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LONG-RANGE TRANSBOUNDARY AIR POLLUTION

Working Group on Strategies and Review

REPORT OF THE THIRTY-SECOND SESSION

Introduction

1. The thirty-second session of the Working Group on Strategies and Review was held in Geneva from 29 August to 1 September 2000.
2. The session was attended by representatives of the following Parties to the Convention: Armenia; Austria; Belgium; Bulgaria; Canada; Czech Republic; Denmark; Finland; France; Germany; Greece; Hungary; Ireland; Italy; Latvia; Monaco; Netherlands; Norway; Poland; Portugal; Republic of Moldova; Romania; Russian Federation; Slovakia; Slovenia; Spain; Sweden; Switzerland; Turkey; Ukraine; United Kingdom; United States of America; and the European Community (EC).
3. The United Nations Environment Programme (UNEP) was also represented. Furthermore, representatives of the following non-governmental organizations participated: the International Institute for Applied Systems Analysis (IIASA); the International Union of Producers and Distributors of Electrical Energy (UNIPEDDE); and the World Conservation Union (IUCN).
4. The meeting was chaired by Mr. R. BALLAMAN (Switzerland).

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I. ADOPTION OF THE AGENDA

5. The Working Group adopted the provisional agenda as contained in document EB.AIR/WG.5/65.

II. ELECTION OF OFFICERS

6. The Working Group re-elected Messrs. W. HARNETT (United States) and V. SOKOLOVSKY (Russian Federation) as Vice-Chairmen and elected Messrs. D. JOST (Germany) and J. ZUREK (Poland) as new Vice-Chairmen.

III. REVIEW OF PROTOCOLS

7. The Chairman outlined the scope and procedures for the discussions, making reference to the work-plan adopted by the Executive Body (ECE/EB.AIR/68, annex IV, item 1.1). He stressed that the considerations should take a long-term view, spanning the next three to five years. He also reminded the Working Group that its tasks were quite distinct from those of the Implementation Committee, which reviewed the compliance by individual Parties with their Protocol obligations.

8. Mr. L. LINDAU (Sweden), Co-Chairman of the workshop on the needs for future revisions to the Protocols and strategies on transboundary air pollution held in Saltsjöbaden (Sweden) on 10-12 April 2000, presented the report of the workshop (EB.AIR/WG.5/2000/7). He pointed out that, with over 100 participants from all parts of the Convention area, the workshop was well attended. Its proceedings, including the plenary presentations in full, were being mailed to participants and would be made available on the Internet. In its conclusions and recommendations, the workshop had given a strong indication of the need for, and the direction of, further work, as there was agreement that atmospheric pollution would continue to cause problems even after the implementation of the 1999 Gothenburg Protocol to Abate Acidification, Eutrophication and Ground-level Ozone.

9. The delegation of the Russian Federation expressed its support for the workshop results, regretting that it had not been able to participate. It pointed out that scientific results demonstrated important relationships between heavy metals concentrations in soils, acidification and impacts on food chains. This should be studied in more detail. It was also necessary to take an integrated view of the risks resulting from heavy metals and persistent organic pollutants (POPs) and to avoid mistakes in the analysis by focusing on the effects of individual substances in isolation.

10. After a brief discussion, the Working Group on Strategies and Review:

- (a) Took note of the report (EB.AIR/WG.5/2000/7);
- (b) Agreed to take it into consideration in its discussion on further work; and

- (c) Recommended the Executive Body to endorse its conclusions and recommendations.

11. Mr. M. WILLIAMS (United Kingdom), Chairman of the EMEP Steering Body, reported the results obtained by EMEP with respect to the achievements of the 1991 Geneva Protocol concerning the Control of Emissions of Volatile Organic Compounds or their Transboundary Fluxes and the 1994 Oslo Protocol on Further Reduction of Sulphur Emissions. He pointed out that emissions of sulphur had decreased significantly since 1980. This was not yet the case for nitrogen oxides, volatile organic compounds or ammonia, but more reductions in these pollutants were to be expected from the implementation of the Gothenburg Protocol. Nevertheless, analysis showed that environmental problems would persist even after 2010: critical levels for vegetation effects, and the health effects indicator for ozone, would be exceeded in many parts of Europe; areas remained where critical loads for acidification would be exceeded; and depositions would continue to be well above the critical loads for eutrophication.

