutrophying compounds is summarized in paragraphs 27-30 on the report of the Steering Body's twenty-third session.

6. MSC-W had also continued its efforts to develop the regional scale photo-oxidant version of the multi-layer Eulerian model. Important work had also been done on coupled hemispheric - European scale modelling. MSC-W had actively cooperated with IIASA to provide scientific input and support to the negotiations on the multi-pollutant, multi-effect protocol and the European Union's acidification and ozone strategy. Work on photo-oxidants is summarized in paragraphs 31-33 of the report on the Steering Body's twenty-third session.

7. The MSC-E/CCC joint reports on HMs and POPs analysed the present state in the monitoring and modelling of these pollutants. Work on HMs and POPs would be further discussed in the upcoming EMEP/WMO/UNEP Workshop on Modelling of Atmospheric Transport and Deposition of POPs and HMs, which would take place in Geneva from 16 to 19 November 1999. MSC-E had further developed Eulerian-type models to calculate the transboundary transport of the priority heavy metals, mercury, lead and cadmium, and of selected persistent organic pollutants in the EMEP region. For cadmium, MSC-E had carried out the second stage of model intercomparison using 1990 as a reference year. There was an obvious need to consider the POP transport on a hemispheric scale in the modelling work. The Steering Body expressed its grave concern about the amount of HM and POP measurement data. Hardly any progress had been made since its decision in 1998 to include these compounds in the EMEP measurement programme. Progress of work on HMs and POPs is summarized in paragraphs 34-39 of the report on the Steering Body's twenty-third session.

8. The Steering Body welcomed the fact that fine particulates were incorporated in the Convention's 1999 work-plan. EMEP had actively started its work to produce and collect background information on the long-range transport of primary and secondary particles. MSC-W and CCC had contributed to the work of the Task Force on the Health Aspects of Air Pollution of the Working Group on Effects to prepare documentation for the Working Group's eighteenth session. The status of know-how and the future needs for work would be considered in detail at the upcoming EMEP/WMO Workshop on Fine Particulates - Emissions, Modelling and Measurements, which would take place in Interlaken (Switzerland) from 22 to 25 November 1999.

9. Finally, the Steering Body considered the financial and budgetary matters of EMEP (EB.AIR/GE.1/1999/8). The financial issues are reported in document EB.AIR/1999/8.

10. The Executive Body may, inter alia, wish to:

(a) Consider the progress of work of EMEP and take note of the report on the twenty-third session of the Steering Body (EB.AIR/GE.1/1999/2);

(b) Encourage Parties to make further efforts to use the EMEP results, which are available on the Internet (<http://www.emep.int>), in national and international air pollution policy-making;

(c) Take note of the emission data and other significant related information presented in documents EB.AIR/GE.1/1999/6 and Add.1 and remind the Parties to report emissions annually in due time, as requested by the secretariat, fill in gaps in the data and carefully check data consistency;

(d) Request the Steering Body to finalize the reporting guidelines (draft reporting procedure EB.AIR/GE.1/1997/5) for adoption at the eighteenth session of the Executive Body;

(e) Decide to set up a task force on measurements and modelling to offer a forum to the Parties, the EMEP centres and other international organizations for scientific discussions to evaluate measurements and modelling and to further develop working methods and tools, and welcome WMO's offer to co-chair it;

(f) Draw the attention of the Parties to their responsibility to maintain the necessary monitoring network and expand it to cover the whole EMEP area and include all agreed chemical components, in particular also heavy metals and selected persistent organic pollutants;

(g) Encourage EMEP to continue cooperation on emissions, atmospheric monitoring and modelling with the national scientific programmes, the regional marine commissions, HELCOM and OSPARCOM, as well with other relevant international programmes, institutes and organizations.

11. Furthermore, the Executive Body may wish to consider and take decisions on financial issues as detailed in document EB.AIR/1999/8 under item 11.