UNITED NATIONS

E

Economic and Social Council

Distr.
GENERAL

ECE/EB.AIR/68
27 December 1999

Original: ENGLISH

ECONOMIC COMMISSION FOR EUROPE

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

REPORT OF THE SEVENTEENTH SESSION OF THE EXECUTIVE BODY

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Introduction

1. The seventeenth session of the Executive Body for the Convention on Long-range Transboundary Air Pollution was convened in Gothenburg (Sweden) from 29 November to 3 December 1999.

2. The meeting was attended by representatives of the following Parties to the Convention: Armenia; Austria; Belgium; Bulgaria; Canada; Croatia; Czech Republic; Denmark; Finland; France; Georgia; Germany; Hungary; Ireland; Italy; Latvia; Liechtenstein; Luxembourg; Monaco; Netherlands; Norway; Poland; Portugal; Republic of Moldova; Romania; Russian Federation; Slovakia; Slovenia; Sweden; Switzerland; the former Yugoslav Republic of Macedonia; Turkey; Ukraine; United States of America; United Kingdom; and the European Community (EC).

3. Representatives from the United Nations Environment Programme (UNEP); the World Health Organization (WHO/European Centre for Environment and Health); and the Arctic Monitoring and Assessment Programme (AMAP) also attended.

4. The Meteorological Synthesizing Centre-East (MSC-E) of EMEP was also represented.

5. Representatives of the following non-governmental organizations were present: International Institute for Applied Systems Analysis (IIASA); International Union of Producers and Distributors of Electrical Energy (UNIPEDE); Oil Companies' European Organization for Environment, Health and Safety (CONCAWE); World Conservation Union (IUCN).

6. Mr. Jan THOMPSON (Norway) chaired the meeting. Item 2 of the agenda was chaired by Mr. Kjell LARSSON, Minister for the Environment (Sweden).

I. ADOPTION OF THE AGENDA

7. The agenda, as contained in document ECE/EB.AIR/67, was adopted on the understanding that item 2 would be the subject of the Ministerial segment of the session.

II. PROTOCOL TO THE 1979 CONVENTION ON LONG-RANGE TRANSBOUNDARY AIR POLLUTION TO ABATE ACIDIFICATION, EUTROPHICATION AND GROUND-LEVEL OZONE

8. This agenda item was taken up during the session's ministerial segment, which Mr. K. LARSSON, Sweden's Minister for the Environment, chaired.

9. Mr. L. BJÖRKBOM (Sweden), Chairman of the Working Group on Strategies, introduced the draft protocol (EB.AIR/1999/1) and, on behalf of the Working Group, recommended the Executive Body to adopt it. He also introduced the

guidance documents for the protocol on best available control techniques and economic instruments (EB.AIR/1999/2) and recommended that the Executive Body should adopt them before adopting the protocol.

10. Mr. A. ELIASSEN (Norway), Ms. J. LOGAN (United States) and Mr. R. MILLS (United Kingdom) presented the Protocol's scientific basis. They highlighted the transboundary nature of the air pollution problems, pointed at the intercontinental dimension of tropospheric ozone problems, especially in the northern hemisphere, and outlined the main challenges for future air pollution policy.

11. The Executive Body formally adopted decision 1999/1 on the guidance documents on best available control techniques and economic instruments (annex I, below), and the Protocol to the 1979 Convention on Long-range Transboundary Air Pollution to Abate Acidification, Eutrophication and Ground-level Ozone, as contained in EB.AIR/1999/1, in Gothenburg (Sweden) on 30 November 1999.

12. The following Parties to the Convention signed the Protocol in Gothenburg on 1 December 1999: Armenia, Austria, Bulgaria, Canada, Croatia, Czech Republic, Denmark, Finland, France, Germany, Hungary, Ireland, Italy, Latvia, Liechtenstein, Luxembourg, Netherlands, Norway, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, United Kingdom of Great Britain and Northern Ireland, and United States of America. The delegations of Belgium, Greece, Poland and the Russian Federation indicated that they intended to sign in the near future.

13. On behalf of the Executive Body's Bureau, Mr. J. THOMPSON (Norway), Chairman of the Executive Body, introduced the draft ministerial declaration, which had been finalized at a meeting of Heads of Delegation on 30 November 1999.

14. On the occasion of the adoption of the Protocol, the Executive Secretary of ECE, Mr. Y. BERTHELOT, addressed the Meeting. He also conveyed a message from the United Nations Secretary-General, Mr. Kofi ANNAN. Mr. J. BEALE, Deputy Assistant Administrator of the United States Environmental Protection Agency, Mr. P. GANTAR, Minister for the Environment of Slovenia, Mr. L. MIKLÓS, Minister of the Environment of Slovakia, and Mr. J. PRONK, Minister for Housing, Spatial Planning and Environment of the Netherlands, delivered keynote addresses. Delegations represented at ministerial or senior official level and non-governmental organizations made statements and comments. The full text of their statements was made available to the participants during the session.

15. In his concluding remarks, the Chairman stressed, in particular, the significance of the new Gothenburg Protocol not only for the UN/ECE region but also for action in other regions and worldwide. He underlined the need for strong implementation and compliance schemes and expressed his conviction that

the new structure that the Executive Body would adopt would serve this purpose. The foundations for further developing policy, including further scientific work on air pollution effects and integrated assessment modelling, had to be laid now. It was crucial to safeguard the funding for the activities necessary to continue to involve all the skilled scientists that had already contributed so much.

16. The Executive Body adopted the Ministerial Declaration, as contained in annex II.

III. MATTERS ARISING FROM THE FIFTY-FOURTH SESSION OF THE ECONOMIC COMMISSION FOR EUROPE AND THE SIXTH SESSION OF THE COMMITTEE ON ENVIRONMENTAL POLICY

17. The Deputy Director of the Environment and Human Settlements Division, Mr. Lars NORDBERG, informed the Executive Body of the discussions held and decisions taken at the fifty-fourth session of the Economic Commission for Europe and the sixth session of the Committee on Environmental Policy of relevance to the Executive Body. He drew attention, in particular, to plans for a joint activity in 2000 among all ECE multilateral environmental agreements to seek synergies so as to improve the agreements' effectiveness and to define ways of possible cooperation. It was expected that the Executive Body, in particular through the secretariat, would be involved in this exercise, sharing its experience from 20 years of successful work to abate air pollution.

18. He also reported on the current status of ratifications of the Convention and the Protocols, noting that with the recent accession of Georgia and Monaco there were now 45 Parties to the Convention. He expressed concern over the fact that the 1998 Aarhus Protocols on Heavy Metals and on Persistent Organic Pollutants had so far been ratified only by Canada. Sixteen ratifications were necessary for the Protocols to enter into force. The Chairman also expressed concern over the slow progress and encouraged Parties to speed up their preparations for ratification.

IV. STRATEGIES AND POLICIES OF PARTIES AND SIGNATORIES TO THE CONVENTION FOR THE ABATEMENT OF AIR POLLUTION

19. The secretariat introduced the draft outline and questionnaire for the 2000 review of strategies and policies for air pollution abatement (EB.AIR/1999/3). Both the questionnaire and outline had been completely revised to reflect directly the obligations of Parties under the protocols. The questionnaire not only covered the protocols currently in force, but also the Protocols on Heavy Metals (HMs) and on Persistent Organic Pollutants (POPs). The Implementation Committee had reviewed the questionnaire and its suggestions had been incorporated into the document.

20. Delegations expressed their great satisfaction with the questionnaire and congratulated both the Implementation Committee and the secretariat for their excellent work. Some delegations proposed amendments to the outline and the questionnaire. There was some concern regarding the deadline for responding to the questionnaire. The Chairperson of the Implementation Committee, Ms. K. HILLMAN (Canada), thanked the secretariat for its excellent work. She proposed some amendments, additional text and two new questions concerning research and monitoring for section 7 (General information).

21. The following amendments were made to annex I (draft annotated outline) of document EB.AIR/1999/3:

(a) Chapter IV, section D, of the table of content should read Voluntary measures and agreements

(b) In paragraph 3 (a), delete and the region as a whole

(c) After subparagraph (a), insert a new subparagraph: To assess the progress of the region as a whole in abating air pollution; and renumber the remaining subparagraph.

22. The following amendments were made to annex II (Questionnaire for the 2000 Review) in document EB.AIR/1999/3:

(a) In paragraph 6 and question Q.0 for 15 March substitute 10 April

(b) In section 4, in the note before question Q.20 for 27 to 30 substitute 20 to 23";

(c) In section 7, add to the introductory note Parties may wish to recall that under article 4 of the Convention they have committed to exchanging information on their policies aimed at abating air pollution

(d) In section 7, in the heading ?Voluntary Agreements? and in question Q.61, after voluntary add measures and

(e) Add the following two questions to Section 7 under a new heading (Research and Monitoring):

(i) Parties are invited to provide information on research and monitoring activities undertaken pursuant to article 6 of the Protocol on Nitrogen Oxides;

(ii) Parties are invited to provide information on research and monitoring activities undertaken pursuant to article 5 of the VOC Protocol;

(f) In question Q.31, for Should this be the case, please describe the strategies and any progress made substitute Should this be the case, please document the strategies applied and their compliance with article 3, paragraph 2 (d)

(g) In question Q.44, for Should this be the case, please describe the strategies and any progress made substitute Should this be the case, please document the strategies applied and their compliance with article 3, paragraph 5 (b)(iv)

23. The Executive Body:

(a) Adopted the outline and questionnaire as amended;

(b) Set 10 April 2000 as the deadline for Parties to respond to the questionnaire;

(c) Decided to request Parties to respond to all sections of the questionnaire as amended; and

(d) Requested the secretariat to circulate the questionnaire as amended to all Parties as soon as possible but no later than early January 2000.

V. ACTIVITIES OF THE WORKING GROUP ON STRATEGIES

24. Mr. L. BJÖRKBOM (Sweden), Chairman of the Working Group on Strategies, introduced the reports of the twenty-eighth, twenty-ninth, thirtieth and thirty-first sessions of the Working Group (EB.AIR/WG.5/58, 60, 62 and 64).

25. He drew the attention of the Executive Body to the results of the work undertaken in response to the request made by the Executive Body in decision 1998/5 (ECE/EB.AIR/59, annex I) concerning the review foreseen under article 8 of the Oslo Protocol on Further Reduction of Sulphur Emissions. This work had been accomplished with the support of the Implementation Committee and input from the Chairman and the Bureau of the Working Group on Effects and the Chairman of the EMEP Steering Body. On the basis of the information received, the Working Group had recommended that the review conducted in the context of the preparations of the Protocol to Abate Acidification, Eutrophication and Ground-level Ozone could serve the purpose of article 8 of the Oslo Protocol. The Chairman noted that the new Protocol´s emission ceilings could be taken to indicate that Parties whose sulphur emission ceilings in annex II to the Oslo Protocol did not conform to the calculated and internationally optimized allocations of emission reductions had made every effort to undertake revised obligations, in line with paragraph 2 (c) of article 8 of the Oslo Protocol.

26. Finally, Mr. Björkbom drew the attention of the Executive Body to the important discussion on further work on integrated assessment modelling. The

Working Group on Strategies had not found the time to discuss this issue at its thirty-first session. He, therefore, recommended the Executive Body to take into account the report of the Task Force on Integrated Assessment Modelling (EB.AIR/WG.5/1999/14, chapter IV) when it discussed the further work on integrated assessment modelling under agenda item 9.

27. The Executive Body:

(a) Took note of the reports of the twenty-eighth, twenty-ninth, thirtieth and thirty-first sessions of the Working Group (EB.AIR/WG.5/58, 60, 62 and 64), expressing its great appreciation to the Working Group for the work accomplished and to Mr. Björkbom for his able and energetic leadership;

(b) Agreed that, in the preparations for the Gothenburg Protocol, those Parties whose sulphur emission ceilings in annex II to the Oslo Protocol did not conform to the calculated and internationally optimized allocations of emission reductions had made every effort to undertake revised obligations, in line with paragraph 2 (c) of article 8 of the Oslo Protocol, and that it could therefore consider the first review of the Oslo Protocol, in line with its article 8, as completed.

VI. IMPLEMENTATION COMMITTEE

28. Ms. K. HILLMAN (Canada), Chairperson of the Implementation Committee, presented the second report of the Committee (EB.AIR/1999/4), including the results of its third and fourth meetings. The Committee had reviewed the final version of the 1998 Major Review on Strategies and Policies for Air Pollution Abatement and drawn a number of conclusions. It had also exchanged views with experts from EMEP on the reporting of emission data. Ms. Hillman stressed that, besides the results presented in the report, this first contact had provided a useful basis for further work and the Implementation Committee would be pleased to accept the invitation of the Task Force on Emission Inventories. In the light of the information received by experts, the Committee had drafted a set of questions concerning emission data that it recommended to be annexed to emission data requests in the future. Ms. Hillman explained that, for its 2000 work plan, the Committee had suggested, inter alia, to carry out an in-depth review of compliance by Parties with the 1985 Sulphur and the 1988 NOx Protocols, which, if adopted by the Executive Body, would lead the Committee for the first time to work under paragraph 3(d) of its functions, as set out in the annex to Executive Body decision 1997/2. Finally, Ms. Hillman informed the Executive Body that she was not able to continue to work on the Implementation Committee and that Mr. B. BRIX had also informed her that he could not fulfil his second year on the Committee.