12. With reference to the EMEP Strategy (EB.AIR/GE.1/2000/5), Mr. Williams presented the ongoing work and the plans for the future, including work regarding emissions of particulate matter, heavy metals and POPs. He stressed some of the major strategic issues: hemispheric scale modelling; cooperation with the EC; linking transboundary pollution and urban problems; and making deposition and concentration data available to the Working Group on Effects so that it could better quantify health and ecosystem effects. Work on inventories and atmospheric transport and transformation modelling, as well as integrated assessment modelling for particulate matter, would be pursued as a matter of priority. Work on tropospheric ozone, acidification and eutrophication would focus on determining trends in deposition/exposure fluxes, the verification of reported emission reductions, and modelling of acidification recovery and changes in photochemical processes. For heavy metals and POPs, one of the most important challenges was that there were insufficient emission data and measurements. First results on transboundary fluxes of heavy metals were available but needed to be scrutinized. To obtain some better heavy metals and POPs measurements, setting up a few specialized monitoring sites was being considered. A pilot project for heavy metals and POPs monitoring was proposed for inclusion in an EC research programme.

13. Several delegations expressed agreement with the importance of work in new areas like particulate matter modelling, but they stressed the need to continue work on traditional pollutants and their effects so as to provide a sound basis for the review of the adopted Protocols. Scientific work on acidification, eutrophication and ground-level ozone had to continue for the coming years. Some delegations also highlighted the need for more work on ammonia, both in order to support future policy discussions and because of the importance of ammonia aerosols for particulate matter pollution. Work on particulate matter should clearly highlight the transboundary component.

14. The representative of the European Commission briefly drew the attention of the Working Group to the discussions in the EC on the Clean Air For Europe (CAFE) programme, which would provide the framework for most of its future air pollution work, including the work on revising EC air quality legislation. The Commission envisaged a high degree of cooperation with EMEP under the CAFE programme.

15. The secretariat introduced a note on the most relevant provisions of the Protocols (EB.AIR/WG.5/2000/1), and presented the latest changes in the status of ratification of the Convention and the Protocols, updating the table in the note. In particular, it informed the Working Group that with the accession by Kyrgyzstan the Convention now had 47 Parties.

A. The 1991 Geneva Protocol concerning the Control of Emissions of Volatile Organic Compounds or their Transboundary Fluxes

16. Mr. T. JOHANNESSEN (Norway), acting Chairman of the Working Group on Effects, provided a summary of the results and the ongoing work on the effects of ozone exposure on ecosystems and on health. Vegetation and forest damage due to ozone were of particular concern in central and western Europe and the southern European/Mediterranean area and economic losses due to crop damage were significant in several countries. Work still continued on the level II approach with respect to ozone, which aims to provide more precise ozone thresholds, taking into account important factors such as climate, humidity and irrigation. Work was also under way to estimate the damage to materials due to ozone exposure. Although the health effects of ozone had been the focus of workshops under the Convention, the Task Force on the Health Aspects of Air Pollution had not yet considered the topic.

17. The delegation of Germany informed the Working Group about a workshop on ozone trend analysis to be held in Cologne on 9-11 November 2000.

18. Several Parties that had not yet become a Party to the VOC Protocol informed the Working Group about their policy regarding VOC emissions. Belgium was already implementing the Protocol and expected to complete its ratification procedure fairly soon. The Russian Federation was now preparing for accession to the Gothenburg Protocol as the more appropriate instrument for dealing with VOCs and did not intend to ratify the 1991 VOC Protocol. Canada was taking the necessary steps to meet the requirements of the Gothenburg Protocol, which it considered to be the most appropriate instrument to address VOCs, obviating the need to ratify the 1991 VOC Protocol. The United States would comply with all the substantive requirements of the 1991 VOC Protocol, but could not ratify due to procedural complications. The delegation of Monaco and the representative of the EC indicated that they had studied accession to the Protocol, but did not consider this possible for the time being, though they had taken significant measures to reduce VOC emissions. However, Monaco was considering acceding as soon as it became possible. Ireland and Poland were examining the possibility of becoming a Party to the Protocol.

19. Several Parties informed the Working Group about progress in implementing the Protocol. The delegation of Slovakia pointed out that it had acceded to the Protocol at the end of 1999 and chosen 1990 as the base year for its emission reduction obligations.

20. Several delegations pointed to the importance of product-related measures to control VOC emissions and the need for some specific work in this area to support Parties. The representative of the EC informed the Working Group that it had initiated work on VOC-containing products and offered to keep the Working Group informed about progress.

21. As a result of the discussion, the Working Group on Strategies and Review:

(a) Took note of the information received, including the information contained in note EB.AIR/WG.5/2000/1;

(b) Agreed not to create an expert group on product-related VOC measures, but to revert to this possibility in the light of the information by the EC; and

(c) Recommended the Executive Body to acknowledge that the negotiations on the Gothenburg Protocol also served the purpose of paragraph 6 of article 2 concerning the second step to the VOC Protocol (as the Executive Body had with regard to the Oslo Protocol (ECE/EB.AIR/68, para. 27 (b))).

