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

Seventeenth session, Gothenburg (Sweden)
(29 November - 3 December 1999)
Item 6 of the provisional agenda

THE SECOND REPORT OF THE IMPLEMENTATION COMMITTEE

Introduction

1. At its fifteenth and sixteenth sessions (ECE/EB.AIR/53, para. 50 (f) and ECE/EB.AIR/59, para. 27 (h)) the Executive Body elected the following members to the Implementation Committee: Ms. Kirsten HILLMAN (Canada); Mr. Bohuslav BRIX (Czech Republic); Mr. Dieter JOST (Germany); Mr. Harald DOVLAND (Norway); Mr. Stanislaw WAJDA (Poland); Ms. Natalia KARPOVA (Russian Federation); Mr. Ramón GUARDANS (Spain); Mr. Patrick SZÉLL (United Kingdom); and Mr. David VAN HOOGSTRAATEN (United States).

2. The Committee held two meetings in 1999. The third meeting was held in Ottawa (Canada) on 1-3 March 1999 and the fourth was held in Geneva on 6-8 September 1999. Mr. Bohuslav Brix and Mr. Stanislaw Wajda did not participate in either of the two meetings, Mr. David van Hoogstraten was able to attend only part of the third meeting, and Ms. Kirsten Hillman did not participate in the fourth meeting.

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3. The third meeting was chaired by the Chairperson of the Committee, Ms. Kirsten Hillman. The fourth meeting was chaired by Mr. Patrick Széll.

I. REVIEW OF THE 1998 MAJOR REVIEW

4. The secretariat informed the Committee that it had received a number of comments, additions and corrections to the draft 1998 major review and that it had finalized the report for publication. It had sent letters to Parties highlighting the deficiencies in reporting and would keep the Committee informed about any responses or the lack of responses.

5. The Committee welcomed the approach and the forthright nature followed by the secretariat in the preparation of the major review. The document and the reactions to it should be considered as a symbol of the maturity of the Convention. It also noted the close relationship between the review and its own functions.

6. The Committee noted with some concern that six Parties, Bosnia and Herzegovina, France, Liechtenstein, Luxembourg, Malta and the former Yugoslav Republic of Macedonia, had not presented any input to the 1998 Major Review despite repeated reminders by the secretariat.

7. The Committee emphasized that the Major Review could be considered as a great success, as never before had 37 Parties (more than 85% of all Parties) actually submitted a report. As can be seen from table 1 below, almost all Parties (with the notable exceptions of Belarus and Cyprus) had failed to respect the deadline of 1 June 1998 set for submitting their reports. In some cases reports had reached the secretariat too late to be addressed in the draft review presented to the Executive Body.

8. The Committee suggested that the Executive Body should remind Parties of the importance of respecting reporting deadlines. Delays disrupted the work of the secretariat and made the task of the Implementation Committee more difficult. The Executive Body may wish note that in the absence of any submission, as in the case of France, Liechtenstein and Luxembourg, the Implementation Committee has minimal basis for reviewing the compliance of these Parties with their protocol obligations. (Bosnia and Herzegovina, Malta and the former Yugoslav Republic of Macedonia are not Party to any Protocol that falls within the functions of the Implementation Committee.)

II. REVISION OF THE QUESTIONNAIRE FOR REPORTING

9. At its third meeting, the Committee discussed the structure of a revised questionnaire to be used for reporting by Parties on their strategies and policies for air pollution abatement. It recommended that the questionnaire on strategies and policies should be divided into two parts. The Committee

recognized that the questionnaire was a crucial tool. Together with emission data reporting, reporting on strategies and policies provided the basis for reviewing compliance by Parties with their protocol obligations. Emission data reporting is discussed in chapter III below.

10. Part I of the questionnaire should cover the mandatory reporting requirements under each Protocol. The questions should be formulated in a focused manner and make reference to the corresponding reporting articles in the protocols. Part I would also include questions related to the Protocols on Heavy Metals and Persistent Organic Pollutants, although these were not yet in force and, hence, any question related to them would be optional. The Committee recommended that it should be indicated clearly in a cover note as well as throughout the text, which questions were mandatory. To assist Parties, a table showing which questions were mandatory for which Party would be useful.

