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

Steering Body to the Cooperative Programme for Monitoring and Evaluation
of the Long-range Transmission of Air Pollutants in Europe (EMEP)

REPORT ON THE TWENTY-FIFTH SESSION

Introduction

1. The Steering Body held its twenty-fifth session in Geneva from 3 to 5 September 2001.

2. The session was attended by representatives from 28 Parties to the Convention: Austria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Hungary, Italy, Kazakhstan, Luxembourg, Monaco, Netherlands, Norway, Poland, Portugal, Russian Federation, Slovakia, Slovenia, Sweden, Switzerland, Turkey, United Kingdom, United States, Yugoslavia and the European Community.

3. Representatives from the World Meteorological Organization (WMO), the European Environment Agency (EEA), the four EMEP Centres (Centre for Integrated Assessment Modelling (CIAM), Chemical Coordinating Centre (CCC), Meteorological Synthesizing Centre-East (MSC-E), and Meteorological Synthesizing Centre-West (MSC-W)) and the EUREKA Environmental Project on the Transport and Chemical Transformation of Environmentally Relevant Trace Constituents in the Troposphere over Europe; Second Phase (EUROTRAC-2) also attended.

4. Mr. Martin WILLIAMS (United Kingdom) chaired the meeting.

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I. ADOPTION OF THE AGENDA

5. The Steering Body decided to include item 5 of the provisional agenda as sub-item 4 (i) in the work-plan discussion and to invert the order of sub-items 4 (g) and (h). With these amendments, the provisional agenda as contained in document EB.AIR/GE.1/2001/1 was adopted.

II. ADOPTION OF THE REPORT ON THE TWENTY-FOURTH SESSION

6. The Steering Body adopted the report on its twenty-fourth session (EB.AIR/GE.1/2000/2).

III. MATTERS ARISING FROM THE EIGHTEENTH SESSION OF THE EXECUTIVE BODY FOR THE CONVENTION AND ACTIVITIES OF THE EMEP BUREAU, INCLUDING COOPERATION WITH THE WORKING GROUP ON EFFECTS

7. The secretariat informed the Steering Body about matters arising from the eighteenth session of the Executive Body for the Convention (ECE/EB.AIR/71) and developments since that meeting. It highlighted that Kazakhstan had ratified the Convention and become the 48th Party. Yugoslavia had deposited its instrument of succession, both to the Convention and to the EMEP Protocol, to become effective on 27 April 1992. The secretariat also drew the attention of delegations to the publication of the EMEP Strategy 2000-2009 (ECE/EB.AIR/73), which was now available. The Strategy had been approved by the Executive Body and published by the secretariat after substantial editing.

8. The Chairman of the Steering Body presented the summary report on the work of the EMEP Bureau between the Steering Body's twenty-fourth and twenty-fifth sessions, including cooperation with the Working Group on Effects (EB.AIR/GE.1/2001/10). He informed the Steering Body that the Bureau at its meeting on 3 September 2001 had decided to review the procedure for reporting by the centres and for derestricting reports by the Steering Body. The Bureau had set up a small subgroup to draw up a proposal. Delegations were invited to make suggestions on this subject.

9. The Vice-Chairman of the Working Group on Effects, Mr. T. JOHANNESSEN (Norway), informed the Steering Body about discussions held at the recent twentieth session of the Working Group on Effects. He highlighted that the Working Group had welcomed the possibility of participating in the EMEP Bureau meeting. He stressed that the requests from the Working Group on Effects centres to EMEP for data, reflected in the report on the work of the EMEP Bureau (EB.AIR/GE.1/2001/10, para. 31), were of great importance to the Working Group. The Working Group's Bureau had accepted the offer from the EMEP Bureau to organize a joint meeting and suggested holding that meeting at the end of February.

10. The Steering Body:

(a) Took note of this information, including the requests for data from the Working Group

on Effects;

(b) Encouraged its Bureau to further enhance cooperation with the Working Group on Effects, welcoming the idea of a joint meeting of the Bureaux.

IV. PROGRESS IN 2001 AND WORK-PLAN UP TO 2004

11. The Chairman introduced the draft work-plan for 2002 and the proposed priorities up to 2004 (EB.AIR/GE.1/2001/9). The Steering Body discussed separately each area of work considering progress made in 2001 with respect to the work-plan (ECE/EB.AIR/71, annex IV, item 2).

A. Heavy metals

12. Mr. S. DUTCHAK of the Meteorological Synthesizing Centre-East (MSC-E) presented an overview of activities on monitoring and modelling heavy metals, including progress in work at the Chemical Coordinating Centre (CCC) and MSC-E, the results of the Task Force on Measurements and Modelling (EB.AIR/GE.1/2001/4), and plans for work up to 2004. The Steering Body received the following technical reports:

(a) EMEP report 3/2001 (jointly by MSC-E and CCC). Evaluation of transboundary transport of heavy metals in 1999. Trend analysis;

(b) MSC-E report 2/2001. Intercomparison study of numerical models for long-range atmospheric transport of mercury. Stage I. Comparison of chemical modules for mercury transformations in a cloud/fog environment;

(c) MSC-E note 8/2001. Hemispheric model of airborne pollutant transport; and

(d) CCC report 9/2001. Heavy metals and POPs in the EMEP region in 2000.

13. Mr. Dutchak highlighted that data submitted now by more than 30 Parties indicated that emissions in Europe of lead, cadmium and mercury had decreased since 1990, as required under the Protocol on Heavy Metals. Emissions in 1999 were well below 1990 levels: about 60% for lead, 40% for cadmium and 50% for mercury. Deposition decreases were not always as great, especially in small countries, due to the transboundary nature of the pollution. While much progress has been made in the monitoring of heavy metals, its coverage in Europe was still insufficient, with large gaps in southern and eastern Europe. Modelling of lead and cadmium transport had advanced well and comparison with measurements showed good agreement. Modelled data tended in general to give underestimates, which might be due to underestimated emission data. MSC-E had made country-specific information and data available on its web site (www.msceast.org) and invited experts to review the data.

14. In 2000, CCC had conducted an intercomparison of analytical methods for heavy metals monitoring in precipitation. Thirthy laboratories participated, 18 of which were from within the EMEP network. In general, the intercomparison had given good results. MSC-E had performed model intercomparisons for lead and cadmium and was now conducting a complex model intercomparison exercise for mercury. A high priority in the work at MSC-E was the development of a hemispheric model. The model was running and being tested for lead. It was, for instance, used to show the contribution of lead to the Arctic.