B. The 1994 Oslo Protocol on Further Reduction of Sulphur Emissions

22. Mr. JOHANNESSEN reported on the results and the ongoing work under the Working Group on Effects with regard to acidification. This work had a long tradition among the effect-oriented activities and was well advanced. The substantive report on trends prepared in 1999 showed that sulphur emission reductions had already led to decreased sulphate levels and improved water quality throughout most of Europe. The risk was now that high nitrogen deposition levels could lead to damage that would counteract these positive trends. Work on trend analysis and particularly on more detailed studies of recovery processes continued.

23. Mr. R. MAAS (Netherlands), Chairman of the Task Force on Integrated Assessment Modelling, pointed out that recent modelling work had shown that the costs of sulphur emission reductions were decreasing. The costs estimated at the time of negotiation of the Oslo Protocol had been significantly higher than those estimated in work on the Gothenburg Protocol. With the implementation of measures to reduce CO₂ emissions, lower sulphur emission levels would be achievable at still lower cost. He also flagged that much of the observed emission reduction was due to economic recession in countries with economies in transition and this trend could be reversed with economic recovery. Mr. Maas finally drew attention to article 6 of the Oslo Protocol, which foresaw further work on the economic evaluation of benefits from air pollution abatement, and stressed that such work should be closely linked to integrated assessment modelling.

24. The delegation of Slovenia informed the Working Group that it had submitted a case to the Implementation Committee concerning its possible inability to fully comply with a provision (paragraph 5 (b) of article 2) of the Oslo Protocol for the period between 2004 and 2007, due to the continued operation of a coal-fired thermal power plant. The secretariat explained that the Implementation Committee was considering the case and expected it to present its recommendations to the Executive Body at its eighteenth session.

25. Several Parties that were not Party to the Oslo Protocol informed the Working Group about their plans to ratify it. The delegations of Belgium and Hungary indicated that they expected to complete their ratification processes soon. The delegation of Bulgaria explained that much effort was necessary to be able to comply with the requirements of the Oslo Protocol, but it expected all

necessary legislation to be in place by the end of 2000 and ratification could follow rapidly after that. The delegation also informed the Working Group that Bulgaria was interested in developing a joint implementation project in accordance with paragraph 7 of article 2 of the Protocol, should it find a partner for such an agreement.

26. The delegation of the Russian Federation informed the Working Group that it was not in a position to ratify the Oslo Protocol because of the mandatory emission limit values that is set. The implementation of the emission limit values was considered too costly for the Russian Federation. Instead, it would prepare for accession to the Gothenburg Protocol. Until the entry into force of the Gothenburg Protocol, the 1985 Sulphur Protocol would serve as a temporary framework, setting a ceiling for national sulphur emissions.

27. Several Parties reported on progress in reducing sulphur emissions.

28. As a result of the discussion, the Working Group on Strategies and Review:

(a) Took note of the information received, including the information contained in note EB.AIR/WG.5/2000/1, expressing its satisfaction with the clear trend in decreased sulphur emissions;

(b) Agreed that further work on sulphur should be part of an integrated approach and recommended the Executive Body to decide that future work on sulphur emissions should focus on the review of the Gothenburg Protocol and that such reviews should be considered as fulfilling the requirements of further reviews foreseen under article 8 of the Oslo Protocol.

C. The 1998 Aarhus Protocol on Heavy Metals

29. The secretariat informed the Working Group that Finland, Luxembourg and the Netherlands had deposited their instruments of ratification or acceptance, bringing the number of ratifications of the Protocol on Heavy Metals to six.

30. Mr. JOHANNESSEN informed the Working Group about progress in the work on the effects of heavy metal deposition. At its twentieth session, the Working Group on Effects had considered progress in the work on critical loads for heavy metals, including the results of a workshop on effect-based approaches for heavy metals held in Schwerin (Germany) in October 1999. The Working Group on Effects had decided that information was not yet sufficient to start mapping critical loads on a European scale, but Parties that had developed their own data were invited to submit these to the Coordination Center for Effects. The Working Group had approved an outline for a substantive report on heavy metals to be prepared in 2001 by its extended Bureau with contributions from all International Cooperative Programmes and the Task Force on the Health Aspects of Air Pollution. The work of the Task Force this year had focused on heavy metals. A draft report on the effects of heavy metals on human health had been prepared and would be finalized by the end of this year. Work had also continued to examine heavy metal deposition by analysing concentrations in a number of plant species. This work had documented some clear reductions in heavy metal concentrations over the past few years.