29. Several delegations stated that they attached great importance to the work of the Implementation Committee and congratulated the Committee for its good work. The Chairman of the EMEP Steering Body stressed the usefulness of the close cooperation between EMEP and the Implementation Committee.

30. The delegation of France informed the Executive Body that it wished to give its full support to the work of the Committee, and this included the provision of complete and accurate reports. It would examine the reasons for gaps in past reporting and improve the situation in the future. The delegation of the European Community explained that it could only report emission data once it had received reports from all its members States. It would increase its efforts to ensure that its member States would provide the information necessary for it to comply with the reporting requirements.

31. In the light of the discussion the Executive Body:

(a) Took note of the second report by the Implementation Committee (EB.AIR/1999/4), expressing its great appreciation to the members of the Committee and, especially, its Chairperson for their good work;

(b) Stressed the great importance of good reporting both on strategies and policies and on emissions, and urged Parties to present reports that were complete and on time;

(c) Noting that Ms. Nataly KARPOVA (Russian Federation) and Mr. David van HOOGSTRATEN (United States) remained on the Committee for another year, re-elected to the Implementation Committee for a second term of two years:

- Mr. Harald DOVLAND (Norway);
- Mr. Ramón GUARDANS (Spain);
- Mr. Dieter JOST (Germany); and
- Mr. Patrick SZELL (United Kingdom),

elected as new members, for two years:

- Mr. Tuomas KUOKKANEN (Finland);
- Mr. Ivan MOJIK (Slovakia); and
- Mr. Masud HUSAIN (Canada),

and elected Mr. Szell Chairman of the Committee.

VII. FUTURE ORGANIZATION OF WORK

32. Mr. J. BEALE (United States) introduced the proposal on the future organization of work (EB.AIR/1999/5) on behalf of the Executive Body’s Bureau. He reminded delegations that the proposal had been prepared to serve the future priorities set by the Executive Body at its fifteenth session and taking into account the discussion at its sixteenth session.

33. Several delegations questioned whether the new structure provided a sufficient link between the different bodies, in particular between the work of the Working Group on Strategies and Review and the Task Force on Integrated Assessment Modelling and its centre. Many delegations noted the need for

flexible management to allow the most efficient organization of work. Some delegations also stressed that no expert body should be singled out, as any one of them may become important to the work of the Working Group on Strategies and Review at some point in time.

34. The delegation of the Netherlands announced that it was ready to lead a new ad hoc expert group on persistent organic pollutants (POPs) to produce a state-of-the-art report on substances already included in the Protocols and candidate substances for future inclusion. The expert group would be the first ad hoc group to be placed under the Working Group on Strategies and Review.

35. The delegation of France announced that it was ready to lead an ad hoc expert group on abatement options and their costs to complete the work that had started on the development of techno-economic databases to be used for integrated assessment modelling. It would present a detailed work plan under agenda item 9.

36. The delegation of the United Kingdom announced that it was ready to continue to lead an ad hoc expert group on economic benefits and instruments to be chaired by Mr. David PEARCE. This group would build on the work of the former Task Force on Economic Aspects of Abatement Strategies and organize a series of workshops, starting with workshops on health benefits, in the autumn of 2000, on ecosystem benefits and on economic instruments for transboundary air pollution.

37. Several delegations welcomed these initiatives and stressed the importance of the proposed work. Doubts were raised, however, about whether the Executive Body should expect the Working Group on Strategies and Review to set up ad hoc expert groups before it had even started to operate. Moreover, it was proposed that the work on abatement options and their costs should be linked directly to the Task Force on Integrated Assessment Modelling.

38. The delegation of Canada expressed its support for the expert work on POPs and announced that it would be ready to host a follow-up workshop to the one scheduled to take place in the Netherlands. It also suggested examining the usefulness of establishing an expert group to peruse the interaction between trade and environment policy.

39. On the basis of this discussion, the Executive Body:

(a) Adopted decision 1999/2 concerning the structure and organization of work (annex III), to take effect as of 1 January 2000;

(b) Thanked the delegations for their offers and decided to establish under the Working Group on Strategies and Review:

- An ad hoc expert group on the assessment of persistent organic pollutants (POPs) to be led by the Netherlands; and

- An ad hoc expert group on abatement options and their costs to be led by France; and

- A work element on economic assessment of benefits to cover in 2000 the workshop on health benefits to be organized by the United Kingdom,

while requesting the Working Group on Strategies to review this set-up with a view to finding the most effective way to organize the work.

40. It was the understanding of delegations that the new organization of work would give the Working Group on Strategies and Review the possibility of directly requesting expert groups and centres under the Working Group on Effects and the EMEP Steering Body, in particular the Task Force on Integrated Assessment Modelling, to carry out specific tasks. In drafting the work plans for the expert groups and centres, the Working Group on Effects and the EMEP Steering Body would closely cooperate with the Working Group on Strategies and Review and the Implementation Committee to take due account of their requirements.

VIII. PROGRESS IN SELECTED AREAS OF COOPERATION

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

41. Mr. M. WILLIAMS (United Kingdom), Chairman of the EMEP Steering Body, introduced the report of its twenty-third session (EB.AIR/GE.1/1999/2). The session had been devoted to the further consideration of the EMEP strategic goals, the Steering Body's mandate and the future role and challenges foreseen for EMEP under the new organization from 2000 onwards. EMEP would continue to play a key role in providing scientific support to the Convention.

42. The draft strategy paper also considered increasing scientific contributions from Parties to EMEP and intensifying cooperation between EMEP and other relevant international organizations and programmes. This, as well as other strategic issues, had been further considered in the EMEP/WMO Workshop on Data Analysis and Interpretation in Dubrovnik (Croatia) on 4-8 October 1999 and would be taken into account in the finalization of the document for 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, had already been included in the work-plan for 2000.

43. Mr. Williams also reported on the progress in modelling and monitoring acidifying pollutants, photochemical oxidants, heavy metals (HMs) and persistent organic pollutants (POPs). For the first time, the three EMEP centres had prepared joint analytical reports covering both measurements and modelling results in these areas. A huge amount of country-specific information was currently available on the EMEP homepage (http://www.emep.int). MSC-W had, for the first time, used the Eulerian acid deposition model to update estimates of air concentrations and depositions of sulphur and nitrogen and to quantify their transboundary transport. In modelling photo-oxidants and acidifying pollutants, MSC-W had closely cooperated with IIASA to provide scientific input to the Protocol's negotiations. Important work had also been done on coupled hemispheric – European-scale photo-oxidant modelling. Mr. Williams drew the Executive Body's attention to the lack of HM and POP monitoring data. Measurement results would be necessary for the further development of the models at the Meteorological Synthesizing Centre-East (MSC-E) . HMs and POPs had been further considered at the EMEP/WMO/UNEP workshop in Geneva on 16-19 November 1999.

44. Concerning emission inventories, the Steering Body had taken a firm decision to extend reporting on SNAP level 2 at the latest when reporting data for 1999 (by the end of 2000). The emission reporting "guidelines" were under further revision. Updated emission data tables and figures had been distributed in advance to the Executive Body.

45. Mr. Williams welcomed the publication of the report of the joint Task Force (with WHO) on the Health Aspects of Air Pollution. Furthermore, he reported on the main conclusions and recommendations from the successful EMEP/WMO workshop on fine particulates in Interlaken (Switzerland) on 21-25 November 1999. The Steering Body would formally consider the recommendations in 2000. However, to speed up the start of the work, in particular on emissions inventories, some of the workshop's recommendations were proposed to be taken into account already in the work-plan for 2000.

46. In the ensuing discussion, several delegates noted with appreciation the excellent work done by EMEP. The representative of the European Community thanked EMEP, and in particular MSC-W, for its very valuable contributions to the preparation of the European Commission's proposal on the national emission ceilings directive. He also welcomed the emission reporting on SNAP level 2 and the recommendations to start work on fine particulates swiftly. The representative of the World Health Organization also thanked EMEP for its input to the Task Force on the Health Aspects of Air Pollution concerning fine particles. The representative of the European Community promised to take active steps to support the development of emission inventories of fine particulates and to consider, in coordination with the European Environment Agency, ways of funding these activities starting in 2000. The Chairman welcomed the European Community's promise to consider providing financial support for the work on emission inventories of fine particulates. The

representative of the Russian Federation proposed that MSC-W should make parallel model runs with the Lagrangian and the Eulerian models. Several delegations requested EMEP and the Implementation Committee to consider further the reporting requirements under the POPs Protocol, in particular for POPs for which products - not emissions - were regulated.

47. As a result of the discussion, the Executive Body:

(a) Took note of the report on the twenty-third session of the Steering Body (EB.AIR/GE.1/1999/2);

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

(c) Took note of the emission data and other significant related information presented in document EB.AIR/GE.1/1999/6 and its update, and reminded 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) Requested the Steering Body to finalize the emission reporting "guidelines" (draft reporting procedure EB.AIR/GE.1/1997/5) for adoption at the eighteenth session of the Executive Body;

(e) Having decided to set up the 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, welcomed Austria's offer to lead this Task Force and the WMO offer to co-chair it;

(f) Drew 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) Encouraged 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.

B. Effects of major air pollutants on human health and the environment

48. Mr. K. BULL (United Kingdom), Chairman of the Working Group on Effects, introduced the report on its eighteenth session (EB.AIR/WG.1/1999/2) and reviewed the most important recent results achieved by the Working Group on

Effects, the International Cooperative Programmes (ICPs), the Mapping Programme and the Task Force on the Health Aspects of Air Pollution.

49. He noted, in particular:

(a) The results of the external review, confirming the effectiveness and relevance of all international cooperative programmes and the high quality of their scientific activities;

(b) The substantial contribution of the Mapping Programme to the preparation of the new Protocol and the need for further expanding activities on (i) dynamic modelling; (ii) critical load exceedances and violation of criteria; and (iii) uncertainties. A change of name to “International Cooperative Programme on Mapping” would be more appropriate in view of the programme’s broader activities and close links with other groups under the Convention;

(c) That the development and broadening of ICP Crops activities, especially on level II, would be better reflected by changing its name to “ICP on Effects of Air Pollution on Natural Vegetation and Crops (ICP Vegetation)”;

(d) The further strengthening of collaboration among ICPs (e.g. in preparing the workshop on mapping air pollution effects on materials, including stock at risk, and the meeting of the expert group on dynamic modelling);

(e) The important work of the European Centre for Environment and Health of WHO in leading the Task Force and reviewing knowledge on possible health effects of selected pollutants;

(f) The importance of the work carried out by National Focal Centres (NFCs), the support provided by lead countries and coordinating centres and the need for further measures to ensure more stable, long-term funding of the effect-oriented activities.

50. In the ensuing discussion, a number of delegations expressed their satisfaction with the continuing development of activities and impressive results of the Working Group on Effects.

51. They also underlined:

(a) The need for more advanced planning of the effect-oriented activities, which should include, inter alia, the health effects of particulate matter, studies on heavy metals and POPs, and the impact of air pollution on cultural heritage;

(b) The importance of monitoring and dynamic modelling of recovery;

(c) The need for the continuing assessment of actual damage observed in the environment;

(d) The importance of further studies on uncertainties;

(e) The substantial contribution of the Mapping Programme, which went far beyond the mere production of maps, and suggested that this should be reflected in its name; and

(f) The essential need for a stable, long-term financing mechanism.

52. The Executive Body:

(a) Took note of the report of the eighteenth session of the Working Group on Effects (EB.AIR/WG.1/1999/2);

(b) Took note of the summarized conclusions and recommendations of the external review of the effect-oriented activities (EB.AIR/WG.1/1999/3, chap. III) and noted that the reviewer recognized the successful implementation of the programmes and their high scientific value;

(c) Took note of the important results of the International Cooperative Programmes, the Mapping Programme and the Task Force on the Health Aspects of Air Pollution in implementing the Convention (EB.AIR/WG.1/1999/4) and their contribution to the preparation of the new Protocol to Abate Acidification, Eutrophication and Ground-level Ozone.

(d) Stressed again the importance of the work carried out by the National Focal Centres and the programme coordinating centres and of the support provided by the lead countries;

(e) Agreed to change the name of ICP Crops to ICP on Effects of Air Pollution on Natural Vegetation and Crops (short name: ICP Vegetation);

(f) Decided to establish the ICP on Mapping Critical Levels and Loads with the programme task force led by Germany and the scientific and technical support provided by the Coordination Center for Effects (CCE) in Bilthoven, Netherlands;

(g) Noted the impressive results of the Task Force on the Health Aspects of Air Pollution, expressed its appreciation to the European Centre for Environment and Health of WHO (WHO/ECEH) for its important coordinating role, agreed that a study on the possible health effects of heavy metals should be a short-term priority but that preparations for addressing the health effects of POPs should also be started, and reiterated the invitation to all interested countries to nominate experts and actively participate in the work of the Task Force;

(h) Welcomed the publication of the substantial report on trends in the impacts of long-range transboundary air pollution and took note of its executive summary (EB.AIR/WG.1/1999/10);

(i) Welcomed the publication of the report on the preliminary assessment of the health risk from particulate matter from long-range transboundary air pollution, took note of its executive summary (EB.AIR/WG.1/1999/11), and noted the significant health risk associated with the long-range transport of fine particulates;

(j) Noted the important results of the Workshop on critical levels for ozone - level II (EB.AIR/WG.1/1999/12);

(k) Approved the note on the future priorities and objectives of the effect-oriented activities (EB.AIR/WG.1/1999/3);

(l) Noted document EB.AIR/WG.1/1999/13 on the financing of the effect-oriented activities, stressed again the need for their adequate financing at the national and international level, welcomed voluntary contributions for 1999 already made by several Parties and invited other Parties to explore possibilities for contributing to the Trust Fund, using the indicative scale provided in document EB.AIR/WG.5/46, annex I.

