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

Sixteenth session  
(Geneva, 8-11 December 1998)  
Item 7 of the provisional agenda

**PROGRESS IN SELECTED AREAS OF COOPERATION**

Note by the secretariat

I. INTRODUCTION

1. This note has been prepared in order to assist the Executive Body in its review and assessment of progress made in the following areas of cooperation within the scope of the Convention:

(a) Cooperative programme for monitoring and evaluation of the long-range transmission of air pollutants in Europe (EMEP);

(b) Effects of major air pollutants on human health and the environment;

(c) Technologies for emission control.

Documents prepared under the auspices or at the request of the Executive Body for the Convention on Long-range Transboundary Air Pollution for GENERAL circulation should be considered provisional unless APPROVED by the Executive Body.

2. Progress in cooperation should be evaluated in relation to the work-plan for the implementation of the Convention, as adopted by the Executive Body at its fifteenth session (ECE/EB.AIR/53, annex V). A number of Parties have significantly contributed to the work by organizing workshops and seminars, leading task forces, hosting coordinating centres and designating experts to assist the secretariat in the preparation of draft documents for submission to relevant bodies or meetings.

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

3. The Steering Body of EMEP held its twenty-second session in Geneva from 7 to 9 September 1998 (EB.AIR/GE.1/1998/2).

4. The Steering Body reviewed the status of the emission data and the database under the Convention as reported by the Meteorological Synthesizing Centre-West (MSC-W) (EB.AIR/GE.1/1998/4 and a technical report). 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 of national annual totals for the period 1980-96. The Steering Body decided to submit the emission report and an addendum including corrections and updates (EB.AIR/GE.1/1998/4 and Add.1) to the Executive Body at its sixteenth session. The Steering Body also agreed that Parties should use the new procedures for estimating and reporting emission data (EB.AIR/GE.1/1997/5) one more year on a trial basis, when submitting their 1997 emission data. The Steering Body also took note of the progress achieved by the EMEP Task Force on Emission Inventories (EB.AIR/GE.1/1998/5).

5. The Steering Body reviewed the work done at MSC-W in the modelling of acidifying pollutants and photochemical oxidants and in the verification of the Eulerian model. The major results on model runs are summarized in the report on the twenty-second session. The Steering Body also reviewed the progress of work at the Meteorological Synthesizing Centre-East in the modelling of selected heavy metals and persistent organic pollutants. Some preliminary results are annexed to the report on the twenty-second session. Furthermore, the Steering Body reviewed the status of monitoring and quality assurance activities at the Chemical Coordinating Centre.

6. The Steering Body considered thoroughly the strategic long-term goals for EMEP in all three areas of its work: emissions, monitoring and modelling. The Steering Body decided to submit the document on its visions for 2005/2010 and the seventh-phase programme (1999-2001), as amended, for further consideration and approval by the Executive Body at its sixteenth session (EB.AIR/GE.1/1998/3).

7. The Steering Body was informed about developments in the cooperation between EMEP and other monitoring and modelling projects (the World Meteorological Organization, the Baltic Marine Environment Protection Commission (HELCOM), the Oslo and Paris Commission for the Protection of the Marine Environment of the North-East Atlantic (OSPARCOM), the North American activities on long-range transboundary air pollution, the European Environment Agency's Topic Centres on Air Quality and Air Emissions).

8. The Steering Body was also informed about the draft website of EMEP. It decided to introduce it also at the sixteenth session of the Executive Body and ask the Executive Body's approval for the procedure to put EMEP results on the Internet.

9. Finally, the Steering Body considered the financial and budgetary matters of EMEP (EB.AIR/GE.1/1998/7). The financial issues are reported in document EB.AIR/1998/9.