31. Several delegations informed the Working Group about progress in their ratification processes. Denmark, Switzerland and the EC expected to ratify the Protocol before the end of 2000. In Austria, the Czech Republic, Germany, Italy, Poland, the Russian Federation and the United Kingdom work was under way to make the ratification possible. The delegations of these countries expressed the hope that their ratification would follow in 2001.
32. Several delegations stressed the importance of preparing reliable emission inventories. The emission data on heavy metals submitted to the secretariat and providing the basis for modelling work by EMEP were still very incomplete.
33. The delegation of the United Kingdom pointed out that preparations should be made so that the Parties are in a position to establish limit values for existing chlor-alkali plants within two years after entry into force, as required under annex V, paragraph 19, to the Protocol on Heavy Metals.
34. The delegation of the Sweden stressed the need for close cooperation with other relevant bodies, in particular the Helsinki Commission, the OSPAR Commission and the EC. It pointed out that discussions had been initiated to add mercury to the substances scheduled for inclusion into a global POPs convention that was under negotiation within the framework of UNEP. Mercury was considered by Sweden to resemble POPs in many ways, especially in the risks it posed. In this context the delegation appealed to Parties to reconsider the approach currently followed with regard to mercury and to consider a complete phase-out of mercury as an alternative approach to eliminating the risks posed by mercury contamination.
35. The Working Group on Strategies and Review took note of the information received, including the information contained in note EB.AIR/WG.5/2000/1, and urged delegations to do their utmost to speed up the ratification process.

D. The 1998 Aarhus Protocol on Persistent Organic Pollutants

36. The secretariat informed the Working Group that Luxembourg and the Netherlands had deposited their instruments of ratification or acceptance, bringing the number of ratifications of the Protocol on POPs to five.
37. Mr. JOHANNESSEN informed the Working Group about progress in the work on the effects of POPs. Not much work had been done since the workshop in Bad Harzburg (Germany) in 1997, where possible thresholds for POPs had been discussed and it had been concluded that a risk assessment approach would be more appropriate. The Task Force on the Health Aspects of Air Pollution was preparing an outline for a report on the health effects of POPs that would be presented to the Working Group on Effects in 2001.
38. The delegation of the United States reported on the workshop on POPs convened by the United States Environmental Protection Agency in Durham, North Carolina, from 5 to 7 October 1999 with participation of experts from Canada, Germany, the Netherlands, the Russian Federation, Spain, Sweden, the United Kingdom, the United States and from the Meteorological

Synthesizing Centre-East (MSC-E) of EMEP. The workshop had reviewed the state of the science and developments since the conclusion of the negotiations of the Protocol on POPs. Based on the conclusions of the workshop, the establishment of an ad hoc expert group had been recommended to the Executive Body.

39. The delegation of the Netherlands reported on preparations for the first meeting of the ad hoc expert group on POPs scheduled to take place on 6-8 November 2000 in The Hague. Topics to be covered included the review obligations of the Protocol on POPs, an assessment of available data on pollutants that might qualify for inclusion into the Protocol in the future, and preparations for a joint workshop with other international initiatives. The delegation of Canada informed the Working Group that preparations were under way for the second meeting of the expert group to be held in Canada in 2001. The delegation of Norway pointed out that it might be necessary to foresee another meeting of the expert group in 2001 to be able to advance the work sufficiently quickly.

40. The delegations that had reported on their ratification process for the Protocol on Heavy Metals pointed out that the situation was the same for the Protocol on POPs. In addition, Finland's ratification of the Protocol on POPs should follow that of the Protocol on Heavy Metals in early 2001.

41. Several delegations referred to the relationship between the Protocol on POPs and the negotiations of a global POPs convention under UNEP. While the Protocol on POPs had provided much of the basis for the global negotiations, the credibility of the regional work was now somewhat diminished due to the delays in ratification. One delegation pointed out the need for consistency between the two instruments and expressed its dissatisfaction with the position of some Parties that had supported positions in the global negotiations that were quite different from the positions they had adopted for the Protocol on POPs.

42. Several delegations stressed the need to initiate specific product-related measures and study their trade implications. Others pointed to the ongoing discussions in the context of the negotiations of a global POPs convention, expressing their expectation that the solution found there might have a bearing also on the regional POPs work as well as on product-related measures for other pollutants.

43. The Working Group on Strategies and Review took note of the information received, including the information contained in note EB.AIR/WG.5/2000/1 and urged delegations to do their utmost to speed up the ratification process.

E. The 1999 Gothenburg Protocol to Abate Acidification, Eutrophication and Ground-level Ozone

44. The secretariat informed the Working Group that with the signing by Belgium, Greece, Poland and the Republic of Moldova after the seventeenth session of the Executive Body, the number of Signatories to the Gothenburg Protocol had now reached 31. As the period provided for signing the Protocol had ended on 30 May 2000, this would be the final number of Signatories.

