



**Economic and Social  
Council**

Distr.  
GENERAL

ECE/EB.AIR/75  
16 January 2002

Original: ENGLISH

ECONOMIC COMMISSION FOR EUROPE

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

**REPORT OF THE NINETEENTH SESSION OF THE EXECUTIVE BODY**

**CONTENTS**

	<u>Paragraphs</u>
Introduction.....	1 - 6
I. ADOPTION OF THE AGENDA.....	7 - 8
II. MATTERS ARISING FROM THE FIFTY-SIXTH SESSION OF THE ECONOMIC COMMISSION FOR EUROPE AND THE EIGHTH SESSION OF THE COMMITTEE ON ENVIRONMENTAL POLICY OF CONCERN TO THE EXECUTIVE BODY.....	9 - 10
III. ADJUSTMENT TO ANNEX II TO THE 1994 OSLO PROTOCOL ON FURTHER REDUCTION OF SULPHUR EMISSIONS.....	11 - 13
IV. ACTIVITIES OF THE WORKING GROUP ON STRATEGIES AND REVIEW, INCLUDING FINANCING OF CORE ACTIVITIES.....	14 - 33
V. COMPLIANCE WITH PROTOCOL OBLIGATIONS.....	34 - 48
VI. PROGRESS IN CORE ACTIVITIES.....	49 - 65
A. Cooperative Programme for Monitoring and Evaluation of the Long-range Transmission of Air Pollutants in Europe (EMEP).....	49 - 57
B. Effects of major air pollutants on human health and the environment.....	58 - 65

**CONTENTS** (continued)

	<u>Paragraphs</u>
VII. MEDIUM-TERM WORK-PLAN .....	66 - 69
VIII. STRATEGIES AND POLICIES OF PARTIES AND SIGNATORIES TO THE CONVENTION FOR THE ABATEMENT OF AIR POLLUTION .....	70 - 79
IX. ACTIVITIES OF ECE BODIES AND INTERNATIONAL ORGANIZATIONS RELEVANT TO THE CONVENTION.....	80 - 86
X. WORK-PLAN FOR 2002 .....	87 - 90
XI. FINANCIAL ISSUES .....	91 - 101
XII. FACILITATING PARTICIPATION OF COUNTRIES WITH ECONOMIES IN TRANSITION .....	102- 106
XIII. ELECTION OF OFFICERS .....	107
XIV. ADOPTION OF THE REPORT .....	108

Annexes

- I. Decision 2001/1 on the compliance by Norway with the 1991 VOC Protocol
- II. Decision 2001/2 on the compliance by Finland with the 1991 VOC Protocol
- III. Decision 2001/3 on the compliance by Italy with the 1991 VOC Protocol
- IV. Decision 2001/4 on compliance by the Parties with their reporting obligations
- V. Decision 1997/2 concerning the Implementation Committee, its structure and functions and procedures for review of compliance, as amended
- VI. 2002 work-plan for the implementation of the Convention
- VII. Provisional list of meetings for 2002
- VIII. 2002 essential coordination costs for core activities not funded through the EMEP Protocol
- IX. Decision 2001/5 and recommendation on the financing of core activities in 2002-2004
- X. Decision 2001/6 on the facilitation of participation of countries with economies in transition
- XI. Trust funds

## **Introduction**

1. The nineteenth session of the Executive Body for the Convention on Long-range Transboundary Air Pollution was convened in Geneva from 11 to 14 December 2001.
2. The meeting was attended by representatives of the following Parties to the Convention: Austria; Belgium; Canada; Cyprus; Czech Republic; Denmark; Finland; France; Georgia; Germany; Hungary; Italy; Kazakhstan; Lithuania; Monaco; Netherlands; Norway; Poland; Portugal; Russian Federation; Slovakia; Slovenia; Spain; Sweden; Switzerland; Turkey; Ukraine; United Kingdom; United States of America; and the European Community (EC).
3. Representatives from the United Nations Environment Programme (UNEP), the World Health Organization (WHO) and the World Meteorological Organization (WMO) attended. The European Environment Agency (EEA) was also represented.
4. 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); and World Conservation Union (IUCN).
5. The Centre for Integrated Assessment Modelling (CIAM), the Meteorological Synthesizing Centre-East (MSC-E) and the Meteorological Synthesizing Centre-West (MSC-W) of EMEP were also represented..
6. Mr. H. Dovland (Norway) chaired the meeting.

### **I. ADOPTION OF THE AGENDA**

7. The agenda (ECE/EB.AIR/74) was adopted.
8. Mr. K. Bull, of the secretariat, provided information on the distribution of documents, noting that the Conference Services Division had again experienced problems, which had delayed the distribution of documents. He apologized for any inconvenience that this might have caused to delegates.

### **II. MATTERS ARISING FROM THE FIFTY-SIXTH SESSION OF THE ECONOMIC COMMISSION FOR EUROPE AND THE EIGHTH SESSION OF THE COMMITTEE ON ENVIRONMENTAL POLICY OF CONCERN TO THE EXECUTIVE BODY**

9. The Director of the Environment and Human Settlements Division, Mr. K. Bärlund, drew attention to the preparations for the World Summit on Sustainable Development in Johannesburg, South Africa, in 2002 and, at the ECE level, the fifth Ministerial Conference "Environment for

Europe” in Kiev in May 2003. Delegates were invited to consider relevant inputs to the latter. He pointed out that the Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters had recently entered into force. He drew attention to the plans of the Committee on Environmental Policy to prepare a report on the phasing-out of leaded fuel, and the work of its Task Force on Compliance and Enforcement. He welcomed the input from the Convention on these issues. He noted the continuing success of the Convention but stressed the need for ratifying the protocols that were not yet in force as well the need for countries with economies in transition in particular to accede to the protocols that were already in force. He urged support for the scientific underpinning of the Convention as well as for the participation of countries with economies in transition, issues to be discussed by the Executive Body later in its session.

10. The secretariat drew attention to Kazakhstan’s accession to the Convention, and to Yugoslavia’s succession to the Convention and the EMEP Protocol. It informed the Executive Body of the status of ratification of the protocols, noting that Denmark, the United States and the European Community had ratified the Protocol on Heavy Metals (giving a total of 10 ratifications), Bulgaria and Denmark had ratified the Protocol on Persistent Organic Pollutants (POPs) (giving a total of eight ratifications), and Luxembourg was the first Signatory to ratify the Gothenburg Protocol.

### **III. ADJUSTMENT TO ANNEX II TO THE 1994 OSLO PROTOCOL ON FURTHER REDUCTION OF SULPHUR EMISSIONS**

11. The secretariat drew attention to a letter that it had received from Monaco indicating its wish to accede to the 1994 Oslo Protocol on Further Reductions of Sulphur Emissions. In accordance with article 11 of the Protocol, Heads of Delegation had been informed, by fax in September 2001, of Monaco’s proposal for the necessary adjustment to annex II to the Protocol to enable Monaco’s accession.

12. The delegate for Monaco noted Monaco’s endeavours to become party to relevant environmental agreements and its accession to the Protocol on Volatile Organic Compounds (VOCs) in June 2001. He indicated that Monaco was keen to become Party to the 1994 Oslo Protocol and submitted the adjustment for the Executive Body’s approval.

13. The Executive Body adopted by consensus the proposed adjustment to annex II. As required under article 11, the Executive Secretary will inform all Parties of the adoption of the adjustment, which shall become effective 90 days thereafter.

#### **IV. ACTIVITIES OF THE WORKING GROUP ON STRATEGIES AND REVIEW, INCLUDING FINANCING OF CORE ACTIVITIES**

14. Mr. R. BALLAMAN (Switzerland), Chairman of the Working Group on Strategies and Review, introduced the report of its thirty-third session (EB.AIR/WG.5/70). He highlighted the Working Group's progress on a legal instrument to secure the long-term financing of core activities other than those covered by the EMEP Protocol and expressed his thanks to Mr. P. SZELL (United Kingdom), Vice-Chairman of the Executive Body, for having led the drafting group that had prepared the revised text. The preliminary draft protocol text set out in annex I to the Working Group's report reflected the best compromise feasible to bring together the different positions of the Parties to the Convention. At the Working Group's session, several delegations had not been in a position to formally agree to such a draft protocol and stated that they would need to consult their Governments.

15. Several delegations indicated that they could not promise that their countries would be able to sign and ratify a new protocol requiring mandatory financing. They stressed that they supported the core activities and recognized the need for funding of the international coordination costs. They announced that they would continue to contribute on a voluntary basis and expressed their willingness to pursue the discussions in their capitals with the hope of securing agreement also for a mandatory funding mechanism.

16. Some delegations expressed their doubts about the usefulness of a protocol unless all the major contributors were party to it. If the position of these Parties did not change, a voluntary scheme might be preferable. The delegation of the United Kingdom drew attention to its proposal for a more transparent way of recording contributions in kind (EB.AIR/WG.5/70, para. 15), suggesting that this should be part of a voluntary funding scheme.

17. Many delegations supported the draft protocol, pointing out that only a mandatory funding instrument would secure long-term financing of the core activities. Several delegations believed that further negotiations would not be useful as it was not possible to improve the text, besides clarifying a few minor points.

18. In the light of the discussion, the Executive Body:

(a) Took note of the report of the thirty-third session of the Working Group on Strategies and Review (EB.AIR/WG.5/70) and the report on the meeting of Heads of Delegation (EB.AIR/WG.5/68);

(b) Took note, in particular, of the preliminary draft protocol in the report of the Working Group (EB.AIR/WG.5/70, annex I) and the preliminary draft text to be included in an

Executive Body decision to be adopted at the time of adoption of the protocol (EB.AIR/WG.5/70, annex II);

(c) Decided to finalize its work on the long-term financing of core activities at its twentieth session and to prepare input on it to the Ministerial Conference “Environment for Europe” scheduled for May 2003 in Kiev;

(d) Requested the Working Group on Strategies and Review to finalize the draft protocol by resolving the few issues still outstanding and to prepare, as an alternative, a decision and recommendation that would facilitate voluntary financing, including a proposal for reporting and recording contributions;

(e) Further requested the Working Group to hold a meeting of Heads of Delegation on these issues in spring 2002 and requested the secretariat to prepare, in consultation with the Working Group’s Chairman and the delegation of the United Kingdom, draft text as input for this meeting.

19. Mr. Ballaman presented the Working Group’s recommendations regarding the review of the Gothenburg Protocol to Abate Acidification, Eutrophication and Ground-level Ozone (EB.AIR/WG.5/70, para. 31). Based on information from EMEP and the Working Group on Effects, the Working Group had taken stock of progress in preparing for the review. Much progress had been made in the work on particulate matter, but many tasks were still to be completed. While these were partly the responsibility of EMEP and the Working Group on Effects, many data were still needed from Parties. A second workshop under the Network of Experts on Benefits and Economic Instruments (NEBEI), to be held on 2-4 October 2002 in the Netherlands, would cover the economic valuation of benefits from reducing ecosystem damage through air pollution abatement. Mr. Ballaman also noted that it would be useful to have some indication of possible target years for the review of the Gothenburg Protocol so that databases for these years could be developed. He suggested that one could consider 2015 and 2020.

20. Some delegations drew attention to the need for close cooperation with the European Commission’s Clean Air for Europe (CAFE) programme in the work leading up to the review of the Gothenburg Protocol. This was crucial in view of the important resource requirements especially for the work on particulate matter. Also the timing of the work should be well coordinated.

21. Some delegations suggested that proposals for revision in the review should look only at target years after 2010 and not encompass the agreed emission ceilings for 2010. One delegation suggested adding emission ceilings for particulate matter emissions for 2010.

22. The Executive Body:

(a) Took note of the progress in preparing for the review of the Gothenburg Protocol and decided to revert to the recommendation by the Working Group on Strategies and Review (EB.AIR/WG.5/70, para. 31) under agenda item 7;

(b) Agreed that the work should use 2015 and 2020 as target years, while noting that this choice should be re-evaluated in the light of the data quality and uncertainty.

23. The Chairman of the Working Group on Strategies and Review informed the Executive Body about progress in preparing for the review of the Protocols on Heavy Metals and Persistent Organic Pollutants (POPs). He noted that the process of ratification had been disappointingly slow, but the Working Group had envisaged scheduling the reviews for 2005.

24. Mr. Ballaman also informed the Executive Body that the Expert Group on POPs Assessment had held its second meeting on 24-26 October 2001 in Torun (Poland). The Expert Group intended to support the review of the Protocol on POPs. It had reviewed assessments of those substances that were subject to specific review requirements in the Protocol (DDT, heptachlor, HCH/lindane, polychlorinated terphenyls and Ugilec) and started work to assist Parties prepare preliminary risk profiles and summary reports for possible new substances to be added to the Protocol, including pentabromodiphenyl ether, Dicofol, hexachlorobutadiene, pentachlorobenzene, polychlorinated naphthalenes and short-chain chlorinated paraffins. In order to base its results on a broad overview of information covering the whole UNECE region, the Expert Group had drawn up a questionnaire on these substances. Mr. Ballaman invited the Executive Body to lend its support to this exercise and encourage all Parties, in particular those that were not participating in the work of the Expert Group, to respond to the questionnaire.

25. The Executive Body:

(a) Urged all Signatories to the Protocols that had not yet ratified them to speed up their ratification procedures with the aim of having the number of ratifications necessary for entry into force by the time of the Johannesburg Summit in September 2002;

(b) Decided that, in the review of the Protocol on Heavy Metals, priority would be given to cadmium and mercury, while this did not exclude the need for action on other heavy metals, including those not yet in the Protocol;

(c) Agreed on the need to review the technical annexes to the Protocols on Heavy Metals and POPs and to continue work on the development of an effect-based approach;

(d) Agreed that the reviews of the Protocols on Heavy Metals and POPs could be scheduled to start in 2005;

(e) Noted the work of the Expert Group on POPs was well under way, and called upon Parties to support this work by responding to the questionnaire drawn up by the Expert Group.

26. Mr. Ballaman introduced the draft framework advisory code of good agricultural practice for reducing ammonia emissions (EB.AIR/WG.5/2001/7), the work of the Expert Group on Ammonia Abatement. The code was intended to assist Parties to the Gothenburg Protocol fulfil their obligation under annex IX.

27. He also drew attention to the proposal by France to lead a new expert group on techno-economic issues (EB.AIR/WG.5/2001/8), whose main tasks would be updating existing techno-economic databases on emission reduction technologies and drawing up draft revisions of texts on techno-economic issues to be included in, or annexed to, existing protocols.

28. The Executive Body:

(a) Adopted the draft framework advisory code of good agricultural practice for reducing ammonia emissions (EB.AIR/WG.5/2001/7) to assist future Parties to the Gothenburg Protocol in developing codes at the national level, as required by annex IX to the Gothenburg Protocol;

(b) Agreed to establish a new Expert Group on Techno-economic Issues (EB.AIR/WG.5/2001/8), to be led by France, noting that its first meeting was expected to be held in the first quarter of 2002.

29. Mr. Ballaman finally introduced the work on the communication strategy, highlighting the results of the open-ended group of experts (EB.AIR/WG.5/2001/3). He outlined the seven recommendations of the group, including making better use of the Internet especially improving the Convention's own web pages, increasing the participation of NGOs in meetings of the Convention, improving the questionnaire on strategies and policies for air pollution abatement, and updating the brochure on the Gothenburg Protocol, possibly in other languages.