15. The Task Force on Measurements and Modelling had discussed the modelling and monitoring of heavy metals and presented a number of conclusions to the Steering Body (EB.AIR/GE.1/2001/4, paras. 45-63). It also recommended the Steering Body to adopt the new chapters on heavy metals for inclusion into the EMEP Manual for Sampling and Chemical Analysis.

16. The Vice-Chairman of the Working Group on Effects informed the Steering Body about the progress in mapping critical loads for heavy metals. Several Parties were now preparing to submit data for European mapping, and preliminary maps were expected to be ready by 2003. This exercise was, however, intended to test the mapping methodology and not for policy application.

17. The delegation of Germany thanked the centres for their excellent work. It announced that it hoped to be able to conduct a field intercomparison exercise for mercury in 2002.

18. The delegation of the Russian Federation also expressed satisfaction with the work. It pointed out that some of the results were used for its national policy purposes. It also supported suggestions for further work on pollution transport into the Arctic and cooperation with the Arctic Monitoring and Assessment Programme (AMAP).

19. The delegation of Sweden highlighted the importance of work related to mercury. It considered it particularly important to link mercury pollution to exceedances of critical loads to illustrate its harmful effects.

20. The Steering Body:

(a) Took note of the reports presented and decided to derestrict them;

(b) Expressed its appreciation to MSC-E and CCC for the excellent progress in the work on heavy metals;

(c) Endorsed the conclusion by the Task Force on Measurements and Modelling that the MSC-E model was in principle operational for lead and cadmium and that it could be applied for policy purposes once the emission data uncertainties had been reduced;

(d) Adopted the two new chapters on heavy metals of the EMEP Manual for Sampling and Chemical Analysis and requested Parties to use this Manual for heavy metals monitoring, as recommended by the Task Force on Measurements and Modelling (EB.AIR/GE.1/2001/4, para. 46 (c)).

B. Photo-oxidants

21. Ms. L. TARRASÓN of the Meteorological Synthesizing Centre-West (MSC-W) presented an overview of activities on monitoring and modelling of photo-oxidants, including progress in work at CCC, MSC-W and the Centre for Integrated Assessment Modelling (CIAM), and plans for work up to 2004. The Steering Body had the following technical reports before it:

(a) EMEP report 1/2001 (jointly by CCC, CIAM and MSC-W). Transboundary acidification, eutrophication and ground-level ozone in Europe including the corrigendum with a revised chapter 2;

(b) MSC-W note 2/2001 (jointly with the European Community Joint Research Centre's Environment Institute (JRC-EI)). The influence of scale in modelled ground-level ozone;

(c) CCC report 1/2001. Ozone measurements 1999; and

(d) CCC report 7/2001. VOC measurements 1999.

22. Ms. Tarrasón emphasized the need to improve the emission inventory for VOCs, especially improving the information on the speciation of non-methane VOCs. This required support from the Task Force on Emission Inventories and Projections and an extension of the EMEP/CORINAIR Guidebook. Further work, based on monitoring experience and modelling requirements, was also necessary on the selection of VOC species that were monitored. The measurement network for ozone needed improvement and a better coverage was, in particular, required for the Mediterranean region.

23. MSC-W had cooperated with the (JRC-EI) to carry out a study on the influence of scale in modelling ground-level ozone. In general, higher resolution tended to predict a stronger response to the control of NOx and VOC emissions. This could primarily be explained by a dilution of the NOx concentrations in larger grid cells. JRC-EI, in cooperation with CIAM and MSC-W, was also organizing a model intercomparison of urban and regional dispersion of ozone precursors in the framework of the EC Clean Air for Europe (CAFE) programme. This would provide the basis for evaluating ozone abatement strategies at a higher resolution, once the more detailed source-receptor relationships were incorporated into the CIAM integrated assessment model RAINS.

24. MSC-W had further developed the unified Eulerian model that uses a 50 km x 50 km grid scale, which provides much better modelling of ozone hotspots in Europe. The Eulerian model also

showed an increase in ozone concentrations in the free troposphere that contrasted with the decrease in surface ozone levels. Linking the regional model to the hemispheric scale was, therefore, proposed as one of the priorities for future work. Work was under way to conduct ozone deposition studies using the 'level II' approach that focused on plant intake rather than on ozone exposure.

25. Several delegations expressed their gratitude to the centres, congratulating them for their good work.

26. The delegation of Germany reported the main conclusions from the workshop on ozone trends, which took place on 9-11 November 2000 near Cologne (Germany). Long data series (> 10 years) of validated high-quality data were needed for trend assessment of ozone. To assess the effect of emission changes on ozone levels, non-anthropogenic factors like weather conditions should be filtered out. There were different ozone trends for areas with different ozone regimes and indicators; therefore, the workshop recommended monitoring the ozone precursors. More information on the workshop was available on the Internet at: http://www.air-information.de

27. The delegation of Switzerland announced an EMEP workshop on NOx and VOC limitation of ozone formation, to be held in cooperation with EUROTRAC-2 on 3-6 December 2001 in Gerzensee, near Berne (Switzerland). It also drew attention to a problem that experts had encountered in linking monitored ozone to vegetation exposure. Monitoring was conducted, in line with the recommendations, at 3-5 m above the ground, while exposure, for instance to crops, occurred closer to the ground, where different concentrations prevailed. This required some correction of the measured ozone levels.

28. MSC-W explained that it was possible to determine the right correction factor, but emphasized that the level II approach would make this unnecessary, as it focused on plant intake. CCC stressed that this problem should not lead to a departure from the practice of monitoring 3-5 m above the ground, as otherwise the representativeness of measurements for a wider area was not ensured.

29. A representative of the European Environment Agency (EEA) pointed out that urban air quality data, as available from the EEA database AIRBASE, indicated that there was an upward trend in urban ozone concentrations in Europe, which was correlated with decreasing nitrogen dioxide concentrations. It might be useful to re-examine the ozone abatement strategy in the light of these findings.

30. In response, the representative of CIAM pointed out that this phenomenon had already been known when modelling was conducted to provide the basis for the Gothenburg Protocol emission ceilings.

31. The Steering Body:

(a) Took note of the reports presented and decided to derestrict them;

(b) Expressed its appreciation to MSC-W, CIAM and CCC for the excellent progress in the work on photo-oxidants;

(c) Also took note of the information on the workshop on ozone trends presented by the delegation of Germany;

(d) Requested CCC and MSC-W to prepare a short note on the question raised by the delegation of Switzerland and present it to the Task Force on Measurements and Modelling for discussion.