11. Part II of the questionnaire should pose questions relating to obligations not covered by the mandatory reporting requirements under the protocols and also serve the purpose of general exchange of information under the Convention. The questions included in this part could be based on the questionnaire used for the 1998 Major Review. Given that there would be some repetitions in the questions covering the reporting obligations, the use of cross-references in the answers should be encouraged where applicable. The Committee also drew attention to the fact that the issues included in part II covered some mandatory obligations under the protocols, such as those relating to research and monitoring. The difference between these and the issues addressed in part I was that they were not covered by mandatory reporting obligations.

12. Based on the proposals of the Committee, the secretariat had prepared a draft questionnaire that was reviewed by the Committee at its fourth meeting and was amended to incorporate the changes proposed. The revised questionnaire would be presented by the secretariat to the Executive Body at its seventeenth session (EB.AIR/1999/3).

13. The Committee recognized that only experience would show how well the questions had been formulated and that it would be worthwhile to revert to the questions once the first round of reporting had been completed. The Committee noted that using pre-filled questionnaires would help to reduce the imbalance in the quality and quantity of responses experienced in the past. The new questionnaire required Parties to provide basically the same information as before, but it gave better guidance on what exactly should be covered by the responses. The amount of data provided would increase because of the inclusion of the questions on the Protocols on Heavy Metals and POPs, but these questions were, at present, optional and should be answered only by Parties that considered that they had the capacity to do so. The new

questionnaire might require additional effort by all concerned the first time it was completed, but after that, the secretariat would provide a pre-filled questionnaire to Parties and updating should be simple. There would therefore be a need to invest some time and effort in 2000 for a first round of responses.

III. EMISSION DATA REPORTING

14. As set out in the long-term work programme of the Committee (EB.AIR/1998/4, annex), the objective of examining the reported emissions data and the basis for their calculation was to receive guidance as to whether the emission data submitted with respect to sulphur, nitrogen oxides and VOCs, and the basis for the calculation of those data, were satisfactory for the purposes of assessing compliance.

15. At the invitation of the Committee, experts from the Meteorological Synthesizing Centre West (MSC-W) of EMEP, as well as the Chairmen of the Steering Body of EMEP and of the Task Force on Emission Inventories participated during a part of the fourth meeting of the Committee. The exchange provided all participants with a first opportunity to understand better the data needs of compliance review on the one hand and modelling by EMEP on the other. Both sides had a common objective of obtaining more complete and accurate emission data. It gave the Committee a useful opportunity to establish the contacts that it could use when specific questions needed to be addressed in the course of its work.

16. Guidelines for reporting emission data were adopted by the Executive Body in 1991 (EB.AIR/GE.1/R.65). These have not yet been replaced. A revised set of guidelines has been drafted and recommended by the Executive Body twice for application by Parties on a trial basis (ECE/EB.AIR/53, para. 55 (c) and ECE/EB.AIR/59, para. 33 (c)). The preparation of the Atmospheric Emission Inventory Guidebook, which provides a detailed explanation of the methodologies, meant that the old reporting guidelines (EB.AIR/GE.1/R.65) needed to be revised. In 1997, a proposal for estimating and reporting emission data (EB.AIR/GE.1/1997/5) was drafted. The revised draft guidelines distinguish between general reporting and specific reporting for atmospheric modelling. Continuous updating of the Atmospheric Emission Inventory Guidebook has made it necessary to draw up a new set of guidelines for adoption in 2000.

17. General reporting specifies the timetable to be followed, the pollutants of interest, the type of data required (national annual totals and sectoral emissions at SNAP level 1), and the procedure for reporting and updating emission projections. These reporting requirements are consistent with the old

reporting guidelines so that the Implementation Committee can assume that a Party has complied with the reporting obligations in force (EB.AIR/GE.1/R.65) if it has fulfilled the revised reporting requirements.

18. Specific reporting for atmospheric modelling distinguishes further between a required minimum reporting and a recommended extended reporting. Minimum reporting requires submission of spatial distribution of annual totals and source sector split data in the 50 km x 50 km EMEP grid every five years, reporting on gridded low (below 100 m) and high (above 100 m) emissions, and annual updates on any substantial changes in the distribution of emissions (e.g. in large point sources). Extended reporting recommends reporting of, for instance, monthly resolution of national totals and for the 11 main source sectors. The requirements also specify a detailed electronic data format for reporting to make it easier to process the vast amount of gridded and sectoral data received.