30. One delegation felt that the highest priority should be to update and improve the Convention's web site, noting that this was currently one of the most useful environmental web sites. The secretariat confirmed that it planned to update the content and modify the structure of the web site in the early part of 2002.

31. The delegation of Canada indicated that it would be willing to support the work of updating the Gothenburg brochure, provided that there was assistance from other Parties.

32. Several delegations expressed their interest in a workshop on communications and agreed to take the necessary steps to organize this provided that adequate resources could be found. The delegation of the Netherlands emphasized in this context the importance of improving the questionnaire on strategies and policies for air pollution abatement. The Netherlands had provided resources for work on improving the questionnaire and was interested in continuing this support.

33. The Executive Body:

(a) Endorsed the goals and recommendations of the open-ended group of experts on elements for a communication strategy for the Convention (EB.AIR/WG.5/2001/3, paras. 4-12);

(b) Requested the secretariat, with the help of Parties, to improve the presentation and user-friendliness of the Convention's web page and urged Parties to transmit to the secretariat any additional ideas for improving the structure or content of the pages;

(c) Welcomed the possibility of a workshop on enhanced communications for the Convention, noting a preparatory meeting would be held in due time to report to the Working Group on Strategies and Review at its thirty-fourth session. The workshop might examine ways of improving the questionnaire on strategies and policies and the associated 2004 review. Participants could include experts on communications and public relations, NGOs, and journalists;

(d) Welcomed the offer of Canada to reproduce the brochure on the Gothenburg Protocol in English, noting that Canada would assess the printing costs and contribute at least part of the financing.

## **V. COMPLIANCE WITH PROTOCOL OBLIGATIONS**

34. The Chairman invited his Vice-Chairman, Mr. R. Ballaman, to chair this agenda item. The Executive Body agreed to this change.

35. Mr. P. Széll (United Kingdom), Chairman of the Implementation Committee, introduced its fourth report (EB.AIR/2001/3). As a matter of priority, the Committee had considered the submissions by Norway, Finland and Italy concerning their compliance with the 1991 Protocol on the Control of Emissions of Volatile Organic Compounds or their Transboundary Fluxes. The Committee had concluded that the three Parties were in non-compliance with their emission reduction obligations under the VOC Protocol and had prepared a recommendation for each case.

36. Mr. Széll also presented the Committee's recommendation concerning Parties' compliance with their reporting obligations. The Committee had examined progress by Parties that had been subject to Executive Body decision 2000/2. It noted that Liechtenstein, Luxembourg and the European Community had still not complied with the reporting requirements in question

(EB.AIR/2001/3, para. 30 (c)-(e)). Mr. Széll highlighted the problem that Parties had with the timeliness of submitting reports, in particular emission data.

37. Mr. Széll drew attention to the in-depth review of the compliance by the Parties with their emission reduction obligations under the VOC Protocol conducted at the request of the Executive Body. He also highlighted the proposed amendments (EB.AIR/2001/3, para. 59) to the Committee's terms of reference (Executive Body decision 1997/2), which would bring the text into line with established practice. Mr. Széll finally expressed his special gratitude to the long-standing Committee members that were stepping down and to the secretariat.

38. The delegations of Norway, Finland and Italy explained the circumstances leading to their non-compliance with their emission reduction obligations under the VOC Protocol. They expressed their appreciation to the Implementation Committee for the attention given to their cases. They outlined the measures they had taken to remedy the situation and bring them back into compliance as quickly as possible.

39. The delegation of Sweden informed the Executive Body that it was in a similar situation as Norway, Finland and Italy and had also failed to comply with its emission reduction obligation under the VOC Protocol. It had submitted its case to the Implementation Committee, but this was too late for consideration in its fourth report. The delegation considered that the recommendations formulated for Norway, Finland and Italy also applied to it and it would act accordingly by preparing the requested information for the Committee.

40. One delegation questioned to whom the decision, once adopted by the Executive Body, would be addressed. It also wondered whether there were any plans to publicise the decisions.

41. In the discussion, some delegations referred to the uncertainties linked to VOC emission data. Other delegations drew attention to the need for emission reduction measures in all VOC-emitting sectors, including the solvents sector. The Chairman of the Implementation Committee confirmed that the Committee had considered these issues when preparing its report.

42. The representative of EEA noted that the work of the Implementation Committee could provide useful insight into the experiences gained and possible difficulties encountered in implementing emission reduction measures. He asked if the Committee intended to evaluate this experience. The Chairman of the Committee pointed out that this was not within the Committee's mandate.

43. Several delegations expressed serious concern regarding the state of implementation of the VOC Protocol as reflected in chapter III of the fourth report of the Implementation Committee (EB.AIR/2001/3, paras. 46-51). They were particularly concerned that three of the Parties

identified in that report had not made a submission to the Committee and were, hence, not subject to a draft Executive Body decision.

44. The delegation of Slovenia informed the Executive Body about progress in work following on from Executive Body decision 2000/1 concerning Slovenia's compliance with the 1994 Oslo Protocol. A draft environmental action plan for the Trbovlje power plant had been drawn up and presented to the Government. This had been rejected and improvements requested. A new draft was expected for early 2002. Slovenia would keep the Implementation Committee informed.

45. Concerning the reporting of emission data, the secretariat informed the Executive Body that it had recently received a submission by Spain that included emission data up to 1998. Spain had indicated that it would submit the missing data for 1999 and data for 2000 by 31 January 2002. No submission by Luxembourg, contrary to what that Party had announced (EB.AIR/2001/3, para. 30 (d)), had been received.

46. The delegation of the Russian Federation informed the Executive Body that it had now completed its revised emission inventory and would submit its final and complete emission data on sulphur and nitrogen oxides (covering all relevant emission sources), as required by the Helsinki Protocol and the Sofia Protocol, by 31 January 2002.

47. The representative of the European Community (EC) expressed his regret about its inability to submit emission data as required under the protocols. He indicated that it would submit all available data in early 2002, but noted that this would not cover all its member States. It recognized that it needed to increase pressure on the Member State that had not provided the required emission data to prepare this information without undue delay.

48. In the light of the discussion, the Executive Body:

(a) Took note of the fourth report of the Implementation Committee (EB.AIR/2001/3), expressing its great appreciation to the members of the Committee and its Chairman for their excellent work;

(b) Adopted decision 2001/1 on the compliance by Norway with the 1991 VOC Protocol (annex I);

(c) Also adopted decision 2001/2 on the compliance by Finland with the 1991 VOC Protocol (annex II);

(d) Furthermore adopted decision 2001/3 on the compliance by Italy with the 1991 VOC Protocol (annex III);

(e) Requested the secretariat to communicate these decisions to the Ministers of Foreign Affairs of the Parties in question;

(f) Requested the Implementation Committee to consider the difference between its approach to Parties in non-compliance making a submission on this matter and those Parties in non-compliance not making such a submission and to report back to it at its twentieth session;

(g) Adopted decision 2001/4 on compliance by the Parties with their reporting obligations (annex IV);

(h) Adopted the amendments, proposed by the Committee (EB.AIR/2001/3, para. 59), to its decision 1997/2 (annex V);

(i) Decided to delegate to its Bureau the authority to select a replacement member for the Implementation Committee from the same Party in a case where, due to exceptional circumstances, a member had become permanently unavailable;

(j) Requested the Committee to conduct in 2002 an in-depth review on compliance by Parties with their obligations under the 1994 Oslo Protocol on Further Reduction of Sulphur Emissions;

(k) Noted that the following two members remained on the Committee for another year: Mr. Cristiano PIACENTE (Italy) and Ms. Tine KJAERULFF (Denmark);

(l) Re-elected as members, for another term of two years:

- Mr. Tuomas KUOKKANEN (Finland);
- Mr. Ivan MOJÍK (Slovakia); and
- Mr. Patrick SZELL (United Kingdom) as Chairman;

(m) Elected for a first term of two years:

- Ms. Sue BINIAZ (United States);
- Mr. Volkert KEIZER (Netherlands);
- Mr. Lars LINDAU (Sweden); and
- Mr. Stephan MICHEL (Switzerland); and

(n) Expressed its gratitude to the outgoing members of the Committee for the years of dedicated work in establishing the working procedures of the Committee:

- Mr. Harald DOVLAND (Norway);
- Mr. Ramón GUARDANS (Spain);
- Mr. Masud HUSAIN (Canada); and
- Mr. Dieter JOST (Germany).

## VI. PROGRESS IN CORE ACTIVITIES

### A. Cooperative Programme for Monitoring and Evaluation of the Long-range Transmission of Air Pollutants in Europe (EMEP)

49. Mr. M. Williams (United Kingdom), Chairman of the EMEP Steering Body, introduced the report of its twenty-fifth session (EB.AIR/GE.1/2001/2). He emphasized that the new structure had now started to show the intended results. Because of the support on technical issues from its task forces, in particular the new Task Force on Measurements and Modelling, the Steering Body had now been able to give more attention to strategic issues. He also informed the Executive Body that the long-term strategy for EMEP 2000-2009 had now been published (ECE/EB.AIR/73).

50. The Chairman of the EMEP Steering Body drew the attention of the Executive Body to the work on particulate matter. He emphasized the need for monitoring on the basis of the programme adopted by the Steering Body. He also highlighted the importance of efforts by Parties to develop emission inventories for particulate matter and hoped that the Coordinated European Programme on Particulate Matter Emission Inventories, Projections and Guidance (CEPMEIP), coordinated by EEA and EMEP, would provide some assistance to Parties in completing this task. Parties were also urged to review the data on abatement options and their costs to be used for integrated assessment modelling of particulate matter; the Centre for Integrated Assessment Modelling (CIAM) had made these available via the Internet. While much progress had been made for POPs and heavy metals, significant further efforts were also needed with respect to emission and monitoring data.

51. Mr. Williams pointed out that one of the major challenges for EMEP was the development of the unified Eulerian model. Good documentation of the model and a thorough comparison of its modelling results with those of the previously used Lagrangian model were necessary to get experts to accept the model and to build the confidence of Parties in this new tool to that they would use it for future negotiations on abatement policies.

52. Mr. Williams also drew the attention of delegations to the upcoming workshop of the Task Force on Integrated Assessment Modelling on uncertainty management in integrated assessment modelling to be held at CIAM at the International Institute for Applied Systems Analysis (IIASA) in Laxenburg (Austria) on 24-25 January 2002. A workshop under the Task Force on Emission Inventories and Projections on the validation and evaluation of air emission inventories would be held on 14-16 October 2002 in Gothenburg (Sweden).

53. The delegation of the United States informed the Executive Body that it intended to organize in autumn 2002 a follow-up workshop to the EMEP workshop held in June in Palisades

(United States). The workshop would address the hemispheric transport of air pollutants. The delegation of Germany expressed its interest in the topic and offered to co-sponsor this workshop.

54. The delegation of Canada noted that it had reviewed the new emission reporting guidelines adopted in principle by the EMEP Steering Body. It had identified some points of concern to it, regarding both the technical content and the legal status of the draft. It was committed to supporting the work to finalize the guidelines and would coordinate with experts from the United States and present its comments to the editorial group.

55. The delegation of Germany expressed concern about the workload generated by different emission data reporting schemes and urged the Executive Body to enhance harmonization with the guidelines (new reporting format) of the Intergovernmental Panel on Climate Change.

56. The delegation of Kazakhstan expressed its satisfaction at having become Party to the Convention. It intended to participate in the work of the subsidiary bodies under the Convention and was looking forward to joining the task forces and cooperating in the technical work under way in the framework of the Convention. Kazakhstan was interested in the Convention's priority areas and had designated bodies and nominated heads of delegation for each of the Convention's main subsidiary bodies.

57. The Executive Body:

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

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

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

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

(e) Welcomed the progress achieved in the work on particulate matter (PM) and approved the adopted monitoring programme;

(f) Called upon Parties to initiate PM monitoring work as quickly as possible, to review the data related to primary PM emission-generating activities and their costs that the

Centre for Integrated Assessment Modelling (CIAM) had made available on the Internet, and make every effort to report this year for the first time their emissions of PM;

- (g) Approved the terms of reference for the Task Force on Measurements and Modelling as well as its work programme;
- (h) Expressed its support for the preparation of the assessment report and called upon Parties to contribute to the work planned;
- (i) Welcomed the cooperation with the EEA European Environment Information and Observation Network (EIONET) and expressed its support for harmonizing the reporting of air quality data and air emissions;
- (j) Noted the shift of emphasis in the work of the Task Force on Emission Inventories and Projections in the coming years to focus on data quality;
- (k) Endorsed the procedure adopted by the Steering Body to move towards new emission reporting guidelines by adopting a pilot phase to allow Parties to apply the new guidelines in the 2001 reporting round, while requesting the Task Force on Emission Inventories and Projections to review them, in particular with a view to harmonizing the reporting format with that of the United Nations Framework Convention on Climate Change, and called upon Parties to support this work;
- (l) Took note with appreciation of the further development of integrated assessment models, especially concerning the assessment of uncertainties, and called upon Parties to support the work of the Task Force on Integrated Assessment Modelling on urban air quality modelling;
- (m) Approved the proposed budget of CIAM for 2002 and 2003 as set out in the report of the Task Force on Integrated Assessment Modelling (EB.AIR/GE.1/2001/3, paras. 57-58) and called upon Parties to make every effort to provide the necessary funding for the work on integrated assessment modelling to be conducted as foreseen in the work plan; and
- (n) Endorsed the conclusions and recommendations of the workshop on photo-oxidants, particles, and haze across the Arctic and the North Atlantic: Transport observations and models, and agreed that this work should be pursued with high priority taking a hemispheric perspective in collaboration also with Asian scientists.

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

58. Mr. B. Achermann (Switzerland), Vice-Chairman of the Working Group on Effects, introduced the report on its twentieth session (EB.AIR/WG.1/2001/2). He summarized the most

important results of the Working Group on Effects, the International Cooperative Programmes and the Task Force on the Health Aspects of Air Pollution (EB.AIR/WG.1/2001/3), stressed the importance of the active participation of all Parties to the Convention in the ongoing activities, emphasized the further development of cooperation with other subsidiary bodies, in particular with the EMEP Steering Body, and noted the strengthened links with relevant institutions and organizations outside the Convention. He also underlined the need for close coordination of work-plans and collaboration in their implementation with the Clean Air for Europe (CAFE) programme of the European Commission.

59. He drew special attention to the preparation of the draft long-term strategy of the effect-oriented activities till 2010 (EB.AIR/WG.1/2001/4), and to the draft medium-term work-plan for the further development of the effect-oriented activities for 2002-2004 (EB.AIR/WG.1/2001/5), aimed at updating scientific knowledge and data on the current state and trends in the quality of the environment and on the effects of selected air pollutants.