C. Particulate matter

32. Mr. K. TORSETH of CCC presented an overview of activities on atmospheric monitoring and modelling of particulate matter (PM), including progress in work at MSC-W, CCC and the results of the Task Force on Measurements and Modelling (EB.AIR/GE.1/2001/4) and plans for work up to 2004. The Steering Body had the following technical reports before it:

(a) EMEP report 4/2001 (jointly by CCC, CIAM and MSC-W). Transboundary particulate matter in Europe: status report 2001; and

(b) CCC report 5/2001. Status report with respect to measurements of particulate matter.

33. Mr. Torseth emphasized the work on the PM monitoring strategy and explained the proposed monitoring programme (EB.AIR/GE.1/2001/4, annex I). Very few countries reported PM measurements at present and this situation had to improve quickly if EMEP wanted to meet its timetable for work on PM. To assist rapid implementation of the programme, CCC proposed to send Parties a questionnaire to ascertain the resources they could allocate to the work and to determine additional resource requirements. For the implementation of level 3 monitoring, CCC intended to use contacts with other research projects, such as the Nordic PM project, various EC projects including the work at JRC, work under EUROTRAC-2, the EEA air quality database AIRBASE and national projects.

34. Further progress was made on the implementation of the physical aerosol dynamic processes in the unified EMEP Eulerian model. A validation of modelling results was at present not possible due to the lack of both emission and monitoring data. Comparison of modelled and measured data indicated a general underestimation by the model, which was due to the fact that several emission sources, in particular natural emissions and re-suspension, were not included yet. Comparison of

modelled results with chemically speciated measurements proved very useful for further model development. Progress had been made in the further development of the box model 'MULTIMONO', a multi-component, mono-dispersed aerosol dynamics module developed at the University of Helsinki.

35. Results were now available from the Coordinated European Programme on Particulate Matter Emission Inventories Projections and Guidance (CEPMEIP) project. Under this project funded by EMEP through voluntary contributions from the Netherlands and Switzerland and supported by EEA, the Netherlands consultancy TNO had prepared a PM emission inventory for 1995. Experts at MSC-W and CIAM had reviewed the emission data. A fully documented version of the inventory was available on the Internet, accessible via the EMEP homepage (www.emep.int). A detailed analysis of emission data for Norway and Poland showed that there were still large discrepancies between different emission inventories. The data should now be reviewed by national experts and used for preparing their national PM emissions inventory for the year 2000 for submission at the beginning of 2002. Work to update the EMEP/CORINAIR Atmospheric Emission Inventory Guidebook was under way within the Task Force on Emission Inventories and Projections.

36. Mr. M. AMANN of CIAM presented progress in further developing integrated assessment modelling for the inclusion of particulate matter, including the results of the workshop held in Laxenburg (Austria) on 23-24 November 2000 (EB.AIR/GE.1/2001/3, annex). The objective of the work was to have PM fully integrated into the RAINS model by 2004 so that it could be used to examine multi-effect, multi-pollutant abatement strategies including PM and its health effects. Preliminary national cost curves for primary PM emission were available on the web site of CIAM (www.iiasa.ac.at/~rains) for review by national experts. The data showed that important emission reductions had already been made for PM10 but that reductions for smaller-size fractions were less significant. Work was under way to examine the linearity of the different source-receptor relationships, to see where simple transfer matrices could be implemented and where a more sophisticated approach had to be taken. A priority area would be the incorporation of health effects. This work would be done in cooperation with WHO and the Netherlands National Institute of Public Health and the Environment (RIVM).

37. Several delegations expressed their gratitude to the centres for their impressive work.

38. Several delegations raised the importance of starting work on measurements of finer fractions than PM10. The representative of the European Commission supported this position. She explained that the development of a reference method for monitoring PM2.5 had been delayed and could not be expected before 2004. The EC was at present finalizing a contract with WHO for a project to develop a health-impact metric and subsequently to determine some indicator value using this metric. It was hoped that first results would be available by the end of the year. The contract would also

enable WHO to provide support to the work under the Convention.

39. Several delegations expressed support for a rapid start to the measurement programme. It should, however, be borne in mind that this programme required significant resources and expertise from the Parties. It was suggested that CCC should organize training sessions for national experts involved in the monitoring of PM.

40. Several delegations drew attention to the importance of speciation of VOC emissions for the modelling of secondary organic aerosols. Some delegations stressed the significance of natural emission sources, such as sea salt and dust from the Sahara.

41. The delegation of the Netherlands pointed out that it was incorrect to compare the data from the 1990 inventory with those of the 1995 inventory, as had been done in section 3.3.1 of EMEP report 4/2001. The larger figure for 1995 did not reflect an increase in emissions but a more detailed inventory covering more emission sources. It would be expected that emissions decreased over that period, if estimated with the same method.

42. The Steering Body:

(a) Took note of the reports presented and decided to derestrict them;

(b) Expressed its appreciation to MSC-W, CIAM and CCC for the large amount of work carried out and the good progress achieved in the work on particulate matter;

(c) Took note of the conclusions of the workshop on the potential and costs for controlling fine particulate matter emissions in Europe;

(d) Invited Parties to review the data related to emission-generating activities and their costs that CIAM had made available on the Internet;

(e) Adopted the measurement programme based on the proposal from the Task Force on Measurements and Modelling (EB.AIR/GE.1/2001/4, annex I);

(f) Decided that monitoring of particulate matter should be pursued as a matter of high priority;

(g) Invited Parties to cooperate with CCC and to respond to the questionnaire that CCC would send to them, in order to ensure rapid implementation of the monitoring programme (level 1);

(h) Called upon Parties to set up monitoring sites that could perform more detailed monitoring (level 2);

(i) Requested CCC to develop, in close collaboration with ongoing work of the European Community, guidance for the monitoring of smaller-size fractions than PM10 (e.g. PM2.5); and

(j) Invited Parties to submit to CCC other PM measurements that they had obtained and encouraged CCC to work in close cooperation with other aerosol-related research programmes.

D. Acidifying and eutrophying compounds

43. Ms. L. Tarrasón of MSC-W presented an overview of activities on monitoring and modelling acidifying and eutrophying compounds, including progress in work at CCC, MSC-W, CIAM, discussions by the Task Force on Measurements and Modelling (EB.AIR/GE.1/2001/4) and plans for work up to 2004. The Steering Body had the following technical reports before it:

(a) EMEP report 1/2001 (jointly by CCC, CIAM and MSC-W). Transboundary acidification, eutrophication and ground-level ozone in Europe including the corrigendum with a revised version of chapter 2;

(b) CCC report 2/2001. Data report 1999. Acidifying and eutrophying compounds, part 1: annual summaries; and

(c) CCC report 3/2001. Data report 1999. Acidifying and eutrophying compounds, part 2: monthly and seasonal summaries.