19. MSC-W is responsible for the Convention's emission database. It performs some routine checks for completeness, timeliness, consistency and comparability of reported data. Work has started to establish methods for examining the accuracy of reported emission data, either using atmospheric models and measurements or, in a bottom-up approach, using internationally available statistics. After the annual reporting deadline (31 December), the basic checks are performed and Parties are contacted if questions arise. During 3 months, i.e. up to 31 March, Parties have the possibility to correct the data that they have reported taking into account the questions raised.

20. Less than 25% of Parties provide their data on time. An extension of the annual deadline for reporting by a few months may improve this situation, as the basic national statistics are often not available when data are requested. It is, however, by no means certain that such an extension of the deadline would also improve the quality of the data.

21. Few Parties (11 out of 44 in 1998) provide information about the methodologies they use. Some Parties, as foreseen in the guidelines, update all emission data, including for past years, whenever they update their methodologies. The footnotes in the tables on national emission totals in most cases indicate serious departures from the guidelines that may pose problems regarding the comparability of the data.

22. The Chairman of the Task Force on Emission Inventories invited a representative of the Implementation Committee to attend the next meeting of the Task Force to inform the experts about the Committee's work and the requirements on reported emission data with respect to compliance review. The Committee welcomed this opportunity for direct contacts with emission data experts.

23. The Implementation Committee noted that emission data reporting needed to be improved. This was well illustrated by the information presented in tables 8, 10 and 11 of EB.AIR/GE.1/1999/6, which showed that some Parties' emission reporting was late and incomplete. Given that the data referred to in these tables fell under the requirements of the adopted guidelines, this might constitute non-compliance for Parties to the 1991 VOC and the 1994 Sulphur Protocols within the geographical scope of EMEP with the reporting requirements of these Protocols, in particular, article 8, paragraph 3, of the 1991 VOC Protocol and article 5, paragraphs 1 (b) and 2, of the 1994 Sulphur Protocol.

24. The Committee reviewed compliance with emission data reporting obligations, based on the information presented in the report on the present state of emission data (EB.AIR/GE.1/1999/6) that had been prepared for the Steering Body of EMEP. The report covered emission data reported up to 28 June 1999, while the deadline for reporting was 31 December 1998.

25. Table 2 below, updating the information previously presented by the Committee to the Executive Body (EB.AIR/1998/4, table 2), gives an overview of emission data reporting by the Parties to the 1985 Sulphur Protocol. It shows the date of entry into force of the Protocol for each Party and whether data were reported for the base year and the years starting with the year of entry into force for that Party. 94% of the required annual total emission data have been reported and 89% of the data were reported as final and covering all emission source categories.

26. Table 3 below, updating the information previously presented by the Committee to the Executive Body (EB.AIR/1998/4, table 3), gives an overview of emission data reporting by the Parties to the 1988 NOx Protocol. It shows the date of entry into force of the protocol for each Party and indicates whether data were reported for the base year and the years starting with the year of entry into force for that Party. 89% of the required annual total emission data have been reported and 86% of the data were reported as final and covering all emission source categories.

27. In table 4, the Committee reviews for the first time the reporting on VOC emissions by Parties to the 1991 VOC Protocol. It shows the date of entry into force of the Protocol for each Party and indicates whether data were reported for the base year and the one year since entry into force. 79% of the required annual total emission data have been reported and 76% of the data were reported as final and covering all emission source categories.

28. The Committee noted with satisfaction the improvement in the completeness of emission data reported by Parties to the Sulphur and NOx Protocols in comparison to the previous year (EB.AIR/1998/4, tables 2 and 3). Some Parties had improved their record significantly. There remained, however, some worry

over a few Parties that were consistently in non-compliance with their emission data reporting requirements. For the 1988 NOx Protocol, there were still three Parties (Greece, Luxembourg and European Community) that had not even reported emission data for the base year. For the 1991 VOC Protocol, two Parties (France and the Netherlands) had not yet reported data for the base year.

29. The Committee drafted a set of questions concerning emission data (annex I) that fell under mandatory reporting requirements for Parties to the protocols. The specific questions developed by the Committee relate to the legal obligations of Parties to the protocols and cover the emission data and information on methodologies for their estimation. The Committee recommended that the questions relating to emission data should be annexed to the annual request concerning emission data sent by the secretariat to Parties. The annual request was based on the annual work plan adopted by the Executive Body and therefore sought more data than those required by the mandatory reporting obligations under the protocols.

