

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

THE 2000 REVIEW ON STRATEGIES AND POLICIES
FOR AIR POLLUTION ABATEMENT

FUTURE RATIFICATION
REPLIES TO QUESTIONS 66 - 71 OF THE 2000 QUESTIONNAIRE

Prepared by the secretariat from submissions by the Parties

Introduction

1. This document is the basis for part of the 2000 Review of Policies and Strategies requested by the Executive Body at its seventeenth session in December 1999. It provides the answers as received from Parties in response to the questionnaire circulated in January 2000. It is in English only, non-English submissions were passed to the UN translation services, and are incorporated as translated. Answers have been reformatted for the document but have been subjected to minimal editing. Indication is given where responses have been altered, e.g. moved where an answer appears to be for a different question.
2. The document is intended as a reference for the summary to be found in the 2000 Review of Strategies and Policies (EB.AIR/2000/1/Add.3) and will be provided to the Executive Body, the Implementation Committee and will be made available through the Executive Body document Web site. The document is one section of the questionnaire.
3. This section summarizes the answers received to questions 66 to 71 of the questionnaire. The questions in this section are of a general nature and optional. Their purpose is to provide further information that will enable the secretariat to analyse the current situation regarding air pollution abatement in the region, and provide information that the Executive Body would like the Parties to the Convention to share to identify air pollution abatement. Parties may wish to recall that under article 4 of the Convention they have committed to exchanging information on their policies aimed at abating air pollution.
4. **Q.66 If your country has not yet ratified the 1984 EMEP Protocol, does it have plans to ratify/accede to this Protocol?**
If so, when?
If not, you may wish to provide any available information as to possible problems or obstacles to ratification and on measures taken to overcome them.
5. **Armenia.** Questions 66-72: The Republic of Armenia has repeatedly stated its intention to accede to the 1984 EMEP Protocol, the 1988 Nitrogen Oxides Protocol, the 1991 VOC Protocol, the 1994 Sulphur Protocol and to ratify the 1998 Protocols on heavy metals and on persistent organic pollutants and the 1999 Gothenburg Protocol, although this will involve economic and technical problems relating to compliance with the obligations under these instruments.
6. **Belarus.** The Ministry of Environmental Protection, the Committee on Science and Technology and the National Academy of Sciences are carrying out the scientific groundwork to

evaluate the options and implications of accession by the Republic of Belarus to the VOC, heavy metals and POP protocols. The work is due to be completed in 2001.

7. **Bulgaria.** Ratified.
8. **Czech Republic.** The 1984 EMEP Protocol has been ratified.
9. **Georgia.** Yes. The date of accession is not identified yet.
10. **Greece.** Greece has already ratified the 1984 EMEP Protocol.
11. **Lithuania.** Yes, after accession into the EU.
12. **Monaco.** Not relevant (unofficial translation).
13. **Netherlands.** The Netherlands has already ratified the 1984 EMEP Protocol.
14. **Poland.** Poland has acceded to the 1984 EMEP Protocol on 14 September 1988 and is fully fulfilling its obligations.
15. **Republic of Moldova.** Republic of Moldova plans to ratify the 1984 EMEP Protocol. At present the possibility of ratification is studying in our country and our participation in EMEP Programme as a consequence. Unfortunately, the greatest obstacle of the earlier ratification is the difficult economic situation in which we have been put now. In this context we are preparing project proposals concerning our participation in EMEP Programme, including our contributions in kind.
16. **Slovakia.** Yes. Slovakia is a party to the EMEP Protocol since 28 May, 1993 by succession of former Czechoslovakia.
17. **Switzerland.** The 1984 EMEP protocol was ratified on 26 July 1985 by Switzerland.
18. **Turkey.** See answer to question 64. (given as an answer to question 66 but appears to be answer to question 68): Turkey has not ratified the 1991 VOC Protocol yet.
19. **Ukraine.** See answer to question 64. (given as an answer to question 66 but appears to be answer to question 68): Ukraine has not ratified the 1991 VOC Protocol, and has no plans to do so for economic and technical reasons.
20. **United Kingdom.** The UK ratified the Protocol in 1985.
21. **United States.** The United States has ratified the 1984 EMEP Protocol.
22. **Q.67 If your country has not yet ratified the 1988 Nitrogen Oxides, does it have plans to ratify/accede to this Protocol?
If so, when?**

If not, you may wish to provide any available information as to possible problems or obstacles to ratification and on measures taken to overcome them.

23. **Armenia.** See answer to question 66.