60. Mr. Achermann further noted, in particular:

(a) The drawing-up of the draft outline of the report on the assessment of present air pollution effects and their recorded trends (EB.AIR/WG.1/2001/3, annex VIII), which might be presented by the Working Group to the Executive Body in 2004 as its contribution to, and technical support for, the expected review/revision of the existing protocols to the Convention;

(b) Progress achieved in updating the European critical loads data and maps, in developing the effect-based approaches for heavy metals, and in studying the effects of ozone on vegetation and determining its critical fluxes;

(c) The recommendation of the Working Group on Effects to change the name of ICP on Mapping Critical Levels and Loads to ICP on Modelling and Mapping of Critical Levels and Loads and Air Pollution Effects, Risks and Trends;

(d) The preparation of the summary report on the occurrence, movement and effects of selected heavy metals (EB.AIR/WG.1/2001/10) and technical reports on this topic to be published by individual programmes;

(e) The important results of the Task Force on the Health Aspects of Air Pollution on the assessment of the health risks of heavy metals and persistent organic pollutants and the substantial contribution and continuing coordination provided to these activities by the Bonn Office of the WHO European Centre for Environment and Health (ECEH);

(f) Noted with appreciation the excellent support provided by the secretary to the Working Group, Mr. R. Chrast, over many years.

61. Mr. M. Krzyzanowski, Chairman of the Task Force on the Health Aspects of Air Pollution and representative of WHO/ECEH noted that the Air Quality and Health programme of the WHO Regional Office for Europe, had moved from Bilthoven (Netherlands) to Bonn (Germany), where WHO/ECEH continued to provide the secretariat to the Task Force.

62. At its fourth meeting held in December 2001 in Bonn, the Task Force had reviewed the first draft of the assessment of the "Health risks of persistent organic pollutants from long-range transboundary air pollution" and agreed on its finalization. Further work of the Task Force would include the evaluation of the effects of particulate matter and, later, ozone and NO<sub>2</sub>. This work would benefit from the WHO project "Systematic review of health aspects of air quality in Europe", implemented in support of CAFE and with financial support from the European Commission, which would provide scientific background on the health effects of exposure. The Task Force would focus on linking exposure with long-range transboundary air pollution.

63. The Task Force discussed a need for establishing a permanent core group, complemented and supplemented by specific experts for specific tasks. This should enable the Task Force to be more proactive in advising the Working Group on Effects, the Executive Body and policy makers about health problems arising from the long-range transport of air pollution, in addition to addressing specific tasks assigned to it. The need for consistent support from Parties (both financial and expert) was emphasized, especially for such a proactive role.

64. So far, the necessary international coordination activities of the Task Force had been funded by WHO/ECEH (about US\$ 60,000 per year, including staff costs for 2000-2001). However, these resources were not assured for future years. Despite the voluntary contribution from Switzerland (85,000 Sw F) to support activities of the Task Force in 2001-2003, additional resources were urgently required. Fulfilling all health-related tasks envisaged in the medium-term work-plan would require a substantial increase in funds (to some US\$ 100,000 per year).

65. The Executive Body:

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

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

(c) Stressed again the importance of the active participation of all Parties to the Convention, the effective cooperation among the programmes, task forces and coordinating centres under the Working Group on Effects, and their close collaboration with EMEP, as well as

the development of close links with relevant institutions and organizations outside the Convention;

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

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

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

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

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

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

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

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

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

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

## VII. MEDIUM-TERM WORK-PLAN

66. Mr. K. Bull presented the overview of the work-plan for the Convention (EB.AIR/2001/9) on behalf of the Bureau of the Executive Body. He noted the Bureau's intention to draw attention to the main issues to be considered when planning the reviews of the three protocols not yet in force. The Bureau was aware that much preparatory work had been done by its subsidiary bodies but wished to highlight some of the scientific and technical elements that might be included in the future reviews. While noting the subsidiary bodies' comments on possible bottlenecks and the ambitious and demanding nature of the work, the Bureau wished to give the Executive Body the opportunity to identify its priorities while taking into account such issues as economic importance, complexity of the work and likelihood of achieving success, and the adequacy of resources for completing work in time.

67. Mr. P. WICKS (European Community) drew attention to the recent meeting of the European Commission's CAFE programme and the development of its detailed work-plan. Because of possible difficulties with meeting deadlines for technical and scientific outputs, a finalization date of 2005 had now been proposed instead of 2004. A CAFE web site was available at: <http://www.europa.eu.int/comm/environment/air/cafe.htm>.

68. In the following discussion, one delegation drew attention to the importance of national contributions, both of data and also of financial support for coordination activities and workshops. Other delegations stressed the importance of the parallel activities taking place under the CAFE programme and proposed that a similar "project plan" approach be adopted making use of the work done under CAFE. They pointed out the interdependency of the work under the Convention and under CAFE, and noted the overlap of issues, data and many of the participating countries. The Vice-Chairman of the Working Group on Effects indicated that delays in outputs from the dynamic modelling work were due to problems of addressing nitrogen and eutrophication. It was pointed out that the planned meeting of the Bureaux of the EMEP Steering Body and the Working Group on Effects would be an excellent time for experts from the programme centres to draw up a coordinated medium-term work-plan.

69. In view of the discussion, and noting the need for taking decisions outstanding from item 5, the Executive Body decided:

(a) To schedule the review of the Gothenburg Protocol, in view of its expected entry into force in 2003, to commence in 2004;

(b) That this review should encompass particulate matter and its health impacts, and take account of available knowledge on the hemispheric transport of air pollutants;

(c) To support the coordination of work by EMEP and the Working Group on Effects and authorize the technical bodies and centres to share information and data informally as soon as they become available to speed up the process;

(d) To take note of the plans for the next workshop scheduled by NEBEI, which would be devoted to the economic valuation of ecosystem damage; and

(e) To request the Bureau of the EMEP Steering Body and the Extended Bureau of the Working Group on Effects at their meeting, scheduled for February 2002, to develop a coordinated medium-term work-plan, taking note of the planning activities already carried out by the CAFE programme, and report this to the Bureau of the Executive Body and the Working Group on Strategies and Review at their next meetings.

#### **VIII. STRATEGIES AND POLICIES OF PARTIES AND SIGNATORIES TO THE CONVENTION FOR THE ABATEMENT OF AIR POLLUTION**

70. The secretariat introduced the remaining section of the draft 2000 Review of Strategies and Policies (EB.AIR/2000/1/Add.2) and the corrigenda to documents submitted at the nineteenth session (EB.AIR/2000/1/Corr.1; EB.AIR/2000/1/Add.1/Corr.1; EB.AIR/2000/1/Add.3/Corr.1) based on corrections submitted by Parties.

71. The delegation from Germany noted its corrections were not included in the corrigenda. The secretariat regretted the omission but would keep these changes on file to use in the 2002 review exercise. Several other Parties suggested minor editorial changes to the documents. They were asked to submit these to the secretariat to be kept on file.

72. The delegation of the United States of America introduced the draft Executive Summary of Strategies and Policies of Air Pollution Abatement (EB.AIR/2001/1), which included background information on the Convention and its protocols, based on replies to the 2000 questionnaire, as well as 1998 emissions data. It indicated this aimed to present a user-friendly summary of the strategies and policies of Parties that could be presented to governments and the public. The United States offered to print a total of 1000 copies, which would include coloured charts and graphs, in the three ECE languages. Parties should submit corrections by 31 January 2002.

73. One delegate noted that the document avoided naming countries not meeting their emission targets; he felt that this obscured the results. Another suggested naming countries meeting targets as a more positive approach. A third delegate pointed out that, since the document was based on 1998 data, more recent information could not be reflected. It was stressed that the document should clearly indicate that it was the review for 2000.

74. The Executive Body took note of:

(a) The corrigenda to the 2000 Review of Strategies and policies, and requested the secretariat to record further corrections submitted by Parties and make use of these in the 2002 review exercise;

(b) The Executive Summary of the 2000 Review, expressed its appreciation for the work of the consultant provided by the United States, accepted the generous offer of that country to publish it in three languages, suggested that the names of Parties effectively implementing protocols should be highlighted in the final version, invited Parties to submit corrections to the secretariat by 31 January 2002, and requested its Bureau to take responsibility for approving the final version.

75. The secretariat introduced the draft questionnaire on strategies and policies for 2002 (EB.AIR/2001/2), noting it contained two new sections. Section 7 (questions 50-58) was for the 1999 Gothenburg Protocol. In Section 8, the general questions (59-71) had been revised as proposed by a consultant from the Netherlands. This was intended to provide more focus for the replies from Parties and to aid comparisons. Furthermore, in response to suggestions made at the eighteenth session, the secretariat had developed an Internet-accessible questionnaire to facilitate Parties' replies. This was planned to be on-line from 31 January and each Party would have a user name and password to provide security. Replies would be due by 31 March 2002. The database of replies would be made accessible on the Internet and a draft executive summary was planned for submission to the Executive Body at its twentieth session for approval and final publication.

76. The secretariat demonstrated the Internet application of the 2002 questionnaire on strategies and policies for air pollution abatement. It indicated that, as usual, a covering letter would be sent to delegations by the end of January; this time it would include technical instructions on using the electronic questionnaire, user names and passwords, as well as ECE contact information.

77. Several Parties noted the benefits of streamlining the questionnaire in future, as well as coordinating it with other bodies requiring similar information, such as the Organization for Economic Cooperation and Development (OECD), the United Nations Framework Convention on Climate Change and EC. One organization suggested including a question in either the

questionnaire or its covering letter on the effectiveness of measures taken by Parties. One Party suggested strengthening the obligations for providing information on research and monitoring for the Nitrogen Oxide and VOC Protocols. These issues were all thought useful for consideration for the 2004 review.

78. The Executive Body:

(a) Thanked the consultant from the Netherlands for his contribution to the revised questionnaire and adopted the questionnaire with its new sections 7 and 8;

(b) Thanked the secretariat for developing the Internet application and requested it be used for the 2002 reporting on strategies and policies;

(c) Agreed to consider questions on the effectiveness of measures undertaken, efforts at streamlining and coordination with other organizations, and strengthening the obligations on reporting of research and monitoring when preparing for the 2004 review.

79. Furthermore, the Executive Body decided to:

(a) Make replies from Parties available on the Internet in the language in which they were submitted and in English, in particular for consideration by the Implementation Committee, but also for access by Parties and the public;

(b) Produce a draft report providing a summary of the most important information from Parties, to be submitted to the Executive Body at its twentieth session;

(c) Compile information on emissions, critical loads, etc. provided by the EMEP Steering Body and the Working Group on Effects; and

(d) Publish a report (major review for 2002), based on (b) and (c) above, to be made available to the Executive Body at its twenty-first session.

## **IX. ACTIVITIES OF ECE BODIES AND INTERNATIONAL ORGANIZATIONS RELEVANT TO THE CONVENTION**

80. The representative from UNEP reported on progress with the implementation of the Stockholm Convention on POPs. So far 110 countries and one regional organization had signed and two countries had ratified. The Intergovernmental Negotiating Committee would continue to meet in the interim period and its next meeting was scheduled for June 2002. UNEP was conducting a series of subregional workshops to support implementation. It would conduct a global assessment of mercury and its compounds at the request of its Governing Council and

would report at its next Council session in 2003. At present UNEP was developing a draft for circulation to members of an open-ended working group that would meet in mid-2002 and address this issue.

81. The secretariat informed the Executive Body that it had sent a letter, as requested at its eighteenth session, to the UNEP Governing Council inviting consideration of a global assessment of mercury and its compounds. Since the decision by the Governing Council, the secretariat had responded to a request for information for the global assessment from UNEP indicating the activities and data of relevance to the Convention.

82. The representative from WMO noted that it was collaborating closely with EMEP through its Global Atmosphere Watch (GAW) programme, for instance by co-chairing the Task Force on Measurements and Modelling. Recent GAW activities had included the preparation of the "Strategy for the Implementation of the GAW Programme", development of urban air quality issues through the GAW Urban Research Meteorology and Environmental Project (GURME), and active coordination of satellite and ground-based measurements through the Integrated Global Observing Strategy (IGOS). The WMO Commission for Atmospheric Sciences would meet in Oslo in February and the European GAW activities would be reviewed at the workshop in RIGA in May.

83. The representative of EEA drew attention to the extension of its membership to 33 in early 2002. He mentioned several indicator-based EEA reports, as well as the recent report "Reporting on environmental measures: are we being effective?" The new European Topic Centre on Air and Climate Change aimed to support the Convention as well as the United Nations Framework Convention on Climate Change, the CAFE Programme and the European Climate Change Programme (ECCP). The representative was pleased to note the enhanced cooperation between EEA and the bodies of the Convention.

84. The delegate for EC drew attention to his earlier intervention relating to the medium-term work-plan. He noted the importance of collaborative efforts between the CAFE programme and the Convention, welcomed the efforts that were being made by the Convention's subsidiary bodies, and hoped that the collaboration would continue in this effective way.

85. The secretariat stated that it had received an invitation from the Acid Deposition Monitoring Network in East Asia (EANET) to attend the first meeting of its Scientific Advisory Committee and its third intergovernmental meeting. Mr. K. Bull had attended the meetings and representatives of ICP Forests and the Chemical Coordinating Centre of EMEP had attended the scientific meeting. The Bureau of the Executive Body was keen for further collaboration between the two bodies and the secretariat proposed to ensure that the EANET secretariat was informed of activities, documents and meetings.

86. In discussion it was agreed that the Convention should continue its outreach activities to other regions where air pollution initiatives were taking place.

## **X. WORK-PLAN**

87. The secretariat introduced the draft work-plan for the implementation of the Convention (EB.AIR/2001/6) and the provisional list of meetings for 2002, amended to reflect the discussion and the decisions that the Executive Body had taken earlier in the session.

88. While considering its demanding work-plan for 2002, the Executive Body stressed the importance of closer cooperation between the Convention and the CAFE programme, in particular in harmonizing as much as possible their detailed work-plans and in their effective implementation. The Executive Body also requested its subsidiary bodies and invited the CAFE programme to make their relevant provisional data available to one another without any delay.

89. The Executive Body adopted its work-plan for 2002 as annexed below (annex VI).

90. The Executive Body tentatively scheduled its twentieth session from 10 to 13 December 2002. A provisional list of meetings for 2002 is annexed below (annex VII).

## **XI. FINANCIAL ISSUES**

91. The secretariat introduced document EB.AIR/2001/7 on the financial requirements for the implementation of EMEP. It drew attention to the status of the mandatory contributions and explained that due to non-payment by some Parties it had so far been impossible for the secretariat to pay the EMEP centres the budgeted contributions for 2001 in full. The situation had improved since the document had been drafted, with full payments received from Croatia, Greece, Ireland and Spain. This left only six Parties that had not yet paid their 2001 mandatory contributions. A partial payment for the outstanding arrears dating back to 1999 had been received from Italy. In addition, the secretariat had received a voluntary contribution from Switzerland of Sw F 35,000 to support the work of CEPMEIP to develop the particulate matter emission inventory.

92. The secretariat also informed the Executive Body about the payments by Ukraine. In 1999, Ukraine had declared its intention to cover its arrears in kind for 1992-1994 and 1996-1998 and to pay its contributions from 1999 onwards in cash to the Trust Fund. A project to be undertaken in 2002-03 had now been set up between Ukraine and MSC-E as well as the Institute for Environmental Protection in Poland, to cover the outstanding contributions in kind of Ukraine for the years 1992-1994. The delegation of Ukraine reported on progress in preparing the project, which was ready to start in January.