C. Technologies for emission control

53. Mr. L. LINDAU (Sweden), Chairman of the Working Group on Abatement Techniques, introduced the report on its seventh session (EB.AIR/WG.6/1999/2). In particular, he reported on input to the negotiation of the Protocol to Abate Acidification, Eutrophication and Ground-level Ozone with a view to preparing annexes on limit values and guidance documents on abatement techniques for VOCs, NOx and ammonia emissions from stationary and mobile sources, including agriculture. These had been developed by the Task Forces on the Assessment of Abatement Options/Techniques for VOCs and NOx led by Germany, the expert group on ammonia led by the United Kingdom, and the secretariat assisted by another expert group on mobile sources. He informed the Executive Body that the background documents on limit values (LVs) and best available technology (BAT) for NOx and VOCs were now available on CD-ROM and would be circulated to the delegations by the lead country shortly.

54. The Chairman of the Working Group also took the opportunity to review briefly its history and its past achievements and those of its predecessors, in particular the preparation of the technical annexes to the control protocols and the organization of a series of seminars and workshops leading to an exchange of information on techniques to prevent and reduce emissions of pollutants. He thanked all Parties that actively participated in the technology-related work-plan elements, and particularly Germany, for their valuable contributions. He praised Mr. O. Rentz, the Chairman of the Task Forces, for his personal effort and efficient leadership. Looking to the

future, Mr. L. Lindau mentioned the necessity to continue the work on ammonia abatement, following the outcome of the workshop held in Bratislava (Slovakia). He pointed out the progress on the management of by-products containing heavy metals and persistent organic pollutants (POPs) and the follow-up to the workshop on techno-economic databases on production processes and related emission abatement options held recently in Angers (France). He also referred to the need to continue this work in an ad hoc expert group on abatement options and their costs.

55. Several delegations expressed their gratitude to the Working Group and its Task Forces and expert groups for their contribution not only to the Gothenburg Protocol, but also to the other control protocols to the Convention, and recommended that the work on techniques and their cost calculations should be continued in a more flexible way, e.g. via ad hoc expert groups, under the new structure of the Executive Body and in closer cooperation with the IPPC Bureau in Seville (Spain). They also thanked the contributing Parties, particularly Germany, and the long-time Chairman of different task forces, Mr. O. Rentz, as well as the secretariat for their efforts.

56. The Executive Body:

(a) Took note of the report on the seventh session of the Working Group on Abatement Techniques (EB.AIR/WG.6/1999/2);

(b) Took note of the final results of the Task Forces on the Assessment of Abatement Options/Techniques for Volatile Organic Compounds (EB.AIR/WG.6/1999/3 and background documents on BAT and LVs) and NOx (EB.AIR/WG.6/1999/4 and background documents on BAT and LVs), both led by Germany, and welcomed the publication of the final versions of the background documents in CD-ROM form;

(c) Endorsed the conclusions and recommendations of the Workshop on ammonia abatement from agriculture (EB.AIR/WG.6/1999/6) in relation to future ammonia-related work under the Convention and requested the expert group on ammonia abatement, led by the United Kingdom, to prepare a framework code of good agricultural practice and address the uncertainties raised during the Workshop within its scope of competence;

(d) Took note of the progress report by the Task Force on the Management of By-products containing Heavy Metals or Persistent Organic Pollutants (EB.AIR/WG.6/1999/7) and invited more Parties to participate in its activities;

(e) Invited Parties to organize further workshops and seminars related to the future activities on abatement options/techniques, in consultation with the Bureau of the Executive Body, the Working Group on Strategies and Review and the secretariat.

IX. WORK-PLAN

57. The secretariat introduced the draft work-plan for the implementation of the Convention (EB.AIR/1999/7 and Add.1), amended to reflect the discussion and the decisions that the Executive Body had taken earlier in the session, and a tentative list of meetings for 2000.

58. The Executive Body invited Parties to nominate more generalists to their delegations to the EMEP Steering Body, in accordance with its new mandate.

59. The Executive Body requested the Bureau of the EMEP Steering Body to examine whether the measurements and reporting of Parties on heavy metals and POPs and the subsequent compilation of data and calculations by the EMEP Centres were consistent with the requirements of the Protocols. The EMEP Steering Body was invited to present its findings with appropriate recommendations at the eighteenth session of the Executive Body.

60. The Chairman stressed the need for closer cooperation with the European Commission to improve the efficiency of the work and take full advantage of possible synergies.

61. In concluding the discussion on funding issues, the Executive Body requested its Bureau to prepare, in collaboration with the secretariat and in consultation with the Parties, a specific proposal for a stable, long-term funding mechanism for consideration at its eighteenth session. The draft proposal would be submitted by the Bureau of the Executive Body for preliminary consideration to the Working Group on Strategies and Review at its thirty-second session. The Executive Body welcomed the offer of Canada to provide an unofficial translation of the draft proposal into French and Russian.

62. The Executive Body adopted its work-plan for 2000 as annexed below (annex IV).

63. The Executive Body tentatively scheduled its eighteenth session from 4 to 7 December 2000. A provisional list of meetings for 2000 is annexed below (annex V).

X. ACTIVITIES OF ECE BODIES AND INTERNATIONAL ORGANIZATIONS RELEVANT TO THE CONVENTION

64. The secretariat informed the Executive Body about the ongoing activities of the principal subsidiary bodies of ECE that were relevant to its work-plan, in particular those of the Committee on Sustainable Energy, the ECE/FAO Temperate and Boreal Forest Resource Assessment 2000 and the Inland Transport Committee. Information about the most relevant activities of other international organizations, particularly the International Civil Aviation

Organization (ICAO) and the International Maritime Organization (IMO), had been submitted to the secretariat and was made available to the Executive Body as received.

65. The representatives of the Arctic Monitoring and Assessment Programme (AMAP) and of the United Nations Environment Programme (UNEP) reported on their activities related to the work-plan under the Convention and made information material available. Also available was information from the World Health Organization (WHO/ECEH) on its work related to the assessment of the health effects of air pollution in Europe.

66. The Executive Body expressed its gratitude for the information provided and its wish to further strengthen ties with other international organizations of relevance to its work-plan.

XI. FINANCIAL ISSUES

67. The secretariat introduced document EB.AIR/1999/8 on the financial requirements for the implementation of EMEP. In particular, it drew the attention of the Executive Body to the positive development in the payment of the arrears up to 1998 to the Trust Fund and to the somewhat less positive status of the 1999 mandatory contributions, which meant that the secretariat had not been able to pay the EMEP centres the 1999 budgeted contributions in full by December 1999. The secretariat also reported on Ukraine´s intention to cover its arrears in kind for 1992-1994 and 1996-1998. From 1999 Ukraine would pay its contributions to the Trust Fund. Thereafter, Belarus would be the only Party that would contribute in kind to MSC-E.

68. At its twenty-third session, the Steering Body had prepared a detailed budget proposal for 2000. Its structure followed the new problem-oriented approach of the work programme, which had first been applied in 1999. The Steering Body had decided to add a budget line for cooperation with national programmes.

69. As requested by the Executive Body at its sixteenth session, the Steering Body and its Bureau had analysed the total EMEP budget and considered, in particular, the feasibility of fixing the mandatory contributions for a three-year period, starting from 2001. According to the official procedure, the Committee on Contributions in New York would prepare a draft proposal for the United Nations scales of assessments for the three-year period 2001-2003, by June/July 2000. The final figures would therefore not be available before the end of 2000, when the General Assembly adopted them. Consequently, in response to the Executive Body´s request, the Steering Body decided to propose that the Executive Body should set the total EMEP budgets from 2001 to 2003 at the same level as in 2000 (that is, US$ 2,040,495), and calculate the mandatory contributions in United States dollars according to the 2000 scale of assessments for the three years.

70. In the ensuing discussion, several delegations welcomed the Steering Body´s proposal to fix the total annual EMEP budget for the three-year period 2001-2003. They also emphasized the need to ensure stable, long-term funding for all core activities under the Convention, as also recognized in paragraph 10 of the Gothenburg Ministerial Declaration. A number of delegations particularly referred to the needs of integrated assessment modelling and the current financial situation of the Coordination Center for Effects and the WHO European Centre for Environment and Health, as well as to the importance of these activities for the effective implementation of the Convention.

71. Canada announced its intention to continue to support specific work elements under the Convention in a voluntary manner. The representative of the European Community announced that the European Commission intended to continue supporting effect-related work under the Convention and, next year, also work on heavy metals and persistent organic pollutants.

72. Germany reserved its position on its 2000 mandatory contribution, as it had earlier reserved its position on its 1999 contribution, calculated on the basis of the United Nations scales of assessments for these years, which had led to a steep increase in Germany's contributions to EMEP. The delegation of Germany repeated that it did not find the use of this scale appropriate for calculating the EMEP contributions and that it would submit a formal statement on this matter to the Executive Secretary of ECE shortly. In 1999, Germany had paid US$ 398,114 to the Trust Fund, i.e. 85% of the expected amount calculated on the basis of the 1999 scale.

73. The Executive Body:

(a) Decided on the detailed use of resources in 2000 as proposed in table 3 of document EB.AIR/1999/8, changing the first budget line to "Acid deposition and eutrophication";

(b) Decided to set the total EMEP budgets from 2001 to 2003 at the same level as in 2000 (US$ 2,040,495) and to calculate the mandatory contributions for these years in United States dollars according to the 2000 United Nations scale of assessments;

(c) Requested the Steering Body, with the assistance of its Bureau, to consider further the details of the 2001 budget together with the work-plan for approval by the Executive Body at its eighteenth session;

(d) Welcomed, in particular, the payment to the Trust Fund of Italy's arrears from 1992 to 1998 and Ukraine's intention to pay its arrears from 1992 to 1998 in kind. This meant that only two Parties (Bosnia and Herzegovina, and Yugoslavia) remained in arrears up to 1998;

(e) Requested the Parties that had not yet paid their 1999 mandatory contributions in cash to the Trust Fund to do so urgently and, in 2000, pay

their mandatory contributions in February/March according to the procedure that would be explained in a circular letter by the secretariat;

(f) Welcomed the progress in developing procedures and methods to budget and monitor the EMEP Centres' use of resources and requested the Steering Body, with the assistance of its Bureau and the secretariat and in consultation with the United Nations auditors, to continue this work as decided at the Steering Body's twenty-first session and report to the Executive Body at its eighteenth session.

74. Furthermore, the Executive Body:

(a) Again stressed the need to establish a stable, long-term financial mechanism for the core activities under the Convention, including, besides EMEP, the effect-oriented activities and integrated assessment modelling, and requested its Bureau to prepare a specific proposal for consideration at its eighteenth session;

(b) Welcomed the voluntary contributions made to the Trust Fund in 1999 and invited other Parties to explore possibilities for making pledges for 2000, using the indicative scale of contributions annexed to the report of the twenty-second session of the Working Group on Strategies (EB.AIR/WG.5/46, annex I).

Voluntary contributions in US dollars should be sent to:

Account Number:	001-1-508629
Bank Name:	Chase Manhattan Bank, New York
Account Title:	UNOG General Fund
General Ledger:	UN-0503456 (for UNOG/Finance reference only)
Address:	International Agencies Branch 270 Park Avenue, 43rd Floor New York, N.Y. 10017, USA
ABA:	021000021 (US Banking Code)
Reference:	Trust Fund for the Implementation of the Convention, Sub-account for Voluntary Contributions towards Funding of Effect-oriented Activities under the Convention, Allotment account No.: LUC-25-270

Voluntary contributions in other currencies (except US dollars) should be sent to:

Account Number:	240-CO-590,160.0
Bank Name:	UBS S.A.
Account Title:	UNOG General Fund
Bank Address:	2, rue de la Confédération Case postale 2770 1211 Geneva 2

Switzerland
Bank Swift Code: UBSWCHZH12A

Reference: Trust Fund for the Implementation of the Convention, Sub-account for Voluntary Contributions towards Funding of Effect-oriented Activities under the Convention, Allotment account No.: LUC-25-270

These contributions should clearly indicate the year for which they are made and the specific programme/coordinating centre, if applicable.

Alternatively, contributions may also be made by cheque made payable to "UN Economic Commission for Europe", clearly earmarked as indicated above and addressed to:

Administrative and Conference Service Unit (Office 333)
Office of the Executive Secretary
Economic Commission for Europe
Palais des Nations
1211 Geneva 10

Whatever the method of payment, a communication should be sent to UN/ECE, specifying the amount contributed, the date and purpose of the payment.

XII. OTHER BUSINESS

75. The Swedish delegation informed the Executive Body about the sixth International Conference on Acidic Deposition “Acid Rain 2000", which would take place in Tokyo (Japan) from 10 to 16 December 2000.