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

(a) Take note of the report on the twenty-first session of the Steering Body and the modelling and monitoring results annexed to it (EB.AIR/GE.1/1998/2);

(b) Take note of the emission data (EB.AIR/GE.1/1998/4 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;

(c) Encourage Parties to apply the draft reporting guidelines (EB.AIR/GE.1/1997/5) on a trial basis, as feasible, in an effort to improve the quality of emission data, and provide further comments on these guidelines to the secretariat by the end of January 1999;

(d) Draw the attention of the Parties to their responsibility to maintain the necessary monitoring network and expand it to cover the whole EMEP area; encourage the Parties to improve further their EMEP monitoring so as to improve the quality of measurements, and to nominate, if they have not done so, their national quality assurance managers; and remind them to report monitoring data in due time;

(e) Continue to encourage cooperation on emissions, atmospheric monitoring and modelling between EMEP and the regional marine commissions, HELCOM and OSPARCOM;

(f) Approve the posting of the EMEP results on the Internet as proposed by the Steering Body;

(g) Approve the seventh-phase programme of EMEP and take it and the visions for the EMEP work by 2005/2010, presented by the Steering Body, into account when finalizing the 1999 work-plan for the implementation of the Convention.

Furthermore, the Executive Body may wish to consider and take decisions on financial issues as detailed in document EB.AIR/1998/9 under item 10.

### III. EFFECTS OF MAJOR AIR POLLUTANTS ON HUMAN HEALTH AND THE ENVIRONMENT

11. The Working Group on Effects held its seventeenth session in Geneva from 26 to 28 August 1998 (EB.AIR/WG.1/1998/2).

12. The Working Group noted that the results achieved by the International Cooperative Programmes (ICPs) and the Mapping Programme (EB.AIR/WG.1/1998/4) contributed substantively to the effective implementation of the Convention and to the establishment of a scientific basis for the preparation of the new multi-pollutant, multi-effect protocol on nitrogen oxides and related substances (EB.AIR/WG.1/1998/2, para. 41 (a)).

13. The Working Group considered a note on the further development of the effect-oriented activities (EB.AIR/WG.1/1998/3). It approved it as amended and decided to submit it to the Executive Body for information. The Working Group noted that the results of the ongoing external review of the effect-oriented activities, once considered and approved by it and by the Executive Body (in 1999), might have an important impact on the future orientation, objectives, structure and scope of activities of the programmes. It agreed to reconsider the further development of the effect-oriented activities at its eighteenth session in 1999, taking into account any changes in activities of individual programmes proposed by the Task Forces, the conclusions and recommendations of the ongoing external review, and the Executive Body's deliberations on its medium- and long-term activities (EB.AIR/WG.1/1998/2, para. 13 (a) and (c)).

14. The Working Group reviewed the activities of the Task Force on Mapping and the Coordination Center for Effects (CCE). It noted the progress in the mapping of critical levels and loads and approved the updated maps of critical loads of sulphur and nutrient nitrogen (EB.AIR/WG.1/1998/5), as amended, for submission to the Executive Body. The Working Group noted that next year there would be no update in the critical loads database. It stressed that the further development of critical loads data should continue, and welcomed the effort of Parties and CCE to provide for transparency in critical loads data. It also took note of the target-setting methods (accumulated exceedances and

maximum depositions) being used by integrated assessment modellers (EB.AIR/WG.1/1998/2, para. 19 (a)-(b) and (f)-(h)).

15. The Working Group reviewed the activities and results of the five International Cooperative Programmes (ICPs) on assessment and monitoring of air pollution effects on forests, aquatic ecosystems, materials, crops and non-wood plants, and on integrated monitoring of air pollution effects on ecosystems, as presented in the 1998 joint report of the International Cooperative Programmes and the Mapping Programme (EB.AIR/WG.1/1998/4). It stressed the importance of the support provided by the lead countries and coordinating centres, and of the work carried out by the national focal centres. It also noted the potential importance of using national and international research projects and "help in kind" to address specific tasks for which funding proved difficult (EB.AIR/WG.1/1998/2, para. 41 (a)-(e)).

16. The Working Group welcomed the effort of ICP on the Assessment and Monitoring of Air Pollution Effects on Forests to streamline its activities. It took note of the summary report on monitoring forest condition in Europe (EB.AIR/WG.1/1998/6), approved the strategy paper on the present status and proposed strategy for further developing ICP Forests until the year 2001 (EB.AIR/WG.1/1998/7) as amended, and noted the revised objectives of the programme and proposed priorities for the years 1998-2001. The Working Group noted that a more integrated evaluation of level I results was needed. It welcomed the plans to address this issue and requested that, following the integration and evaluation exercises, the programme should assess its data collection needs, paying due attention to the possible requirements of future evaluations of long-term trends (EB.AIR/WG.1/1998/2, para. 24 (a), (c)-(d) and (g)-(h)).