44. Ms. Tarrasón highlighted the work on the evaluation of trends and the support that the centres provided to the preparation of the assessment report under the Task Force on Measurements and Modelling by providing national experts with modelled and measured data via the Internet. For the assessment report, MSC-W intended to perform, with the new Eulerian model, a recalculation of meteorological fields for five-year intervals between 1980 and 2000. It was also in the process of updating the spatial distribution of emissions within countries included in the model.

45. MSC-W had calculated the data for 1996, the last year for which the Lagrangian model was used, with the Eulerian model to allow a comparison of the results of the two models. The Eulerian model provided on average a better correlation with measured nitrogen compounds and ozone but not with measured sulphur. Improvements were mainly related to the increased (horizontal and vertical) resolution of the Eulerian model and improvements to the chemical scheme for nitrate. The systematic underestimation of sulphate and ammonium by the Eulerian model was a subject for further work. Source-receptor relationships were affected by the change of model. The two models behaved similarly in assessing relative contributions to depositions in European countries, but in absolute terms the Eulerian model gave higher estimates of export and import deposition. This was because the Eulerian model was mass-conservative and allocated a larger fraction of the emissions inside the EMEP area, including also the “indeterminate deposition” of the Lagrangian model.

Exceedances, therefore, tended to be larger with the Eulerian model and more hot spots were identified.

46. CCC had conducted an intercomparison of analytical methods for measured data and obtained good results, in particular for the participating EMEP stations. Comparisons with modelled data indicated that the Eulerian model tended to underestimate sulphate, nitrate and ammonium in air. The monitoring network for acidification and eutrophication was not satisfactory. Large gaps existed in central, eastern and southern Europe and very few stations reported data on nitrates in air.

47. Several delegations expressed their thanks to the centres for their interesting work. Some delegations stressed the importance of recalculating the base years of the different protocols in order to obtain good data for comparisons and for trend analysis.

48. The delegation of the Russian Federation explained that it had examined the data from the two models. Due to the lack of time, it had only looked at the data for the Russian Federation. It concluded that a shift from the Lagrangian to the Eulerian model had significant implications. The contribution from other countries to the sulphur deposition in the Russian Federation had increased and, for some countries, this increase was very large in percentage terms. The delegation expressed concern that the new results might shed doubt on a model that had been used for more than ten years to derive data on the transboundary transport of air emissions. This might disrupt the ratification process for the Gothenburg Protocol.

49. Mr. A. ELIASSEN of MSC-W recognized the points raised by the Russian Federation but stressed that the modelling work for the Gothenburg Protocol had been based on the best available scientific knowledge at that time. Modelling had been conducted so that the results were robust to small changes. The two models showed in general a good degree of similarity, but the, sometimes large, differences between specific values still needed to be understood better. Further analysis would be conducted at the Centre on the specific differences and their implications.

50. Mr. R. BALLAMAN (Switzerland), Chairman of the Working Group on Strategies and Review, emphasized that the review of protocols should be based on the best science. One of the purposes of a review was to evaluate whether the provisions of a protocol were still adequate in view of changes in scientific knowledge. It was important that EMEP provided, at an appropriate point in time, advice to the Working Group on Strategies and Review on which model gave the best results from a scientific point of view.

51. The Steering Body:

(a) Took note of the reports presented and decided to derestrict them;

(b) Expressed its appreciation to MSC-W, CIAM and CCC for the good progress in the work on acidifying and eutrophying compounds;

(c) Requested MSC-W to investigate further the differences between the Lagrangian and the Eulerian model, present results for discussion to the Task Force on Measurements and Modelling, and report on progress at the twenty-sixth session of the Steering Body;

(d) Requested CCC, in consultation with the Task Force on Measurements and Modelling, to come up with suggestions to improve nitrate aerosol monitoring and called upon Parties to cooperate in this endeavour.

E. Persistent organic pollutants (POPs)

52. Mr. V. SHATALOV of MSC-E presented an overview of activities on monitoring and modelling POPs, including progress in work at CCC, MSC-E, and plans for work up to 2004. The Steering Body had the following technical reports before it:

(a) MSC-E report 4/2001. Assessment of POP transport and accumulation in the environment;

(b) MSC-E note 1/2001. Dynamics of POPs distribution in sea water between different phases;

(c) MSC-E note 5/2001. Processing and presentation of information on HMs and POPs: database and web site;

(d) MSC-E note 6/2001. Investigation of dioxin/furan composition in emissions and environmental media. Selection of congeners for modelling;

(e) CCC report 4/2001. Sources and environmental cycling of POPs in the Baltic Sea region;

(f) CCC report 9/2001. Heavy metals and POPs in the EMEP region in 2000.

53. Mr. Shatalov highlighted the work of CCC on an intercomparison of analytical methods for PCB and benzo[a]pyrene, which had provided good results. The project on sources and environmental cycling of POPs in the Baltic Sea region had been continued with a case study for α- and γ-HCH. It had provided very useful information, for instance on emissions.

54. The work of MSC-E had concentrated on dioxins/furans, HCB, PCBs and PAHs (B[a]P). Mr. Shatalov presented some results of the work, emphasizing that data were available on the Internet at www.msceast.org. Results included pollutant concentrations in different environmental media,

country-specific transboundary deposition and emission fluxes, long-term emission and deposition trends, and evaluation of pollution clearance rates, for instance from polluted soils. Model validation with measured air and precipitation concentrations were satisfactory for the pollutants covered so far. MSC-E planned to make a detailed presentation of the status of its modelling work to the Task Force on Measurements and Modelling.

55. The delegation of Sweden and the United Kingdom, expressing their gratitude to the centres for their good work, informed the Steering Body about national work on physical-chemical modelling of POPs and offered to collaborate in the work of MSC-E.

56. Several delegations stressed the importance of the work by the ad hoc expert group on POPs operating under the Working Group on Strategies and Review. This work focused on evaluating new substances that might be candidates for addition to the Protocol on POPs. EMEP should contribute to this work and the decision to investigate other POPs should be taken at an appropriate point in time.

57. The Vice-Chairman of the Working Group on Effects pointed out that it was premature to envisage effects-based approaches at this stage. A workshop considering the possibility of establishing critical limits had concluded that this was not feasible for POPs at present. Work continued on risk assessments, in particular, within the Task Force on the Health Aspects of Air Pollution and the International Cooperative Programme on Assessment and Monitoring of Acidification of Rivers and Lakes (ICP Waters).

58. The Russian Federation noted that, while it might not be feasible to follow a critical load approach for POPs, there might be other effects-based approaches that could be pursued. It called upon the Working Group on Effects to intensify its efforts, also in view of the recently adopted global convention on POPs.