IV. SPECIFIC REQUESTS BY THE EXECUTIVE BODY

A. Consideration of the transition from the 1985 Sulphur Protocol to the 1994 Sulphur Protocol

30. As part of its long-term work plan (EB.AIR/1998/4, annex), adopted by the Executive Body at its sixteenth session, the Committee was mandated to assess the transition from the 1985 Sulphur Protocol to the 1994 Sulphur Protocol. Now that the 1994 Sulphur Protocol has entered into force, it becomes necessary to assess whether compliance with the obligations in that Protocol constitutes compliance with the 1985 Sulphur Protocol. The Committee examined how to undertake compliance review with respect to Parties that were Party to one or both of the sulphur protocols.

31. The Implementation Committee concluded that at present reporting under the 1985 Sulphur Protocol had to continue. Only after the year 2000 would compliance with the 1994 Sulphur Protocol also constitute compliance with the 1985 Sulphur Protocol for all Parties that were Parties to both protocols.

32. At present not all Parties to the 1985 Sulphur Protocol have become Parties to the 1994 Sulphur Protocol and, unless this situation changes, reporting under the 1985 Sulphur Protocol will have to be continued even after 2000 for those Parties that are only Party to that 1985 Sulphur Protocol

B. Consideration of action by signatories and provisions in political declarations adopted in conjunction with protocols

33. The Executive Body, at its sixteenth session, requested the Implementation Committee to consider how the Committee could cover in its work:

(a) Action taken by Signatories to protocols regarding the implementation of protocol provisions;

(b) Provisions in the political declarations that had been adopted in conjunction with some of the protocols,

and report back to it at its seventeenth session (ECE/EB.AIR/59, para. 27 (f)).

34. The Implementation Committee noted that according to its functions, set out in Executive Body decision 1997/2, it had been established to review compliance by Parties with their obligations under the protocols to the Convention. Only Parties, not Signatories, had any obligations under the protocols. It also noted that political declarations did not contain any obligations. It therefore informed the Executive Body that it was not within the Committee's functions to consider action by Signatories to protocols nor provisions in political declarations.

C. Timing of reviews on strategies and policies

35. At its sixteenth session, the Executive Body (ECE/EB.AIR/59, para. 27 (g)) requested the Implementation Committee to present to it a proposal regarding the timing of the reviews on strategies and policies, expressing its preference for a flexible schedule that would take into account the target dates for obligations in the protocol.

36. The Committee examined the relevant protocol obligations, and in particular those relating to emission reductions and those relating to specific pollution control measures. It noted that emission reporting was still conducted on an annual basis, so there was no need for a reconsideration of the timing. There was no clear pattern concerning the timing of other obligations that merited a modification of the biennial reporting schedule adopted by the Executive Body (ECE/EB.AIR/53, para. 15 (c)). The Committee was of the view that sufficient information would flow under this biennial schedule to enable it to perform its functions. It suggested that in the intervening years the secretariat should send out letters to Parties inviting them to report any updates to information reported the previous year, highlighting any specific obligations that became effective in that year.

V. FURTHER WORK

37. The Committee undertook a first in-depth discussion of the reporting obligations concerning technology-related measures. The results of the discussion were integrated into the questions in the revised questionnaire. It agreed not to go further until it had obtained experience with the responses to these questions. To allow early consideration of the effectiveness of the questions, it would contact a number of technical experts and invite them to

respond to the questions on a trial basis. These responses could then be evaluated at the Committee's next meeting.

38. The Committee recognized that the new Protocol to Abate Acidification, Eutrophication and Ground-level Ozone would require changes to the questionnaire on strategies and policies. Such modifications should be prepared before the entry into force of the new Protocol.