24. **Belarus.** For the time being the Republic of Belarus considers it impossible to accede to the 1994 Sulphur Protocol. Reconstruction and major investment will be needed at the two oil refineries in Novopolotsk and Mozyr to achieve the standards set by the Protocol for sulphur content in fuels. A considerable proportion of the light and dark petroleum products supplied to Belarus comes from the Russian Federation and other CIS countries which have not ratified the Protocol. This creates serious problems in meeting obligations under the Protocol.

Stationary source categories	National emission standards for NO _x (in NO ₂ equivalent)		Units and statistical treatment	Pollution control measures applied
	gas	fuel oil		
Boilers for power generation, manufactured before 1.07.90			kg/GJ (mg/m ³) dry gas with $\alpha = 1.40$, $t = 0$ °C, 101.3 kPa	flue gas recycling, multi-stage combustion
Output less than 420 t/h	0.086 (255)	0.10 (290)		
Output more than 420 t/h	0.10 (290)	0.12 (350)		
Boilers for power generation, manufactured after 1.07.90			kg/GJ (mg/m ³) dry gas with $\alpha = 1.40$, $t = 0$ °C, 101.3 kPa	flue gas recycling, multi-stage combustion
Output less than 420 t/h	0.07 (200)	1.10 (290)		
Output more than 420 t/h	0.08 (240)	1.12 (250)		

Stationary source categories	National emission standards for NO _x (in NO ₂ equivalent)		Units and statistical treatment	Pollution control measures applied
	gas	fuel oil		
Steam boilers, stationary, manufactured before 1.07.90			kg/kJ dry gas with $\alpha = 1.40$, $t = 0$ °C, 101.3 kPa	flue gas recycling, multi-stage combustion for boilers with output of more than 20 t/h
Output 4-25 t/h	0.12	0.15		
Output 35-75 t/h	0.15	0.20		
Output 100-160 t/h	0.30	0.30		
Steam boilers, stationary, manufactured after 1.07.90			kg/kJ dry gas with $\alpha = 1.40$, $t = 0$ °C, 101.3 kPa	flue gas recycling, multi-stage combustion for boilers with output of more than 20 t/h
Output 4-25 t/h	0.11	0.14		
Output 35-75 t/h	0.14	0.18		
Output 100-160 t/h	0.22	0.27		
Boilers for district heating, water-heating, from 1.01.89 to 1.01.96			kg/kJ (mg/m ³) dry gas with $\alpha = 1.40$, $t = 0$ °C, 101.3 kPa	

Stationary source categories	National emission standards for NO _x (in NO ₂ equivalent)		Units and statistical treatment	Pollution control measures applied
	gas	fuel oil		
Output 30 (35) Gcal/h (MW)	0.09 (230)	0.13 (340)		not applied
Output 50 (58) Gcal/h (MW)	0.12 (300)	0.15 (380)		not applied
Output 100 (116) Gcal/h (MW)	0.12 (300)	0.15 (380)		flue gas recycling, multi-stage combustion
Output 180 (209) Gcal/h (MW)	0.12 (300)	0.15 (380)		
Boilers for district heating, water-heating, from 1.01.96 to 2006 Output 100 kW	240/150	230*	mg/m ³ dry gas with $\alpha = 1.40$, $t = 0$ °C, 101.3 kPa	not applied
Output 30 (35) Gcal/h (MW)	0.08 (200)	0.10 (250)		not applied
Output 50 (58) Gcal/h (MW)	0.08 (200)	0.10 (250)	kg/kJ (mg/m ³) dry gas with $\alpha = 1.40$, $t = 0$ °C, 101.3 kPa	not applied
Output 100 (116) Gcal/h (MW)	0.08 (200)	0.10 (250)		flue gas recycling, multi-stage combustion, heaters with low NO _x output
Output 180 (209) Gcal/h (MW)	0.08 (200)	0.10 (250)		

* Light petroleum fuel used.