17. The Working Group took note of the executive summary of the report on critical loads and their exceedances at ICP Waters sites (EB.AIR/WG.1/1998/8) and welcomed the effective cooperation of the ICP on Assessment and Monitoring of Acidification of Rivers and Lakes with CCE in its preparation. It also took note of the information concerning the present status and further development of the programme's database and the report on the evaluation of results of the 1997 chemical intercalibration, and reviewed the preparations for the joint ICP Integrated Monitoring and ICP Waters Workshop on biological assessment and monitoring (October 1998, Zakopane, Poland) (EB.AIR/WG.1/1998/2, para. 27 (b)-(e)).

18. The Working Group approved the report prepared by ICP on Effects of Air Pollution on Materials, including Historic and Cultural Monuments on the analysis of data after eight years of exposure: dose-response functions and corrosion trends (EB.AIR/WG.1/1998/9), and took note of the report of the Workshop on quantification of effects of air pollution on materials (May 1998,

Berlin, Germany). It also took note of the plan to further develop the programme, welcomed the proposals on mapping activities and economic assessment of air pollution damage to materials and buildings, and stressed the importance of identifying stock at risk (EB.AIR/WG.1/1998/2, para. 31 (b)-(d) and (f)).

19. The Working Group approved the report presented by ICP on Effects of Air Pollution and other Stresses on Crops and Non-wood Plants on the incorporation of level II factors into the critical level of ozone for yield reduction in crops and its subsequent mapping (EB.AIR/WG.1/1998/10). It took note of the report on the Workshop on using artificial neural networks to model environmental data, and invited the programme to continue its activities to realistically assess crop losses due to ozone pollution. The Working Group also agreed on a new short name and abbreviation for the programme: ICP on Non-wood Plants and Crops (ICP NWPC) (EB.AIR/WG.1/1998/2, para. 36 (b)-(c), (e) and (g)).

20. The Working Group took note of the seventh annual report 1998 of ICP on Integrated Monitoring of Air Pollution Effects on Ecosystems and of the summary report on the EU/LIFE Project: development of assessment and monitoring techniques at integrated monitoring sites in Europe (EB.AIR/WG.1/1998/11). It approved the revised manual for integrated monitoring. It also welcomed the proposals for further developing the programme (EB.AIR/WG.1/1998/2, para. 40 (b)-(e)).

21. The Working Group approved the draft summary of the substantive report: Trends in Impacts of Long-range Transboundary Air Pollution (EB.AIR/WG.1/1998/4). It took note of the suggested amendments and additions to the draft substantive report on trends and agreed on the organization of the work and the time schedule for finalizing the report for submission to it in 1999. It requested its Chairman and the Institute of Terrestrial Ecology (United Kingdom) to continue to coordinate the work (EB.AIR/WG.1/1998/2, para. 44 (a)-(b) and (d)).

22. The Working Group approved the conclusions of the summary report on the Workshop on critical limits and effect-based approaches for heavy metals and persistent organic pollutants (POPs) (November 1997, Bad Harzburg, Germany) (EB.AIR/WG.1/1998/13). It expressed its appreciation for the speedy publication of the proceedings, and welcomed the proposal by Germany to host a workshop on heavy metals in late 1999. The Working Group also invited the Task Force on the Health Aspects of Air Pollution to consider the possibility of addressing the health effects of heavy metals and POPs in its future activities, and invited all ICPS to continue to include into their activities, as feasible, the assessment of effects of heavy metals and POPs (EB.AIR/WG.1/1998/2, para. 46 (a)-(c) and (e)-(f)).

23. The Working Group noted the document summing up the main results of the Conference on nitrogen (March 1998, Noordwijkerhout, Netherlands) (EB.AIR/WG.1/1998/14) and agreed to consider its conclusions and recommendations when further developing and implementing the effect-oriented activities (EB.AIR/WG.1/1998/2, para. 48).

24. The Working Group welcomed the information on the establishment of the Task Force on the Health Aspects of Air Pollution, approved its terms of reference, short-term priorities and its plan of action for 1998/1999. It also invited all interested Parties to actively participate in the work of the Task Force, and expressed its appreciation to the European Centre for Environment and Health of the World Health Organization (WHO) for its important role in initiating these activities (EB.AIR/WG.1/1998/2, para. 53).