59. The Steering Body:

(a) Took note of the reports presented and decided to derestrict them;

(b) Expressed its appreciation to MSC-E and CCC for the good progress in the work on POPs;

(c) Took note of the offer from Sweden and the United Kingdom to collaborate with MSC-E; and

(d) Encouraged MSC-E to continue its good cooperation with national experts, including those from Sweden and the United Kingdom, and to intensify its cooperation with the ad hoc expert group on POPs.

F. Measurements and modelling

60. Mr. J. SCHNEIDER (Austria), Co-Chairman of the Task Force on Measurements and Modelling, reported on progress, including the results of the first two meetings of the Task Force, held in Vienna on 23-25 October 2000 and in Portoroz (Slovenia) from 30 May to 1 June 2001 (EB.AIR/GE.1/2001/4). He also presented the work of CCC to improve monitoring quality (CCC report 6/2001. Data quality 1999, quality assurance and field comparisons).

61. Mr. Schneider highlighted the work on the assessment report. The Task Force had appreciated the support given by the centres to the work of national experts. Since the meeting, a number of experts had offered to contribute to the general part of the report, giving an overall European perspective. While this part was intended to cover all substantive areas of work, the country-specific part of the report would focus on acidification and eutrophication. It was intended to provide an assessment by Parties of: (i) the results of emission reduction measures within the country and internationally; (ii) the present status in relation to the desired environmental quality; and (iii) the need for further action to reduce pollution levels. The work would be coordinated by experts at the Swedish Environmental Research Institute (IVL), which had already established contact with some 20 Parties. The assessment work should be finalized by 2002 so that the report could be completed in spring 2003. This could only be accomplished if full support was given to the experts working on it, by the Steering Body, the Executive Body and national authorities.

62. The Task Force had started close cooperation with EEA with the aim of harmonizing reporting of monitoring data. The second meeting of the Task Force took place in conjunction with a European Environment Information and Observation Network (EIONET) workshop on air quality management and assessment. The Task Force had also initiated cooperation with the ad hoc expert group on ammonia, which had begun investigating the measurement of reduced nitrogen concentrations and depositions.

63. The third meeting of the Task Force would to be hosted by the World Meteorological Organization (WMO) in Geneva, on 20-22 March 2002.

64. Several delegations stressed the importance of the new Task Force as a forum for in-depth discussions of scientific issues of high importance to the work of EMEP. This Task Force was filling an important place to assist the Steering Body in its work by reviewing the work of the EMEP centres on measurements and modelling.

65. Many delegations also supported the work on the assessment report, pointing out that the task was not a simple one. The Chairman of the Working Group on Strategies and Review noted that the assessment report would provide a very useful input to the work on the review of protocols. It could also help to communicate better the results of the work under the Convention to the outside world.

66. The representative of EEA expressed his appreciation to Slovenia for hosting the EIONET workshop in conjunction with the second meeting of the Task Force. He was satisfied with the prospect of cooperating with the Task Force.

67. The delegation of Germany proposed to include in the draft terms of reference the task of reviewing the reports by the EMEP centres and derestricting them and providing scientific guidance and advice to the work of the centres. This would also require participation in the Task Force's meetings to be limited to specific national representatives.

68. Several delegations stressed that the Task Force should remain an open body to allow free and broad discussion and attract the best scientists working in the field. The Chairman informed the Steering Body that the Bureau had discussed the review of the centres' reports by the Steering Body and agreed that this issue should be further discussed at its next meeting. One of the options discussed was to use the task forces in the review of the reports by the centres.

69. The Steering Body:

(a) Took note of the report of the Task Force, expressing its appreciation to the two Co-Chairpersons, the lead country, Austria, and WMO for the support that they had given to the Task Force;

(b) Took note of the CCC report presented and decided to derestrict it;

(c) Adopted the terms of reference for the Task Force as proposed (EB.AIR/GE.1/2001/4, annex II) but agreed to reconsider them at its twenty-sixth session;

(d) Endorsed the work items for the next three years and the priorities for the coming year proposed by the Task Force (EB.AIR/GE.1/2001/4, paras. 79-80);

(e) Took note, in particular, of the progress in preparing the assessment report, expressing its gratitude to all national experts contributing to the work and, especially, to Sweden for providing the focal point for the finalization of the report;

(f) Requested the Executive Body to support the preparation of the assessment report and call upon Parties to contribute to the work-planned;

(g) Welcomed the cooperation between the Task Force and the EEA EIONET expressing its support for harmonizing the reporting of air quality data;

(h) Endorsed the proposal to require Parties to report only once a year and requested the Task Force assisted by CCC to prepare, in cooperation with EEA, a practicable scheme for air quality

data reporting;

(i) Agreed on the importance of further work on both measurements and modelling of ammonia and requested the Task Force to keep in close contact with the ad hoc expert group on ammonia.

G. Emissions

70. Mr. M. WOODFIELD (United Kingdom), Chairman of the Task Force on Emission Inventories and Projections, reported on the progress made (EB.AIR/GE.1/2001/5), including the results of the tenth meeting of the Task Force, held in Geneva on 9-11 May 2001, which was the second to be held jointly with EIONET. In addition, he introduced the draft guidelines for emission data reporting (EB.AIR/GE.1/2001/6 and Add.1) and informed the Steering Body about the status of emission data reporting (EB.AIR/GE.1/2001/7) as well as the further development of the emission database at MSC-W. The Steering Body also had before it:

(a) MSC-W note 1/2001. Emission data reported to UNECE/EMEP: evaluation of spatial distribution of emissions; and

(b) MSC-E note 7/2001. MSC-E contribution to the heavy metals and persistent organic pollutants emission inventories.

71. Mr. Woodfield highlighted the coordination of work between the Task Force and other groups, including the United Nations Framework Convention on Climate Change and the Intergovernmental Panel on Climate Change (IPCC). The Task Force had continued work on the EMEP/CORINAIR Guidebook and extensive material was available for review by experts on the Task Force's web site. He underlined the shortfall in reporting of data during the last round (38 Parties reporting data in 2000, compared with 41 Parties the previous year), although he cited an improvement in reporting on POPs. Obtaining gridded data from Parties remained a problem and the Task Force would address the lack of sufficient reporting at its next meeting in May 2002 in Cordoba (Spain).