39. The Committee suggested to the Executive Body to revise its work plan for 2000 as set out in annex II.

Table 1. Reporting for the 1998 Major Review

| Party | Date submission was received (deadline 1 June 1998) |
|------------------------|--|
| Armenia | 11 June 1998 |
| Austria | 21 August 1998 |
| Belarus | 1 June 1998 |
| Belgium | 9 July 1998 |
| Bosnia and Herzegovina | |
| Bulgaria | 3 July 1998 |
| Canada | 27 August 1998 |
| Croatia | 3 September 1998 |
| Cyprus | 14 May 1998 |
| Czech Republic | 7 June 1998 |
| Denmark | 3 September 1998 |
| Finland | 3 July 1998 |
| France | |
| Georgia | not applicable |
| Germany | 27 July 1998 |
| Greece | 28 August 1998 |
| Hungary | 12 June 1998 |
| Iceland | 24 March 1999 |
| Ireland | 31 August 1998 |
| Italy | 12 June 1998 |
| Latvia | 25 February 1999 |
| Liechtenstein | |
| Lithuania | 21 August 1998 |
| Luxembourg | |
| Malta | |
| Netherlands | 6 August 1998 |
| Norway | 22 June 1998 |
| Poland | 3 July 1998 |
| Portugal | 28 August 1998 |
| Republic of Moldova | 12 June 1998 |
| Romania | 26 August 1998 |
| Russian Federation | 28 August 1998 |
| San Marino | 7 April 1999 |
| Slovakia | 29 July 1998 |
| Slovenia | 13 July 1998 |
| Spain | 6 August 1998 |
| Sweden | 24 August 1998 |
| Switzerland | 12 June 1998 |
| The FYR of Macedonia | |
| Turkey | 6 August 1998 |
| Ukraine | 10 July 1998 |
| United Kingdom | 12 June 1998 |
| United States | August 1998 |
| Yugoslavia | 12 June 1998 |
| European Community | 31 August 1998 |

Table 2. National total annual emissions reported by Parties to the 1985 Sulphur Protocol (a)

| | Entry into force | Emission data reported for: | | | | | | | | | | | | | | | | | | | Share of data available: | |
|-------------------------------|------------------|-----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|----------|----------------------|----|------|------|--|--------------------------|--|
| | | Base year, 1980 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1997 | all data | final, complete data | | | | | | |
| Austria | 02.09.87 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 100% | 100% | | | |
| Belarus | 02.09.87 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 100% | 100% | | | |
| Belgium | 07.09.89 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 100% | 92% | | | |
| Bulgaria | 02.09.87 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 100% | 100% | | | |
| Canada | 02.09.87 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 92% | 83% | | | |
| Czech Republic | 01.04.93 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 100% | 100% | | | |
| Denmark | 02.09.87 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 100% | 100% | | | |
| Finland | 02.09.87 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 100% | 83% | | | |
| France | 02.09.87 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 92% | 92% | | | |
| Germany | 02.09.87 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 100% | 100% | | | |
| Hungary | 02.09.87 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 100% | 100% | | | |
| Italy | 06.05.90 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 83% | 83% | | | |
| Liechtenstein | 02.09.87 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 75% | 75% | | | |
| Luxembourg | 22.11.87 | X | - | - | - | X | - | - | - | - | - | - | - | X | X | X | X | 42% | 42% | | | |
| Netherlands | 02.09.87 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 100% | 100% | | | |
| Norway | 02.09.87 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 100% | 100% | | | |
| Russian Federation | 02.09.87 | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | 100% | 17% | | | |
| Slovakia | 26.08.93 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 100% | 92% | | | |
| Sweden | 02.09.87 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 100% | 100% | | | |
| Switzerland | 20.12.87 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 100% | 100% | | | |
| Ukraine | 02.09.87 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 100% | 100% | | | |
| Total: | 21 Parties | 21 | 20 | 20 | 20 | 21 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 21 | 20 | 19 | 19 | 94% | 89% | | | |
| Total (final, complete data): | | 20 | 19 | 19 | 19 | 20 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 20 | 19 | 18 | 18 | | | | | |

Notes:

Information based on EB.AIR/GE.1/1999/6 (reflecting data submitted by 28 June 1999).

X Final and complete data available for that year.

P Preliminary or partial data available for that year.

- No emission data available for that year.

(a) Protocol on the Reduction of Sulphur Emissions or their Transboundary Fluxes by at least 30 per cent, adopted 8.7.1985 in Helsinki.

Table 3. National total annual emissions reported by Parties to the 1988 NOx Protocol (a)

