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

Nineteenth session
(Geneva, 11-14 December 2001)
Item 6 of the provisional agenda

# PROGRESS IN CORE ACTIVITIES

Note by the secretariat

## Introduction

1. This note has been prepared 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), encompassing the two core activities:
(i) atmospheric monitoring and modelling; and (ii) integrated assessment;

(b) Effects of major air pollutants on human health and the environment, the third core activity identified by the Executive Body.



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2. Progress in cooperation should be evaluated in relation to the 2001 work-plan for the implementation of the Convention, as adopted by the Executive Body at its eighteenth session (ECE/EB.AIR/71, annex IV).

3. At its eighteenth session the Executive Body invited the Working Group on Effects and its Bureau to consider drawing up a long-term strategy for the effect-oriented activities (ECE/EB.AIR/71, para. 58 (d)). The Executive Body also acknowledged the benefits of a more advanced, longer-term planning of the activities of its subsidiary bodies. To this end it invited the Steering Body of EMEP and the Working Group on Effects to prepare their medium-term programmes for the period 2001-2004 for review of the protocols and to submit them to it for consideration at its nineteenth session (ECE/EB.AIR/71, para. 80).

4. The Working Group on Effects at its twentieth session and the EMEP Steering Body at its twenty-fifth session stressed the need for further strengthening their cooperation and for harmonizing, as far as possible, their medium-term work-plans. To this end they agreed to hold a joint meeting of the Bureau of the EMEP Steering Body and the Extended Bureau of the Working Group on Effects late in February 2002.

5. A number of Parties have significantly contributed to the core activities by leading task forces, hosting coordinating centres, organizing workshops and seminars, and by designating experts to assist the secretariat in the preparation of draft documents for submission to relevant bodies or meetings.

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

6. The Steering Body of EMEP held its twenty-fifth session in Geneva from 3 to 5 September 2001 (EB.AIR/GE.1/2001/2).

7. The EMEP Strategy 2000-2009 has now been published (ECE/EB.AIR/73). The Steering Body adopted the draft-work plan for 2002 and the proposed priorities for work up to 2004 (EB.AIR/GE.1/2001/9). It reviewed separately each area of work, considering progress made in 2001. The Steering Body recognized the request by several delegations to have requirements for Parties spelled out more clearly in the work-plan. It requested the secretariat to add to the draft work-plan a summary on the data requests to Parties to facilitate their work.

8. The Steering Body reviewed progress in the work on heavy metals, especially with respect to atmospheric modelling, monitoring and the availability of emission data. It endorsed the conclusion by the Task Force on Measurements and Modelling that the model developed by the Meteorological Synthesizing Centre-East (MSC-E) was, in principle, operational for lead and cadmium and that it could be applied for policy purposes once the emission data uncertainties had been reduced. It also adopted the two new chapters on heavy metals to the EMEP Manual for Sampling and Chemical Analysis and requested Parties to use this Manual for monitoring heavy metals.

9. The Steering Body also reviewed progress in the work on acidification, eutrophication and photo-oxidants. It took note of the information presented by the delegation of Germany on the workshop on ozone trends. The Steering Body recognized that there were problems in linking monitored ozone to vegetation exposure. While it noted that this problem would be avoided with the level II approach, it requested the Chemical Coordinating Centre (CCC) and the Meteorological Synthesizing Centre-West (MSC-W) to prepare a short note on the question. It also requested CCC, in consultation with the Task Force on Measurements and Modelling, to come up with suggestions to improve nitrate aerosol monitoring and called upon Parties to cooperate in this endeavour.

10. The Steering Body recognized that the shift from the Lagrangian to the Eulerian model developed by MSC-W affected the calculations of source-receptor relationships. The Eulerian model provided on average a better correlation with measured nitrogen compounds and ozone but not with measured sulphur. The Steering Body requested MSC-W to investigate further the differences between the models, present results for discussion to the Task Force on Measurements and Modelling, and report on progress to the Steering Body at its twenty-sixth session.