72. Mr. Woodfield provided background to the work on the draft guidelines. A workshop had been held in The Hague (Netherlands) in January 2001 to prepare the basic approach for an editorial group to draft a first version of the guidelines for presentation to the Task Force. Comments from the Implementation Committee had been solicited and incorporated in the draft. After the Task Force's meeting, an editorial group had revised the first draft in the light of the comments received and prepared the document for presentation to the Steering Body. All comments received before 31 May 2001 had been included in an informal document for the consideration of the Steering Body. Those agreed by the editorial group had been incorporated into EB.AIR/GE.1/2001/6 and Add. 1. The Task

Force had agreed to recommend the adoption of the guidelines in principle for the coming (2001) reporting round, which would cover emission data for the year 2000, while work would continue to finalize the guidelines in the light of outstanding comments and taking into account experience gained in the coming reporting round. An informal editorial meeting, tentatively scheduled for 4-6 March 2002 in Geneva, would consider all comments submitted to the secretariat by 31 January 2002. Its results would be presented to the Task Force at its meeting in May 2002.

73. Mr. Woodfield noted that in the coming years the Task Force would focus on data quality and intended to shift its annual meeting time from spring to autumn, beginning in 2003. This would allow the Task Force to take into account recently reported data.

74. The delegation of Sweden informed the Steering Body that it was interested in supporting the work on emission data validation and, therefore, offered to host a workshop. The workshop on emission data verification and validation would be held in autumn 2002.

75. The delegation of the United States supported the revision of the emission reporting guidelines but urged that his country's comments, which had been submitted late, should be considered. The guidelines needed be revised to clarify what was required from Parties outside the geographic scope of EMEP. The Implementation Committee and the Working Group on Strategies and Review should be involved in finalizing the guidelines.

76. The delegation of Luxembourg highlighted a problem for his country. A disproportionately high rate of transport emissions would result if, as proposed, estimation was to be based on fuel sales rather than on fuel consumption.

77. In view of the needs for integrated assessment modelling, the delegation of Germany welcomed the fact that future emission data reporting would also cover activity data. Since this was, however, an additional task, mandatory reporting frequency and detail should be limited to the extent absolutely necessary for the integrated assessment modelling work.

78. Many delegations welcomed the move towards harmonization with the emission data reporting format used by United Nations Framework Convention on Climate Change. Several delegations requested that efforts should be made to go further in this process and use, where possible, the same source sectors as under United Nations Framework Convention on Climate Change.

79. Several delegations pointed out that they would not be ready in 2001 to report emissions according to the new system.

80. The Steering Body:

(a) Took note of the report of the Task Force, expressing its appreciation to the Co-Chairmen, the lead country and EEA for the support that they had given to the Task Force and thanking the national experts that had worked with the Task Force;

(b) Took note of the status of emission data, expressing its gratitude to MSC-W for the valuable work on the emission database;

(c) Took note of the MSC-W and MSC-E notes and decided to derestrict them;

(d) Adopted the new guidelines for estimating and reporting emission data in principle for a pilot phase to allow Parties to apply them in the 2001 reporting round, while requesting the Task Force to review the guidelines and incorporate the comments made during the session (paras. 76-79 above) to the extent possible, in particular, with a view to further harmonizing the reporting format with that of the United Nations Framework Convention on Climate Change, and to take into account the comments made by national experts and the experience gained during the 2001 reporting round;

(e) Also requested the Task Force and MSC-W to examine ways to assist Parties in applying the new guidelines; and

(f) Recommended the Executive Body to endorse this procedure.

H. Integrated assessment modelling

81. Mr. R. MAAS (Netherlands), Chairman of the Task Force on Integrated Assessment Modelling, reported on progress, including the results of the twenty-sixth meeting of the Task Force, held in Brussels on 14-16 May 2001 (EB.AIR/GE.1/2001/3). He also introduced the work of CIAM related to uncertainty (CIAM report 1/01) carried out with the Coordination Center for Effects. From economic activity to ecosystem protection in Europe. A framework for uncertainty analysis.

82. Mr. Maas highlighted the work on linkages between global and regional air quality and stressed the need for an exchange of scenario information between modellers working with IPCC and EMEP. Tropospheric ozone and black carbon from fossil fuel burning had been identified by IPCC as important greenhouse gases.

83. Urban exposure to air pollution was an important factor in environment-related health risks. The Task Force asked the Steering Body for guidance on the objectives of integrated assessment modelling of urban air quality. A focus should be to strike a balance between the cost-effectiveness of Europe-wide emission reduction measures and local measures. To this end, modelling a number of example cities would be sufficient. To estimate the exceedance of air quality limit values in all cities, for instance on an hourly basis, the model would probably become too complex for applying optimization methodologies. Compliance with air quality limit values would require additional

modelling either at national level by the Parties or at European level. The workshop originally scheduled for November 2001 would be postponed, as urban modelling had not progressed far enough. Urban modelling would be discussed at the Task Force's meeting in May 2002.

84. CIAM had started uncertainty analysis with the RAINS model. A workshop on uncertainty management would be held in Laxenburg in January or February 2002. The methodology of CIAM could assess the propagation of errors, which made it possible to process additional information from the Parties on the quality of the input data and estimate the probability of meeting environmental targets.

85. The work-plan of the Task Force was only feasible if the necessary inputs arrived in time. Possible bottlenecks related to the quality of emission data, the development of source-receptor matrices based on the new Eulerian model, the developments in dynamic ecosystem modelling, the remaining uncertainties in the fine particles that caused health effects and the development of scenarios for energy and agriculture and for the influence of transcontinental fluxes. Mr. Maas also expressed his worries that only very few Parties from southern and eastern Europe participated in the Task Force's meetings.

86. Several delegations commented on the difficulties of finding the right approach to urban modelling. EEA stressed that there was a lack of information about urban abatement scenarios. Urban air quality data available in different databases should be used wherever possible. The delegation of the Russian Federation drew the attention of the Steering Body to work related to NOx pollution carried out in Moscow. This had illustrated the difficulty in dealing with the large differences between cities at a national level.

87. The delegation of Sweden pointed out that it was important to start early with a discussion of possible gap-closure targets. It suggested that the Task Force should already address this question at its next meeting. Work on a baseline scenario should also commence soon and the development in the different sectors (energy, transport, agriculture) should be adequately covered.

88. The Steering Body:

(a) Took note of the report of the Task Force, expressing its appreciation to the Chairman, the lead country and the International Institute for Applied Systems Analysis (IIASA), which had hosted the workshop, for the support that they had given to the Task Force;

(b) Took note of the CIAM report presented and decided to derestrict it;

(c) Invited Parties to contribute to the work on urban modelling;

(d) Agreed to draw the attention of the Executive Body to the need for good

harmonization of the work-plans of the Working Group on Effects and EMEP; and

(e) Agreed to revert to the proposed budget for CIAM under agenda item 6.