45. The acting Chairman of the Working Group on Effects drew attention to the preliminary assessment of the health effects of particular matter published by the Task Force on the Health Aspects of Air Pollution. The Task Force would continue its work on this topic.
46. The delegations of Canada and the United States informed the Working Group about work in relation to particulate matter and their precursors in their countries. They also reported on progress in their negotiations on an ozone annex to the 1991 bilateral Canada – United States Air Quality Agreement. Three formal negotiating sessions had been held since the signing of the Gothenburg Protocol and discussions on a number of issues had been completed, including: the focus on VOC and NO_x as the primary ozone precursors of concern, the geographic focus on eastern North America, and the reporting requirements. Discussions were continuing with respect to the specific control measures for each Party and the form those commitments would take, as well as the timing for achieving reductions. Both Parties expected the negotiations to be completed by the end of 2000.
47. Mr. R. MAAS presented the report by the Task Force on Integrated Assessment Modelling (EB.AIR/WG.5/2000/2), including the results of its twenty-fifth meeting, held in Saltsjöbaden, Sweden on 12-14 April 2000. He stressed the importance of the link between the work by the Task Force and work by the EC and suggested organizing meetings in conjunction with relevant EC meetings in the future. He also highlighted the plans of the Task Force to establish closer links with national work by setting up a network of national focal points. Mr. Maas explained the proposal for a long-term work plan presented in the Task Force's report and invited the Working Group to comment on this proposal.
48. Mr. M. AMANN, representative of the Centre for Integrated Assessment Modelling (CIAM) at IIASA, reported on progress in integrated assessment modelling work on particulate matter. The work had been a natural extension of the RAINS model. The precursors to secondary particles were already included in the model and most of the sources of primary particles could also be linked to sources covered by the model. IIASA had been able to prepare a first set of cost curves on the basis of a project funded by the German Environment Agency. These cost curves, and other information about modelling work done so far, would be presented at a workshop of the Task Force on Integrated Assessment Modelling planned for the second half of November 2000. All work done by IIASA, including the preliminary results of particulate matter modelling work, was available on the Internet at: <http://www.iiasa.ac.at/~rains>.
49. Several delegations indicated that the ratification process was often delayed by a lack of resources to undertake some of the necessary practical steps, such as translation of texts into national languages. Such problems were particularly relevant to newly independent States.
50. The Working Group on Strategies and Review:
- (a) Took note of the report of the Task Force on Integrated Assessment Modelling (EB.AIR/WG.5/2000/2) and expressed its satisfaction with the early progress in the work on particulate matter;

(b) Also took note of the information on progress in the bilateral negotiations between Canada and the United States;

(c) Agreed to revert to further work in relation to the preparation of the review of the Gothenburg Protocol under agenda item 6; and

(d) Decided to recommend the Executive Body to offer assistance to Parties that required support in the ratification process, either by facilitating bilateral contacts or by establishing a mechanism that allowed the use of its trust funds for technical steps in the ratification process such as the translation of documents.

IV. LONG-TERM FUNDING OF EFFECT-ORIENTED ACTIVITIES

51. Mr. J. THOMPSON (Norway), Chairman of the Executive Body, presented a report on the long-term financing of core activities (EB.AIR/WG.5/2000/3), prepared by the Executive Body's Bureau in collaboration with the secretariat. He reminded delegations that in the Ministerial Declaration adopted in Gothenburg, the Parties had recognized that the Convention's core activities required adequate funding if the Protocols were to be implemented effectively and cost-optimal abatement measures further developed. To this end the Declaration had requested the preparation of a stable, long-term funding arrangement, preserving the possibilities for contributing in kind, that included the international coordination of health and ecosystem effect-related activities and integrated assessment modelling, for instance by appropriately extending the EMEP Protocol (ECE/EB.AIR/68, annex II). The Bureau had presented three options, two of which (a new protocol and an Executive Body decision) had already been presented in a similar form before. The third option was the combination of an Executive Body decision on the budget and a recommendation on the share each Party should contribute. In contrast to previous documents, the proposals also covered integrated assessment modelling activities, in addition to the effect-oriented activities, to ensure that the cost of all core activities under the Convention would be covered.

52. Mr. T. JOHANNESSEN (Norway), Acting Chairman of the Working Group on Effects, stressed that till now the burden of funding the effect-oriented activities was primarily carried by the lead countries of the International Cooperative Programmes and/or by the countries hosting the programme coordinating centres. He also noted that a number of Parties provided voluntary contributions (in cash) to the Trust Fund, and he acknowledged the support given by hosting workshops and task force meetings and/or by contributing in kind. The table annexed to this report shows the estimated essential coordination costs of different elements of the effect-oriented activities in 2001 of US\$ 1 525 000 (the estimate being rather stable over the years). In recent years, the voluntary contributions had, on average, covered only some 15% of this amount.

53. The delegation of the Netherlands, lead country for the Task Force on Integrated Assessment Modelling, informed the Working Group that some US\$ 120 000 would be required to cover the minimum coordination costs at the Centre for Integrated Assessment, to keep the model, as used for the Gothenburg Protocol, up to date. These costs did not cover the further development of the model and therefore Parties were invited to contribute voluntarily.