11. The Steering Body looked in some detail at the work on particulate matter. It adopted a measurement programme for PM10 (particulate matter <10 ìm) and decided that monitoring of particulate matter should be pursued as a matter of high priority. It invited Parties to cooperate with CCC and to respond to the questionnaire that CCC would send them to ensure rapid implementation of the monitoring programme (level 1). It called upon Parties to set up monitoring sites that can perform more detailed monitoring (level 2) and invited Parties to submit to CCC other PM measurements that they had obtained. It encouraged CCC to work closely with other aerosol-related research programmes and requested it to develop, in close collaboration with ongoing work of the European Community, guidance for the monitoring of smaller-size fractions than PM10 (e.g. PM2.5).

12. The Steering Body took note of the good progress achieved in the work on particulate matter. It noted the conclusions of the workshop on the potential and costs for controlling fine particulate matter emissions in Europe and invited Parties to review the data related to emission-generating activities and their costs that the Centre for Integrated Assessment Modelling (CIAM) had made available on the Internet. Results were available from the Coordinated European Programme on Particulate Matter Emission Inventories, Projections and Guidance (CEPMEIP) project. A fully documented version of the inventory was available on the Internet, accessible via the EMEP homepage (www.emep.int). Work to update the EMEP/CORINAIR Atmospheric Emission Inventory Guidebook was under way within the Task Force on Emission Inventories and Projections.

13. The Steering Body recognized the importance of speciation of VOC emissions also for the modelling of the secondary organic aerosols and the significance of natural emission sources, such as sea salt and dust from the Sahara.

14. The Steering Body reviewed the progress in the work on persistent organic pollutants (POPs) , which had concentrated on dioxins/furans, HCB, PCBs and PAHs (B[a]P). It encouraged MSC-E to continue its good cooperation with national experts, including those from Sweden and

the United Kingdom that had offered to cooperate. In view of the importance of the work by the ad hoc expert group on POPs focusing on the evaluation of new substances that may be candidates for addition to the Protocol on POPs, it encouraged MSC-E to intensify its cooperation with the expert group.

15. The Steering Body adopted the terms of reference for the Task Force on Measurements and Modelling, recognizing the importance of the new Task Force as a forum for in-depth discussions of important scientific issues. The Task Force would assist the Steering Body by reviewing the work of the EMEP centres on measurements and modelling. The Steering Body took note of the report of the Task Force and expressed its appreciation to the lead country, Austria, and the World Meteorological Organization (WMO) for their support.

16. An assessment report was being prepared by the Task Force on Measurements and Modelling. To be published in 2003, it would consist of a general part, giving an overall European perspective and covering all substantive areas of work, and a country-specific part, focusing on acidification and eutrophication. The latter would provide an assessment by Parties on: (i) the results of emission reduction measures within the country and internationally; (ii) the present status in relation to the desired environmental quality; and (iii) the need for further actions to reduce pollution. The Steering Body took note of the progress in preparing the assessment report, expressing its gratitude to all national experts that had contributed to the work and, especially, to Sweden for providing the focal point for the finalization of the report. It requested the Executive Body to support the preparation of the assessment report and to call upon Parties to contribute to the work planned.

17. The Steering Body welcomed the cooperation between the Task Force on Measurements and Modelling and the European Environment Information and Observation Network (EIONET) of the European Environment Agency (EEA) and expressed its support for harmonizing the reporting of air quality data. It endorsed the proposal to require Parties to report only once a year and requested the Task Force, assisted by CCC, to prepare in cooperation with EEA a practicable scheme for air quality data reporting. The Steering Body agreed on the importance of further work on ammonia, both measurements and modelling, and requested the Task Force on Measurements and Modelling to keep close contact with the ad hoc experts group on ammonia.

18. The Steering Body took note of the report of the Task Force on Emission Inventories and Projections, expressing its appreciation to the lead country and EEA for their support. It took note of the status of emission data and the progress in the development of the emission database at MSC-W. It noted that the work of the Task Force in the coming years would focus on data quality and accepted the offer by Sweden to host a workshop on emission data verification and validation in autumn 2002.