I. Intercontinental transport of air pollutants

89. Mr. T. KEATING (United States) presented the report of the workshop on photo-oxidants, particles, and haze across the Arctic and the North Atlantic: Transport observations and models, held in Palisade, New York (United States), on 12-15 June 2001 (EB.AIR/GE.1/2001/11). The workshop had been hosted by the Center for International Earth Systems Information Network (CIESIN) at Columbia University with primary funding from the United States Environmental Protection Agency and additional support from Environment Canada. The workshop had been organized as part of the United States and Canada's ongoing participation and cooperation with EMEP and AMAP.

90. Mr. Keating highlighted the conclusions and recommendations adopted by the workshop (EB.AIR/GE.1/2001/11, paras. 8-30). The focus of the workshop had quickly shifted to hemispheric scale processes. The recommendations tried to highlight the general science requirements to move to work on a hemispheric scale. A web site would be set up and maintained for the coming two years at CIESIN: http://www.ciesin.columbia.edu/pph. This would give access to the presentations, but also was intended to allow the posting of new research material, further information on the topic and comments. There had been interest among scientists at the workshop to organize a follow-up event. The United States Environmental Protection Agency was investigating possibilities for this, but would appreciate cooperation from other Parties.

91. Several delegations expressed interest in the work. They noted that there was, at present, no forum addressing air pollution on a hemispheric scale, as this fell somewhere between work under the Convention, AMAP and the global initiatives. The conclusions of the workshop were also important for the EC, as it might become difficult to reach the concentration levels required under some of its air quality directives.

92. Delegations also noted that it would be essential to involve scientists from Asia. It was recognized that the Acid Deposition Monitoring Network in East Asia (EANET) could provide a useful connection. While EANET had so far focused on monitoring work, it had recently requested IIASA to organize a model intercomparison workshop, which would take place at IIASA in October 2001.

93. A representative of the WMO Global Atmospheric Watch (GAW) expressed his interest in cooperating with EMEP in the follow-up to the Palisade workshop.

94. The Steering Body:

(a) Took note of the report and endorsed the conclusions and recommendations agreed at the workshop, expressing its appreciation to the organizers and sponsors and noting the availability of the web site;

(b) Agreed to pursue work taking a hemispheric perspective and decided to invite Asian scientists, possible through EANET, to cooperate in this and requested its Bureau to establish the necessary contacts;

(c) Agreed that a follow-up workshop, with the participation also of Asian scientists, should be organized in 2002 and called upon Parties to consider hosting this workshop;

(d) Requested the centres, in consultation with the Task Force on Measurements and Modelling and the Task Force on Integrated Assessment Modelling, to study the possibilities and resource requirements for extending work to the whole northern hemisphere; and

(e) Agreed to draw the attention of the Executive Body to this area of work, asking for guidance on the priorities and resources that might be attached to the work.

95. After discussing specific work-plan items, the Steering Body briefly discussed the proposed work-plan for 2002 and priorities up to 2004 (EB.AIR/GE.1/2001/9).

96. Several delegations requested that requirements for Parties should be spelled out more clearly. Preferably the work-plan should contain a list of specific requirements and all requirements for Parties, deadlines, questionnaires, etc. should be adopted together with the work-plan. Tasks should not just be posted on the Internet, but always accompanied by direct communication to the Parties.

97. In the light of the progress in the scientific work, the Steering Body:

(a) Adopted its work-plan for 2002 (EB.AIR/GE.1/2001/9, annex II);

(b) Requested the secretariat finalize the work-plan for presentation to the Executive Body, taking into account the decisions made during the session and adding a summary on the data requests to Parties to facilitate their work; and

(c) Also adopted the priorities for its work up to 2004 and the medium-term work programme (EB.AIR/GE.1/2001/9, annex I).

V. FINANCIAL AND BUDGETARY MATTERS

98. The secretariat introduced the note on financial and budgetary matters (EB.AIR/GE.1/2001/8) informing the Steering Body that, since the preparation of the document, it had received the mandatory contributions to EMEP for 2001 from France, Portugal and Slovakia. The secretariat

pointed out that, unless some of the arrears were paid soon, it might not be in a position to pay fully the centres for their work in 2001. The note also presented the budget proposal for 2002 prepared on the basis of the decisions of the Bureau (EB.AIR/GE.1/2001/10, para. 29). The secretariat reminded the Steering Body that it had agreed that the budget should remain at the same level also for 2003 and the Executive Body had endorsed that decision (ECE/EB.AIR/71, para. 89 (c)).

99. The secretariat also drew attention to the status of the contributions in kind. The Bureau had recommended the approval of the contribution from Belarus in 2000 and approved the work-plan for the 2001 contribution and the proposal for a contribution in 2002 (EB.AIR/GE.1/2001/10, paras. 20- 22). The Bureau had also approved the work-plan for a contribution in kind from Ukraine to cover arrears from 1992-1994 by a project to be carried out in 2002-2003.

100. The delegations of Slovenia and the United Kingdom informed the Steering Body that they were making their payments for 2001.

101. The delegation of Italy explained the problems that had led to its large arrears. The law that had been passed for the ratification of the EMEP Protocol had reserved a fixed amount in Italian Lire, which, due to inflation, had not been sufficient to pay the annual contribution. A new decree was under preparation to solve both the problem of the arrears and the shortfall in funding for the future. The delegation hoped that the arrears would be paid by the end of the year, but it would report to the Executive Body on progress.

102. The delegation of Yugoslavia expressed its satisfaction that, for the first time in ten years, it had been possible for it to be present at a session of the EMEP Steering Body. Yugoslavia was looking forward to participating in the work of EMEP and to contributing to the protection of the environment. The delegation informed the Steering Body that it planned to deal with the outstanding arrears to EMEP as it was doing for other United Nations bodies, but it would pay its 2001 contribution before the end of the year.

103. The Steering Body:

(a) Took note of the status of contributions to the financing of EMEP provided in document EB.AIR/GE.1/2001/8 and the additional information provided by the secretariat;

(b) Reminded Parties of the importance of paying the mandatory contributions as early as possible in the fiscal year;

(c) Adopted the budget for 2002 set out in table 3 of EB.AIR/GE.1/2000/8 and fixed the mandatory contributions from Parties for 2002 as set out in the last column of table 4 of that document;

(d) Approved the 2000 contribution in kind from Belarus to MSC-E; and

(e) 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

(f) Called upon Parties to make every effort to ensure the necessary funding for the work on integrated assessment modelling to be conducted as foreseen in the work-plan.