Mobile source categories	National emission standards for NO _x (in NO ₂ equivalent)	Units and statistical treatment	Pollution control measures applied
Diesels for ships, locomotives and industrial uses	120	g/kg fuel	
with average effective pressure under test of ≤ 0.3 Mpa			
with average effective pressure under test of > 0.3 Mpa and specific fuel consumption, g/kWh:			
up to 214	29	g/kWh	
214 to 226	25	"	
226 to 238	21	"	
238 to 252	17	"	
252 to 268	14	"	
over 268	11	"	
Diesels for agricultural and industrial tractors	22.0	g/kWh	
Combine diesels	25.0	g/kWh	
Diesels for tractors to be used in places with limited air exchange	13.0	g/kWh	

25. **Belgium.** Yes. The institutional structure of Belgium means that all international arrangements (including the protocols) are subject to an approval procedure by the three regional parliaments and by the Federal Parliament in the event of concurrent competence, in order to be ratified by the Belgian State. This means that there are actually four procedures to be complied with, rather one, and if these are not conducted in parallel final ratification is delayed. The four Belgian authorities intend to ratify all the protocols signed to date, including the Gothenburg Protocol. The only problem is that of procedural delays, there is no opposition in principle. The NO_x, SO₂, and VOC protocols are in the final stage of ratification. The protocols on heavy metals and POPs are at an early stage of ratification.

26. **Bulgaria.** Ratified.

27. **Cyprus.** Due to the developing nature of the Cyprus economy the NO_x emissions of Cyprus were increasing during the period covered by the Protocol. Therefore Cyprus could not meet the requirements of the Protocol.

28. **Czech Republic.** The 1988 Nitrogen Oxides Protocol has been ratified.

29. **Georgia.** No.

30. **Greece.** Greece has already ratified the 1988 Nitrogen Oxides Protocol.
31. **Latvia.** Latvia will ratify the Protocol to the 1979 Convention on Long-range Transboundary Air Pollution to Abate Acidification, Eutrophication and Ground-level Ozone.
32. **Lithuania.** Yes, after accession into the EU.
33. **Netherlands.** The Netherlands has already ratified the 1988 Protocol on Nitrogen Oxides.
34. **Poland.** Poland has signed the 1988 Nitrogen Oxides Protocol on 1 November 1988 but it has not been ratified yet. Its ratification is planned in 2000.
35. **Republic of Moldova.** The Republic of Moldova doesn't plan in the nearest future to ratify the 1988 Nitrogen Oxides Protocol. We signed the 1999 Gothenburg Protocol to Abate Acidification, Eutrophication and Ground-level Ozone in conformity with art.14 of the mentioned protocol. We included in this Protocol our obligations regarding emission ceilings on Nitrogen Oxides for 2010. The next step after the signing of mentioned Gothenburg Protocol will be the effectuation of necessary procedures in order to ratify it and the elaboration of National Programme of Activities concerning its implementation in the framework of our obligations, including the achievement of NOx emission ceilings.
36. **Slovakia.** Yes. Slovakia is a party to the Nitrogen Oxides Protocol since 28 May, 1993 by succession of former Czechoslovakia.
37. **Switzerland.** The 1988 nitrogen oxides protocol was ratified on 18 September 1990 by Switzerland.
38. **Turkey.** See answer to question 65. (given as an answer to question 67 but appears to be answer to question 69): Turkey has not ratified the 1994 Sulphur Protocol yet.
39. **Ukraine.** See answer to question 65. (given as an answer to question 67 but appears to be an answer to question 69): Ukraine has not ratified the 1994 Sulphur Protocol, and has no plans to do so for economic and technical reasons.
40. **United Kingdom.** The UK ratified the Protocol in 1990.
41. **United States.** The United States has ratified the 1988 Nitrogen Oxides Protocol.
42. **Q.68** **If your country has not yet ratified the 1991 VOC Protocol, does it have plans to ratify/accede to this Protocol?**
If so, when?
If not, you may wish to provide any available information as to possible problems or obstacles to ratification and on measures taken to overcome them.
43. **Armenia.** See answer to question 66.