25. The Working Group considered, amended and approved the note on the financing of the effect-oriented activities (EB.AIR/WG.1/1998/15) and decided to submit it to the Executive Body. It also confirmed that the estimated 1999 essential coordination costs of different elements of the effect-oriented activities as provided in document EB.AIR/WG.1/1997/14 were still valid. The Working Group reiterated the need to share the coordinating costs more equally. It invited all countries to consider providing voluntary contributions towards funding the international coordination services for ICPs, the Mapping Programme and the Task Force on the Health Aspects of Air Pollution, and invited its Bureau, in collaboration with the secretariat, to establish a transparent method for recording and presenting all kinds of voluntary contributions (EB.AIR/WG.1/1998/2, para. 58).

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

(a) Take note of the report of the seventeenth session of the Working Group on Effects (EB.AIR/WG.1/1998/2);

(b) Take note of the significant results achieved by the International Cooperative Programmes and the Mapping Programme, and their substantive contribution to the effective implementation of the Convention and to the establishment of a scientific basis for the preparation of the new multi-pollutant, multi-effect protocol on nitrogen oxides and related substances, as presented in the 1998 joint report of the International Cooperative Programmes and the Mapping Programme (EB.AIR/WG.1/1998/4);

(c) Approve the note on the further development of the effect-oriented activities (EB.AIR/WG.1/1998/3), and endorse the plan of the Working Group to reconsider it at its eighteenth session in 1999, taking into account any

changes proposed by the Task Forces, the conclusions and recommendations of the ongoing external review, and the Executive Body's deliberations on its medium- and long-term activities (EB.AIR/WG.1/1998/2, para. 13 (c));

(d) Endorse the updated European maps of critical loads of sulphur and nutrient nitrogen (EB.AIR/WG.1/1998/5);

(e) Note the effort of ICP Forests to streamline its activities as outlined in the programme's paper on the present status and proposed strategy for further developing ICP Forests until the year 2001 (EB.AIR/WG.1/1998/7) (EB.AIR/WG.1/1998/2, para. 24 (a) and (d));

(e) Endorse the plans for finalizing the substantive report on trends and invite the Bureau of the Working Group on Effects to consider preparing a short, condensed version of the report for the general public (EB.AIR/WG.1/1998/2, paras. 43 and 44 (b) and (d)-(e));

(f) Welcome the proposal by Germany to host a workshop on heavy metals in late 1999 (EB.AIR/WG.1/1998/2, para. 46 (c));

(g) Welcome the establishment of the Task Force on the Health Aspects of Air Pollution, note its terms of reference, short-term priorities and the plan of action for the forthcoming year, and express appreciation to the European Centre for Environment and Health of WHO for its important role in initiating these activities (EB.AIR/WG.1/1998/2, paras. 49-51);

(h) Note document EB.AIR/WG.1/1998/15 on the financing of effect-oriented activities and invite the Bureau of the Working Group on Effects to continue to provide information on voluntary contributions (earmarked and non-earmarked) to the Trust Fund, on the understanding that direct financial contributions of lead countries or host countries to the coordinating centres, if duly documented and officially reported to the Bureau and to the secretariat, are to be considered as voluntary contributions towards funding the effect-oriented activities under the Convention (ECE/EB.AIR/53, para. 65 (1)) and will be recorded as such in a separate table. Other forms of contributions (e.g. hosting of task force meetings and workshops, support of the national focal centres, indirect contributions/support to Programme Coordinating Centres) reported by Parties to the relevant bodies, should not be officially recorded by the secretariat.

#### IV. TECHNOLOGIES FOR EMISSION CONTROL

27. The sixth session of the Working Group on Abatement Techniques took place in Geneva from 2 to 3 July 1998 (EB.AIR/WG.6/1998/2).



28. The Working Group reviewed the progress of the Task Forces on the Assessment of Abatement Options/Techniques for Volatile Organic Compounds and NOx (EB.AIR/WG.6/1998/5, 6, 8 and 9), both led by Germany, of the expert group on control techniques for emissions of reduced nitrogen (EB.AIR/WG.6/1998/10), led by United Kingdom, and of the expert group on control techniques for emissions of VOCs and NOx from selected mobile sources (EB.AIR/WG.6/1998/11/Rev.1, 12/Rev.1 and 13/Rev.1).