| | Entry into force | Base year | Emission data reported for: | | | | | | | | | | Share of data available: | |
|-----------------------------|------------------|-----------|-----------------------------|------|------|------|------|------|------|----------|----------------------|-----|--------------------------|------|
| | | | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | all data | final, complete data | | | |
| Austria | 14.02.91 | X | X | X | X | X | X | X | X | X | X | X | 100% | 100% |
| Belarus | 14.02.91 | X | X | X | X | X | X | X | X | X | X | X | 100% | 100% |
| Bulgaria | 14.02.91 | X | X | X | X | X | X | X | X | X | X | X | 100% | 100% |
| Canada | 25.04.91 | X | X | X | X | X | X | X | X | X | P | - | 88% | 75% |
| Czech Republic | 01.04.93 | X | X | X | X | X | X | X | X | X | X | X | 100% | 100% |
| Denmark | 30.05.93 | X | X | X | X | X | X | X | X | X | X | X | 100% | 100% |
| Finland | 14.02.91 | X | X | X | X | X | X | X | X | X | P | P | 100% | 75% |
| France | 14.02.91 | X | X | X | X | X | X | X | X | X | X | X | 88% | 88% |
| Germany | 14.02.91 | X | X | X | X | X | X | X | X | X | X | X | 100% | 100% |
| Greece | 28.07.98 | - | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | 0% | 0% |
| Hungary | 10.02.92 | X | X | X | X | X | X | X | X | X | X | X | 100% | 100% |
| Ireland | 15.01.95 | X | X | X | X | X | X | X | X | X | X | P | 100% | 88% |
| Italy | 17.08.92 | X | X | X | X | X | X | X | X | X | X | - | 75% | 75% |
| Liechtenstein | 22.06.94 | X | X | X | X | X | X | X | X | X | - | - | 63% | 63% |
| Luxembourg | 14.02.91 | - | - | - | - | - | X | X | X | X | X | - | 38% | 38% |
| Netherlands | 14.02.91 | X | X | X | X | X | X | X | X | X | X | X | 100% | 100% |
| Norway | 14.02.91 | X | X | X | X | X | X | X | X | X | X | X | 100% | 100% |
| Russian Federation | 14.02.91 | P | X | X | X | X | X | X | X | X | X | X | 100% | 88% |
| Slovakia | 26.08.93 | X | X | X | X | X | X | X | X | X | X | X | 100% | 100% |
| Spain | 04.03.91 | X | X | X | X | X | X | X | X | X | X | - | 75% | 75% |
| Sweden | 14.02.91 | X | X | X | X | X | X | X | X | X | X | X | 100% | 100% |
| Switzerland | 14.02.91 | X | X | X | X | X | X | X | X | X | X | X | 100% | 100% |
| Ukraine | 14.02.91 | X | X | X | X | X | X | X | X | X | X | X | 100% | 100% |
| United Kingdom | 14.02.91 | X | X | X | X | X | X | X | X | X | X | X | 100% | 100% |
| United States | 14.02.91 | X | X | X | X | X | X | X | X | X | X | X | 100% | 100% |
| European Community | 17.03.94 | - | n/a | n/a | n/a | n/a | - | - | - | - | - | - | 88% | 88% |
| Total: | 26 Parties | 23 | 23 | 23 | 23 | 23 | 24 | 24 | 23 | 23 | 21 | 17 | 89% | 86% |
| Total (final and complete): | | 22 | 23 | 23 | 23 | 24 | 24 | 23 | 23 | 21 | 19 | 15 | | |

Notes:

Information based on EB.AIR/GE.1/1999/6 (reflecting data submitted by 28 June 1999).

X Final and complete data available for that year.

P Preliminary or partial data available for that year.

n/a Not applicable.

- No emission data available for that year.

(a) Protocol concerning the Control of Emissions of Nitrogen Oxides or their Transboundary Fluxes, adopted 31.10.1988 in Sofia.

Table 4. National total annual emissions reported by Parties to the 1991 VOC Protocol (a)

| | Entry into force | Base year | Emission data reported for: Base year | 1997 | Share of data available: all data | final, complete data |
|-----------------------------|------------------|-----------|--|------|--------------------------------------|-------------------------|
| Austria | 29.09.97 | 1988 | X | X | 100% | 100% |
| Bulgaria | 28.05.98 | 1988 | X | X | 100% | 100% |
| Czech Republic | 29.09.97 | 1990 | X | X | 100% | 100% |
| Denmark | 29.09.97 | 1985 | X | X | 100% | 100% |
| Finland | 29.09.97 | 1988 | X | P | 100% | 50% |
| France | 29.09.97 | 1988 | - | - | 0% | 0% |
| Germany | 29.09.97 | 1988 | X | X | 100% | 100% |
| Hungary | 29.09.97 | 1988 | X | X | 100% | 100% |
| Italy | 29.09.97 | 1990 | X | - | 50% | 50% |
| Liechtenstein | 29.09.97 | 1984 | X | - | 50% | 50% |
| Luxembourg | 29.09.97 | 1990 | X | - | 50% | 50% |
| Netherlands | 29.09.97 | 1988 | - | X | 50% | 50% |
| Norway | 29.09.97 | 1988 | X | X | 100% | 100% |
| Spain | 29.09.97 | 1988 | X | - | 50% | 50% |
| Sweden | 29.09.97 | 1988 | X | X | 100% | 100% |
| Switzerland | 29.09.97 | 1984 | X | X | 100% | 100% |
| United Kingdom | 29.09.97 | 1988 | X | X | 100% | 100% |
| Total: | 17 Parties | | 15 | 12 | 79% | 76% |
| Total (final and complete): | | | 15 | 11 | | |