19. The Steering Body adopted in principle the new guidelines for estimating and reporting emission data (EB.AIR/GE.1/2001/6 and Add.1) for a pilot phase to allow Parties to apply them in the 2001 reporting round. However, it requested the Task Force to review the guidelines to incorporate as far as possible the comments made during the session, in particular with a view to further harmonizing the reporting format with that of the United Nations Framework Convention on Climate Change. The Task Force should also take into account comments made by national

experts and experience gained during the 2001 reporting round. The Steering Body requested the Task Force and MSC-W to examine ways to assist Parties in applying the new guidelines and recommended the Executive Body to endorse this procedure.

20. The Steering Body took note of the report of the Task Force on Integrated Assessment Modelling, expressing its appreciation to the lead country and to IIASA for their support. It welcomed the work by CIAM, in collaboration with the Coordination Center for Effects (CCE), on uncertainty analysis and noted that the forthcoming workshop on uncertainty management would be held in Laxenburg (Austria) in January or February 2002. The Steering Body also noted the work on linkages between global and regional air quality and the importance of an exchange of scenario information between modellers within the Intergovernmental Panel on Climate Change (IPCC) and EMEP. The Steering Body recognized that urban exposure to air pollution was an important factor in environment-related health risks. It agreed that one focus of integrated assessment modelling should be striking a balance between the cost-effectiveness of Europe-wide emission reduction measures and local measures. It invited Parties to contribute to the work on urban modelling.

21. The Steering Body recognized that the work-plan of the Task Force was only feasible if the necessary inputs arrived in time. Possible bottlenecks related to the quality of emission data, the development of source-receptor matrices based on the new Eulerian model, the developments in dynamic ecosystem modelling, the remaining uncertainties in the fine particles that cause health effects, the development of scenarios for energy and agriculture, and the influence of transcontinental fluxes. The Steering Body agreed to draw the Executive Body's attention to the need for a good harmonization of the work-plans of the Working Group on Effects and of EMEP.

22. The Steering Body took note of the report and endorsed the conclusions and recommendations agreed upon at the workshop on photo-oxidants, particles, and haze across the Arctic and the North Atlantic: Transport observations and models, held in Palisade, New York (United States), on 12-15 June 2001 (EB.AIR/GE.1/2001/11). It was organized in cooperation with the Arctic Council's Arctic Monitoring and Assessment Programme (AMAP). The Steering Body expressed its appreciation to the organizers and sponsors, noting the availability of the web site (http://www.ciesin.columbia.edu/pph). The Steering Body agreed to pursue this work by taking a hemispheric perspective. It decided to invite Asian scientists, possibly through the Acid Deposition Monitoring Network in East Asia (EANET) to cooperate in this work, requesting its Bureau to establish the necessary contacts. It agreed that a follow-up workshop, with the participation of Asian scientists, should be organized in 2002 and called upon Parties to consider hosting this workshop.

23. The Steering Body requested the EMEP centres, in consultation with the Task Force on Measurements and Modelling and the Task Force on Integrated Assessment Modelling, to study the possibility and resource requirements for extending work to the whole northern hemisphere. It agreed to draw this area of work to the attention of the Executive Body and ask for guidance on the priorities and resources that should be given to this work.

24. The Steering Body welcomed the cooperation with the EEA, the EUREKA Project on the Transport and Chemical Transformation of Environmentally Relevant Trace Constituents in the

Trophosphere over Europe: Second Phase (EUROTRAC-2), the Helsinki Commission (HELCOM) and WMO, including its Global Atmospheric Watch (GAW) programme. It requested the secretariat to invite to its next meeting also representatives of AMAP, the Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR) and the United Nations Environment Programme (UNEP). Furthermore, the Steering Body welcomed the increasingly close collaboration with the European Community's Clean Air for Europe (CAFE) programme, recognizing the increasing involvement of its centres and its Chairman in the work of CAFE.