29. The Working Group focused in particular on the draft proposals for emission limit values (ELVs) from different stationary and mobile sources and proposals for future work in relation to best available technology (BAT) and ELVs as contained in the Task Forces' summary reports (EB.AIR/WG.6/1998/4 and 7).

30. The Working Group took note of the documents prepared by the Task Forces and the expert groups and invited Parties to provide comments and to consider proposals for future work on BAT and ELVs. It also requested the Task Forces and expert groups to finalize their work, taking into account the views expressed by the Working Group on Strategies and following its guidance according to established practice (EB.AIR/WG.6/1998/2, paras. 23, 32, 37 and 41).

31. The Working Group reviewed the conclusions and draft recommendations of the Workshop on the elaboration and evaluation of techno-economic databases on production processes and related emission abatement options related to the activities of the Task Forces, following the recommendations of the Sixth Seminar on Control Technology for Emissions from Stationary Sources (EB.AIR/WG.6/1998/3). The Working Group approved the Workshop's conclusions and draft recommendations aimed in the short term, inter alia, at the development of an international network of databases and in the long term at their efficient use in the verification process of integrated assessment modelling, and invited the Executive Body to take its results into account when considering future priorities and core activities (EB.AIR/WG.6/1998/2, para. 15).

32. The Working Group started reviewing information collected by the secretariat on innovative ways and means of promoting the exchange of technology for air pollution abatement in order to comply with the recommendations to the Executive Body by the Sixth Seminar on Control Technology for Emissions from Stationary Sources (EB.AIR/WG.6/1998/14). It invited Parties and international organizations to provide more information on the exchange of air pollution control technology, focusing on successful cases, and entrusted the secretariat with collecting such information and reporting on the outcome at the next session (EB.AIR/WG.6/1998/2, para. 46).

33. The Working Group discussed its future activities and decided to include the short-term ones into the existing structure of its draft work-plan (EB.AIR/WG.6/1998/2, annex III) and to put the long-term ones, including those related to exchange of technology, on a list of future potential activities (EB.AIR/WG.6/ 1998/2, annex IV). It invited Parties to develop the latter into concrete projects in consultation with its Bureau and the secretariat (EB.AIR/WG.6/1998/2, para. 58 (a)).

34. In order to support the implementation of the Aarhus Protocols on Heavy Metals and Persistent Organic Pollutants, the Working Group recommended that a task force on by-products should be established to focus on residues containing those pollutants and agreed on its provisional mandate (EB.AIR/WG.6/1998/2, annex II). It also requested the prospective lead country, Austria, to define the scope of its work and refine its draft mandate, if necessary (EB.AIR/WG.6/1998/2, para. 58 (b)).

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

(a) Take note of the report on the sixth session of the Working Group on Abatement Techniques (EB.AIR/WG.6/1998/2);

(b) Take note of the progress made by the Task Forces on the Assessment of Abatement Options/Techniques for VOCs and NO<sub>x</sub> and invite them to finalize guiding documents on control techniques for emissions of VOCs and NO<sub>x</sub> from stationary sources and related draft annexes on emission limit values of emissions of VOCs and NO<sub>x</sub> from stationary sources;

(c) Take note of the progress made by the expert group in preparing a draft document on control options/techniques for preventing and abating emissions of reduced nitrogen and invite it to finalize its work taking into account particularly best agricultural practices brought to its attention by the Parties;

(d) Invite Parties to actively participate in the awareness-raising campaign and organize target-oriented workshop(s) on best available control options and techniques for preventing and abating emissions of ammonia from agriculture as well as other workshops addressing air pollution problems within selected sectors based on the needs of countries in transition;

(e) Take note of progress made by the expert group on control techniques for emissions of VOCs and NO<sub>x</sub> from selected mobile sources and invite them to finalize its work related to best available control techniques for emissions of VOCs and NO<sub>x</sub> and related emission limit values for VOCs and NO<sub>x</sub> for new mobile sources;

(f) Invite Parties to consider a list of future potential activities in order to develop on that basis concrete projects, i.e. workshops, studies and expert groups, in consultation with the Bureau of the Working Group and the secretariat;

(g) Establish a task force on by-products, with Austria as lead country, to focus on residues containing heavy metals and persistent organic pollutants.