93. The secretariat also explained that, at the request of the EMEP Bureau, it had contacted the ten Parties to the Convention (Armenia, Estonia, Georgia, Iceland, Kazakhstan, Kyrgyzstan, Lithuania, Republic of Moldova, Romania, and the former Yugoslav Republic of Macedonia) that were not yet Party to the EMEP Protocol and asked them to consider accession to the EMEP Protocol. It had drawn attention to the fact that all Parties to the Convention benefited from the work of EMEP and would be expected to contribute their fair share to its financing.

94. The delegation of Italy informed the Executive Body that it had now effected payment of all its outstanding arrears, including its EMEP contribution for 2001.

95. The delegation of Lithuania informed the Executive Body that it was in the process of completing its ratification of the EMEP Protocol. It expected this process to be completed in the first half of 2002.

96. The delegation of Kazakhstan informed the Executive Body that it was studying possibilities for contributing its share to the work under the Convention. There were difficulties persuading its Government to contribute financially to EMEP when the country was working hard to establish policies necessary to fulfil its obligations under the Convention.

97. The Executive Body:

(a) Adopted the detailed use of resources in 2002 as set out in table 2 of EB.AIR/2001/7 and on the scale of mandatory contributions as set out in table 3 (last two columns) of EB.AIR/2001/7;

(b) Confirmed its decision of the seventeenth session to keep the budget for 2003 at the same level as in 2000, 2001 and 2002 (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 2003 budget together with the work-plan for approval by the Executive Body at its twentieth session;

(d) Furthermore requested the Steering Body, with the assistance of its Bureau, to consider the budget requirements for the years after 2003 and prepare a proposal for approval by the Executive Body at its twentieth session;

(e) Urged Parties to pay their 2001 contributions in cash to the Trust Fund (Annex XI) if they had not yet done so and, in 2002, to pay their contributions in February/March according to the procedure that would be explained in a circular letter by the secretariat;

(f) Requested the secretariat to study the possibility of adopting the annual budget of EMEP in euro instead of United States dollars in the future; and

(g) Expressed its thanks to Switzerland for its voluntary contribution to EMEP.

98. The secretariat introduced a note on the financing of core activities, including the relevant decision and recommendation (EB.AIR/2001/8), and provided updated information on the voluntary contributions received in 2001.

99. Noting the earlier discussions and decision of the Executive Body concerning the importance of further work on assessing the health aspects of long-range transboundary air pollution, and in view of the demanding tasks that the Task Force on the Health Aspects of Air Pollution was requested to undertake in 2002-2004, it was agreed that the necessary funding for essential international coordination of its activities should be addressed by the decision and recommendation.

100. After in-depth discussion, the Executive Body decided to increase the budget for the 2002 essential coordination costs for core activities not funded through the EMEP Protocol by US\$ 100,000, to allocate this sum to the Task Force on the Health Aspects of Air Pollution, and to amend the tables in document EB.AIR/2001/8 (annex I and annex II, appendix) accordingly.

101. The Executive Body:

(a) Approved the total budget for 2002, which included 3% programme support costs, of US\$ 1,920,950 for essential international coordination of the core activities not funded through the EMEP Protocol (annex VIII);

(b) Adopted decision 2001/5 and the recommendation on the financing of core activities in 2002-2004 (annex IX);

(c) Welcomed the voluntary contributions made to the Trust fund in 2001 and urged Parties to continue to provide their important financial support to the activities under the Convention on a voluntary basis to the Trust Fund (Annex XI).

## **XII. FACILITATION OF PARTICIPATION BY COUNTRIES WITH ECONOMIES IN TRANSITION**

102. On behalf of the Bureau of the Executive Body Mr. K. Bull introduced the proposals of the Bureau to revise decision 1997/4 on the facilitation of participation by countries with economies in transition (EB.AIR/2001/5). He noted there had been a need to update the previous list of countries eligible for support, taking into account, for example, new Parties to the Convention.

The Bureau had intended to provide the maximum flexibility for use of the funds but still giving priority to negotiating groups and related meetings. It was also aware that the funds available were very limited so care was needed to ensure a reasonable level of support to all eligible Parties.

103. The delegate of Kazakhstan indicated the willingness of his country, as a new Party, to participate fully in the work of the Convention and its intention to accede to the Convention's protocols. It was, therefore, important that Kazakhstan should attend all meetings of the main subsidiary bodies as well as of the Executive Body so that it could get a fuller picture of what was happening under the Convention, understand possible future obligations and explore mechanisms for implementation through, for example, help with the development of national strategies. The trust fund support was important to ensure that Kazakhstan was an active Party to the Convention.

104. The Director of the Environment and Human Settlements Division noted the positive position adopted by Kazakhstan and welcomed the support that the Convention was proposing. He regretted the lack of funds available from the regular United Nations budget and drew attention to the continued need for extrabudgetary funds to support the participation of delegates from countries in transition. He urged Parties to investigate if their national development assistance agencies had funds that might be made available for this purpose.

105. The delegate of Poland, as a former country with an economy in transition, offered to provide advice to those countries still needing support.

106. The Executive Body:

(a) Adopted Decision 2001/6 on the facilitation of participation of countries with economies in transition (annex X);

(b) Urged Parties to make voluntary contributions to the Trust Fund for supporting the participation of countries with economies in transition in the coming year. (Details of methods of payment are provided in annex XI.)

### **XIII. ELECTION OF OFFICERS**

107. Mr. H. Dovland (Norway) was re-elected Chairman. Messrs. D. Hrcek (Slovenia), W. Harnett (United States), and L. Lindau (Sweden) were re-elected Vice-Chairmen. The Chairmen of the EMEP Steering Body (Mr. M. Williams, United Kingdom), the Implementation Committee (Mr. P. Széll, United Kingdom), the Working Group on Strategies and Review (Mr. R. Ballaman, Switzerland) and the Working Group on Effects (Chairman Mr. H.-D. Gregor, Germany) were also elected as Vice-Chairmen. Mr. R. Ballaman was re-elected as Chairman of the Working Group on Strategies and Review.

**XIV. ADOPTION OF THE REPORT**

108. The Executive Body adopted for general distribution the report of its nineteenth session on 14 December 2001.

Annex I**DECISION 2001/1 ON THE COMPLIANCE BY NORWAY  
WITH THE 1991 VOC PROTOCOL**The Executive Body,

Acting under paragraph 11 of the structure and functions of the Implementation Committee (Executive Body decision 1997/2, annex),

1. Welcomes the submission by Norway to the Implementation Committee concerning its compliance with the requirements of paragraph 2 (b) of article 2 of the 1991 Geneva Protocol on the Control of Emissions of Volatile Organic Compounds or their Transboundary Fluxes;
2. Notes the report provided by the Implementation Committee on this matter (EB.AIR/2001/3, paras. 3-9) and in particular its conclusion regarding Norway's non-compliance with the emission reduction obligation of the VOC Protocol;
3. Expresses its concern at the failure by Norway to fulfil its obligation to take effective measures to reduce its annual emissions within the TOMA specified under annex I by at least 30% by 1999 using 1989 as its base year, and to ensure that its total national annual emissions by 1999 did not exceed its 1988 levels, as required by paragraph 2 (b) of article 2 of the VOC Protocol;
4. Notes that Norway expects that the measures that it has adopted to implement the provisions of paragraph 2 (b) of article 2, in particular its licensing system for offshore oil loading facilities, will bring it into compliance not later than 2005 or 2006;
5. Notes with concern that, if Norway reaches the required emission reductions only by 2006, it would be in non-compliance for seven years;
6. Urges Norway to fulfil its obligation under the VOC Protocol as soon as possible;
7. Invites Norway to report to the Implementation Committee by 30 April 2002 on the progress that it has made with regard to the implementation of measures to reduce its VOC emissions, including information on:
  - (a) The legislative and administrative steps that it has taken to reduce emissions, in particular through the implementation of its licensing system and the progress made in introducing abatement technology in the offshore sector, as well as measures taken to reduce emissions from

the use of solvents and other products;

- (b) The further reductions in its VOC emissions since 1999; and
- (c) Data on economic activities in its main VOC-emitting sectors since 1999;

8. Requests the Implementation Committee to review the progress made by Norway and report to it thereon at its twentieth session.

Annex II**DECISION 2001/2 ON THE COMPLIANCE BY FINLAND  
WITH THE 1991 VOC PROTOCOL**The Executive Body,

Acting under paragraph 11 of the structure and functions of the Implementation Committee  
(Executive Body decision 1997/2, annex),

1. Welcomes the submission by Finland to the Implementation Committee concerning its compliance with the requirements of paragraph 2 (a) of article 2 of the 1991 Geneva Protocol on the Control of Emissions of Volatile Organic Compounds or their Transboundary Fluxes;
2. Notes the report provided by the Implementation Committee on this matter (EB.AIR/2001/3, paras. 11-18) and in particular its conclusion regarding Finland's non-compliance with the emission reduction obligation of the VOC Protocol;
3. Expresses its concern at the failure by Finland to fulfil its obligation to take effective measures to reduce its national annual emissions by at least 30% by 1999 using 1988 as its base year, as required by paragraph 2 (a) of article 2 of the VOC Protocol;
4. Notes that Finland expects that the measures that it has adopted to implement the provisions of paragraph 2 (a) of article 2 will bring it into compliance not later than 2004 or 2005;
5. Notes with concern that, if Finland reaches the required emission reductions only by 2005, it would be in non-compliance for six years;
6. Urges Finland to fulfil its obligation under the VOC Protocol as soon as possible;
7. Invites Finland to report to the Implementation Committee by 30 April 2002 on the progress that it has made with regard to the implementation of measures to reduce its VOC emissions, including information on:
  - (a) The legislative and administrative steps that it has taken to reduce emissions, in particular with respect to its mobile source (road and non-road) sectors;
  - (b) The further reductions in its VOC emissions since 1999; and
  - (c) Data on economic activities in its main VOC-emitting sectors since 1999;
8. Requests the Implementation Committee to review the progress made by Finland and report to it thereon at its twentieth session.

Annex III

**DECISION 2001/3 ON THE COMPLIANCE BY ITALY  
WITH THE 1991 VOC PROTOCOL**

The Executive Body,

Acting under paragraph 11 of the structure and functions of the Implementation Committee (Executive Body decision 1997/2, annex),

1. Welcomes the submission by Italy to the Implementation Committee concerning its compliance with the requirements of paragraph 2 (a) of article 2 of the 1991 Geneva Protocol on the Control of Emissions of Volatile Organic Compounds or their Transboundary Fluxes;
2. Notes the report provided by the Implementation Committee on this matter (EB.AIR/2001/3, paras. 20-26) and in particular its conclusion regarding Italy's non-compliance with the emission reduction obligation of the VOC Protocol;
3. Expresses its concern at the failure by Italy to fulfil its obligation to take effective measures to reduce its national annual emissions by at least 30% by 1999 using 1990 as its base year, as required by paragraph 2 (a) of article 2 of the VOC Protocol;
4. Notes that Italy expects that the measures that it has adopted to implement the provisions of paragraph 2 (a) of article 2 will bring it into compliance not later than 2001 or 2002;
5. Urges Italy to fulfil its obligation under the VOC Protocol as soon as possible;
6. Invites Italy to report to the Implementation Committee by 30 April 2002 on the progress that it has made with regard to the implementation of measures to further reduce its VOC emissions, including information on:
  - (a) The legislative and administrative steps that it has taken to reduce emissions, in particular with respect to its mobile source sector (road and non-road, especially the use of two-stroke engines);
  - (b) The further reductions in its VOC emissions since 1999; and
  - (c) Data on economic activities in its main VOC-emitting sectors since 1999;
7. Requests the Implementation Committee to review the progress made by Italy and report to it thereon at its twentieth session

Annex IV**DECISION 2001/4 ON COMPLIANCE BY THE PARTIES****WITH THEIR REPORTING OBLIGATIONS**

The Executive Body,

Acting under paragraph 11 of the structure and functions of the Implementation Committee (Executive Body decision 1997/2, annex),

1. Takes note of the report of the Implementation Committee with respect to follow-up to Executive Body decision 2000/2 regarding compliance by Parties with their reporting obligations (EB.AIR/2001/3, paras. 28-31);
2. Also takes note of the report of the Implementation Committee with respect to compliance by Parties with their emission data reporting obligations under the Protocols, prepared on the basis of information compiled by EMEP (EB.AIR/2001/3, paras. 32-41);
3. Recalls that the Implementation Committee in its second (EB.AIR/1999/4, para. 28) and third (EB.AIR/2000/2, para. 21) reports drew attention to the fact that Luxembourg and the European Community had not reported emission data on the base year for the 1988 NOx Protocol;
4. Also recalls that the Implementation Committee in its second report (EB.AIR/1999/4, para. 8) drew attention to the fact that Liechtenstein and Luxembourg had not submitted any report for the 1998 Major Review on Strategies and Policies and that in its third report (EB.AIR/2000/2, para. 23) it drew attention to the fact that Liechtenstein and Luxembourg had not submitted any report for the 2000 Review on Strategies and Policies;
5. Furthermore recalls that the Implementation Committee in its third report (EB.AIR/2000/2, para. 21) had identified the Russian Federation and Spain as not having fulfilled their emission data reporting obligations;
6. Expresses concern that the Russian Federation and Spain continue to be in non-compliance with these reporting obligations;
7. Urges:
  - (a) The Russian Federation to comply with its reporting obligations under the 1985 Sulphur Protocol and the 1988 NOx Protocol; and

(b) Spain to comply with its reporting obligations under the 1988 NOx Protocol and the 1991 VOC Protocol, and in these contexts to provide, as soon as possible, but no later than 31 January 2002, all the missing information on their national emissions;

8. Expresses serious concern that Liechtenstein, Luxembourg and the European Community all remain in non-compliance with their reporting obligations and did not meet the request of the Executive Body in its decision 2000/2 to provide that information by 31 January 2001;

9. Strongly urges:

(a) Liechtenstein to comply with its reporting obligations under the 1985 Sulphur Protocol, the 1988 NOx Protocol and the 1991 VOC Protocol;

(b) Luxembourg to comply with its reporting obligations under the 1985 Sulphur Protocol, the 1988 NOx Protocol and the 1991 VOC Protocol; and

(c) The European Community to comply with its reporting obligations under the 1988 NOx Protocol,

and in these contexts to provide, as soon as possible, but no later than 31 January 2002, all the missing information on their national emissions and, if they cannot comply fully within this time frame, to draw up a precise timetable in agreement with the secretariat before 31 January 2002 for the provision of the missing information;

10. Requests the Implementation Committee to review the progress made by the above-mentioned Parties with regard to their reporting obligations and to report to it thereon at its twentieth session.