25. The Steering Body approved the proposed budget of CIAM for 2002 and 2003 as set out in the report of the Task Force on Integrated Assessment Modelling (EB.AIR/GE.1/2001/3, paras. 57-58) and called upon Parties to make every effort to provide the necessary funding for the work on integrated assessment modelling foreseen in the work-plan. It also considered the financial and budgetary matters of EMEP (EB.AIR/GE.1/2001/8). All the financial and budgetary matters are reported in EB.AIR/2001/7 and 8.

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

(a) Take note of the report of the twenty-fifth session of the EMEP Steering Body (EB.AIR/GE.1/2001/2);

(b) Approve the priorities for its work up to 2004 and the medium-term work programme (EB.AIR/GE.1/2001/9);

(c) Note the progress made on heavy metals and POPs modelling, monitoring and emission inventories, and call upon Parties to support this work, especially by reporting more and better data on measurements and emissions;

(d) Note the progress in the development of the Eulerian model for acidifying and eutrophying pollutants and for ozone, and recommend that work should continue to clarify the differences between this and the old model;

(e) Welcome the progress achieved in the work on particulate matter and approve the adopted monitoring programme;

(f) Call upon Parties to initiate PM monitoring work as quickly as possible, to review the data related to primary PM emission-generating activities and their costs that the Centre for Integrated Assessment Modelling (CIAM) had made available on the Internet, and make every effort to report this year for the first time their emissions of PM;

(g) Approve the terms of reference for the Task Force on Measurements and Modelling as well as its work programme;

(h) Express its support for the preparation of the assessment report and call upon Parties to contribute to the work planned;

(i) Welcome the cooperation with the EEA EIONET and express its support for harmonizing the reporting of air quality data;

(j) Note the shift of emphasis in the work of the Task Force on Emission Inventories and Projections in the coming years to focus on data quality;

(k) Endorse the procedure adopted by the Steering Body to move towards new emission reporting guidelines by adopting a pilot phase to allow Parties to apply the new guidelines in the 2001 reporting round, while requesting the Task Force on Emission Inventories and Projections to review them, and call upon Parties to support this work;

(l) Take note with appreciation of the further development of integrated assessment models, especially concerning the assessment of uncertainties, and call upon Parties to support the work of the Task Force on Integrated Assessment Modelling on urban air quality modelling;

(m) Approve the proposed budget of CIAM for 2002 and 2003 as set out in the report of the Task Force on Integrated Assessment Modelling (EB.AIR/GE.1/2001/3, paras. 57-58) and call upon Parties to make every effort to provide the necessary funding for the work on integrated assessment modelling to be conducted as foreseen in the work plan; and

(n) Endorse the conclusions and recommendations of the workshop on photo-oxidants, particles, and haze across the Arctic and the North Atlantic: Transport observations and models, and agree that this work should be pursued with high priority taking a hemispheric perspective in collaboration also with Asian scientists.

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

27. The Working Group on Effects held its twentieth session in Geneva from 29 to 31 August 2001 (EB.AIR/WG.1/2001/2).

28. The Working Group reviewed the results of the effect-oriented activities, as presented in the 2001 Joint Report of the International Cooperative Programmes (ICPs) and the Task Force on the Health Aspects of Air Pollution (EB.AIR/WG.1/2001/3). While noting with appreciation the substantial progress achieved in the implementation of the Convention, it stressed the importance, for the further development of the effect-oriented activities, of the active participation of all Parties to the Convention, the effective cooperation among the programmes, task forces and coordinating centres under the Working Group on Effects, and their close collaboration with EMEP, as well as the development of close links with relevant institutions and organizations outside the Convention.

29. The Working Group welcomed the progress achieved by ICP on the Assessment and Monitoring of Air Pollution Effects on Forests, in particular in level II monitoring and in assessing and interpreting its results. It took note of the summary report on monitoring forest condition in Europe (EB.AIR/WG.1/2001/6), and reports on intensive monitoring of forest ecosystems in Europe, integrative studies on forest ecosystem condition, and on atmospheric heavy metals and forest ecosystems. It also noted the progress in drafting the report on the cause-effect relationships

(in forest ecosystems) in cooperation with ICP Integrated Monitoring and in addressing the effects of ozone with ICP Vegetation.