44. **Belarus.** See answer to question 66
45. **Belgium.** See answer to question 67.
46. **Bulgaria.** Ratified.
47. **Croatia.** In 2000/2001.
48. **Cyprus.** Cyprus will consider the ratification of the VOC Protocol soon and after the evaluation of data that are being collected within the accession negotiations with the European Union.
49. **Czech Republic.** The Czech Republic has acceded to the 1991 VOC Protocol.
50. **Georgia.** No.
51. **Greece.** Greece intends to ratify the 1991 VOC Protocol. That will require the adoption of a law on the matter by the Parliament.
52. **Latvia.** Necessity to accede to this Protocol will be discussed. Latvia will ratify the Protocol to the 1979 Convention on Long-range Transboundary Air Pollution to Abate Acidification, Eutrophication and Ground-level Ozone.
53. **Lithuania.** Yes, after accession into the EU.
54. **Monaco.** See answer to Q.71.
55. **Netherlands.** The Netherlands has already ratified the 1991 VOC Protocol.
56. **Poland.** Poland has not signed the 1991 VOC Protocol, but the matter of acceding to this agreement is being considered.
57. **Republic of Moldova.** The Republic of Moldova will not ratify in the nearest time the 1991 VOC Protocol. We've signed already the 1999 Gothenburg Protocol to Abate Acidification, Eutrophication and Ground-level Ozone in conformity with art.14 of the mentioned protocol. We included in this Protocol our obligations regarding emission ceilings on VOC for 2010. The next step after the signing of the mentioned Gothenburg Protocol will be the effectuation of necessary procedures in order to ratify it and the elaboration of National Programme of Activities regarding its implementation in the framework of our obligations, including the achievement of emission ceilings on VOC.
58. **Slovakia.** Yes. Slovakia has ratified the VOC Protocol on 16 December, 1999, and it has come to force for Slovakia on 14 March, 2000.
59. **Switzerland.** The 1991 volatile organic compounds protocol was ratified on 21 March 1994 by Switzerland.

60. **Turkey.** See answer to question 66. (given as an answer to question 68 but appears to be answer to question 70): Turkey has not ratified the 1998 Protocol on Heavy Metals yet.
61. **Ukraine.** See answer to question 66. (given as an answer to question 68 but appears to be an answer to question 70): Ukraine has not ratified the 1998 Protocol on Heavy Metals. Ratification is planned for 2001-2002.
62. **United Kingdom.** The UK ratified the Protocol in 1994.
63. **United States.** The United States has no current plans to move forward with ratification of the 1991 VOC Protocol. However, the United States is achieving the goals of the Protocol. The U.S. made a 30 percent reduction by 1999 in VOC emissions from 1984 levels and will maintain this level.
64. **European Community.** Ratification of the Protocol on behalf of the European Community is not envisaged.
65. **Q.69 If your country has not yet ratified the 1994 Sulphur Protocol, does it have plans to ratify/accede to this Protocol?
If so, when?
If not, you may wish to provide any available information as to possible problems or obstacles to ratification and on measures taken to overcome them.**
66. **Armenia.** See answer to question 66.
67. **Belarus.** See answer to question 66.
68. **Belgium.** See answer to question 67.
69. **Bulgaria.** Signed. Ratification expected in 2002.
70. **Cyprus.** Cyprus will consider the ratification of the 1994 Sulphur Protocol on the basis of the outcome of the accession negotiations that are now taking place with the European Union.
71. **Czech Republic.** The 1994 Sulphur Protocol has been ratified.
72. **Georgia.** No.
73. **Greece.** Greece has already ratified the 1994 Sulphur Protocol.
74. **Hungary.** In 2000.
75. **Latvia.** Latvia foresees to accede to this Protocol on 2000.
76. **Lithuania.** Yes, after accession into the EU.
77. **Monaco.** See answer to Q.71.

78. **Netherlands.** The Netherlands has already ratified the 1994 Sulphur Protocol.
79. **Poland.** Poland has signed the 1994 Sulphur Protocol on 14 June 1994, but it has not been ratified yet. Its ratification is planned in 2000.
80. **Republic of Moldova.** The Republic of Moldova doesn't plan in the nearest time to ratify the 1994 Sulphur Protocol. We've signed already the 1999 Gothenburg Protocol to Abate Acidification, Eutrophication and Ground-level Ozone in conformity with art.14 of mentioned protocol. We included in this Protocol our obligations regarding emission ceilings for Sulphur for 2010. The next step after the signing of mentioned Gothenburg Protocol will be the effectuation of necessary procedures in order to ratify it and the elaboration of National Programme of Activities regarding its implementation in the framework of our obligations, including the achievement of emission ceilings on Sulphur.
81. **Slovakia.** Yes. Slovakia has ratified the Second Sulphur Protocol on 1 April, 1998, and it has come to force for Slovakia on 1 July, 1998.
82. **Switzerland.** The 1994 second sulphur protocol was ratified on 23 January 1998 by Switzerland.
83. **Turkey.** See answer to question 67. (given as an answer to question 69 but appears to be an answer to question 71): Turkey has not ratified the 1998 Protocol on Persistent Organic Pollutants yet.
84. **Ukraine.** See answer to question 67. (given as an answer to question 69 but appears to be an answer to question 71): Ukraine has not ratified the 1998 Protocol on Persistent Organic Pollutants. Ratification is planned for 2001-2002.
85. **United Kingdom.** The UK ratified the Protocol in 1996.
86. **Q.70 If your country has not yet ratified the 1998 Protocol on Heavy Metals, does it have plans to ratify/accede to this Protocol?
If so, when?
If not, you may wish to provide any available information as to possible problems or obstacles to ratification and on measures taken to overcome them.**
87. **Armenia.** See answer to question 66.
88. **Austria.** Ratification planned for early 2001.
89. **Belgium.** See answer to question 67.
90. **Bulgaria.** Signed. Ratification expected in 2002.
91. **Croatia.** In 2001.