Annex V**DECISION 1997/2 CONCERNING THE IMPLEMENTATION COMMITTEE, ITS  
STRUCTURE AND FUNCTIONS AND PROCEDURES FOR REVIEW OF COMPLIANCE  
AS AMENDED**

The Executive Body,

Determined to promote and improve compliance with the existing protocols to the 1979 Convention on Long-range Transboundary Air Pollution,

Recalling article 10, paragraph 2, of the Convention, as well as article 7 of the 1994 Protocol on Further Reduction of Sulphur Emissions and article 3, paragraph 3, of the 1991 Protocol concerning the Control of Emissions of Volatile Organic Compounds or their Transboundary Fluxes,

1. Establishes the Implementation Committee for the review of compliance by the Parties with their obligations under the protocols to the Convention;
2. Decides that the structure and functions of the Implementation Committee and the procedures for review of compliance shall be those set out in the annex to this decision;
3. Urges the Parties to the 1994 Protocol on Further Reduction of Sulphur Emissions to decide that the structure, functions and procedures set out in the annex to this decision shall apply for the review of compliance with article 7, paragraph 3, of that Protocol, in place of the regime adopted at the special session of the Executive Body in Oslo on 14 June 1994;
4. Urges the Parties to the 1991 Protocol concerning the Control of Emissions of Volatile Organic Compounds or their Transboundary Fluxes to decide to use the Implementation Committee established by this decision for the purposes of article 3, paragraph 3, of that Protocol and to apply the structure, functions and procedures set out in the annex to this decision to monitor compliance with that Protocol;
5. Resolves that the Implementation Committee as well as the structure, functions and procedures set out in the annex to this decision shall be available for the review of compliance with future protocols in accordance with the terms of such protocols and of any decisions of the Parties thereto.

Annex

**STRUCTURE AND FUNCTIONS OF THE IMPLEMENTATION COMMITTEE AND  
PROCEDURES FOR REVIEW OF COMPLIANCE**

Structure

1. The Committee shall consist of nine Parties to the Convention; each member of the Committee shall be Party to at least one protocol. The Executive Body shall elect Parties for terms of two years. Outgoing Parties may be re-elected for one consecutive term, unless in a given case the Executive Body decides otherwise. The Committee shall elect its own Chairman and Vice-Chairman.

Meetings

2. The Committee shall, unless it decides otherwise, meet twice a year. The secretariat shall arrange for and service its meetings.

Functions of the Committee

3. The Committee shall:

(a) Review periodically compliance by the Parties with the reporting requirements of the protocols;

(b) Consider any submission or referral made in accordance with paragraphs 4 and 5 below with a view to securing a constructive solution;

(c) Where it deems it necessary, be satisfied, before it adopts a report or recommendation on such a submission or referral, that the quality of data reported by a Party has been evaluated by a relevant technical body under the Executive Body and/or, where appropriate, by an expert nominated by the Bureau of the Executive Body; and

(d) Prepare, at the request of the Executive Body, and based on any relevant experience acquired in the performance of its functions under subparagraphs (a), (b) and (c) above, a report on compliance with or implementation of specified obligations in an individual protocol.

Submissions by Parties

4. A submission may be brought before the Committee by:

(a) One or more Parties to a protocol that have reservations about another Party's

compliance with its obligations under that instrument. Such a submission shall be addressed in writing to the secretariat and supported by corroborating information. The secretariat shall, within two weeks of receiving a submission, send a copy of it to the Party whose compliance is at issue. Any reply and information in support thereof shall be submitted to the secretariat and to the Parties involved within three months or such longer period as the circumstances of a particular case may require. The secretariat shall transmit the submission and the reply, as well as all corroborating and supporting information, to the Committee, which shall consider the matter as soon as practicable; or

(b) A Party that concludes that, despite its best endeavours, it is or will be unable to comply fully with its obligations under a protocol. Such a submission shall be addressed in writing to the secretariat and explain, in particular, the specific circumstances that the Party considers to be the cause of its non-compliance. The secretariat shall transmit the submission to the Committee, which shall consider it as soon as practicable.

#### Referrals by the secretariat

5. Where the secretariat, in particular upon reviewing the reports submitted in accordance with a protocol's reporting requirements, becomes aware of possible non-compliance by a Party with its obligations, it may request the Party concerned to furnish necessary information about the matter. If there is no response or the matter is not resolved within three months or such longer period as the circumstances of the matter may require, the secretariat shall bring the matter to the attention of the Committee.

#### Information gathering

6. To assist the performance of its functions under paragraph 3 above, the Committee may:

- (a) Request further information on matters under its consideration, through the secretariat;
- (b) Undertake, at the invitation of the Party concerned, information gathering in the territory of that Party; and
- (c) Consider any information forwarded by the secretariat concerning compliance with the protocols.

7. The Committee shall ensure the confidentiality of any information that has been provided to it in confidence.

Entitlement to participate

8. A Party in respect of which a submission or referral is made shall be entitled to participate in the consideration by the Committee of that submission or referral, but shall not take part in the preparation and adoption of any report or recommendations of the Committee in accordance with paragraph 9 below.

Committee report to the Executive Body

9. The Committee shall report at least once a year on its activities to the Executive Body and make such recommendations as it considers appropriate, taking into account the circumstances of the matter, regarding compliance with the protocols. Each report shall be finalized by the Committee no later than ten weeks in advance of the session of the Executive Body at which it is to be considered.

Competence of Committee members

10. Only those Committee members that are Parties to the protocol in respect of which compliance procedures in accordance with paragraphs 3, 6, 7 and 9 above are being undertaken may participate in those procedures. If as a result of the operation of this paragraph the size of the Committee is reduced to five members or less, the Committee shall forthwith refer the matter in question to the Executive Body.

Consideration by the Executive Body

11. The Parties to the protocol concerned, meeting within the Executive Body, may, upon consideration of a report and any recommendations of the Committee, decide upon measures of a non-discriminatory nature to bring about full compliance with the protocol in question, including measures to assist a Party's compliance. Any such decision shall be taken by consensus.

Relationship to settlement of disputes

12. Application of the present compliance procedures shall be without prejudice to the settlement of disputes provisions of the protocols.

Annex VI**2002 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:

Taking into account the relevant activities under EMEP and the Working Group on Effects, as well as the initiatives of the European Community, and on the basis of information received from its expert groups, the Working Group on Strategies and Review will, in particular:

(a) Assess work in preparation of a review of the 1999 Gothenburg Protocol, including progress in reducing acidification, eutrophication and ground-level ozone and the pollutants responsible for these effects, including work carried out under items 1.4 (economic assessment) and 1.8 (ammonia abatement). It will also review progress in the work on particulate matter pollution, including work carried out under items 2.3 (integrated assessment modelling), 2.8 (fine particulates) and 3.8 (health effects). It will present a proposal for further action and required input for a review of the Protocol to the Executive Body;

(b) Assess work in preparation of a review of the Protocol on Heavy Metals, including information on the measures scheduled for re-evaluation in the Protocol. It will prepare a proposal for further action and required input for a review of the Protocol, including a possible effect-based approach as a basis for future action;

(c) Assess work in preparation of a review of the Protocol on Persistent Organic Pollutants (POPs), also taking into account progress under item 1.5 below, including information on the pollutants scheduled for re-evaluation in the Protocol and on pollutants that are candidates for future inclusion. It will prepare a proposal for further action and required input for a review of the Protocol;

(d) Review progress in the exchange of information and technology, including the work on techno-economic issues (see item 1.6 below), information received on product-related measures to reduce emissions of volatile organic compounds (VOCs), POPs and heavy metals and progress in work carried out under item 1.7 below;

(e) Finalize negotiations on the draft protocol on long-term financing of core activities under the Convention, by resolving the few issues still outstanding, and prepare, as an alternative, a draft decision and recommendation that would facilitate voluntary financing. Both instruments will be presented to the Executive Body at its twentieth session.

A meeting of heads of delegation will be held on 25-26 April 2002. The thirty-fourth session of the Working Group on Strategies and Review will take place from 16 to 20 September 2002.

## 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 reporting by the Parties on their strategies and policies, including the reporting on technology-related obligations. It will carry out an in-depth review of compliance by the Parties with the 1994 Sulphur Protocol, including their national emission obligations. The Committee will continue its dialogue with appropriate 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. Any submission, referral or request for a report made under paragraph 3 (b) or (d) of the Committee's functions will have to be dealt with as a priority and the Committee may have to adjust its work-plan and time schedule accordingly. The Committee will continue to review the progress made by the Parties in response to decisions taken by the Executive Body based upon the Committee's recommendations.

(a) Ninth meeting of the Implementation Committee in Copenhagen, 6-8 May 2002;

(b) Tenth meeting of the Implementation Committee in Geneva, tentatively on 11-13 September 2002;

(c) Fifth report by the Implementation Committee to the Executive Body at its twentieth session.

### **1.3 REVIEWS OF STRATEGIES AND POLICIES FOR AIR POLLUTION ABATEMENT**

Description/objectives: Overview of air pollution abatement in the UNECE 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 with their obligations under the protocols to the Convention. The reviews are carried out every two years.

Main activities and time schedule:

(a) The Executive Summary of the 2000 Review, based on replies to the 2000 Questionnaire (EB.AIR/2001/1), was submitted to the Executive Body at its nineteenth session. Parties are invited to present corrections or modifications to the secretariat by 15 January 2002. The secretariat will then publish the Executive Summary;

(b) The next review is scheduled for 2002. The draft outline and draft questionnaire, considered by the Executive Body at its nineteenth session (EB.AIR/2001/2), will be circulated by the secretariat by 31 January 2002, with replies due by 31 March 2002. Replies will be made available to the Implementation Committee and posted on the Convention's web page. The secretariat will prepare a draft review, based on the replies to the questionnaire and other information. It will aim at conveying information to the Parties, the public, the press and the scientific and research communities, in accordance with the recommendations of the expert group on communications.

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

Description/objectives: To develop further the economic work on benefits and economic instruments undertaken by the former Task Force on Economic Aspects of Abatement Strategies and to enable economic considerations to be taken into account in the discussion/review of the protocols to the Convention. A second workshop will focus on the valuation of ecosystem benefits from air pollution abatement and build on the work of all relevant International Cooperative Programmes (ICPs) under the Working Group on Effects. Future workshops will cover the use of economic instruments to reduce transboundary air pollution and economic evaluation of damage to materials.

Main activities and time schedule: The Network of Experts on Benefits and Economic Instruments (NEBEI), led by the United Kingdom and with Mr. David Pearce as rapporteur, will provide the framework and expertise for a series of workshops. NEBEI will meet only on the occasion of planned workshops and include not only economists but also representatives from other specialist groups. It will collaborate closely with the Task Force on the Health Aspects of Air Pollution, the Working Group on Effects and the Task Force on Integrated Assessment Modelling.

The second workshop under NEBEI on the valuation of ecosystem benefits from air pollution abatement will be held on 2-4 October 2002 in the Netherlands.

### **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 Protocol on POPs; and
- (b) Assisting Parties in preparing preliminary risk profiles for substances that may be candidates for inclusion in the Protocol. The addition of new substances to annex I, II or III to the Protocol on POPs 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 co-led by Canada and the Netherlands will:
  - (i) Prepare a compendium of available information provided by experts relating to the existing obligations for substances listed in annex I, II or III to the Protocol on POPs, together with an expert judgement on this material;
  - (ii) Prepare a compendium of information provided by national experts on substances not included in the Protocol after technical evaluation of this material;
- (b) The third meeting of the expert group will take place in Geneva, on 4-5 June 2002, to prepare the report to the Working Group on Strategies and Review for presentation at its thirty-fourth session and to discuss the need for further work.

## 1.6 TECHNO-ECONOMIC ISSUES

Description/objectives: To further explore best available techniques (BAT) for emission abatement, their efficiency and cost; to develop techno-economic databases and methodologies for evaluating uncertainties and to draw up draft revisions of techno-economic issues in annexes to protocols, including those on POPs and heavy metals.

Main activities and time schedule:

- (a) Establish an expert group on techno-economic issues, led by France, with a first meeting expected in the spring of 2002;
- (b) Develop software describing emission control options, their costs and their range of uncertainties; validate and use the software in selected countries;
- (c) Disseminate software to Parties for application; organize a workshop to promote the use of this tool.

## 1.7 EXCHANGE OF INFORMATION AND TECHNOLOGY

Description/objectives: To create favourable conditions for implementing technology-related obligations of the Convention and its protocols, to facilitate the implementation of existing protocols and the accession of non-Parties, particularly countries with economies in transition; to examine the needs for updating technical annexes and guiding documents to the protocols.

Main activities and time schedule:

- (a) Report on the workshop on control technologies for emissions from stationary sources (5-7 December 2001, Warsaw) to the Working Group on Strategies and Review at its thirty-fourth session;
- (b) The secretariat will collect information from Parties and international institutions on control technologies and product management practices for pollutants covered by the protocols and collaborate with other international bodies, e.g. European Integrated Pollution Prevention and Control Bureau in Seville (Spain).

## 1.8 AMMONIA ABATEMENT

Description/Objectives: To promote the use of the draft framework code for good agricultural practice for reducing ammonia, prepared by the ad hoc expert group on ammonia abatement led by

the United Kingdom, as a basis for Parties to draw up national codes, and to quantify better the relationships between recommended control options/techniques and resulting ammonia emission (EB.AIR/WG.5/2001/7); this work to be done in collaboration with EMEP.

Main activities and time schedule:

- (a) Summary report of the second meeting of the ad hoc expert group (26-28 November 2001, Bologna, Italy) to the Working Group on Strategies and Review at its thirty-fourth session;
- (b) Review the guidance document on ammonia abatement techniques (EB.AIR/1999/2);
- (c) Further explore the non-agricultural ammonia emissions possibly underreported by Parties; develop work to improve the quality of reporting of ammonia emissions and measurements;
- (d) Assist Parties, as needed, in developing and drawing up their own national advisory codes of agricultural practice to control emissions.

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

All work items listed below will be undertaken in close cooperation with Parties and national experts, and, where relevant, with other bodies under the Convention. Wherever relevant and possible, the centres will cooperate with other organizations, programmes and projects, including the Arctic Monitoring and Assessment Programme (AMAP), the marine commissions, the United Nations Environment Programme (UNEP), the World Meteorological Organization (WMO) and its Global Atmosphere Watch (GAW) programme, the International Geosphere-Biosphere Programme (IGBP) and its International Global Atmospheric Chemistry (IGAC) activity, the EUREKA Project on the Transport and Chemical Transformation of Environmentally Relevant Trace Constituents in the Troposphere over Europe: Second Phase (EUROTRAC -2), the European Commission's Clean Air for Europe (CAFE) programme and the European Environment Agency (including its Topic Centre for Air and Climate Change).

## 2.1 EMISSIONS

Description/objectives: Maintain the EMEP emission inventory, using data submitted by Parties, provide reliable information on emissions and emission projections, aid the review of compliance, and provide assistance to Parties to help them fulfil their reporting tasks. The Task Force on Emission Inventories and Projections, led by the United Kingdom, will provide a technical forum and expert network to share information, harmonize emission factors, and discuss methodologies and reporting. The secretariat will request the data in line with adopted guidelines. The Meteorological Synthesizing Centre-West (MSC-W) will support the compilation of data, including data quality assurance. It will update the inventory database and make it available. The Centre for Integrated Assessment Modelling (CIAM) will support work on projections. The Meteorological Synthesizing Centre-East (MSC-E) will provide support for heavy metal and persistent organic pollutant (POP) emission activities. The Chemical Coordinating Centre (CCC) will also contribute to this work.