30. The Working Group on Effects reviewed the work of ICP on the Assessment and Monitoring of Acidification of Rivers and Lakes and appreciated, in particular, the publication of its important reports on the assessment of trends and leaching of nitrogen at ICP Waters sites (EB.AIR/WG.1/2001/7), on the effect of year-to-year variations in climate on trends in acidification, and on the trends in results of intercalibration exercises in 1987-1998. The Working Group stressed the importance of continuing long-term chemical monitoring and further developing biological monitoring of surface waters. It welcomed preparations for the workshop on monitoring and biological impacts of heavy metals (March 2002, Lillehammer, Norway).

31. The Working Group welcomed the progress achieved by ICP on Effects of Air Pollution on Materials, including Historic and Cultural Monuments, in implementing the multi-pollutant exposure programme and in mapping air pollution effects on materials (EB.AIR/WG.1/2001/8). It appreciated the important results of the programme's sub-centres, as presented in technical reports No. 35-39, and the progress in the development of a database of environmental data for the multi-pollutant programme (No. 40). It noted that the chapter on the mapping of air pollution effects on materials in the Mapping Manual had been revised and recommended its region-wide application. It also stressed that further work was needed on the assessment of stock at risk in general and of cultural heritage in particular.

32. The Working Group appreciated the important results of ICP on Effects of Air Pollution on Natural Vegetation and Crops, in particular those concerning the effects of ozone on vegetation, the economic assessment of losses due to ozone, and the effects of heavy metals. It took note of the technical report on the effects of ozone on natural vegetation, including requirements for level II modelling and mapping (EB.AIR/WG.1/2001/9), and welcomed the publication of the 2001 annual status report of ICP Vegetation. The Working Group also noted the progress achieved in developing level II critical levels for ozone, in particular that in deriving critical fluxes of ozone, and in evaluating deposition of heavy metals and implementing the European moss survey.

33. The Working Group considered the recent results of ICP on Integrated Monitoring of Air Pollution Effects on Ecosystems and appreciated the progress achieved. It reviewed the ongoing, and noted the planned, activities addressing problems related to nitrogen and eutrophication, trends in pH, base cations, sulphur and nitrogen, bioindicators, dynamic modelling and the impact of climate change. It welcomed the publication of the programme's tenth annual report 2001 and took note of the progress in the assessment of recovery at selected ICP Integrated Monitoring sites. The Working Group also appreciated the results of the programme's active participation in international projects addressing global environmental issues and invited it to keep it informed of new developments.

34. The Working Group reviewed the results of ICP on Mapping Critical Levels and Loads and the Coordination Center for Effects (CCE). The Working Group welcomed the publication of the CCE status report 2001 on modelling and mapping of critical thresholds in Europe. It took note of the new European critical loads data set and maps, while noting that several Parties intended to revise further their critical loads in the coming years. It noted with appreciation the progress

achieved by the programme in updating the Mapping Manual (revising the chapter on materials and on level I critical levels for ozone), deriving critical limits for heavy metals and mapping critical loads of Pb and Cd, and in developing methodologies for dynamic modelling. The Working Group noted the need to further develop and test the methodology for mapping critical loads for heavy metals (Pb, Cd) and, to this end, invited ICP Mapping and CCE to issue, by the end of 2001, a call for relevant data to be provided by NFCs on a voluntary basis.

35. The Working Group stressed the essential importance of continuing the activities of the Joint Group of Experts on Dynamic Modelling and noted that its work greatly benefited from the active participation of experts from other programmes/subsidiary bodies under the Convention.

36. The Working Group agreed to propose to the Executive Body to change the name of the programme to: ICP on Modelling and Mapping of Critical Levels and Loads and Air Pollution Effects, Risks and Trends.