76. The secretariat reported on progress in the UN/ECE work on transport and the environment. The Committee on Environmental Policy and the Inland Transport Committee had continued their joint work to implement the decisions adopted at the Ministerial Conference on Transport and the Environment in Vienna in 1997. The Joint Meeting on Transport and the Environment, set up to coordinate the implementation of the Programme of Joint Action, had held its second meeting in July 1999 and examined the progress reports by lead actors and national focal points responsible for the implementation of the international and national activities, respectively. It had requested the secretariat to organize a meeting of the lead actors, national focal points and other experts, inter alia, to set priorities and develop a work plan for the Programme of Joint Action. This meeting would take place on 7-9 February 2000. Further information was available on the Internet at www.unece.org/poja

77. The Charter on Transport, Environment and Health, which had been adopted during the Third Ministerial Conference on Environment and Health in London, 16-18 June 1999, called on WHO and UN/ECE, jointly and in cooperation with other international organizations, to provide an overview of relevant existing

agreements and legal instruments on transport, environment and health with a view to improving and harmonizing their implementation and further developing them as needed. This would also cover the Convention on Long-range Transboundary Air Pollution and its Protocols. A report on this overview should be submitted at the latest by spring 2000 and recommend which further steps would be needed. The report should also examine the possibility of new non-legally binding actions and the feasibility, necessity and content of a new legally binding instrument (e.g. a convention on transport, environment and health), focusing on adding value to, and avoiding overlaps with, existing agreements. As a first step, the UN/ECE and WHO secretariats were preparing an inventory of all relevant multilateral agreements and legal instruments to be completed by January 2000.

78. The delegation of the Russian Federation raised some questions concerning the adoption of the annual report of the Steering Body of EMEP and whether the body could meet more than once a year. The delegation felt it would be more appropriate if the annual report was adopted at the end of a session rather than the following year. The Chairman of the Executive Body requested the secretariat to bring this issue to the attention of the Steering Body and its Chairman to clarify the matter and to find an appropriate solution.

XIII. ELECTION OF OFFICERS

79. Mr. J. Thompson (Norway) was re-elected as Chairman; Messrs. R. Ballaman (Switzerland), K. Bull (United Kingdom), S. Hart (Canada), D. Hrcek (Slovenia), L. Lindau (Sweden), P. Széll (United Kingdom) and M. Williams (United Kingdom) were elected as Vice-Chairmen. The Executive Body also elected Mr. R. Ballaman as Chairman of the Working Group on Strategies and Review.

XIV. ADOPTION OF THE REPORT

80. On 3 December 1999 the Executive Body adopted the report of its seventeenth session for general distribution.

Annex I

DECISION 1999/1 ON THE GUIDANCE DOCUMENTS FOR THE PROTOCOL TO ABATE ACIDIFICATION, EUTROPHICATION AND GROUND-LEVEL OZONE

The Executive Body adopts, with reference to article 3, paragraphs 6 and 8 (b), and article 6, paragraph 1 (f) and (g), of the draft Protocol to Abate Acidification, Eutrophication and Ground-level Ozone the guidance documents as presented in document EB.AIR/1999/2 on:

(a) Control techniques for emissions of sulphur from stationary sources;

(b) Control techniques for emissions of nitrogen oxides from stationary sources;

(c) Control techniques for emissions of volatile organic compounds (VOCs) from stationary sources;

(d) Control techniques for selected mobile sources;

(e) Control techniques for preventing and abating emissions of ammonia; and

(f) Economic instruments to reduce nitrogen oxides, sulphur, volatile organic compounds and ammonia.

Annex II

GOTHENBURG MINISTERIAL DECLARATION
1 December 1999

We, the Ministers and Senior Officials for the Environment from UN/ECE countries and the European Community, attending the Gothenburg meeting as Parties to the Convention on Long-range Transboundary Air Pollution:

1. Acknowledge the Convention on Long-range Transboundary Air Pollution as an outstanding example of intergovernmental cooperation: it has created an effective framework for gradually reducing the damage caused by air pollution to human health, the environment and the economy in the UN/ECE region and in its first 20 years has substantially contributed to the advancement of international environmental law through the progressive development of protocols covering the major airborne pollutants that affect our region;

2. Express satisfaction that our joint efforts to combat acid rain are yielding tangible results, yet note with serious concern that air pollutants are still transported in large quantities across borders, causing widespread harm to human health and damage to ecosystems and natural resources of major environmental and economic importance;

3. Are determined to intensify our efforts to protect human health and to respond adequately to the new environmental challenges and are keenly aware that future policies must include changes in patterns of production and consumption, bearing in mind that environmental policies may also have positive effects on long-term economic activity and employment;

4. Believe that the Protocol that is opened for signature today breaks new ground by:

- Creating a comprehensive effect-based instrument whose application and progressive extension can reduce emissions to sustainable levels;

- Addressing several effects and several pollutants simultaneously; and

- Providing for cost-effective emission reductions to reach environmental goals;

5. Bear in mind that reducing the emissions of sulphur, nitrogen and volatile organic compounds helps to curb the emission of other pollutants, including transboundary particulate aerosols, which contribute to human health effects, and also that the measures taken under the United Nations Framework

Convention on Climate Change and those taken under the new Gothenburg Protocol will reinforce each other;

6. Encourage all Parties to sign the present Protocol and urge all Signatories to ratify it without undue delay, to try to apply it even before it comes into force and, wherever possible, to take even more stringent measures than those it lays down;

7. Are mindful of the substantial efforts that we will have to make to meet our obligations under this new Protocol and call upon Parties to the Convention and international financial institutions to support its implementation through bilateral and multilateral assistance to Parties with economies in transition;

8. Support the Convention's priorities of work, as outlined by the Executive Body, focusing on implementation and compliance as well as on reviewing and extending existing Protocols, and welcome the Convention's new organizational structure;

9. Are determined to consolidate and strengthen the international scientific, economic and technological basis for further reducing transboundary air pollution, fully recognizing that it is essential to sustain the networks and capacities of the scientists and experts who provide the foundation for such action;

10. Recognize that the Convention's core activities require adequate funding if the Protocols are to be implemented effectively and cost-optimal abatement measures further developed, and to this end request the Executive Body to prepare a stable, long-term funding arrangement, preserving the possibilities for contributing in kind, that includes the international coordination of health and ecosystem effect-related activities and integrated assessment modelling, for instance by appropriately extending the EMEP Protocol;

11. Are determined to address the emissions of air pollutants from ships and aircraft and direct the Executive Body to work with the International Maritime Organization, the International Civil Aviation Organization and other appropriate forums to achieve this goal;

12. Encourage relevant international organizations and conventions to cooperate and coordinate their work with a view to disseminating information and sharing experience;

13. Recognize the crucial role that regional environmental agreements and organizations play in protecting human health and the environment, and request the Executive Body to provide information and assistance to facilitate the development of appropriate regional agreements in other parts of the world;

14. Pledge to make every effort to ratify or accede to the 1998 Aarhus Protocols on Heavy Metals and on Persistent Organic Pollutants so that they can enter into force in the near future and set an example for worldwide action;

15. Intend to strengthen our efforts to help countries with economies in transition, in particular newly independent States, to accede to the Convention and its Protocols, and to support the effective implementation of their provisions.

Annex III

DECISION 1999/2 CONCERNING THE STRUCTURE AND ORGANIZATION OF WORK

Introduction

1. At its fifteenth session, the Executive Body decided on its future priorities for the period after the completion of the Protocol to Abate Acidification, Eutrophication and Ground-level Ozone, and requested its Bureau to prepare a proposal for a new structure (ECE/EB.AIR/53, para. 46). The Bureau submitted a proposal for the Executive Body at its sixteenth session (EB.AIR/1998/5). The Executive Body approved the general approach and requested its Bureau to revise it on the basis of the discussions and to draft mandates for the bodies that would work with the new structure for its seventeenth session (ECE/EB.AIR/59, para. 58).

2. The Protocol's negotiations having been completed, the Executive Body's priorities for the next few years will shift to:

(a) Review and extension of existing protocols;

(b) Implementation of and compliance with existing agreements.

3. These two policy-related tasks require sound scientific support with emphasis on three areas, the core activities:

(a) Atmospheric measurements and modelling;

(b) Effects; and

(c) Integrated assessment, including modelling and economic benefit evaluation.

4. To ensure the scientific basis needed, it will be crucial to maintain the scientific networks that have developed during the preparation of the protocols. An active information strategy, focusing on the Convention's achievements and on new threats to health and the environment, with specific reference to economic benefits, should be implemented with a view to increasing political awareness to back this up. To this end, targeted awareness-raising activities, also involving non-governmental organizations, should be included in the annual work plans adopted by the Executive Body.

5. It will most likely not be possible to count on the same level of political attention in the implementation phase as during negotiations. Basic funding of the core activities, nevertheless, has to be secured to give these activities a long-term perspective. Recent efforts have shown that it is not feasible to establish new legal instruments, similar to the EMEP Protocol, to cover effect-related activities and integrated assessment modelling. In the

medium and long term, however, it is necessary to seek a stable financial mechanism, e.g. in the form of a financial agreement covering all core activities.

Organization of work

6. Work under the Executive Body will be organized in two segments: one providing the necessary scientific and technical support, the other providing a forum for policy-making (see chart).

(a) Scientific and technical segment

7. The Working Group on Effects (WGE) will remain as it is, coordinating the work of its Task Force on the Health Aspects of Air Pollution (TFH) and International Cooperative Programmes (ICPs): on Mapping of Critical Levels and Loads with the Coordination Center for Effects (CCE); on Effects of Air Pollution on Materials, including Historic and Cultural Monuments; on Assessment and Monitoring of Acidification of Rivers and Lakes; on Assessment and Monitoring of Air Pollution Effects on Forests; on Effects of Air Pollution on Natural Vegetation and Crops; and on Integrated Monitoring of Air Pollution Effects on Ecosystems, as well as their centres. It will provide the scientific basis for the review of the effects, including recovery of the environment and human health following emission reductions in line with protocols, and carry out damage and benefit evaluations. It will also alert the Executive Body to any perceived additional, or changed, threats caused by air pollution that may require policy response.

8. The Steering Body to EMEP (EMEP-SB) will have a task force on emission inventories and projections (TFEIP), a task force on measurements and modelling (TFMM), two Meteorological Synthesizing Centres - east and west (MSC-E and MSC-W) - and the Chemical Coordinating Centre (CCC). The continuity of the functions performed by the Task Force on Integrated Assessment Modelling (TFIAM) should be safeguarded, including its streamlined cooperation with the European Commission. To this end, the Task Force will be retained for the time being. A centre for integrated assessment modelling (CIAM), which will support the Task Force on Integrated Assessment Modelling, will build on past modelling work, in particular the RAINS modelling, and cooperate closely with the EMEP centres and CCE. To provide cost calculations for integrated assessment modelling, expert groups and workshops can be set up under it. These will explore new measures to reduce emissions, including structural changes.

9. To coordinate the preparation of annual work plans and budgets for the scientific and technical segment, joint bureau meetings of the Working Group on Effects and the EMEP Steering Body will be held. The joint bureau, which should invite leaders of appropriate technical centres, when relevant to the discussion, will submit proposals to the Executive Body.

(b) Policy-making segment

10. The Working Group on Strategies and Review (WGSR) will initiate proposals to review existing protocols and to possibly negotiate new ones. It will also initiate and review any necessary revisions of technical and other annexes to protocols for which ad hoc expert groups can be established. In this context it will, in collaboration with the Implementation Committee, organize activities to review the performance of existing abatement policies by Parties and prepare recommendations for possible new approaches.

11. The Working Group on Strategies and Review will prepare proposals for any strategic development under the Convention for consideration by the Executive Body. The frequency of its sessions will be decided by the Executive Body.

12. The Working Group on Strategies and Review and the secretariat will be given responsibility, as appropriate, for coordinating activities related to the exchange of technology, with a view to promoting such work, inter alia, by organizing workshops on selected issues and providing information to relevant national and international institutions.

13. The Implementation Committee, according to its mandate, reviews Parties' compliance with obligations and makes recommendations to facilitate compliance, when necessary. It also advises on reporting by Parties on their strategies and policies for air pollution abatement. The Implementation Committee reports directly to the Executive Body.

14. The Bureau of the Executive Body will prepare policy-oriented proposals, as necessary, and will function as an inter-sessional forum for initiating action and for securing necessary operational coordination. To enable the Executive Body to respond flexibly and efficiently to pressing new challenges, an arrangement will be introduced whereby its Bureau can decide upon urgent matters, as appropriate, based on scientific input from the Bureaux of its subsidiary bodies. Such decisions should subsequently be considered and confirmed, as appropriate, by the Executive Body itself.