Main activities and time schedule:

(a) The Task Force on Emission Inventories and Projections will finalize the emission reporting guidelines, based on comments received and on experience gained during the reporting on emission data for the year 2002, for consideration at the twenty-sixth session of the Steering Body, for approval by the Executive Body at its twentieth session, and for comprehensive reporting at the end of 2002. It will prepare a further extension of the Guidebook on heavy metals and particulate matter. It will work with Parties to improve the quality and completeness of emission reporting. The eleventh meeting of the Task Force and an associated European Environment Information and Observation Network (EIONET) workshop will take place in Cordoba, Spain on 6-8 May 2002;

(b) By 31 January 2002, as requested by the secretariat and in accordance with emission data guidelines, Parties will submit 2000 emission data and projections, at the requested sectoral, temporal and spatial distribution, for sulphur, NO<sub>x</sub>, non-methane volatile organic compounds (NMVOCs), NH<sub>3</sub>, particulate matter (PM), CO, heavy metals (priority metals: cadmium (Cd), mercury (Hg) and lead (Pb)) and selected POPs. A summary of required emissions data is given in the appendix (table 1). Parties will ensure that data previously submitted are updated as necessary and that data are available for the protocol base years;

(c) MSC-W will extend the emission database to support the collection and management of new data provided under the emission reporting guidelines. It will also initiate

work to set up a version of the emission database that is directly accessible via the Internet so that all data can be made available as soon as the internal consistency evaluation is completed. MSC-W will present a report on 1980-2000 emissions;

(d) The Task Force on Emission Inventories and Projections will intensify its work on the verification of emission data supported by MSC-W, in cooperation with the other EMEP centres, EEA and the secretariat. To improve estimates of combustion plant emissions, an expert panel of the Task Force will hold a workshop in Ispra, Italy, in March 2002. The Task Force will hold a workshop on validation and evaluation of air emission inventories in Gothenburg, Sweden, on 14-16 October 2002.

## **2.2 ATMOSPHERIC MEASUREMENTS AND MODELLING**

Description/objectives: Evaluate the results of implementing the protocols to the Convention and develop and ensure support for the atmospheric measurement and modelling tools necessary for further international air pollution abatement policies, including the review of protocols. The Task Force on Measurements and Modelling, led by Austria and co-chaired by WMO, with the assistance of the EMEP Centres, supports the EMEP Steering Body and its Bureau by: (i) reviewing and assessing the scientific and operational activities of EMEP related to monitoring and modelling; (ii) evaluating their contribution to the effective implementation and further development of the protocols; and (iii) drawing up specific proposals. It provides for closer collaboration among the Parties to the Convention, the EMEP centres, other bodies under the Convention, other international bodies and the scientific community in strengthening scientific communication and cooperation in air pollution monitoring and modelling.

### Main activities and time schedule:

(a) The Task Force on Measurements and Modelling will investigate the trends in transboundary fluxes, concentrations and depositions over the lifetime of EMEP in different regions, making use of measurements and modelling results. It will assist Parties in the application of tools to assess their data, contribute to the preparation of an assessment report and coordinate the input to it from national experts. The assessment report is scheduled for 2003, but much of the work will be done in 2002. The Task Force will hold its third meeting at WMO in Geneva on 20-22 March 2002 in association with an EIONET workshop (19 March);

(b) CCC, MSC-E and MSC-W will support the work for the assessment report. CCC will evaluate historical data according to quality objectives. In cooperation with MSC-E, it will prepare trends information for selected heavy metals and POPs from 1950 onwards and compare them to modelled and measured concentrations. It will give assistance to Parties to continue or

resume reporting and to provide historical data. It will continue publishing monitoring site descriptions and relevant metadata on the Internet. CCC will assist national experts and the Task Force in identifying and quantifying trends observed across national boundaries. It will use links with other bodies with monitoring responsibilities to improve the geographical coverage of trend data. MSC-E and MSC-W will make updated modelled data available and will continue the recalculation of meteorological input data from 1990;

(c) The Parties will report monitoring results for 2001 to CCC by 1 December for data from January to June and by 1 June for data from July to December. A summary of required monitoring data is given in the appendix (table 2). CCC will continue to collect monitoring data and evaluate and store them in the EMEP database. It will cooperate with EEA on the development of the data exchange module (DEM) used for the submission of data to the EEA database. DEM will be optional for Parties to report data, as an alternative to the NASA Ames format. CCC will inform the Task Force on Measurements and Modelling of progress in further harmonizing reporting between EMEP and EEA, with the focus upon promoting the quality and consistency of data and reducing the burden on Parties;

(d) CCC, in consultation with the Task Force on Measurements and Modelling, will continue work to improve the EMEP Manual for Sampling and Chemical Analysis. It will update the quality assessment (QA) / quality control (QC) part of the Manual and expand the QA information available through the Internet;

(e) The Task Force on Measurements and Modelling will review the current measurement strategy. CCC, in cooperation with MSC-E and MSC-W, will perform representativeness studies to provide input into this work. At selected sites, it will evaluate the regional representativeness and compare EMEP data with data from other monitoring networks. Parties, supported by CCC in close cooperation with EEA, will continue their efforts to improve the EMEP network in the Mediterranean and in Central and Eastern Europe;

(f) The centres will publish all monitoring and modelling results together with related data on the EMEP web site once the EMEP Steering Body has derestricted them;

(g) The centres, in consultation with the Task Force, will study the possibility and resource requirements for extending work to the whole northern hemisphere;

(h) EMEP Workshop on hemispheric transport of air pollutants, co-sponsored by Germany and the United States, autumn 2002, United States (tentatively).

### 2.3 INTEGRATED ASSESSMENT MODELLING

Description/objectives: Analyse scenarios on cost-effective reduction of acidification, eutrophication, tropospheric ozone, particulate matter (PM) pollution and related phenomena, including POPs and heavy metals pollution. Modelling will cover: (i) abatement options for reducing sulphur, nitrogen oxides, ammonia, VOCs and primary particulate matter, including structural measures in energy, transport and agriculture, and their costs; (ii) projections of emissions; (iii) assessments of the atmospheric transport of substances (including global transport); and (iv) analyses and quantification of environmental and health effects and benefits of emission reductions. Modelling will draw upon the results from other subsidiary bodies. The Task Force on Integrated Assessment Modelling, led by the Netherlands, will guide the work of CIAM at the International Institute for Applied Systems Analysis (IIASA). All activities will be conducted in close collaboration with related work led by the European Commission.

Main activities and time schedule:

(a) The Task Force on Integrated Assessment Modelling will continue to discuss modelling work by CIAM and other national and international initiatives. It will review progress in the preparation of model inputs covering all model elements and liaise with the responsible bodies under the Convention to this end. It will encourage and support national modelling activities carried out by National Focal Points for Integrated Assessment Modelling and enhance the sharing of data and experience with integrated assessment modelling work outside the EMEP region. It will hold its twenty-seventh meeting in Oslo on 13-15 May 2002;

(b) CIAM, in collaboration with the Coordination Center for Effects, will pursue work on uncertainty analysis using error propagation. In addition, work done in collaboration with MSC-W will focus on uncertainties in atmospheric transport models and related non-linearities from numerical advection and atmospheric chemical processes. The Task Force will hold a workshop at IIASA in Laxenburg (Austria) on 24-25 January 2002, on uncertainty management in integrated assessment modelling;

(c) CCC, in cooperation with CIAM, will develop criteria for POPs and heavy metals emission projections for selected scenarios and present results to the Task Force on Integrated Assessment Modelling;

(d) The Task Force will hold a workshop at CIAM at IIASA in Laxenburg in November 2002;

(e) CIAM, in consultation with the Task Force, will study the possibility and resource requirements for extending work to the whole northern hemisphere.

## 2.4 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 past, present and future exceedances of critical loads of acidifying and eutrophying depositions in Europe, in collaboration with the Coordination Center for Effects (CCE). Support the preparations for the review of the Gothenburg Protocol.

Main activities and time schedule:

(a) MSC-W will calculate the transport of sulphur and nitrogen compounds with the Eulerian model. It will further work to implement a unified Eulerian model for acidification, eutrophication, ground-level ozone and particulates, based on the evaluation of boundary conditions, the inclusion of base cations in the model and the revision of dry deposition routines. It will further investigate the differences between the Lagrangian and the Eulerian model and report on progress at the twenty-sixth session of the Steering Body;

(b) CCC will arrange for laboratory comparisons of the main components in air and precipitation. Laboratories participating in other monitoring programmes under the Working Group on Effects will also be invited to participate where appropriate. CCC will start field comparisons for air and precipitation chemistry at two new sites (to be selected) and finalize and evaluate field comparisons for Slovenia, Netherlands and possibly Switzerland. It will also develop suggestions to improve nitrate aerosol monitoring;

(c) The Task Force on Measurement and Modelling will review the monitoring and modelling work of EMEP related to ammonia. CCC and MSC-W will provide a summary report to the Task Force on their work related to ammonia.

## 2.5 PHOTO-OXIDANTS

Description/objectives: Provide monitoring and modelling data on concentrations and transboundary transport of ozone and VOCs. Evaluate short- and long-term exposures to photochemical oxidants. Analyse scenarios of ground-level ozone. Support the preparations for the review of the Gothenburg Protocol.

Main activities and time schedule:

(a) MSC-W will calculate the short-term exposures of vegetation to photochemical oxidants for the growing periods, as well as the potential exposure of humans. Together with CCC, it will prepare a note for the Task Force on Measurements and Modelling on the height of ozone monitoring. It will apply the revised ozone level II dry deposition sub-routine. MSC-W

and CIAM will collaborate with work under the Working Group on Effects to develop methods for damage analysis;

(b) MSC-W ozone modelling work will focus on the implementation of the unified Eulerian model. It will revise the radiation routines used in the calculation of photo-oxidant concentrations and evaluate the results of the inter-comparison of the photochemical schemes;

(c) CCC will increase its links with national and other existing monitoring networks to improve the regional coverage of ozone and VOC monitoring data, particularly in southern and eastern parts of Europe. CCC will also evaluate the selection of individual VOCs reported, including their accuracy, precision and representativeness. It will propose to the Task Force on Measurements and Modelling a list of selected VOC species with precision requirements for the future EMEP VOC measurement programme. In collaboration with MSC-W, CCC will evaluate the representativeness of the photo-oxidant monitoring stations using atmospheric transport models, local-scale models, monitoring data and available surface data. In cooperation with other ongoing research projects, they will perform trend analyses and comparisons with model results for some selected sites;

(d) CCC, in collaboration with participating laboratories, will prepare a procedure for regular campaigns with parallel sampling and analyses of VOC. Participating Parties will implement the programme at their sites;

(e) CIAM, in cooperation with MSC-W, will continue to evaluate the effects of control measures on photo-oxidants, paying particular attention to effects of scale. A joint project by MSC-W, CIAM and the Environment Institute of the Joint Research Centre will address urban ozone pollution and its linkage to regional background pollution. A comparison of urban and regional dispersion will be conducted to explore the importance of local and regional emissions for urban air quality and assess the response of the various models towards changes in local and regional precursor emissions. A series of model intercomparison workshops will be conducted covering different urban models that apply the same emission data and meteorological assumptions. MSC-W will start the development of numerical methods to nest urban meso-scale models in the regional model.

## **2.6 HEAVY METALS**

Description/objectives: Provide monitoring and modelling data on concentrations, depositions and transboundary fluxes of cadmium (Cd), lead (Pb) and mercury (Hg). Develop further the Pb, Cd and Hg transport models in parallel with the development of heavy metal critical limits under the Working Group on Effects. Analyse trends in Pb and Cd deposition. Further develop emissions data. Support preparatory work for the review of the Protocol on Heavy Metals.

Main activities and time schedule:

(a) MSC-E will present to the EMEP Steering Body in 2002 information on: deposition and air concentrations fields for 2000 of Pb, Cd and Hg in Europe with a resolution of 50 km x 50 km as well as deposition to the regional seas; country-to-country deposition matrices for Pb and Cd; first results of calculations of Hg atmospheric transport on a hemispheric scale; calculation of heavy metal effect-related deposition maps using land cover data agreed upon under the Working Group on Effects; and results of comparisons between regional and hemispheric models;

(b) MSC-E will further develop its models by: a study of Hg exchange processes between the atmosphere and environmental compartments; improving model parameterizations (Pb, Cd, Hg dry deposition to different underlying surfaces, wet removal processes and mercury atmospheric chemistry); verification of modelling results (concentrations in air and precipitation, deposition fluxes) against monitoring data; and model sensitivity studies with different sets of meteorological parameters;

(c) MSC-E will continue the Hg model intercomparison study. At stage II, concentrations in short-term episodes (1-2 weeks) will be calculated and compared with measurements obtained in a special campaign; a workshop will be held in Moscow on 14-15 February 2002; at stage III the modelled annual and monthly mean concentrations will be compared with measured values at EMEP stations; and at stage IV export-import matrices for three countries (Italy, Poland, United Kingdom) will be compared;

(d) CCC will publish the guidelines for sampling and analysis of heavy metals and distribute them to the EMEP laboratories and continue collecting measured data. It will complement EMEP data with data from other international programmes. It will organize an intercomparison for sampling and analytical techniques for Hg and carry out an analytical intercomparison of the other seven heavy metals measured in precipitation;

(e) In cooperation with Parties, CCC will complete the setting-up of the superstation network (about ten monitoring sites in defined areas). Hg, Cd and Pb will be included as first priority elements. Second priority elements will be Cu, Zn, As, Cr and Ni. Heavy metals in precipitation will be collected weekly with wet-only samplers. Heavy metals in air will be collected weekly with high-volume samplers. Hg in precipitation will be collected monthly using bulk samplers, whilst one 24 h sample of Hg in air will be collected each week with gold traps;

(f) MSC-E will prepare gridded anthropogenic emission data, based on officially submitted data and expert estimates, and collect available data on natural emissions. CCC and MSC-E, in consultation with national experts, will adjust European Hg emission inventories to modelling requirements. CCC will develop profiles of chemical species of heavy metal emissions.

## 2.7 PERSISTENT ORGANIC POLLUTANTS (POPs)

Description/objectives: Improve the monitoring and modelling data on concentrations, depositions and transboundary fluxes of selected POPs. Study further the physico-chemical processes of POPs in different environmental compartments, taking into account their transport within the EMEP region and on the hemispheric/global scale. Further develop POPs emission data. Support preparatory work for the review of the Protocol on POPs.