37. The Working Group noted with satisfaction the results of the Task Force on the Health Aspects of Air Pollution and expressed its appreciation to the European Centre for Environment and Health of the World Health Organization (WHO), Bonn Office, for its substantial contribution. It noted with appreciation the continuing work on the assessment of the health risks of heavy metals and persistent organic pollutants. The Working Group invited the Task Force to continue assessing the health risks of particulate matter, especially in view of developing indicators/criteria for the Task Force on Integrated Assessment Modelling.

38. The Working Group considered and amended the draft long-term strategy of the effect-oriented activities (EB.AIR/WG.1/2001/4), outlining the aims of its international scientific and research cooperation in studying and assessing the effects of air pollution within the framework of the Convention till 2010. While stressing the need for further work on risk assessment, the Working Group approved the document and decided to submit it to the Executive Body.

39. The Working Group considered the draft medium-term plan for the further development of the effect-oriented activities for 2002-2004 (EB.AIR/WG.1/2001/5), aimed at updating scientific knowledge and data on the current state and trends in the quality of the environment and on the effects of selected air pollutants. It was recognized that the draft medium-term work-plan was ambitious and demanding and that there was a need to address its consistency with the known plans of the Executive Body and its other subsidiary bodies, as well as to explore the possibilities (in particular resources) of individual programmes to implement it effectively. It was also noted that more attention should be devoted to deriving data and mapping stock at risk and that developing dynamic models, in particular for nutrient nitrogen, might require more time than anticipated in the plan. The Working Group approved in principle the draft medium-term work-plan for the further development of the effect-oriented activities as amended and decided to submit the draft to the Executive Body. It also invited delegations to provide the secretariat with their comments and additional proposals, and requested the secretariat to summarize them and to transmit them to the Bureaux of the Working Group on Effects and the Executive Body for further consideration.

40. The Working Group considered the draft outline of the report on the assessment of present air pollution effects and their recorded trends (EB.AIR/WG.1/2001/3, annex VIII), which it might wish to present to the Executive Body in 2004 as its contribution to, and technical support for, the expected review/revision of the existing protocols to the Convention. It was recognized that while such a report would provide the Executive Body with important scientific substantiation for any future reviewing of protocols, the required inputs substantially surpassed the scope of results and information which the ongoing or planned effect-oriented activities might produce by 2003-2004. Hence, the additional resources required for the preparation of such a comprehensive report could be considerable. The Working Group approved in principle the draft outline of the report (as amended) and decided to submit it as a tentative proposal to the Executive Body for information, on the understanding that future action would depend on available resources.

41. The Working Group took note of the summary report on the occurrence, movement and effects of selected heavy metals (EB.AIR/WG.1/2001/10) as amended, and requested its Bureau to synthesize and assess the reported environmental and health effects of heavy metals from long-range transport. It also invited ICPs and the Task Force on the Health Aspects of Air Pollution to publish separately their reports summarizing recent data and results and assessing new knowledge and information on heavy metals and their effects.

42. The Working Group considered in detail the report summarizing the conclusions and recommendations of the first meeting of the Expert Group on Dynamic Modelling held in October 2000 in Ystad, Sweden (EB.AIR/WG.1/2001/11), and expressed its satisfaction with the activities and the results already achieved by the Group. It stressed the importance of dynamic modelling for the work under the Convention in general and for the effect-oriented activities in particular. It welcomed the offer of Sweden to host the second meeting of the Joint Expert Group on Dynamic Modelling in November 2001.

43. The Working Group noted the important results of the meeting of the ad hoc expert group on effect-based critical limits for heavy metals, held in October 2000 in Bratislava, and welcomed the publication of its proceedings. It recognized the need to develop further effect-based approaches for heavy metals, in particular towards improving the harmonization of critical limits and transfer functions. It urged National Focal Centres (NFCs) to use the short guidance for the calculation of critical loads of Cd, Pb, and Hg, and invited ICP Mapping to assess the compatibility/comparability of national data, in view of their possible future use for preparing European maps of critical loads of heavy metals.