Reporting and communication lines

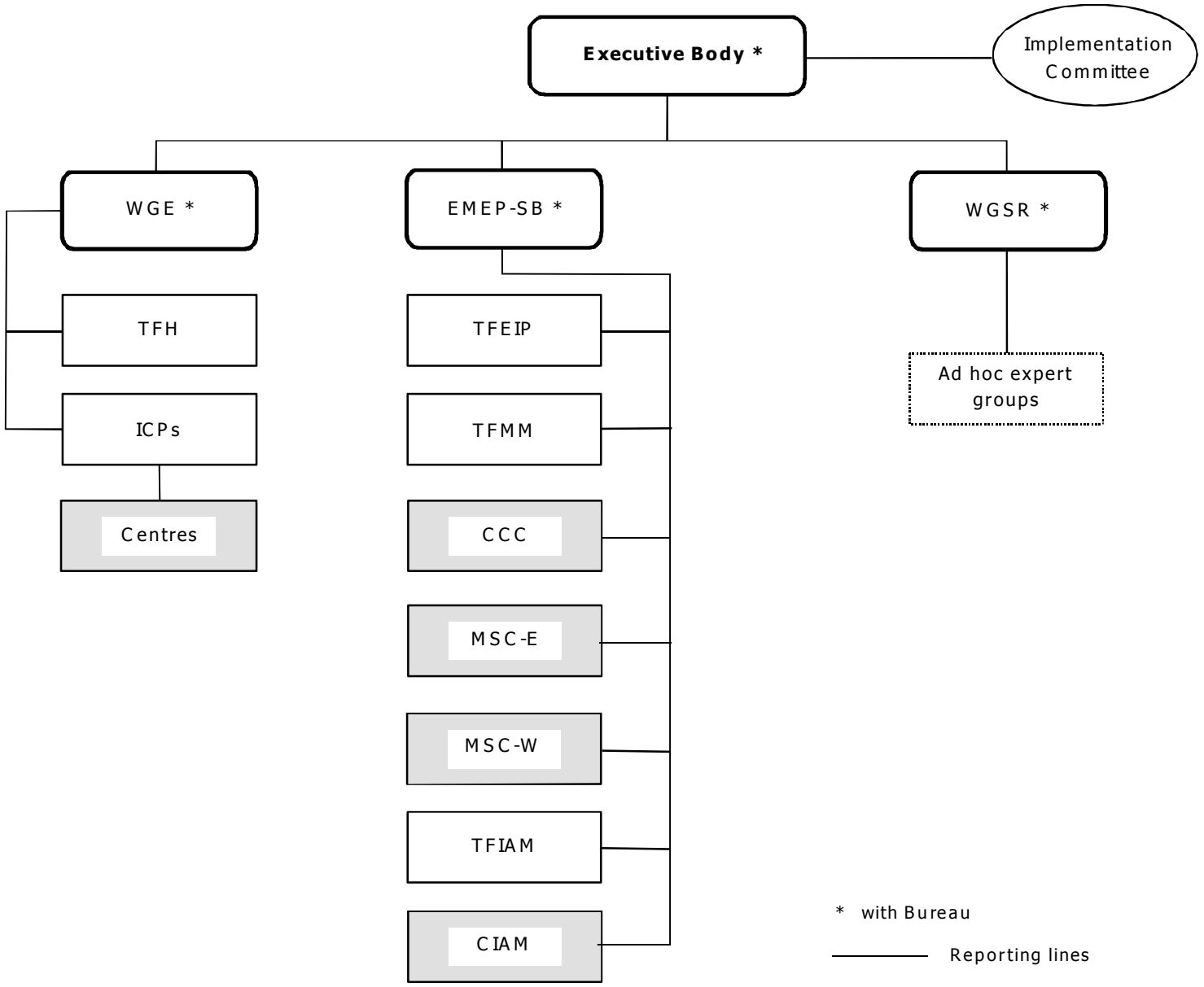
15. Proper functioning of the new structure presupposes open communication between all bodies. Close informal and formal links should be maintained between all bodies, as is the case in the present organization. To strengthen multi-disciplinary cooperation, cross-sectoral meetings will be organized, as required, as well as joint bureau meetings. The Executive Body's Bureau will assume responsibility for such integrational activities.

Mandates

16. The mandates for the main bodies under the Executive Body are appended below.

Outreach

17. The Convention has an important role to play as an example for similar action beyond the UN/ECE region. The secretariat, as guided by the Executive Body, will coordinate the dissemination of information and take an active part in raising awareness in other regions.


Executive Body *
Implementation Committee
WGE *
EMEP-SB *
WGSR *
TFH
ICPs
Centres
TFEIP
TFMM
CCC
MSC-E
MSC-W
TFIAM
CIAM
Ad hoc expert groups
* with Bureau
Reporting lines

Appendix I

MANDATE OF THE BUREAU OF THE EXECUTIVE BODY

The Bureau of the Executive Body prepares policy-oriented proposals and functions as an inter-sessional forum for initiating strategic action and for securing operational coordination. To promote multi-disciplinary cooperation and integration, it cooperates actively with the Bureaux of the subsidiary bodies under the Executive Body. To respond flexibly and efficiently to pressing new challenges, the Bureau can decide upon urgent matters, as appropriate, based on scientific input from the Bureaux of the Executive Body's subsidiary bodies. Such decisions should subsequently be considered and confirmed, as appropriate, by the Executive Body itself.

Appendix II

MANDATE OF THE WORKING GROUP ON STRATEGIES AND REVIEW

1. At the request of the Executive Body, the Working Group on Strategies and Review assists it on policy-oriented matters. In particular, it provides a forum for:

(a) Assessing ongoing scientific and technical activities relating to the potential needs for revising existing protocols and for preparing new protocols, primarily based on information provided by the Working Group on Effects and the EMEP Steering Body;

(b) Negotiating revisions of existing protocols, including their annexes and related guidance documents, and the preparation of new protocols at the request of the Executive Body;

(c) Promoting the exchange of technology;

(d) Preparing proposals for any strategic development under the Convention.

2. The Working Group may set up ad hoc expert groups to address matters related to strategy and review.

3. The Working Group works in close collaboration with the Executive Body's other subsidiary bodies and with other relevant organizations.

Appendix III

MANDATE OF THE EMEP STEERING BODY

1. The EMEP Steering Body uses as a basis for its work the main objective of the Cooperative Programme for Monitoring and Evaluation of the Long-range Transmission of Air Pollutants in Europe (EMEP) under the Convention on Long-range Transboundary Air Pollution, which is to provide sound scientific support for the Convention, in particular in the areas of atmospheric monitoring and modelling, emission inventories and emission projections, and integrated assessment.

2. The EMEP Steering Body takes the necessary steps to provide information on emissions, concentrations and depositions of air pollutants, as well as on the quantity and significance of their long-range transport across boundaries. EMEP also includes integrated assessment modelling, which brings together all relevant scientific information developed under the Convention, and evaluates current and new emission scenarios, including their long-term costs and economic benefits, taking into account uncertainties. The results of EMEP are intended to help Parties when they negotiate protocols to the Convention and when they develop and implement particular national air pollution control measures and consider international emission control strategies and agreements and their implementation.

3. The EMEP Steering Body works in close collaboration with the Executive Body's other subsidiary bodies and with other relevant organizations.

4. The EMEP Steering Body:

(a) Provides the Executive Body and other subsidiary bodies annually withan overall analysis of transboundary air pollution;

(b) Plans, supervises, assesses and guides the work of the EMEP centres and its Task Forces;

(c) Prepares the annual draft work-plan for EMEP and the annual budgets for the EMEP centres and assesses the mandatory contributions from the Parties for final approval by the Executive Body;

(d) Develops the EMEP work-plans on integrated assessment modelling, other areas where appropriate, in cooperation with the other subsidiary bodies under the Convention;

(e) Considers suggestions by Parties on short- and long-term financial and scientific voluntary contributions to EMEP and, based onthe proposals by its Bureau, approves those to be included in the annual EMEP work-plan;

(f) Derestricts the EMEP technical reports and notes, thus enabling EMEP results to be posted on the EMEP Internet homepage to ensure the wide dissemination of its achievements among the Parties and the general public;

(g) Based on the recommendations by its Bureau, approves the mandatory contributions in kind to EMEP;

(h) At its annual sessions, its task force meetings and workshops, provides a forum for discussion and assessment of new scientific developments, the sharing of information and the coordination of work between EMEP and other national and international research programmes and organizations that work in the same field, as well as for the development of EMEP-related activities at national level.

5. The EMEP Steering Body elects its Bureau, which, inter alia:

(a) Monitors, evaluates and directs the work of the EMEP centres and their use of the financial and other resources between the Steering Body's sessions;

(b) Prepares substance and financial matters for the annual sessions of the Steering Body and guides the preparation of documents and reports for the sessions;

(c) Approves the work-plan elements to be carried out as contributions in kind and prepares proposals for voluntary contributions to be included in the EMEP work-plan.

Appendix IV

MANDATE OF THE WORKING GROUP ON EFFECTS

1. At the request of the Executive Body and as required for the effective implementation of the Convention, the Working Group on Effects collects, assesses and further develops knowledge and information on:

(a) The present status and long-term trends in the degree and geographical extent of the impact of air pollution, in particular its long-range transboundary impact;

(b) Dose-response relationships for agreed air pollutants;

(c) Critical loads, levels and limits for agreed air pollutants;

(d) Damage and benefits, as a basis for the further development of air pollution abatement strategies.

2. The Working Group on Effects carries out work to:

(a) Assess the results and effectiveness of the implementation of the existing protocols to the Convention;

(b) Identify the most endangered areas, ecosystems and receptors and the extent of the effects of air pollution on human health and terrestrial and aquatic ecosystems and materials;

(c) Provide scientific substantiation for the review and further development of protocols.

3. The Working Group works in close collaboration with the Executive Body's other subsidiary bodies and with other relevant organizations. The Working Group on Effects provides information for related scientific activities outside the Convention and/or for joint efforts with other bodies/organizations.

4. The Bureau of the Working Group on Effects undertakes the detailed planning, coordination, assessment and reporting of activities as defined in the work-plan for the implementation of the Convention and carried out by its subsidiary units.

Appendix V

MANDATE OF THE IMPLEMENTATION COMMITTEE

1. The Implementation Committee promotes and improves compliance with the existing protocols to the 1979 Convention on Long-range Transboundary Air Pollution. Its main task is to review compliance by the Parties with their obligations under these protocols, pursuant to Executive Body decision 1997/2 concerning the Implementation Committee, its structure and functions and procedures for review of compliance (ECE/EB.AIR/53, annex III) and any amendments thereto.

2. The Committee assists the Executive Body by making recommendations on measures to facilitate compliance, when necessary, and by advising on the reporting by Parties on their strategies and policies for abating air pollution.

3. Where necessary to fulfil its functions, the Committee may inform the Working Group on Strategies and Review about its activities and seek guidance from it. Within its area of competence, the Committee also assists the Working Group on Strategies and Review and the Bureau of the Executive Body in any matter that the Working Group or the Bureau refers to it.

Annex IV

2000 WORK-PLAN FOR THE IMPLEMENTATION OF THE CONVENTION

1. STRATEGIES AND POLICIES

1.1 STRATEGIES AND REVIEW

Description/objective: Assessment of ongoing scientific and technical activities in view of the potential need to revise existing protocols or prepare new ones; negotiating revisions to protocols, including their annexes; promoting the exchange of technology; preparing proposals for any strategic developments under the Convention. The Working Group on Strategies and Review will assist the Executive Body in all policy-related issues.

Main activities and time schedules:

The Working Group on Strategies and Review will, in particular:

(a) Review the progress in implementing the 1991 VOC Protocol and identify the provisions of the Protocol that need specific action by its Parties, either individually or collectively. The secretariat will prepare a background report summarizing the relevant provisions for consideration by the Working Group on Strategies and Reviews at its thirty-second session;

(b) Review the progress in implementing the 1994 Sulphur Protocol and identify the provisions of the Protocol that need specific action by its Parties, either individually or collectively. The secretariat will prepare a background report summarizing the relevant provisions for consideration by the Working Group on Strategies and Reviews at its thirty-second session;

(c) Draft a work programme indicating the steps that should be taken to further the implementation of the Protocols on Heavy Metals and on Persistent Organic Pollutants (POPs) once they enter into force, based on a note by the secretariat highlighting the relevant provisions;

(d) Draft a work programme to further the implementation of the protocols' provisions related to the exchange of information and technology, based on workshops listed under item 4.1 below;

(e) Identify the main work elements to be carried out concerning particulate matter pollution in order to prepare a decision about possible international action to tackle it, taking into account the relevant activities under EMEP and the Working Group on Effects, as well as the relevant initiatives by the European Community.

The thirty-second session of the Working Group on Strategies and Review will take place from 29 August to 1 September 2000.

1.2 COMPLIANCE REVIEW

Description/objectives: Review of compliance by the Parties with their obligations under the protocols to the Convention.

Main activities and time schedule: The Implementation Committee will evaluate the experience with the revised questionnaire for reporting strategies and policies, including the reporting on technology-related obligations. It will carry out an in-depth review of compliance by Parties with the 1985 Sulphur and the 1988 NOx Protocols, focusing on their national emission obligations. The Committee will continue its dialogue with appropriate subsidiary bodies and experts. It will also continue consideration of compliance issues related to obligations in the protocols that are not subject to specific reporting requirements, such as provisions dealing with research and monitoring. If a submission, referral or request for a report is made under paragraph 3 (b) or (d) of the Committee's functions, this will have to be dealt with as a priority and the Committee may have to adjust its work-plan and time schedule accordingly.

(a) Fifth meeting of the Implementation Committee in Berlin, 3-5 April 2000;

(b) Sixth meeting of the Implementation Committee in Geneva in September 2000;

(c) Report to the Executive Body at its eighteenth session.

1.3 REVIEWS OF STRATEGIES AND POLICIES FOR AIR POLLUTION ABATEMENT

Description/objectives: Overview of air pollution abatement in the ECE region, giving a comprehensive description of national and international strategies and policies, including legislation in force and emission levels. Provide, together with emission data, a basis for the Implementation Committee to review compliance by Parties, as a whole and individually, with their obligations under the protocols to the Convention on Long-range Transboundary Air Pollution. The reviews are carried out every two years.

Main activities and time schedule:

(a) The secretariat will prepare a draft review based on the information provided by Parties, and by Signatories, and from other official sources, to be reviewed by the Implementation Committee and then submitted to the Executive Body for consideration. National responses should be based on the questionnaire approved by the Executive Body (EB.AIR/1999/3, annex II, as amended). The review process is in a transition phase. Both the outline and the questionnaire were revised to reflect more directly the obligations of Parties under the Convention and its protocols. Reporting on current and projected emission data will be detailed under item 2;

(b) A review based on the responses to the new questionnaire will be prepared in 2000. It will be published after additions and corrections have been incorporated. The next review is scheduled for 2002.