### Main activities and time schedule:

(a) MSC-E will report to the EMEP Steering Body in 2002 on: an assessment of transboundary transport of Benzo[a]pyrene (BaP) (deposition and concentration fields and country-to-country matrix) for 2000; an evaluation of transport and accumulation of PCDD/Fs and HCB in various compartments; first results of the calculation of PCB regional and hemispheric transport (including to the Arctic) and estimation of its accumulation in different environmental compartments; an assessment of long-range transport of selected POPs to regional seas. It will support the ad hoc expert group on POPs and its national experts in their work on new substances and contribute to work to develop an effects-based approach under the Working Group on Effects;

(b) MSC-E will further develop its models by: modifying the modelled behaviour in soil; modifying modelled air/sea exchange; refining degradation rates in vegetation and litter in view of vegetation types and climatic conditions; improving the gas/particulate partitioning description and the parameterization of aerosol deposition; refining the physico-chemical properties of PAHs,  $\gamma$ -HCH, PCDD/Fs and HCB; modifying the hemispheric version of the POP multi-compartment model for PCB and  $\gamma$ -HCH transport. It will initiate preparations for model intercomparisons;

(c) In cooperation with Parties, CCC will complete the setting-up of the superstation network (five sampling sites). As a first step, PAH, PCB, HCB, chlordane, lindane,  $\alpha$ -HCH, DDT/DDE should be sampled, but this may require financial support to laboratories or a central laboratory to analyse samples. POPs in precipitation will be collected weekly. CCC will finalize the draft guidelines for sampling and analysis and present them to the Task Force on Measurements and Modelling. In cooperation with MSC-E, it will complement EMEP data with data from other international programmes for comparison with model results;

(d) CCC, MSC-E and the Task Force on Emission Inventories and Projections, in consultation with the Parties, will improve the POPs emission data quality. They will adjust European emission inventories for POPs to the modelling requirements. CCC will develop profiles of chemical species of the selected POPs and collate information on the height of major point sources;

(e) The Task Force on Measurements and Modelling will review the monitoring and modelling work of EMEP on POPs. CCC and MSC-E will provide a summary report to the Task Force on their work related to POPs.

## 2.8 FINE PARTICULATES

Description/objectives: Provide a first evaluation of particulate matter emissions, concentrations, transboundary fluxes and cost-effective abatement strategies. Evaluate experience with reporting and review guidance for emission reporting and monitoring of concentrations. Support the investigations on fine particulates under the review of the Gothenburg Protocol.

Main activities and time schedule:

(a) MSC-W will develop further the unified Eulerian model to include aerosol dynamics on the basis of the aerosol dynamic module MULTIMONO. It will carry out model inter-comparisons with other European aerosol modelling groups;

(b) MSC-W and CCC will evaluate the status of monitoring and quality assurance activities, in particular assessing the rural versus urban characteristics of PM in various parts of Europe. CCC will further improve the monitoring data by: supporting Parties to start monitoring or increase their number of sites; extending the database to accommodate the storage of PM data; determining the rural concentrations of elemental and organic carbon for selected EMEP sites covering different regions of Europe. It will strengthen cooperation with other research projects for level 3 monitoring as defined in the PM monitoring programme and continue work on source apportionment and chemical mass closure in cooperation with the other centres and national experts. It will develop, in close collaboration with ongoing work of the European Community, guidance for the monitoring of smaller size fractions than PM<sub>10</sub> (e.g. PM<sub>2.5</sub>);

(c) MSC-W will evaluate the emission data reported by Parties and analyse the consequences of the allocation of PM concentrations. CIAM will review the projections reported by Parties. All centres will support work to improve the emissions database and support Parties' efforts using the results of the Coordinated European Emissions Inventory Project for Particles (CEPMEIP);

(d) CIAM, in collaboration with MSC-W, will further develop the framework for integrated assessment modelling of fine particulates, in particular to incorporate advances in atmospheric transport models. CCC will support CIAM especially by evaluating emissions data. Parties will review their PM abatement cost-curves available on the Internet and present comments to CIAM, which will update its database. The centres will provide the Task Force on the Health Aspects of Air Pollution with data allowing it to draw up recommendations on health indicators/ limit values for subsequent inclusion into integrated assessment modelling.

### **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 (17 May 2002);

(b) Submission of the 2002 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 2002.

##### **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. Preparations for the 2004 substantive review and assessment report of present air pollution effects and their recorded trends.

Main activities and time schedule :

(a) Submission of draft outlines of possible contributions to the substantive report by the International Cooperative Programmes and the Task Force on the Health Aspects of Air Pollution in January 2002 (in accordance with the outline approved by the Working Group on Effects at its twentieth session);

(b) Review of these draft outlines by the Extended Bureau of the Working Group on Effects at its meeting in February 2002;

(c) Preparation of the draft annotated outline of the 2004 substantive report by the Bureau of the Working group on Effects (March-May 2002);

(d) Draft annotated outline and timetable for the preparation of the 2004 substantive report to the Working Group on Effects in 2002.

### **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 on the corrosion of selected materials 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) Preparations for the exposure of (i) passive samplers for particulate matter and nitric acid and (ii) material specimens in connection with the MULTI-ASSESS programme (to be started in autumn 2002);

(b) Preparations for the workshop on the release of heavy metals due to corrosion (to be held in spring 2003 in Germany);

(c) Report on the trend in corrosion attack in the network of the multi-pollutant exposure programme to the Working Group on Effects in 2002;

(d) Progress report on the further development of a database of environmental data for the multi-pollutant exposure programme to the Working Group on Effects in 2002;

(e) Draft technical report on (i) inventory of present methods and available data and (ii) proposed concerted action for assessing stock at risk of materials, including cultural monuments;

(f) Eighteenth meeting of the Programme Task Force, 13-15 May 2002, Kjeller, Norway.

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

Description/objectives: Identification of the state of surface water ecosystems and their long-term changes, with respect to the regional variation and impact of selected air pollutants, and including effects on biota. 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 of a draft of the fifteen-year report of ICP Waters for consideration by the Programme Task Force in 2002;
- (b) Organization of the year 2002 biological and chemical intercalibrations; presentation of the 2001 results (including intercalibration on heavy metals) to the Working Group in 2002;
- (c) Progress report on the further development of the monitoring network and Programme's database with emphasis on biological data to the Working Group in 2002;
- (d) Workshop on heavy metals in surface waters and seventeenth meeting of the Programme Task Force, 18-21 March 2002, Lillehammer, Norway;
- (e) Progress report on tracing recovery in watersheds; a multivariate approach;
- (f) Eighteenth meeting of the Programme Task Force, October 2002, Moscow (tentatively).

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

Description/objectives: Collection and assessment of comprehensive and comparable data on changes in forests under actual environmental conditions (in particular air pollution, including acidifying and eutrophying 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) Preparation of the 2002 executive and technical reports on Forest Condition in Europe (levels I and II); summary report on the 2001 monitoring results to the Working Group on Effects in 2002;
- (b) Further elaboration of a cause-effect report based on the results of suitable plots of ICP Forests and ICP Integrated Monitoring; progress report to the Working Group in 2002;
- (c) Preparation of a report on quality assurance for crown condition assessment; information to the Working Group in 2002;
- (d) Progress report on the further development of links between level I and level II monitoring to the Working Group in 2002;
- (e) Eighteenth meeting of the Programme Task Force, 25-29 May 2002, Lisbon.

### **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 dose/response functions for a range of crops; assessment of economic losses caused by ozone effects on crops; validation of ozone critical levels for natural vegetation and crops and further development of the level II approach; evaluation of natural vegetation and crops as effective indicators of the potential for damage to natural ecosystems by ozone, evaluation and mapping of heavy metal deposition to vegetation; and an evaluation of the impacts of nutrient nitrogen on semi-natural vegetation. A Programme Task Force, led by the United Kingdom, with the cooperation of the Programme's coordination centre (Centre for Ecology and Hydrology, Bangor Research Unit, Bangor, United Kingdom), is responsible for the detailed planning and coordination of the Programme.

Main activities and time schedule :

- (a) The 2001/2002 annual report on the achievements of the Programme to the Working Group on Effects in 2002;
- (b) Progress report on further development of the Programme's experiments on the effects of ambient ozone episodes on crops and natural vegetation to the Working Group in 2002;
- (c) Progress report on determining the critical flux for effects of ozone on biomass, including preparations for the level II workshop (19-22 November 2002, Gothenburg, Sweden) to the Working Group in 2002;
- (d) An assessment of economic losses caused by ozone effects on agricultural production, including predictions for 2010;
- (e) Progress report on studies into the impacts of nutrient nitrogen on semi-natural vegetation;
- (f) Progress report on monitoring heavy metals deposition to crops and natural vegetation, including an update and analysis of data from the Europe-wide heavy metals in mosses survey;
- (g) Fifteenth meeting of the Programme Task Force, 11-14 February 2002, Trier, Germany.

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

Description/objectives: Determination and prediction of the state of ecosystems and their long-term changes with respect to the regional variation and impact of selected air pollutants, with special attention to 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) Preparation of the Eleventh Annual Report of ICP Integrated Monitoring; presentation to the Working Group on Effects in 2002;

- (b) Continued calculation of: (i) sulphur and nitrogen compounds, base cations, organic carbon and H<sup>+</sup> budgets and trends; and (ii) heavy metal pools and fluxes; report to the Working Group in 2002;
- (c) Further development of bioeffects indication, assessment of multi-pollutant, multi-effect relationships (in cooperation with ICP Forests); progress report to the Working Group in 2002;
- (d) Progress report on the results of site-specific dynamic modelling and assessment of the recovery at selected ICP Integrated Monitoring sites, to the Working Group in 2002;
- (e) Consideration of possibilities for closer cooperation with and/or more active participation in activities of other relevant international organizations/bodies, in addressing global environmental issues (e.g. climate change); information to the Working Group in 2002;
- (f) Tenth meeting of the Programme Task Force, and training workshop on dynamic modelling, 24-27 April 2002, Prague.

### **3.7 INTERNATIONAL COOPERATIVE PROGRAMME ON MODELLING AND MAPPING OF CRITICAL LEVELS AND LOADS AND AIR POLLUTION EFFECTS, RISKS AND TRENDS**

Description/objectives: Determination of critical loads and levels and their exceedances for selected pollutants, development and application of other methods for effect-based approaches, and modelling and mapping of the present status and trends in impacts of air pollution. 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 and to other effect-related activities, in particular by developing methods and models for calculating critical loads and levels and for applying other effect-based approaches, as well as by producing maps of critical loads and levels and their exceedances, and other risk parameters related to potential damage and recovery.

Main activities and time schedule:

- (a) Continuing maintenance and updating of the database of critical loads of sulphur and nitrogen, as well as data derived from them; information to the Working Group on Effects in 2002;

(b) Preparation and circulation of the summary report on conclusions and recommendations of the second meeting of the Joint Group of Experts on Dynamic Modelling (November 2001, Ystad, Sweden);

(c) Further development of methods and procedures for dynamic modelling on a European scale, including preparation and application of a draft dynamic modelling manual and provision of training to NFCs, progress report to the Working Group in 2002;

(d) Further development of critical limits for heavy metals, testing and validation of critical load and stand-still calculation tools for heavy metals in national mapping activities, including comparison of their results; report on the results of testing methodologies for Pb and Cd with data provided by NFCs on a voluntary basis to the Working Group in 2002;

(e) Twelfth CCE workshop on modelling and mapping and eighteenth meeting of the programme Task Force, 14-19 April 2002, Sorrento, Italy;

(f) Third meeting of the Joint Expert Group on Dynamic Modelling, 4-6 November 2002, Sweden (tentatively);

(g) Workshop on empirical critical loads for nitrogen, 11-13 November 2002, Bern;

(h) Follow-up workshop on critical limits for heavy metals, autumn 2002.

### **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 long-range transboundary air pollution 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, Bonn Office, evaluates and assesses the health effects of long-range transboundary air pollution and reports on the subject.

Main activities and time schedule:

- (a) Report on a preliminary assessment of the health risk of selected heavy metals from long-range transboundary air pollution to the Working Group on Effects in 2002;
- (b) Continuation of the assessment of population exposure to particulates from long-range transport and of its health effects; information to the Working Group in 2002;
- (c) Preliminary assessment of the potential health effects of the selected “higher priority” POPs; report to the Working Group in 2002;
- (d) Fifth meeting of the Task Force on the Health Aspects of Air Pollution, 13-14 May 2002, in Brno, Czech Republic, or Bonn, Germany (tentatively).

## Appendix

**Table 1. The EMEP Emission Reporting Programme for 2001/2002<sup>1</sup>**

Emissions data should be submitted to the UNECE secretariat by 31 January 2002. This table is based on information in the draft guidelines for estimating and reporting emissions data (EB.AIR/GE.1/2001/6 and Add.1), adopted in principle by the EMEP Steering Body. Parties may continue to report emissions according to the previous guidelines (EB.AIR/GE.1/1997/5).

Description of contents	Components	Reporting years <sup>2</sup>
<b>YEARLY: MINIMUM (and <i>ADDITIONAL</i>)</b>		
<b>A. National totals:</b>		
1. Main pollutants	SO <sub>x</sub> , NO <sub>x</sub> , NH <sub>3</sub> , NMVOC, CO	From 1980 to 2000 <sup>3</sup>
2. Particulate matter	PM <sub>2.5</sub> , PM <sub>10</sub> , TSP	For 2000
3. Heavy metals	Pb, Cd, Hg / ( <i>As, Cr, Cu, Ni, Se, Zn</i> )	From 1990 to 2000
4. POPs	(See note 4)	From 1990 to 2000
<b>B. Sector emissions:</b>		
1. Main pollutants	SO <sub>x</sub> , NO <sub>x</sub> , NH <sub>3</sub> , NMVOC, CO	From 1980 to 2000 <sup>3</sup>
2. Particulate matter	PM <sub>2.5</sub> , PM <sub>10</sub> , TSP	For 2000
3. Heavy metals	Pb, Cd, Hg / ( <i>As, Cr, Cu, Ni, Se, Zn</i> )	From 1990 to 2000
4. POPs	(See note 4)	From 1990 to 2000
<b>5-YEARLY: MINIMUM REPORTING</b>		
<b>C. Gridded data in the EMEP 50x50 km<sup>2</sup> grid</b>		
1. National totals	Main pollutants, PM, Pb, Cd, Hg, PAHs, HCB, dioxins/furans	From 1990 to 2000 (PM for 2000)
2. Sector emissions	Main pollutants, PM, Pb, Cd, Hg, PAHs, HCB, dioxins/furans	From 2000 to 2000 (PM for 2000)
<b>D. Emissions for large point sources</b>		
	Main pollutants, PM, Pb, Cd, Hg, PAHs, HCB, dioxins/furans	From 1990 to 2000 (PM for 2000)
<b>E. Projection data</b>		
1. Energy consumption	See table 3A in EB.AIR/GE.1/2001/6 Add.1	1990, 1995, 2000, 2010, 2020
2. Energy consumption for transport sector	See table 3B in EB.AIR/GE.1/2001/6 Add.1	1990, 1995, 2000, 2010, 2020
3. Agricultural activity	See table 3C in EB.AIR/GE.1/2001/6 Add.1	1990, 1995, 2000, 2010, 2020
<b>5-YEARLY: ADDITIONAL REPORTING/REVIEW</b>		
VOC speciation		Parties are encouraged to review the information used for modelling at the Meteorological Synthesizing Centres. The information will be available for review at <a href="http://www.emep.int/">http://www.emep.int/</a>
Height distribution		
Temporal distribution		
Land-use data		
Mercury breakdown		
% of toxic congeners of PCDD/F		
Pre-1990 emissions of PAHs, HCB, PCDD/F and PCB		

1) For details, refer to the Draft guidelines for estimating and reporting emissions data (EB.AIR/GE.1/2001/6 and Add.1).

2) As a minimum, data for the base year of the relevant protocol and from the year of entry into force of that protocol to the latest year should be reported.

3) Projected emissions of SO<sub>x</sub>, NO<sub>x</sub>, NH<sub>3</sub>, and NMVOCs should be reported for the years 2010 and 2020.