44. The Working Group also took note of the summary report of the workshop on chemical criteria and critical limits held in March 2001 in York, United Kingdom (EB.AIR/WG.1/2001/13), approved its conclusions and recommendations. It invited ICP Mapping to consider the need for reviewing the base cation to aluminium ratios used for calculating critical loads and for further considering biodiversity, climate and human health criteria in the critical load approach, and requested it to introduce the proposed changes and additions into the Mapping Manual.

45. The Working Group noted the substantive report on atmospheric heavy metals and forest ecosystems, reviewing the available data and current state of knowledge, and expressed its appreciation to ICP Forests for preparing and publishing the report.

46. The Working Group considered the note on financing of the effect-oriented activities (EB.AIR/WG.1/2001/14), reviewed the table showing estimated 2002 essential coordination costs of different elements of the effect-oriented activities, and noted the updated tables showing the recent development in the Trust Fund. The Working Group approved the amended note and decided to submit it to the Executive Body. It reiterated its appreciation for the essential support rendered by countries leading the programmes and/or hosting the programme centres, as well as for all other forms of additional voluntary contributions in cash or in kind, provided for the effect-oriented activities.

47. The Working Group considered the financial and budgetary matters of its designated centres (EB.AIR/WG.1/2001/14). The budget is reported in EB.AIR/2001/8.

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

(a) Take note of the report of the twentieth session of the Working Group on Effects (EB.AIR/WG.1/2001/2);

(b) Note the important results achieved by the International Cooperative Programmes and the Task Force on the Health Aspects of Air Pollution in developing further the effect-oriented activities under the Convention (EB.AIR/WG.1/2001/3);

(c) Stress again the importance of the active participation of all Parties to the Convention, the effective cooperation among the programmes, task forces and coordinating centres under the Working Group on Effects, and their close collaboration with EMEP, as well as the development of close links with relevant institutions and organizations outside the Convention;

(d) Agree to change the name of ICP on Mapping Critical Levels and Loads to ICP on Modelling and Mapping of Critical Levels and Loads and Air Pollution Effects, Risks and Trends;

(e) Take note of the long-term strategy and approve the aims of the effect-oriented activities till 2010 (EB.AIR/WG.1/2001/4);

(f) Approve (in principle) the draft medium-term plan for the further development of the effect-oriented activities for 2002-2004 (EB.AIR/WG.1/2001/5) and invite the Working Group on Effects and the Steering Body of EMEP to continue their close cooperation in implementing its priority tasks;

(g) Welcome the draft outline for the 2004 substantive report on the assessment of present air pollution effects and their recorded trends (EB.AIR/WG.1/2001/3, annex VIII), while recognizing that successful realization of this demanding task will require additional resources;

(h) Note with appreciation the further development of the Mapping Manual and the continued updating of the European critical loads data set and maps;

(i) Welcome progress in studying effects of ozone on vegetation, in determining the critical flux for effects of ozone, and in assessing economic losses due to ozone;

(j) Recognize the need to develop further effect-based approaches for heavy metals, to test the methodology for deriving national critical loads data for Pb and Cd, and to assess the compatibility/comparability of national data in view of their possible future use for preparing European maps of critical loads of heavy metals;

(k) Note the summary report on the occurrence, movement and effects of selected heavy metals (EB.AIR/WG.1/2001/10) and invite ICPs and the Task Force on the Health Aspects of Air Pollution to continue their summarizing, assessing and publishing of recent data and new knowledge and information on heavy metals and their effects;

(l) Stress again the important role of dynamic modelling in producing comprehensive information on time scales of damage and recovery, as an input to integrated assessment modelling and a contribution to risk assessment activities on the national as well as the regional scale and invite the Joint Expert Group on Dynamic Modelling to continue its activities; and

(m) Welcome the plans to publish reports on the preliminary assessment of the health risks of heavy metals and persistent organic pollutants and stress again the importance of continuing the assessment of the health risks of particulate matter, especially in view of developing indicators/criteria for the Task Force on Integrated Assessment Modelling.