VI. COOPERATION WITH OTHER ORGANIZATIONS AND PROGRAMMES, INCLUDING THE EUROPEAN COMMISSION AND ITS CLEAN AIR FOR EUROPE PROGRAMME (CAFE), THE EUROPEAN ENVIRONMENT AGENCY (EEA), THE WORLD METEOROLOGICAL ORGANIZATION (WMO), AND THE MARINE COMMISSIONS

104. Ms. L. EDWARDS of the European Commission informed the Steering Body about the EC Clean Air for Europe (CAFE) programme. She emphasized that discussions during the session had clearly illustrated the need for technical consistency between CAFE and the work under the Convention. The question of the best balance between local and other measures would be key to CAFE. The Commission had entered into a contract with the Norwegian Meteorological Institute (DNMI) and IIASA, the host institutions for MSC-W and CIAM respectively, to undertake work that should help address this question. The Commission's Joint Research Centre was already cooperating with both institutions. A working group on implementation of air quality legislation would feed in experience of implementation at the local level and relevant information would be channelled to EMEP. The Commission was preparing a detailed programme of work for discussion at the next meeting of the CAFE Steering Group. The CAFE Technical Analysis Group, on which EMEP was represented, was helping with this. The programme would take into account the draft work programmes of EMEP and the Working Group on Effects. A high level coordination group had been set up between the Convention and the Commission. It had met once and would meet again in October. The Commission also valued the increased cooperation between EEA and EMEP.

105. Mr. R. VAN AALST, representative of EEA, informed the Steering Body about recent developments at EEA. A reorganization had brought staff working on sectoral and environmental issues even closer together. EEA was preparing to contribute to reporting on sustainable development to the EC Council. He also drew attention to the recent Environmental Signals 2001 and TERM 2001 reports, and to the new European Topic Centre on Air and Climate Change, which had started work in March 2001. Cooperation with EMEP in the framework of the Task Forces on Measurements and Modelling, on Emission Inventories and Projections and on Integrated Assessment Modelling, as well as in the framework of the CAFE programme, was a priority.

106. Mr. A. SOUDINE, representative of WMO, informed the Steering Body about relevant activities of the WMO Global Atmosphere Watch (GAW) Programme. The GAW 2001 Workshop

had been held in Geneva in April 2001 to review GAW activities. The GAW 2002 Workshop for Europe would be held in Riga from 27 to 30 May 2002 (www.empa.ch/gaw) to review GAW activities in Europe and to foster cooperation to further develop them. The GAW Training and Education Centre was established in Germany. Two two-week training courses would be held in 2001, 2002 and 2003 with a focus on measurement techniques and data analysis for such parameters as chemical composition of precipitation, surface ozone, CO, greenhouse gases, UV and VOCs. Recently published GAW reports included: "Strategy for Integrating Satellite and Ground-based Observations of Ozone"; "Strategy for the Implementation of the GAW Programme (2001-2007)"; "GAW Measurements Guide"; and "Atmospheric Input of Persistent Organic Pollutants to the Mediterranean Sea". Finally, the Steering Body was informed that WMO had started issuing decadal bulletins on the state of the ozone layer over Antarctica during August-December 2001.

107. Mr. N. HEIDAM (Denmark), Vice-Chairman of the Working Group on Monitoring and Assessment (MONAS) of the Helsinki Commission (HELCOM), informed the Steering Body that cooperation continued to proceed well with great benefits to HELCOM. A report from the EMEP centres, working as consultants for HELCOM, on the air pollution load of the Baltic in 1998 had been available on the EMEP web site. Extensive use was made of the web site's experimental and model data for the work on the 1996-2000 atmospheric pollution load compilation for the Baltic and its catchment areas, which was being prepared for the fourth Periodic Assessment of the State of the Environment in the Baltic Region. MONAS had held a meeting in February 2001 with a focus on future reporting guidelines. Future reports were likely to be based on selected indicators supplemented with short assessment reports. It would convene its next meeting in mid-October 2001, to continue discussions on future reporting formats and remote sensing.

108. Mr. R. DERWENT (United Kingdom) drew the attention of the Steering Body to the work of IPCC. In its third assessment report, IPCC had identified tropospheric ozone as a greenhouse gas with significant radiative forcing potential and stated that it should be ranked third in importance after CO_2 and methane. Increases in surface ozone were projected in the IPCC scenarios and these increases might have important consequences for regional air quality policies in North America, Asia and Europe.

109. Mr. M. REUTHER, representative of EUROTRAC-2, reported on ongoing research projects (AEROSOL, GLOREAM, LOOP, MEPOP) under EUROTRAC-2 of relevance to EMEP. A new subproject was started in mid-2001 on the "European export of precursors and ozone by long-range transport" (EXPORT-E2). Mr. Reuther stressed the usefulness of cooperation with EMEP at the scientific level and in linking science and policy. As examples he mentioned the EUROTRAC-2 mid-term review that was carried out during the past year and the process of synthesis and integration (S&I) that had recently been started to bring EUROTRAC-2 to a successful conclusion. The next EUROTRAC symposium would be held in Garmisch-Partenkirchen (Germany) on 11-15 March 2002

and would be used as a tool for S&I. Information about the EUROTRAC-2 subprojects, the symposium, and the project as a whole, was available on the Internet (http://www.gsf.de/eurotrac).

110. The Steering Body took note of the information with appreciation and requested the secretariat to invite to its next meeting representatives of AMAP, the OSPAR Commission for the Protection of the Marine Environment of the North-East Atlantic and the United Nations Environment Programme (UNEP) to present information under this agenda item.

VII. OTHER BUSINESS

111. The delegation of the United States informed the Steering Body of the activities relevant to EMEP carried out in the United States since the twenty-fourth session. It made available a note summarizing the main activities and providing reference to Internet sites that contained further details.

112. The delegation of Germany expressed its support for a new procedure for the centres to report on their work, hoping that this would reduce the burden on the Steering Body. All reports that went to the Steering Body should, however, be available in good time before the meeting so that they could be thoroughly studied.

VIII. ELECTION OF OFFICERS

113. The Steering Body re-elected Mr. M. WILLIAMS (United Kingdom) as Chairman, and Ms. L. EDWARDS (European Community), Mr. P. GRENNFELT (Sweden), Mr. R. VAN AALST (Netherlands) and Ms. S. VIDIC (Croatia) as Vice-Chairpersons. It elected Mr. S. DOYTCHINOV (Italy) and Mr. J. SANTROCH (Czech Republic) as a new Vice-Chairpersons.

114. The Steering Body expressed its great appreciation to Ms. M. LESNJAK (Slovenia), who was leaving the Bureau, for her many years of valuable contribution to the work of EMEP.

IX. CLOSING OF THE TWENTY-FIFTH SESSION

115. Based on an informal outline of the report, presented by the secretariat, the Steering Body agreed on the main decisions taken during the session.

116. The twenty-sixth session of the EMEP Steering Body is scheduled to take place on 2-4 September 2002.