4) Aldrin, Chlordane, Chlordecone, Dieldrin, Endrin, Heptachlor, Hexaromobiphenyl, Mirex, Toxapene, HCH, DDT, PCBs, Dioxins and Furans, PAHs, HCBs / (**PCP, SCCP**).

**Table 2. EMEP measurement programme 2002**

Measurements are to be reported by 1 December for data from January to June and by 1 June for data from July to December.

	Components	Notes	Minimum reporting	Measurement period	Measurement frequency
<b>Gas</b>	SO <sub>2</sub>		X	24 hours	daily
	NO <sub>2</sub>		X	24 hours	daily
	HNO <sub>3</sub>		Y	24 hours	daily
	NH <sub>3</sub>		Y	24 hours	daily
	O <sub>3</sub>		X	hourly means stored	continuously
	Light hydrocarbons C2-C7		Y	10-15 min.	twice weekly
	Ketones and aldehydes		Y	8 hours	twice weekly
	Hg		Y	24 hours	weekly
<b>Particles</b>	SO <sub>4</sub> <sup>2-</sup>		X	24 hours	daily
	NO <sub>3</sub> <sup>-</sup>		Y	24 hours	daily
	NH <sub>4</sub> <sup>+</sup>		Y	24 hours	daily
	Na, Mg, Ca, K (Cl)	*	X	24 hours	daily
	PM10	*	X	24 hours	daily
	PMx (2.5 or 1.0)	**	Y	24 hours	daily
	Mineral dust		Y	24 hours	daily
	Elemental and organic carbon	*	X	24 hours	daily
	Organic carbon speciation			weekly	weekly
	Cd, Pb (first priority); Cu, Zn, As, Cr, Ni (second priority)		Y	24 hours	once weekly
	Chemical speciation as function of PM size		Y	24 hours	daily
	Number size distribution			hourly means stored	continuously
Light scattering			hourly means stored	continuously	
<b>Gas &amp; particles</b>	HNO <sub>3</sub> (g)+NO <sub>3</sub> <sup>-</sup> (p),		X	24 hours	daily
	NH <sub>3</sub> (g)+NH <sub>4</sub> <sup>+</sup> (p)		X	24 hours	daily
	POPs (PAH, PCB, HCB, chlordan, lindane, α-HCH, DDT/DDE)		Y	to be decided	to be decided
<b>Precipitation</b>	Amount, SO <sub>4</sub> <sup>2-</sup> , NO <sub>3</sub> <sup>-</sup> , Cl, pH, NH <sub>4</sub> <sup>+</sup> , Na <sup>+</sup> , Mg <sup>2+</sup> , Ca <sup>2+</sup> , K <sup>+</sup> , conductivity		X	24 hours/weekly	daily (weekly)
	Hg, Cd, Pb (first priority), Cu, Zn, As, Cr, Ni (second priority)		Y	weekly	weekly
	POPs (PAH, PCB, HCB, chlordan, lindane, α-HCH, DDT/DDE)		Y	to be decided	to be decided

Notes:

\* The recommendation to measure PM10, elemental carbon, organic carbon and soluble base cations at all EMEP sites may not be feasible in the short run. However, measurements should be started at as many sites as possible and on at least one site in each country.

\*\* As a European reference method for PM2.5 is not expected before 2004, countries are encouraged to start their measurements using other available methods.

X – At all sites.

Y – At a selection of sites only.

Annex VII

**PROVISIONAL LIST OF MEETINGS FOR 2002**

25-26 April 2002 Geneva	Working Group on Strategies and Review (meeting of heads of delegations)
28-30 August 2002 Geneva	Working Group on Effects (twenty-first session)
2-4 September 2002 Geneva	EMEP Steering Body (twenty-sixth session)
16-20 September 2002 Geneva	Working Group on Strategies and Review (thirty-fourth session)
10-13 December 2002 Geneva	Executive Body for the Convention (twentieth session)
* * * * *	
6-8 May 2002 Copenhagen	Implementation Committee (ninth meeting)
11-13 September 2002 Geneva (tentatively)	Implementation Committee (tenth meeting)
* * * * *	
24-25 January 2002 Laxenburg (Austria)	Workshop of the Task Force on Integrated Assessment Modelling on uncertainty management in integrated assessment modelling
11-14 February 2002 Trier (Germany)	Programme Task Force, ICP on Effects of Air Pollution on Natural Vegetation and Crops (fifteenth meeting)
14-15 February 2002 Moscow	EMEP/MSC-E Workshop on mercury model inter-comparison (phase II)
18-21 March 2002 Lillehammer (Norway)	Programme Task Force, ICP on Assessment and Monitoring of Acidification of Rivers and Lakes (seventeenth meeting); and workshop on heavy metals (Pb, Cd and Hg) in surface waters: monitoring and biological impact
20-22 March 2002 WMO, Geneva	Task Force on Measurements and Modelling (third meeting)
March 2002 Ispra (Italy)	Workshop on combustion plant emissions: Task Force on Emissions Inventories and Projections
14-19 April 2002 Sorrento (Italy)	Programme Task Force, ICP on Mapping of Critical Levels and Loads (eighteenth meeting); and twelfth CCE workshop on modelling and mapping
24-27 April 2002 Prague	Programme Task Force, ICP on Integrated Monitoring of Air Pollution Effects on Ecosystems (tenth meeting); and training workshop on dynamic modelling.

6-8 May 2002 Cordoba (Spain)	Task Force on Emissions Inventories and Projections (eleventh meeting)
13-14 May 2002 Brno (Czech Republic) or Bonn (Germany) (tentatively)	Joint Task Force on the Health Aspects of Air Pollution (fifth meeting)
13-15 May 2002 Kjeller (Norway)	Programme Task Force, ICP on Effects of Air Pollution on Materials, Including Historic and Cultural Monuments (eighteenth meeting)
13-15 May 2002 Oslo	Task Force on Integrated Assessment Modelling (twenty-seventh meeting)
25-29 May 2002 Lisbon	Programme Task Force, ICP on Assessment and Monitoring of Air Pollution Effects on Forests (eighteenth meeting)
4-5 June 2002 Geneva	Expert Group on POPs Assessment (third meeting)
2-4 October 2002 Netherlands	Second workshop on the valuation of ecosystem benefits from air pollution abatement of the Network of Experts on Benefits and Economic Instruments (NEBEI)
14-16 October 2002 Gothenburg (Sweden)	EMEP Workshop on validation and evaluation of air emission inventories
October 2002 Moscow (tentatively)	Programme Task Force, ICP on Assessment and Monitoring of Acidification of Rivers and Lakes (eighteenth meeting)
4-6 November 2002 Sweden (tentatively)	Joint Expert Group on Dynamic Modelling (third meeting)
11-13 November 2002 Bern	Workshop on empirical critical loads for nitrogen deposition on (semi-) natural ecosystems
19-22 November 2002 Gothenburg (Sweden)	Workshop on level II critical levels for ozone
November 2002 Laxenburg (Austria)	Workshop by the Task Force on Integrated Assessment Modelling
Autumn 2002 United States (tentatively)	Workshop on hemispheric transport of air pollutants
Autumn 2002	Follow-up workshop on critical limits for heavy metals

Annex VIII

**2002 ESSENTIAL COORDINATION COSTS FOR CORE ACTIVITIES NOT FUNDED THROUGH THE EMEP PROTOCOL**

**(in thousands of United States dollars)**

Activities	ICP Forests; PMCC	ICP Waters; PC	ICP Materials; PMRC	ICP Vegetation; PCC	ICP Integrated Monitoring; PC	ICP Mapping CCE	TF Health Aspects	CIAM	Subtotal Activities
Monitoring and assessment	160	55	70	15	70				370
Dose-response		60	50	80	35				225
Critical loads and levels	30	25	60	45	20	115			295
Dynamic modelling		25	25	20	70	130			330
Database management	80	65	70	60	65	25			485
Total	270	230	275	220	260	270	100	240 <sup>1/</sup>	1865 <sup>2/</sup>

<sup>1/</sup> Figure covers costs for generating cost curves for particulate matter (US\$ 60,000) and updating those for other pollutants (US\$ 60,000), modelling for health impacts (US\$ 30,000), cooperation with national focal points (US\$ 30,000) and extended modelling work to include dynamic models (US\$ 60,000).

<sup>2/</sup> Subject to 3% programme support costs, i.e. US\$ 55,950.

Annex IX**DECISION 2001/5 AND RECOMMENDATION ON THE FINANCING OF CORE ACTIVITIES IN 2002-2004**The Executive Body,

Noting that the 1979 Convention on Long-range Transboundary Air Pollution does not contain provision for the financing of core activities,

Noting further that, with the exception of the Protocol on Long-term Financing of the Cooperative Programme for the Monitoring and Evaluation of the Long-range Transmission of Air Pollutants in Europe (hereafter referred to as the “EMEP Protocol”), none of the Protocols to the 1979 Convention provides for the financing of core activities,

Recognizing that the efficient operation of the 1979 Convention and its Protocols would benefit from the adoption of essential coordination costs for three years, the immediate year for decision and the following two years as provisional, for the financing of core activities under the Convention and its Protocols, other than those covered by the EMEP Protocol, and from recommending to Parties an indicative scale of their contributions to those essential coordination costs,

1. Decides that the essential coordination costs for financing the core activities of the Convention and its Protocols<sup>1</sup>, other than those covered by the EMEP Protocol, shall be US\$ 1,920,950 in 2002, and shall provisionally be US\$ 1,920,950 in 2003 and US\$ 1,920,950 in 2004;

2. Recommends that the Parties to the 1979 Convention should make contributions, in cash or in kind, to the essential coordination costs as set out in the appendix to this decision and recommendation without prejudging the outcome of negotiations on a legal instrument;

3. Calls for all such contributions to be deposited in the General Trust Fund for the Financing of the Implementation of the Convention, which has been established by the Secretary-General of the United Nations

---

<sup>1</sup> The core activities for 2002 are set out in annex VIII above.

Appendix**RECOMMENDED SCALE OF CONTRIBUTIONS**

<b>Parties</b>	<b>UN 2000 assessment rate (%)</b>	<b>"EMEP share" (%)</b>	<b>Recommended contribution US\$</b>
Armenia	0.006	0.014	271
Belarus	0.057	0.134	2579
Bosnia and Herzegovina	0.005	0.012	226
Bulgaria	0.011	0.026	498
Canada	2.732		voluntary
Croatia	0.030	0.071	1357
Cyprus	0.034	0.080	1538
Czech Republic	0.107	0.252	4842
Estonia	0.012	0.028	543
Georgia	0.007	0.016	317
Hungary	0.120	0.283	5430
Iceland	0.032	0.075	1448
Kazakhstan	0.048	0.113	2172
Kyrgyzstan	0.006	0.014	271
Latvia	0.017	0.040	769
Liechtenstein	0.006	0.014	271
Lithuania	0.015	0.035	679
Malta	0.014	0.033	633
Monaco	0.004	0.009	181
Norway	0.610	1.437	27602
Poland	0.196	0.462	8869
Republic of Moldova	0.010	0.024	452
Romania	0.056	0.132	2534
Russian Federation	1.077	2.537	48733
Slovakia	0.035	0.082	1584
Slovenia	0.061	0.144	2760
Switzerland	1.215	2.862	54978
The FYR of Macedonia	0.004	0.009	181
Turkey	0.440	1.036	19910
Ukraine	0.190	0.448	8597
United States	25.000		voluntary
Yugoslavia	0.026	0.061	1176
Austria	0.942	2.219	42625
Belgium	1.104	2.601	49955
Denmark	0.692	1.630	31312
Finland	0.543	1.279	24570
France	6.545	15.417	296156
Germany	9.857	23.219	446021
Greece	0.351	0.827	15882
Ireland	0.224	0.528	10136
Italy	5.437	12.807	246020
Luxembourg	0.068	0.160	3077
Netherlands	1.632	3.844	73847
Portugal	0.431	1.015	19502
Spain	2.591	6.103	117241
Sweden	1.079	2.542	48824
United Kingdom	5.092	11.995	230409
European Community		3.330	63968
<b>Total (EMEP region)</b>	<b>41.039</b>	<b>100.000</b>	<b>1920950</b>

Annex X**DECISION 2001/6 ON THE FACILITATION OF PARTICIPATION OF COUNTRIES WITH ECONOMIES IN TRANSITION**

1. Broad participation by Parties in the activities under the Executive Body is essential to ensure progress in the work under the Convention. To facilitate the participation of certain countries with economies in transition which would otherwise not be in a position to take part, Parties are invited to contribute temporarily to the Trust Fund for this purpose.
2. The secretariat is authorized to fund, subject to available resources, the participation of one governmentally designated representative from each of the following countries: Armenia, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Republic of Moldova, Romania, Russian Federation, the former Yugoslav Republic of Macedonia, Ukraine and Yugoslavia, to meetings of the Executive Body's three main subsidiary bodies, giving highest priority to negotiating groups and other relevant meetings directly linked to preparatory or ongoing negotiations. Upon their accession to the Convention and their expressed intention to take part in the work of the Executive Body, the following countries may also qualify for funding: Albania, Azerbaijan, Tajikistan, Turkmenistan and Uzbekistan. First-time participation of new Parties at a session of the Executive Body could be eligible for funding.
3. Participation in other meetings may qualify for funding at the discretion of the Bureau of the Executive Body provided funds are available.
4. To make efficient use of the limited funds available for travel, Parties are encouraged, to the extent possible, to finance their own participation in the activities under the Convention.
5. The countries mentioned in paragraph 2 above that have applied for membership of the European Union and/or the Organisation for Economic Co-operation and Development (OECD) are, in principle, expected to finance their own participation, and should only exceptionally make use of this extraordinary offer.
6. The secretariat is authorized to decide, in consultation with the Chairman of the Executive Body, on the extent of funding (travel and/or daily subsistence allowance, or lump sum), on the basis of available funds and forecasts for requests and contributions for each year, and taking due account of United Nations regulations.

Annex XI

TRUST FUNDS

Contributions should be made by bank transfer in US dollars to the United Nations Economic Commission for Europe (UNECE) as follows:

Bank Name: JPMorgan Chase Bank

Address: International Agencies Banking  
1166, Avenue of the America, 17<sup>th</sup> floor  
New York, N.Y. 10036-2708, USA

ABA code: 021000021 (Specific for US use)  
SWIFT code: CHASUS33

Account Name: UN Geneva General Fund  
Account Number: 485-001802

Each contribution must be clearly referenced indicating the year for which it is made and stating one of the following:

12. (a) "Credit LRA Trust Fund - ECE/EMEP" for the EMEP Trust Fund;
- (b) "Credit LUA Trust Fund -ECE/EOA" (and indicate specific programme/ coordinating centre if applicable) for the Trust Fund for core activities not covered by the EMEP Protocol;
- (c) "Credit Project ID: E112 (ECE-EV-103) CLRTAP" for the Trust Fund to support participation of countries with economies in transition.

To ensure that all contributions are allocated to the correct fund, each time payment is made it is important to send details specifying the amount contributed, the date and purpose of the payment to:

Mr. Keith Bull  
UNECE  
Office 346  
Palais des Nations  
CH-1211 Geneva 10  
Switzerland  
(or e-mail: keith.bull@unece.org)

For contributions other than in US dollars, please contact the UNECE secretariat at the above address.

-----