1.4 ECONOMIC ASSESSMENT OF BENEFITS FROM AIR POLLUTION ABATEMENT AND ECONOMIC INSTRUMENTS

Description/objectives: Based on work carried out by the former Task Force on Economic Aspects of Abatement Strategies, the economic benefits of reducing the air pollutants covered by the protocols to the Convention will be assessed. Topics to be addressed will include the estimation of air pollution damage to human health and to ecosystems. Emphasis will be put on the analysis of uncertainties. This work will be closely linked to the work by relevant bodies under the Working Group on Effects. Further work will also be done on the use of economic instruments to reduce transboundary air pollution.

Main activities and time schedule: A workshop will be held in the United Kingdom in autumn 2000, to examine the benefits from air pollution abatement due to reducing human health effects. It will be organized in close collaboration with the Task Force on Health.

1.5 FURTHER ASSESSMENT OF PERSISTENT ORGANIC POLLUTANTS

Description/objectives: Review the evidence on specific POP compounds with a view to (a) making the best use of available knowledge to meet the existing obligations for substances listed in annexes I, II and III to the POPs Protocol and (b) assisting Parties in identifying which candidates may be given priority for inclusion in the Protocol. The addition of new substances to annex I, II or III to the POPs Protocol is regulated in Executive Body decision 1998/2 on procedures and information to be submitted to the Executive Body.

Main activities and time schedule:

(a) An ad hoc expert group will assess priority substances and then review and assess data put forward, including risk profiles, for those POPs that may qualify to be included in the POPs Protocol. Work will be guided by the Working Group on Strategies and Review;

(b) The first meeting of the expert group will take place in the Netherlands in October 2000 to prepare an interim report, including a work-plan for the expert group, based inter alia on the recommendations of the workshop on POPs held in North Carolina (United States) in October 1999;

(c) A second meeting will take place in Canada in May 2001 aimed at reviewing the evidence and preparing a draft assessment report.

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

The overall objectives of the EMEP work are defined in the mandate of the Steering Body (annex III, appendix III). It provides sound scientific support for the Convention, in particular in the areas of atmospheric monitoring and modelling, emission inventories and emission projections, and integrated assessment. The draft EMEP budget for 2000 is detailed in document EB.AIR/1999/8. As indicated in the budget, the implementation of the work programme at the Meteorological Synthesizing Centre-West requires extrabudgetary resources.

The EMEP work programme is carried out by the Parties together with the Chemical Coordinating Centre (CCC), the two Meteorological Synthesizing Centres (MSC-E and MSC-W) and the Centre for Integrated Assessment Modelling (CIAM) in cooperation with the World Meteorological Organization (WMO). At its twenty-third session, the Steering Body agreed to increase scientific contributions from Parties to EMEP and to intensify cooperation between EMEP and all other relevant international organizations and programmes. Therefore, the Parties are, for the first time in the context of this work-plan, invited to make proposals by 31 March 2000 for national research work that would support EMEP and could be included as voluntary contributions in the EMEP work-plan for 2001 (the final year of the seventh phase) or later. Based on the proposals, the Steering Body's Bureau will in May 2000 prepare the issue for further discussion at the Steering Body's twenty-fourth session.

In 2000, the Steering Body will finalize a document on the long-term strategic objectives of EMEP and action plans for each of the five thematic areas of its work.

A new Task Force was set up to offer a forum to the Parties, the EMEP centres and other international organizations for scientific discussions on air quality measurements, modelling and assessment, together with further development of methods and tools for measurements and modelling, including quality assurance. The Task Force will be led by Austria and co-chaired by WMO. The first meeting of the Task Force will take place in the first half of May 2000 to consider, in particular, the harmonization of EMEP sampling and analysis for acidifying and eutrophying pollutants and photo-oxidants and to prepare recommendations on any changes needed in the measurement programme of these pollutants. The Task Force will also prepare for an assessment of the 1980-2000 EMEP work and a proposal on the main issues that it will consider during the next three to five years. These themes will be included under the relevant thematic areas in the work-plans for 2001 and onwards.

2.1. EMISSIONS

Description/objectives: EMEP emission inventory activities aim to help the Parties to fulfil their reporting tasks, store the reported emission data and

control their quality; report on the available data; evaluate emission inventory requirements under the Convention to ensure an adequate flow of reliable information on emissions and emission projections; provide information to monitor compliance with international emission control agreements, and, as far as possible, cooperate and harmonize emission information with other relevant international work. The Task Force on Emission Inventories and Projections provides a technical forum and expert network to discuss, exchange information and harmonize emission factors, methodologies, projection models and reporting. CIAM/IIASA will contribute to this work in particular by studying emission projections, including the consequences of implementing current legislation.

Main activities and time schedule:

(a) All Parties will submit their 1999 emission data from the territories covered by EMEP for SOx, NOx, NMVOCs, NH_3, CO, HMs (priority metals: Cd, Hg and Pb) and selected POPs and possible updates of previous figures to the secretariat by 31 December 2000, in accordance with the newly revised guidelines and making use of the latest edition of the Atmospheric Emission Inventory Guidebook. National totals, sectoral data (SNAP level 1) and sub-sectoral data (SNAP level 2) should be reported. For CO_2 and CH_4,the same data as reported under the United Nations Framework Convention on Climate Change should be submitted;

(b) MSC-W, together with the secretariat, will report on 1980-1998 emissions and the status of verification to the Steering Body at its twenty-fourth session. The report will then also be available for the Implementation Committee’s meeting in September 2000. The latest data will be made available to the Executive Body at its eighteenth session for consideration in the context of the strategies and policies;

(c) MSC-W, in cooperation with CIAM/IIASA, the European Environment Agency's Topic Centre on Air Emissions, the secretariat, the other EMEP centres and the experts of the Task Force, will develop further methods and a scientific basis for compliance monitoring, verifying emission data and controlling their quality;

(d) MSC-W and the secretariat, in cooperation with the Chairman of the Task Force and in consultation with the other EMEP centres, will finalize a proposal for the emission reporting guidelines for consideration at the twenty-fourth session of the Steering Body and for approval by the Executive Body at its eighteenth session;

(e) To meet any future reporting requirements under the Convention and provide input for the CORINAIR/EMEP Atmospheric Emission Inventory Guidebook, Parties are invited to contribute in 2000 to the preparation of an interim emission inventory using the inventory of the Netherlands Organization for Applied Scientific Research (TNO) for 1990 as a basis with the aim of revising

and updating it for 1995, a technically suitable base year. A decision on the inclusion of a fine particulate emission inventory in the annual work-plans from 2001 onwards will be taken by the Executive Body at its eighteenth session, following the final advice of the EMEP Steering Body.

(f) The Task Force on Emission Inventories and Projections will increase its work on the verification of emission data and on emission projections. It will prepare the further extension of the Guidebook to give more detailed information on VOC species and to cover particulate matter (including issues such as particle size distribution, chemical composition, link to HM emission inventories), and also emissions of high-molecular weight VOCs, which are precursors of secondary organic particulate matter. The ninth meeting of the Task Force will take place in Rome on 15 - 18 May 2000.

2.2 DEPOSITION OF ACIDIFYING AND EUTROPHYING COMPOUNDS

Description/objectives: Provide monitoring and modelling data on concentrations, depositions and transboundary fluxes of sulphur and nitrogen compounds over Europe. Analyse the past, present and future situation in Europe with regard to the exceedance of critical loads of acidifying and eutrophying depositions, in collaboration with the Coordination Center for Effects (CCE). Analyse scenarios on cost-effective reduction of acidification, eutrophication, tropospheric ozone and related phenomena. Provide information to monitor compliance with international emission control agreements.

Main activities and time schedule:

(a) The Parties will report their monitoring results to CCC twice a year: by 1 December data from January to June, and by 1 June data from July to December. CCC will assist countries to monitor nitrogen compounds and carry out quality assurance, in cooperation with the national quality assurance managers, and store data in the monitoring database. The exchange of monitoring information and experiences with the WMO/Global Atmospheric Watch Programme, North American experts and other European research groups will be continued and increased;

(b) CCC and MSC-W will together coordinate the study of the EMEP monitoring stations' representativeness in collaboration with national experts. MSC-W and CCC will develop methods to support the national experts in the development of EMEP-related activities at national level and investigate further the monitoring network design in view of the evolving needs of the Convention;

(c) MSC-W will calculate the annual transboundary transport of sulphur and nitrogen compounds with the Eulerian model. On request, it will supply specific additional information for the joint implementation of the 1994 Sulphur Protocol. In collaboration with CIAM/IIASA, MSC-W will evaluate and

report on the uncertainty of source-receptor matrices as extrapolated to 2010 calculations. CCC and MSC-W will together evaluate trends in concentrations and depositions of acidifying pollutants as can be derived from the present EMEP data and jointly report on their analysis;

(d) MSC-W and CCC will explore new methods for evaluating and validating EMEP results. MSC-W aims at increasing the accuracy of the EMEP model results to 30% agreement with measurements and will review, as necessary, the current parametrizations of dry and wet depositions in the EMEP acid deposition model;

(e) MSC-W will provide scientific input on the modelling of transport of pollutants to IIASA;

(f) All results will be put on the EMEP website once the Steering Body has derestricted them. Specific attention will be given to the reporting to the Baltic Marine Environment Protection Commission (HELCOM) and the Oslo-Paris Commission for the Protection of the Marine Environment of the North-East Atlantic (OSPARCOM), as agreed between EMEP and these organizations;

(g) The EMEP centres, in cooperation with WMO, will organize a third workshop on data analysis and interpretation in Slovenia in 2000/2001;

(h) The first meeting of the Task Force on Measurements and Modelling will be held in the first half of May 2000 to consider the harmonization of EMEP sampling and analysis for acidifying and eutrophying pollutants and photo-oxidants and to prepare recommendations on any changes needed in the measurement programme of these pollutants. The Task Force will also prepare for an assessment of the EMEP work 1980-2000 and a proposal on the main issues that it will consider during the next three to five years.

2.3 PHOTO-OXIDANTS

Objectives/Description: Provide monitoring results on ozone and volatile organic compounds (VOCs). Develop and verify the EMEP Eulerian photo-oxidant model aiming at a common oxidant/acidification model. Evaluate short- and long-term exposures to photochemical oxidants and develop new methods for the analysis of damage, in collaboration with the Working Group on Effects. Analyse different scenarios on cost-effective reduction of ground-level ozone in cooperation with CIAM/IIASA as considered in point 2.2 above.

Main activities and time schedule:

(a) The Parties will report their ozone and VOC monitoring results to CCC as described above for acidifying pollutants. CCC will carry out quality assurance and store data. It will continue and extend, financial resources permitting, the measurements of aldehydes and ketones and organize as part of an EU project a laboratory intercomparison of hydrocarbon measurements. It

will improve the collection of ozone measurement results from existing national and other international ozone networks to increase their spatial coverage;

(b) MSC-W will calculate the short-term exposures to photochemical oxidants for vegetation periods, and the potential exposure of humans. It will include more sophisticated plant uptake mechanisms in the modelling and review exposure calculations. It will also compare the Lagrangian and the multi-layer ozone models and develop further a coupled acid rain and photochemical model;

(c) MSC-W and CCC will together review the possibility of evaluating ozone trends over Europe and review the present status of the monitoring and quality assurance activities for photo-oxidants under EMEP;

(d) MSC-W will evaluate the effects of specific control measures on photo-oxidants in cooperation with CIAM/IIASA (see point 2.7 below);

(e) Workshop on ozone trend analysis, autumn 2000, Germany.

2.4 HEAVY METALS (HMs)

Description/objectives: Provide more monitoring and modelling data on concentrations, depositions and transboundary fluxes of cadmium, lead and mercury over Europe. Develop further the Pb, Cd and Hg transport models in parallel with the further development of HM critical limits under the Working Group on Effects.

Main activities and time schedule:

(a) During 2000, the Parties, in cooperation with CCC, will establish an EMEP network for trace metals, with first priority elements Hg, Cd and Pb and second priority elements Cu, Zn, As, Cr and Ni. About ten monitoring sites in defined areas would be sufficient to support modelling purposes in Europe according to the work-plan for 1999: in northern and southern Scandinavia, western Russia/Belarus, southern Finland/Baltic, Baltic/Poland, central Europe/Czech Republic/Slovakia/Hungary, Balkan, Ireland/United Kingdom, Portugal/Spain, southern France/Italy, and Germany/Netherlands. The Joint Research Centre at Ispra (Italy) and CCC, in cooperation with other organizations, will organize a technical workshop on 8-10 May 2000 to share experience and consider the details of HM sampling and analytical procedures, quality assurance and laboratory comparisons. CCC will also continue the work on the HM standard operating procedures and quality control routines for the EMEP manual for sampling and chemical analysis. CCC and the Swedish Air Research Institute will organize a training course on Hg measurements. CCC will also continue to collect HM measurement results from existing national and other international networks. CCC will, in cooperation with the relevant

universities in Norway and Sweden, convert the moss surveys from 1995 to deposition maps;

(b) MSC-E will continue the assessments of Pb and Cd. It will cooperate with MCS-W and the experts of the Task Force on Emission Inventories in the verification of HM emission data quality. In close cooperation with CCC, the modelling results will be checked against measurements. MSC-E will further study wet and dry deposition schemes in view of particle size distribution and continue sensitivity studies and uncertainty analysis. It will also develop further the mercury models and organize a mercury model intercomparison. Moreover, it will continue to share information and analyses of the scientific results with other international and national programmes, such as EUROTRAC/MEPOP;

(c) MSC-E will report on the recommendations of the Workshop on Modelling of Atmospheric Transport and Deposition of POPs and HMs (Geneva, November 1999) organized in cooperation with WMO, UNEP and EUROTRAC at the twenty-fourth session of the Steering Body;

(d) CCC and MSC-E will together report on HM measurements and modelling results. Specific attention will be given to the reporting to the marine commissions HELCOM and OSPARCOM, as agreed. Both centres will put their detailed data on the EMEP website.