54. In a tour-de-table, all delegations present expressed their positions regarding the three options presented, some indicating that their positions were preliminary and subject to confirmation. Many Parties expressed their preference for a legally binding solution, either in the form of a new protocol or via an amendment to the EMEP Protocol. Most of the delegations that favoured such a solution expressed their readiness to agree with either of the other two options if that were to emerge as a consensus. Some delegations, however, indicated that they saw no possibility of obtaining funding from their Governments through a voluntary cost-sharing scheme.

55. Many delegations expressed their support for the option of combining an Executive Body decision and a recommendation, as this gave useful flexibility and did not require a lengthy ratification process.

56. The delegations of Canada and Germany stressed that they could not accept any solution that required mandatory contributions and urged Parties to find a solution that allowed them to continue to contribute on a voluntary basis. Both delegations pointed out that they had contributed substantial resources either in kind or in cash to the effect-oriented activities in the past.

57. One delegation pointed out that an Executive Body decision would create an impossible situation due to the timing of the decisions about national budgets and the consensus on the overall amount to be funded. It suggested soliciting contributions by means of a recommendation, while negotiations of a legally binding funding mechanism were under way.

58. As a result of the discussion, the Working Group on Strategies and Review:

(a) Recommended the Executive Body to initiate a negotiating process for a legally binding cost-sharing mechanism to cover the Convention's core activities that were not yet covered by the EMEP Protocol, either in the form of a new protocol or by amending the EMEP Protocol;

(b) Also recommended the Executive Body to take the necessary steps to ensure continued funding of the activities through a combination of decisions and recommendations until such a legally binding mechanism was in place.

(c) Expressed its appreciation to the Executive Body's Bureau for its report (EB.AIR/WG.5/2000/3), suggesting that it should present the Executive Body with a proposal taking into account comments made by delegations.

V. EXCHANGE OF INFORMATION AND TECHNOLOGY

59. Mr. L. LINDAU (Sweden), Vice-Chairman of the Executive Body, introduced the agenda item by presenting the most important elements of work related to abatement techniques. He noted that much valuable work was done by the European Integrated Pollution Prevention and Control Bureau (EIPPCB) in Seville (Spain) and the information should be used for the purpose of the Convention. Similarly, the United States Environmental Protection Agency had produced useful work concerning abatement techniques. The target-oriented workshops on specific problem areas, conducted within the framework of the Convention, had proven useful and should be

continued. There would be a need to revise the technical annexes in the course of the review processes and input on abatement techniques was also necessary to further develop the cost curves used for integrated assessment modelling. For both purposes, it would be useful to continue to develop the existing techno-economic databases, if one or more lead countries were available to support this work which required substantial resources. A good link for instance to the work of the EIPPCB in Seville might ease some of this pressure.

60. The EC representative informed the Working Group that the European IPPC Bureau in Seville had already prepared four reference notes on best available technologies (BREF notes) covering different industrial sectors. Further notes were under preparation. Both final notes and those under preparation would be available on the Internet at: <http://eippcb.jrc.es/>. The EC would welcome the use of the information for work under the Convention and suggested that work on abatement techniques under the Convention should concentrate on complementing or correcting this information rather than duplicating it.

61. The delegation of France presented the report (EB.AIR/WG.5/2000/5) on the workshop on techno-economic databases on production processes and related abatement options held in Angers (France) on 28-29 October 1999. It highlighted some of the conclusions and the recommendations, including the recommendation to set up an ad hoc expert group with broad participation of all relevant stakeholders to be supported by a centre, if adequate resources became available. The delegation pointed out that it was preparing a workshop, to be held in April 2001 either in Angers or in Paris, to continue discussions and develop a clearer definition of the work to be carried out by the expert group and the centre, including the role of the lead country.

62. The delegation of the Czech Republic presented the report (EB.AIR/WG.5/2000/4) on the workshop on control options/technologies to reduce emissions of heavy metals and persistent organic pollutants from stationary sources and products held from 26 to 28 April 2000 in Pruhonice (Czech Republic), including its conclusions and recommendations.

63. The delegation of Austria presented the progress report (EB.AIR/WG.5/2000/6) of the Task Force on the Management of By-product/Residues containing Heavy Metals or Persistent Organic Pollutants, including the results of its third meeting held on 8-12 May 2000 in Ottawa/Montreal (Canada). It informed the Working Group that the fourth meeting of the Task Force was to be held on 4-6 October 2000 in Croatia. A drafting group meeting was scheduled for early 2001 in Italy to finalize the status report in due time for presentation to the Working Group at its thirty-third session.

64. The delegation of Italy informed the Working Group that the workshop on the implementation of VOC abatement techniques in the surface-coating and dry-cleaning sectors scheduled to be held this year was now scheduled to take place in February 2001 in Bologna (Italy).