Notes:

Information based on EB.AIR/GE.1/1999/6 (reflecting data submitted by 28 June 1999).

X Final and complete data available for that year.

P Preliminary or partial data available for that year.

n/a Not applicable.

- No emission data available for that year.

(a) Protocol concerning the Control of Emissions of Volatile Organic Compounds or their Transboundary Fluxes, adopted 18.11.1991 in Geneva, entry into force 29.9.1997.

Annex I

QUESTIONS FOR EMISSION REPORTING UNDER THE PROTOCOLS

A. 1985 Sulphur Protocol

1. Parties have to provide information on the levels of national annual emissions of sulphur for 1980 and every year from 1987 to 1998, as required by article 4. Provide the emission data for 1998 and any updates or missing data for previous years.

2. Provide the basis upon which these emission levels have been calculated as required by article 4. For example, in calculating these emission levels, did you follow the EMEP guidelines (EB.AIR/GE.1/R.65) or the draft guidelines (EB.AIR/GE.1/1997/5). If you departed from these guidelines, indicate where and in what respect.

B. 1988 Nitrogen Oxides Protocol

3. Parties have to provide information on the levels of national annual emissions of nitrogen oxides for the base year (1987 or 1978) and for every year from 1991 to 1998 as required by article 8, paragraph 1 (a), or from 1987 to 1998 for those with a base year other than 1987. Provide the emission data for 1998 and any updates or missing data for previous years.

4. Provide the basis upon which these emission levels have been calculated as required by article 8, paragraph 1. For example, in calculating these emission levels, did you follow the EMEP guidelines (EB.AIR/GE.1/R.65) or the draft guidelines (EB.AIR/GE.1/1997/5). If you departed from these guidelines, indicate where and in what respect.

C. 1991 VOC Protocol

5. As required by article 8, paragraph 1:

(a) If you have not already done so in a previous report, provide information on the level of emissions of VOCs in your territory (or any TOMA of your territory) by total and, to the extent feasible, by sector of origin of individual VOCs for 1988 or any other year taken as a base year for the purposes of article 2, paragraph 2;

(b) Also provide information on the level of emissions of VOCs in your territory (or any TOMA of your territory) for 1998, and, if not yet done so, for 1997, by total and, to the extent feasible, by sector of origin of individual VOCs. Where revisions to reports made in previous calendar years are necessary, provide these revisions;

(c) Provide the basis upon which these emission levels have been calculated. For example, in calculating these emission levels, did you follow the EMEP Guidelines (EB.AIR/GE.1/R.65) or the draft guidelines (EB.AIR/GE.1/1997/5). If you departed from these guidelines, please indicate where and in what respect.

6. If you represent a Party within the geographical scope of EMEP, provide information on VOC emissions by sector of origin with a spatial resolution as specified by the Executive Body as required by article 8, paragraph 3.

D. 1994 Sulphur Protocol

7. Provide information on the levels of national annual emissions of sulphur with information for all relevant source categories using the guidelines adopted by the Executive Body, as required by article 5, paragraph 1 (b).

8. If you represent a Party within the geographical scope of EMEP, provide information on the levels of sulphur emissions with temporal and spatial resolution as specified by the Steering Body of EMEP in the guidelines (EB.AIR/GE.1/R.65) or the draft guidelines (EB.AIR/GE.1/1997/5), as required by article 5, paragraph 2

Annex II

WORK PLAN FOR 2000
REVIEW OF COMPLIANCE

Objective: To review compliance by the Parties with their obligations under the protocols to the Convention.

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

Time schedule:

- (a) Fifth meeting of the Implementation Committee in Berlin on 3-5 April 2000;
- (b) Sixth meeting of the Implementation Committee in Geneva in September 2000;
- (c) Report to the Executive Body at its eighteenth session.