2.5 PERSISTENT ORGANIC POLLUTANTS (POPs)

Description/objectives: Increase the provision of monitoring and modelling data on transboundary fluxes, concentrations and depositions of selected POPs over Europe. Develop the modelling bases of selected POPs (lindane, PAHs, PCBs (PCB-28, 52, 101, 118, 138, 153, 180) and some PCDD/Fs) and verify the functioning of the models. Study further the physico-chemical processes of POPs in different environmental compartments, taking also into account their transport within the EMEP region and on the hemispheric/global scale.

Main activities and time schedule:

(a) In 2000, the Parties, in cooperation with CCC, will set up an EMEP network for POP measurements. As a first step, PAH, PCB, HCB, chlordane, lindane, a-HCH, DDT/DDE should be included in the EMEP measurement programme at five sampling sites: Scandinavia/Baltic, northern Atlantic region, continental Europe, Mediterranean region, south Atlantic region. To this end, financial support to laboratories able and willing to analyse samples from one or more countries may be necessary, or one central laboratory should be found. CCC will continue to collect the monitoring data on POPs available from other international programmes. The laboratory comparison initiated by CCC in 1999 will continue through most of 2000. The results will be discussed at a small workshop, to be organized in October/November 2000. CCC will also continue

the work on the POP standard operating procedures and quality control routines for the manual for sampling and chemical analysis;

(b) MSC-E will study physico-chemical properties of selected POPs (see the list above). It will analyse and summarize scientific results obtained under EUROTRAC/MEPOP and other international programmes, such as in the hemispheric modelling under the Arctic Monitoring and Assessment Programme (AMAP), and under national programmes. It will pay specific attention to the improvement of the air-sea exchange module and the air-vegetation exchange process to estimate concentrations, depositions and accumulation of the pollutants in air, soil, sea water and vegetation. Furthermore, MSC-E will study the model sensitivity, assess the seasonal and annual variations and check the calculated results against measurements, in cooperation with CCC. MSC-E will cooperate with MCS-W and the experts of the Task Force on Emission Inventories in the verification of POP emission data quality.

2.6 FINE PARTICULATES

Description/objectives: Develop transport and integrated assessment models to provide the Steering Body, the Task Force on the Health Aspects of Air Pollution and the Executive Body with further information on the transboundary transport of fine particulates. Draw up recommendations for emission reporting and monitoring of air concentrations of atmospheric particles relevant to the Convention.

(a) The Task Force on Emission Inventories and Projections will continue the work needed for emission inventories and an interim emission inventory will be prepared (see points 2.1 (e) and (f) above);

(b) EMEP will devote the necessary attention to PM_{10} measurements. CCC will start preparations for the drawing-up of monitoring requirements and detailed procedures and recommendations with respect to quality assurance. The measurements of fine particles within EMEP should be compatible with recent regulations concerning the measurements of PM_{10} and $PM_{2.5}$ in urban areas. The Parties are invited to voluntarily prepare fine particulate measurements outside urban areas;

(c) MSC-W will evaluate the possibility of including primary aerosols in the Eulerian acid deposition model. It will develop the Eulerian model further in order to include secondary aerosols resulting from the atmospheric oxidation of volatile organic compounds. MSC-W, in cooperation with Nordic and other relevant experts, will initiate the incorporation of an aerosol dynamic module in the Eulerian model;

(d) MSC-E, in cooperation with MSC-W, will study further the physico-chemical properties of primary particles which are relevant for the modelling of heavy metals;

(e) The centres will present a joint progress report to the Steering Body and inform the Task Force on the Health Aspects of Air Pollution about their work;

(f) The EMEP Steering Body will further consider the results of the workshop in Interlaken.

2.7. INTEGRATED ASSESSMENT MODELLING

Description/objectives: Analysis of scenarios on cost-effective reduction of acidification, eutrophication, tropospheric ozone and related phenomena, especially particulate matter pollution. Modelling will cover: (i) abatement options for reducing sulphur, nitrogen oxides, ammonia, volatile organic pollutants and primary particulate matter, including structural measures in energy, transport and agriculture, and their costs; (ii) projections of emissions, including the consequences of implementing current legislation; (iii) assessments of the atmospheric transport of substances; and (iv) analyses of the environmental and health effects and the economic benefits of emission reductions. Where available, modelling will be based on the results of work done by other subsidiary bodies and direct contacts will be established. The Task Force on Integrated Assessment Modelling, led by the Netherlands, will guide the work. A centre for integrated assessment modelling will be set up, using as a basis the work carried out at the International Institute for Applied Systems Analysis (IIASA). Specialized workshops will be organized to develop model elements that are not sufficiently covered by other bodies under the Convention. All activities will be conducted in close collaboration with related work led by the European Commission.

Main activities and time schedule:

(a) A workshop to examine the scientific need for future revisions to the Protocol to Abate Acidification, Eutrophication and Ground-level Ozone, organized by the Nordic Council of Ministers and the Swedish ASTA Programme, will be held in Sweden on 10-12 April 2000;

(b) The Task Force on Integrated Assessment Modelling will meet in Sweden on 12-14 April 2000. It will prepare information to be presented at the thirty-second session of the Working Group on Strategies and Review. In the light of the workshop and based on the discussions during its twenty-fourth meeting (EB.AIR/WG.5/1999/14, chapter IV), the Task Force will develop a long-term programme to prepare for modelling for the purpose of reviewing the Protocol to Abate Acidification, Eutrophication and Ground-level Ozone. IIASA will present the first results of work initiated to integrate particulate matter into the model, including work conducted for the German Environment Agency (UBA) and the United Kingdom Ministry for the Environment, Transport and the Regions.

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

3.1 REVIEW OF EFFECTS OF MAJOR AIR POLLUTANTS

3.1.1 Annual reports on progress in effects-oriented activities

Description/objectives: Annual review of activities and results of the International Cooperative Programmes and the Task Force on the Health Aspects of Air Pollution. Preparation of a draft annual joint report based on the information provided by the lead countries and the programme coordinating centres, for consideration by the Working Group on Effects.

Main activities and time schedule:

(a) Submission of relevant information on the International Cooperative Programmes and the Task Force on the Health Aspects of Air Pollution to the secretariat (20 May 2000);

(b) Submission of the draft 2000 joint report of the International Cooperative Programmes and the Task Force on the Health Aspects of Air Pollution prepared by the secretariat, to the Working Group on Effects in 2000.

3.1.2 Major review of effects of air pollutants

Description/objectives: Review of knowledge on the effects of selected air pollutants based on the results of the International Cooperative Programmes and the Task Force on the Health Aspects of Air Pollution as well as other relevant data and information.

Main activities and time schedule:

(a) The Extended Bureau of the Working Group on Effects at its meeting in February 2000 will prepare a draft outline of the major review;

(b) The Working Group on Effects at its nineteenth session will decide on the structure of the report and on the organization of work in preparing it for submission to the Working Group in 2001.

3.2 INTERNATIONAL COOPERATIVE PROGRAMME ON EFFECTS OF AIR POLLUTION ON MATERIALS, INCLUDING HISTORIC AND CULTURAL MONUMENTS

Description/objectives: Quantification of the multi-pollutant effects in the changing pollution situation; further analysis of the trends in corrosion effects; further development of dose/response functions quantifying the corrosion effects of nitrogen oxides and ozone, on their own and in combination with sulphur dioxide, under different environmental conditions, inter alia, as a basis for the economic evaluation of air pollution damage. A

Programme Task Force led by Sweden, in cooperation with the Programme's main research centre (Swedish Corrosion Institute, Stockholm), is responsible for the detailed planning and coordination of the Programme.

Main activities and time schedule:

(a) Preparation and publication in 2000 of a summary report, for the general public, of the most significant results obtained during the original part of the programme (1987-1996);

(b) Progress report on the evaluation of 1997 results of the trend exposure to the Working Group on Effects in 2000;

(c) Draft report on the evaluation of corrosion effects after 1 year of exposure in the multi-pollutant programme to the Working Group in 2000;

(d) Progress report on the development of a database of environmental data for the multi-pollutant exposure programme to the Working Group in 2000;

(e) Sixteenth meeting of the Programme Task Force, 11-13 May 2000, Paris;

(f) Preparation and organization of the Workshop on mapping air pollution effects on materials, including stock at risk, 14-16 June 2000, Stockholm.

3.3 INTERNATIONAL COOPERATIVE PROGRAMME ON ASSESSMENT AND MONITORING OF ACIDIFICATION OF RIVERS AND LAKES

Description/objectives: Identification of the long-term trends and variations in the chemistry and biota of aquatic ecosystems owing to atmospheric pollutants, in order to provide, inter alia, information on the degree and geographical extent of acidification of surface waters; to yield more complete information on dose/response relationships under different geographical conditions and to correlate changes in depositions with the physical, chemical and biological status of lakes and streams. A Programme Task Force led by Norway, which also provides the Programme's centre (Norwegian Institute for Water Research, Oslo), is responsible for the detailed planning and coordination of the Programme.

Main activities and time schedule:

(a) Preparation and publication of the twelve-year report of ICP Waters; a summary of the report to the Working Group on Effects in 2000;

(b) Organization of the year 2000 biological and chemical intercalibrations; presentation of the 1999 results to the Working Group in 2000;

(c) Progress report on the further development of the monitoring network and the regional lake and river database to the Working Group in 2000;

(d) Report on the assessment of prospects for further development in monitoring of heavy metals in surface waters to the Working Group in 2000;

(e) Organization of a meeting of experts to further develop dynamic modelling on a European scale in cooperation with other ICPs, in particular ICPs Integrated Monitoring and Mapping; September/October 2000, Gothenburg, Sweden;

(f) Sixteenth meeting of the Programme Task Force, autumn 2000.

3.4 INTERNATIONAL COOPERATIVE PROGRAMME ON ASSESSMENT AND MONITORING OF AIR POLLUTION EFFECTS ON FORESTS

Description/objectives: Collection of comprehensive and comparable data on changes in forests under actual environmental conditions (in particular air pollution, including acidifying deposition, as well as other stresses) and determination of cause-effect relationships. A Programme Task Force led by Germany, in cooperation with the Programme's main coordinating centre (Federal Research Centre for Forestry and Forest Products, Hamburg, Germany), is responsible for the detailed planning and coordination of the Programme. Intensive monitoring of forest ecosystems on the permanent sample plots (level II), extensive large-scale monitoring (level I) and integrated evaluation of results are carried out in cooperation with the European Commission.

Main activities and time schedule:

(a) Progress report on the further development of the evaluation strategy for level I and level II monitoring data, including assessment of possible links between levels I and II, to the Working Group on Effects in 2000;

(b) Preparation and publication of the 2000 technical report on Forest Condition in Europe (levels I and II), autumn 2000;

(c) Summary report on the 1999 monitoring results (including assessment of trends) to the Working Group in 2000;

(d) Progress report on the further development of level III monitoring activities (in cooperation with ICP Integrated Monitoring) to the Working Group in 2000;

(e) Cooperation in preparation of the European Union Workshop on the future of the forest condition monitoring programme, 17-18 May 2000, Brussels;

(f) Sixteenth meeting of the Programme Task Force, 20-24 May 2000, Belgium.

3.5 INTERNATIONAL COOPERATIVE PROGRAMME ON EFFECTS OF AIR POLLUTION ON NATURAL VEGETATION AND CROPS

Description/objectives: Evaluation of the effects of air pollutants and other stresses on natural vegetation and crops; identification of realistic dose/response functions for a range of economically important crops, and for the range of crops at risk from air pollution; validation and substantiation of ozone critical levels for natural vegetation and crops; and evaluation of natural vegetation and crops as effective indicators of the potential for damage to natural ecosystems. A Programme Task Force, led by the United Kingdom, with the cooperation of the Programme's coordination centre (Institute of Terrestrial Ecology, Bangor Research Unit, Bangor, United Kingdom), is responsible for the detailed planning and coordination of the Programme.

Main activities and time schedule:

(a) The 2000 annual status report on the achievements of the Programme to the Working Group on Effects in 2000;

(b) Progress report on modelling level II critical levels of ozone for agricultural crops to the Working Group in 2000;

(c) Progress report on the development of methods for the investigation of ozone sensitivity in natural vegetation to the Working Group in 2000;

(d) Report on the investigation of heavy metal deposition to vegetation, including results of analysis of clover clones, to the Working Group in 2000;

(e) Preparations for taking over responsibility for the European survey on heavy metals in mosses; progress report to the Working Group in 2000;

(f) Thirteenth meeting of the Programme Task Force, 18-21 January 2000, Semmering, Austria.