65. The delegation of Switzerland informed the Working Group about the upcoming meeting of the adhoc expert group on ammonia abatement on 18-20 September 2000 in Bern. The main tasks of the meeting were the drafting of the guiding part of the framework advisory code of good agricultural practice foreseen in the Gothenburg Protocol, a discussion of new abatement measures

and a discussion of the link between emissions, concentrations and deposition. The delegation also suggested that future work of the expert group could cover the preparation of advice for national reporting, given that ammonia was a new substance within the framework of the Convention.

66. The delegation of Poland informed the Working Group on Strategies and Review about its readiness to host a seventh seminar on control techniques for emissions from stationary sources in 2001. Planning of the programme had not yet advanced very far and the delegation invited Parties to present proposals. Poland was ready to provide the resources necessary to host the seminar, including the cost of the secretariat and interpretation. It was, however, not in a position to fund any participation and was looking for interested Parties to bear some of these costs.

67. The secretariat informed the Working Group that there were increasing pressures on its resources, but it was the intention to maintain the secretariat services along the Executive Body's priorities. It noted that the sixth seminar had taken up a very substantial part of the secretariat resources, which were not likely to be available again in the future.

68. Several delegations suggested careful consideration of the focus of the proposed seminar. Given that no major developments in control technologies that would make such a seminar useful to experts in more industrialized countries had taken place since the sixth seminar, a clear focus on the needs of experts from countries with economies in transition might be useful.

69. The delegation of Spain reminded delegations of the importance attached to a good flow of information, both among experts working within the framework of the Convention and to the outside, including the general public and experts in other regions. Much useful work had been done in preparation for the meeting in Gothenburg. The delegation proposed to continue this work in the light of the conclusions of the Saltsjöbaden workshop (in particular para. 18 of EB.AIR/WG.5/2000/7) on an informal basis in order not to lose the expertise gained.

70. On the basis of the information received, the Working Group on Strategies and Review:

(a) Took note of the reports EB.AIR/WG.5/2000/4 and 5, expressing its appreciation to the Czech Republic and France for hosting the workshops;

(b) Expressed its appreciation to the delegation of France for its offer to host a workshop on further work on techno-economic databases and agreed that it would come back to the proposal to establish an ad hoc expert group at its thirty-third session, in the light of the report from that workshop;

(c) Took note of the progress report by the Task Force on the Management of By-products (EB.AIR/WG.5/2000/6) and requested it to prepare its final report for consideration at the thirty-third session of the Working Group;

(d) Requested the ad hoc expert group on ammonia abatement to continue its work, which should also cover advice for the reporting on ammonia abatement measures, and to report on progress, including the drafting of elements of the framework advisory code of good

agricultural practice, at the thirty-third session of the Working Group;

(e) Agreed that further work on abatement techniques should draw as much as possible on the results of efforts by Parties, in particular on the work by the European IPPC Bureau;

(f) Took note of the offer by Poland to host a seventh seminar on control techniques for emissions from stationary sources, invited the delegation to consider further the focus of such a seminar and how to engage the target audience, and recommended the Executive Body to take the proposal into account in planning its further work.

VI. FURTHER WORK OF THE WORKING GROUP AND OF EXPERT GROUPS

71. The Chairman invited delegations to comment on the further work of the Working Group and its expert groups in the light of the discussions and the information presented under other agenda items.

72. The delegations agreed that work should follow the multi-effect, multi-pollutant approach used for the Gothenburg Protocol. Work on heavy metals and POPs should continue as a matter of high priority and be integrated into the multi-pollutant approach as far as possible. Discussions on extending the list of heavy metals and POPs covered by the Protocols should begin soon. Work related to particulate matter should receive the necessary attention to be able to move to policy discussions in the course of the next two or three years. In this context it was encouraging that similar timetables existed both in Europe and in North America. Work on ammonia (emission inventories, abatement measures, and atmospheric transport and effects) should intensify, both because of its inclusion in the Gothenburg Protocol and because of its importance in the formation of particulate matter.

73. The delegation of the United Kingdom presented a proposal for a Network of Experts on Benefits and Economic Instruments (NEBEI). The aim of such a network would be to develop further the economic work on benefits and economic instruments formerly undertaken by the 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. NEBEI should meet only on the occasion of planned workshops and include not only economists but also representatives from other specialist groups. It should 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 United Kingdom offered to lead the network with Prof. David PEARCE functioning as its rapporteur. The United Kingdom offered to host a first workshop, but was seeking support from other Parties to host and fund subsequent workshops (e.g. on the economic valuation of ecosystem damage). The first workshop, on the measurement and economic valuation of health effects associated with air pollution, would be held on 19-20 February 2001. It would be aimed at establishing the state of science concerning the measurement and economic valuation of the health effects associated with air pollution, discussing alternative methodologies for the measurement and valuation of air-related health effects, and presenting the results of the latest research in those areas where there was greatest uncertainty. The contact person for the workshop would be Ms. Helen DUNN (Tel.: +44-207-944-6384, e-mail: Helen_dunn@detr.gsi.gov.uk).

74. The delegation of the Netherlands welcomed the proposal by the United Kingdom and announced its plan to consider organizing the second workshop under NEBEI on the valuation of ecosystem benefits from air pollution abatement in November 2001. The workshop would build on work done by all relevant ICPs under the Working Group on Effects. The delegation invited interested Parties to contact it to discuss the organization of the workshop in more detail.

75. On the basis of the discussion and the information received, the Working Group on Strategies and Review:

(a) Welcomed the offer by the United Kingdom both to host the workshop and to lead a network of experts on benefits and economic instruments, and recommended the Executive Body to establish such a network;

(b) Encouraged the delegation of the Netherlands to organize a workshop on the economic valuation of ecosystem benefits from air pollution abatement;

(c) Confirmed the establishment of the ad hoc expert group on POPs and endorsed the plans for its first meeting presented by the Netherlands under agenda item 3;

(d) Welcomed the offer by CIAM to host a meeting of the Task Force on Integrated Assessment Modelling in the form of a workshop at IIASA (near Vienna) in November 2000, focusing on the modelling of particulate matter, and encouraged Parties to participate in this meeting;

(e) Requested the secretariat to prepare the draft work-plan for presentation to the Executive Body on the basis of the decisions and in the light of the discussion during the session; and

(f) Noted that its thirty-third session was scheduled for 24-27 September 2001.

VII. OTHER BUSINESS

76. The secretariat informed the Working Group about progress in the work on transport and environment. The Third Ministerial Conference on Environment and Health (London, 16-18 June 1999), where ministers had adopted the Charter on Transport, Environment and Health, had requested the World Health Organization (WHO) and UN/ECE to provide an overview of relevant agreements and legal instruments, with a view to improving and harmonizing their implementation and further developing them as needed. A report of that overview should cover the possibility of new non-legally binding actions and the feasibility, necessity and content of a new legally binding instrument (e.g. convention on transport, environment and health). Decisions on the negotiation of such an instrument would be taken as soon as possible after the submission of the report, at a meeting of ministers of transport, environment and health of member States or their representatives, to be convened for that purpose by WHO and UN/ECE at the latest by the end of the year 2000. A first draft of this report had now been distributed and was available at

<http://home.unece.org/poja/london.htm>. Comments by national experts would be solicited at a meeting on 5 September and subsequently in writing.

VIII. ADOPTION OF THE REPORT

77. The Working Group adopted the report of its thirty-second session on 1 September 2000.

ANNEX

Estimated 2001 essential coordination costs of different elements of the effect-oriented activities
as currently provided by the coordinating centres (in thousands of United States dollars)

Activities	ICP Forests; PMCC <u>1/</u>	ICP Waters; PC <u>2/</u>	ICP Materials; PMRC <u>3/</u>	ICP Vegetation; PCC <u>4/</u>	ICP Integrated Monitoring PC <u>5/</u>	ICP Modelling & Mapping CCE <u>6/</u>	TF Health Aspects <u>7/</u>	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		270
Database management	80	65	70	60	65	25		365
Total	270	230	275	220	260	270		1525

1/ International Cooperative Programme (ICP) on Assessment and Monitoring of Air Pollution Effects on Forests; Lead Country: Germany; Programme Main Coordinating Centre: Federal Research Centre for Forestry and Forest Products, Hamburg, Germany;

2/ ICP on Assessment and Monitoring of Acidification of Rivers and Lakes; Lead Country: Norway; Programme Centre: Norwegian Institute for Water Research, Oslo, Norway;

3/ ICP on Effects of Air Pollution on Materials, including Historic and Cultural Monuments; Lead Country: Sweden; Programme Main Research Centre: Swedish Corrosion Institute, Stockholm, Sweden;

4/ ICP on Effects of Air Pollution on Natural Vegetation and Crops; Lead Country: United Kingdom; Programme Coordination Centre: Centre for Ecology and Hydrology, Bangor, United Kingdom;

5/ ICP on Integrated Monitoring of Air Pollution Effects on Ecosystems; Lead Country: Sweden; Programme Centre: Finnish Environment Institute, Helsinki, Finland;

6/ ICP on Modelling and Mapping; Lead Country: Germany; Coordination Center for Effects: National Institute of Public Health and the Environment, Bilthoven Netherlands;

7/ Task Force on the Health Aspects of Air Pollution; Led by the WHO European Centre for Environment and Health, Bilthoven, Netherlands; essential coordination costs borne by the WHO European Centre for Environment and Health.