3.6 INTERNATIONAL COOPERATIVE PROGRAMME ON INTEGRATED MONITORING OF AIR POLLUTION EFFECTS ON ECOSYSTEMS

Description/objectives: Determination and prediction of the state of ecosystems (or catchments) and their long-term changes, with respect to the regional variation and impact of air pollutants, especially nitrogen, sulphur and ozone, and including effects on biota. A Programme Task Force led by

Sweden is responsible for planning, coordinating and evaluating the Programme. The Programme's centre (Finnish Environment Institute, Helsinki) is entrusted with collecting, storing, processing and analysing data from countries taking part in the Programme.

Main activities and time schedule:

(a) Presentation of the Ninth Annual Report to the Working Group on Effects in 2000;

(b) Continued assessment of the long-term effects of S and N compounds in support of the implementation of emission reduction protocols, including: (i) assessment of trends; (ii) calculation of ecosystem budgets; and (iii) dynamic modelling and scenario assessment; information to the Working Group in 2000;

(c) Participation in the European Union project on Networking of Long-term Integrated Monitoring in Terrestrial Systems (NoLIMITS); information to the Working Group in 2000;

(d) Progress report on the development of activities to: (i) calculate pools and fluxes of heavy metals at selected sites; and (ii) assess cause-effect relationships for biological data, particularly vegetation, to the Working Group in 2000;

(e) Continuing cooperation with ICP Forests on the further development of level III monitoring activities;

(f) Organization of a meeting of experts to further develop dynamic modelling on a European scale in cooperation with other ICPs, in particular ICPs Mapping and Waters; September/October 2000, Gothenburg, Sweden.

(g) Eighth meeting of the Programme Task Force, spring 2000, Lithuania.

3.7 INTERNATIONAL COOPERATIVE PROGRAMME ON MAPPING OF CRITICAL LEVELS AND LOADS

Description/objectives: Determination of critical levels and loads for forests, crops, natural vegetation, soil/groundwater and materials, with particular attention to the direct effects of air concentrations of SO_2, NO_2 and O_3 and the indirect effects of the long-term deposition of sulphur and nitrogen compounds, mapping of geographical areas experiencing higher than critical levels and loads and establishment of appropriate methods for assessing potential damage. A Programme Task Force led by Germany is responsible for the detailed planning and coordination of activities. The Task Force uses and integrates available and accepted data, drawing, in particular, on the current work of other task forces, International Cooperative Programmes

and EMEP. The Coordination Center for Effects (CCE at the National Institute of Public Health and the Environment, Bilthoven, Netherlands) provides scientific and technical support to the Task Force, in particular by developing methodology and producing maps of critical loads and levels and their exceedances, as well as other risk parameters related to potential damage and recovery.

Main activities and time schedule:

(a) Progress report on maintaining databases of critical loads of sulphur and nitrogen, as well as quantities derived from them, based on the EMEP 50 km x 50 km grid, to the Working Group on Effects in 2000;

(b) Progress report on the investigation of uncertainties and possible systematic biases in critical load and exceedance calculations to the Working Group in 2000;

(c) Further development of the critical loads/levels methodology (level II critical levels, exceedance formulations, dynamic modelling), including possible proposals for a revision/update of the Mapping Manual; information to the Working Group in 2000;

(d) Further development of critical limits for heavy metals using, inter alia, the outcome of the Workshop on effects-based approaches for heavy metals (October 1999, Schwerin, Germany); information to the Working Group in 2000;

(e) Organization of a meeting of experts to further develop dynamic modelling on a European scale in cooperation with other ICPs, in particular ICPs Integrated Monitoring and Waters; September/October 2000, Gothenburg, Sweden;

(f) Sixteenth meeting of the Task Force on Mapping, April 2000, United Kingdom;

(g) Cooperation (with ICP Materials) in organizing the Workshop on mapping air pollution effects on materials, including stock at risk, 14-16 June 2000, Stockholm.

3.8 EFFECTS OF AIR POLLUTANTS ON HUMAN HEALTH

Description/objectives: Preparation of state-of-the-art reports on the direct and indirect effects of air pollutants on human health.

(a) The World Health Organization (WHO) is invited to present relevant progress/technical reports to the Working Group on Effects, so that acquired knowledge of WHO can be applied in the further implementation of the Convention. Additional information/reports should be provided, when

appropriate, by other international organizations, interested Governments, and/or other subsidiary bodies under the Convention;

(b) To support the Working Group on Effects and the Executive Body in preparing/substantiating new and/or updating existing protocols, the joint Task Force of WHO/European Centre for Environment and Health (ECEH) and the Executive Body, led by WHO/ECEH, evaluates and assesses the health effects of long-range transboundary air pollution and reports on the subject. All interested countries are invited to nominate experts and actively participate in the work of the Task Force.

Main activities and time schedule:

(a) Finalization and publication of the technical report on the health risk from particulate matter from long-range transboundary air pollution: a preliminary assessment;

(b) Progress report on the continuous assessment of population exposure to particulates from long-range transport and of its health effects to the Working Group on Effects in 2000;

(c) Preliminary assessment of information on population exposure to heavy metals and, in particular, the contribution from long-range transport, and collation of information on long-term health effects of Cd, Hg and Pb; information to the Working Group in 2000;

(d) Preliminary selection of “priority” POPs based on potential health effects of the compounds and potential contribution of long-range transport to exposure; information to the Working Group in 2000;

(e) Third meeting of the Task Force on the Health Aspects of Air Pollution, 8-10 May 2000, Bilthoven, Netherlands.

4. TECHNOLOGIES FOR EMISSION CONTROL

4.1 EXCHANGE OF TECHNOLOGY FOR AIR POLLUTION CONTROL

Description/objectives: The creation of favourable conditions for implementing technology-related obligations of the Convention and its protocols in order to facilitate the implementation of existing protocols and accelerate the accession of non-Parties, particularly countries with economies in transition, via seminars and target-oriented workshops and report to the Working Group on Strategies and Review.

Main activities and time schedule:

(a) Workshop on control options/technologies to reduce emission of heavy metals and persistent organic pollutants from stationary sources and

products from 26 to 28 April 2000 in Prague - Pruhonice, and report on the outcome to the Working Group on Strategies and Review;

(b) Workshop in Bologna (Italy) in 2000 on the implementation of VOC abatement techniques in the surface-coating and dry-cleaning sectors and report on its outcome to the Working Group on Strategies and Review;

(c) Collection of information by the secretariat from Parties and international institutions on successful schemes for the exchange of technology and report on the outcome to the Working Group on Strategies and Review;

(d) Seminars, workshops and reports to be decided by Parties ready to lead the activity chosen (in contact with the secretariat and the Bureau of the Working Group on Strategies and Review).

4.2 AMMONIA ABATEMENT

Description/objectives: A framework code of good agricultural practice identifying the best available control options and techniques to reduce ammonia emissions from agriculture will be prepared as a basis for Parties to draw up national codes and to better quantify relationships between recommended control options/techniques and resulting ammonia emissions undertaken by the ammonia expert group led by the United Kingdom.

Main activities and time schedule:

(a) Drafting of guiding part of the framework code of good agricultural practice for submission to the Executive Body at its eighteenth session;

(b) Collection of information necessary to improve relationships between the measures applied, ammonia emissions and their reduction, and new information on control techniques by the expert group by the end of September 2000;

(c) First meeting of the ad hoc expert group in London on 15 January 2000 to organize work and assign responsibilities; and second meeting in autumn 2000 in Switzerland to review the collected information and draft elements of the framework code of good agricultural practice;

(d) Results of the work for the first review of the Protocol to Abate Acidification, Eutrophication and Ground-level Ozone.

4.3 CONTROL OPTIONS AND TECHNIQUES FOR EMISSIONS FROM STATIONARY SOURCES AND PRODUCTS

Description/objectives: Updating and preparing technical annexes and guiding documents to existing and future protocols and developing annexes on emission limit values for air pollution abatement, including data for emission inventorying/forecasting, and for the elaboration of cost functions within integrated assessment modelling by task forces and groups of governmentally designated experts. Databases on emission reduction options/BAT and product management will be further organized and updated.

Main activities and time schedule:

(a) Collection of information by the secretariat from Parties and international institutions on control technology and product management practices for pollutants covered by the protocols and establishment of collaboration with other international bodies, e.g. Integrated Pollution Prevention and Control (IPPC) Bureau in Seville (Spain); report to the Executive Body at its eighteenth session.

(b) Further development of techno-economic databases on production processes and related emission abatement options/techniques, including structural changes, and cost calculation of relevant control measures as input to integrated assessment modelling;

(c) Meeting of ad hoc expert group on abatement options and their costs to review information on abatement options/techniques, including structural changes in view of analysing the input data of the cost functions and draft its longer-term workplan in autumn 2000 in France.

4.4 MANAGEMENT OF BY-PRODUCTS/RESIDUES CONTAINING HEAVY METALS (HMs) OR PERSISTENT ORGANIC POLLUTANTS (POPs)

Description/objectives: Preparation of a state-of-the-art report on the management and use of by-products/residues containing primarily heavy metals or persistent organic pollutants generated by different sectors, including conclusions and draft recommendations and, where appropriate, proposals to modify or to extend control techniques under the existing protocols by the Task Force under the leadership of Austria.

Main activities/time schedule:

(a) Two meetings of the Task Force in 2000, the first from 8 to 12 May in Ottawa/Montreal, Canada, and the second from 6 to 8 October 2000 in Dubrovnik, Croatia;

(b) Final draft state-of-the-art report for consideration by the Working Group on Strategies and Review and the Executive Body in 2001.

Annex V

PROVISIONAL LIST OF MEETINGS FOR 2000

23-25 August 2000 Geneva	Working Group on Effects (nineteenth session)
29 August - 1 September 2000 Geneva	Working Group on Strategies and Review (thirty-second session)
4-6 September 2000 Geneva	EMEP Steering Body (twenty-fourth session)
4-7 December 2000 Geneva	Executive Body for the Convention (eighteenth session)
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3-5 April 2000 Berlin (Germany)	Implementation Committee (fifth meeting)
September 2000 Geneva	Implementation Committee (sixth meeting)
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15 January 2000 London (United Kingdom)	Meeting of experts on ammonia abatement (organizational meeting)
18-21 January 2000 Semmering (Austria)	Programme Task Force, ICP on Effects of Air Pollution on Natural Vegetation and Crops (thirteenth meeting)
5-7 April 2000 Edinburgh (United Kingdom) (tentatively)	Programme Task Force, ICP on Mapping of Critical Loads and Levels (first meeting)
10-12 April 2000 Stockholm (Sweden)	Workshop to examine the scientific need for future revisions to the Protocol to Abate Acidification, Eutrophication and Ground-level Ozone
12-14 April 2000 Stockholm (Sweden)	Task Force on Integrated Assessment Modelling (twenty-fifth meeting)
26-28 April 2000 Prague - Pruhonice (Czech Republic)	Workshop on control options/techniques to abate heavy metal and persistent organic pollutant emissions from stationary sources

May 2000 Vienna (Austria) (tentatively)	Task Force on Measurements and Modelling (first meeting)
3-6 May 2000 Vilnius (Lithuania)	Programme Task Force, ICP on Integrated Monitoring of Air Pollution Effects on Ecosystems (eighth meeting)
8-10 May 2000 Bilthoven (Netherlands)	Task Force on the Health Aspects of Air Pollution (third meeting)
8-10 May 2000 Ispra (Italy)	Joint EMEP/Ispra technical workshop on measurement of heavy metals
8-12 May 2000 Ottawa/Montreal (Canada)	Task Force on Management of By-products/Residues Containing Heavy Metals or Persistent Organic Pollutants (third meeting)
11-13 May 2000 Paris (France)	Programme Task Force, ICP on Effects of Air Pollution on Materials, Including Historic and Cultural Monuments (sixteenth meeting)
15-18 May 2000 Rome (Italy)	Task Force on Emission Inventories and Projections (ninth meeting)
17-18 May 2000 Brussels (Belgium)	Workshop on the future development of the forest condition monitoring programme, organized by the European Commission in cooperation with ICP Forests
20-24 May 2000 (Belgium)	Programme Task Force, ICP on Assessment and Monitoring of Air Pollution Effects on Forests (sixteenth meeting)
14-16 June 2000 Stockholm (Sweden) (tentatively)	Workshop on mapping air pollution effects on materials, including stock at risk
September/October 2000 Gothenburg (Sweden) (tentatively)	Meeting of experts to further develop dynamic modelling on European scale
6-8 October 2000 Dubrovnik (Croatia)	Task Force on Management of By-products/Residues Containing Heavy Metals or Persistent Organic Pollutants (fourth meeting)

18-20 October 2000 Riga (Latvia)	Programme Task Force, ICP on Assessment and Monitoring of Acidification of Rivers and Lakes (sixteenth meeting)
October 2000 Bern (Switzerland) (tentatively)	Meeting of experts to review new information control techniques and elements for the draft framework code of good agricultural practice
October 2000 (Netherlands)	Meeting of Ad hoc expert group on the assessment of POPs (first meeting)
October/November 2000	Workshop on measurement of persistent organic pollutants
Autumn 2000 (United Kingdom)	Workshop on benefits from air pollution abatement due to reducing human health effects
Autumn 2000 (France) (tentatively)	Meeting of Ad hoc expert group on abatement options and their costs
Autumn 2000 (Germany)	Workshop on ozone trend analysis
In 2000 Bologna (Italy)	Workshop on the implementation of VOC abatement techniques in the surface-coating and dry-cleaning sectors

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