92. **Cyprus.** In 2004 at the latest.
93. **Czech Republic.** The 1998 Protocol on Heavy Metals is expected to be ratified till the end of 2000.
94. **Denmark.** Autumn 2000.
95. **Finland.** Yes. Finland is on the process of ratifying the Heavy Metals Protocol in the next few months.
96. **Georgia.** No.
97. **Germany.** In 2001.
98. **Greece.** Greece intends to ratify the 1998 Protocol on Heavy Metals. That will require the adoption of a law on the matter by the Parliament.
99. **Hungary.** Not earlier than 2002.
100. **Italy.** The ratification of the 1998 Protocol on Heavy Metals is in process.
101. **Latvia.** Preparation work for ratification is started. Due to limited financial resources ratification of the Protocol is envisaged on 2002 or 2003.
102. **Lithuania.** Yes, after accession into the EU.
103. **Monaco.** See answer to Q.71.
104. **Netherlands.** The Netherlands has ratified the 1998 Protocol on Heavy Metals on 23 June 2000.
105. **Poland.** Poland has signed the 1998 Protocol on Heavy Metals on 24 June 1998 and is planning to ratify it in 2001. As soon as the strategy on heavy metal emission reduction is approved by the Government the ratification procedure can be started.
106. **Republic of Moldova.** Republic of Moldova plans to ratify/accede to the 1998 Protocol on Heavy Metals. Presently the consultations are undertaken in order to assess the possibility of ratification of this Protocol and the real terms for it. Unfortunately, the greatest obstacle of the earlier ratification is the difficult economic situation in which we have been put now. That is why it's hard to undertake the monitoring and laboratory control, there is insufficiency of knowledge for estimating critical loads and levels, pollutants transfer assessment on long ranges, level of sedimentation and modelling.
107. **Slovakia.** Slovakia has to prepare the detailed emission inventory for heavy metals and then decide on appropriate measures to fulfil commitments of the protocol. We expect its acceptance or approval by the end of the year 2002 at the latest, most likely within the year 2001.

108. **Spain.** Yes
109. **Switzerland.** The 1998 heavy metals protocol will probably be ratified at the end of 2000 by Switzerland.
110. **Turkey.** See answer to question 68.
111. **Ukraine.** See answer to question 68.
112. **United Kingdom.** The UK plans to ratify the Heavy Metals Protocol in 2001.
113. **United States.** The United States is intending to ratify the 1998 Heavy Metals Protocol and is currently taking the necessary steps with a view toward ratification within the next year.
114. **European community.** The ratification procedure already started (Proposal for a Council Decision on the conclusion on behalf of the European Community of the HM Protocol, COM(2000)177 final of 12 April 2000).
115. **Q.71 If your country has not yet ratified the 1998 Protocol on Persistent Organic Pollutants, does it have plans to ratify/accede to this Protocol?
If so, when?
If not, you may wish to provide any available information as to possible problems or obstacles to ratification and on measures taken to overcome them.**
116. **Armenia.** See answer to question 66.
117. **Austria.** Ratification planned for early 2001.
118. **Belgium.** See answer to question 67.
119. **Bulgaria.** Signed. Ratification expected in 2001.
120. **Croatia.** In 2001.
121. **Cyprus.** In 2004 at the latest.
122. **Czech Republic.** The 1998 Protocol on Persistent Organic Pollutants is expected to be ratified till the end of 2000.
123. **Denmark.** Autumn 2000.
124. **Finland.** Finland will ratify the POPs Protocol as soon as we can fix the base year for emission reductions. The preliminary results will be ready in autumn this year. So the ratification might happen early next year (2001).
125. **Georgia.** No.

126. **Germany.** In 2001.
127. **Greece.** Greece intends to ratify the 1998 Protocol on Persistent Organic Pollutants. That will require the adoption of a law on the matter by the Parliament.
128. **Hungary.** In 2001.
129. **Italy.** The ratification of the 1998 Protocol on Persistent Organic Pollutants is in process.
130. **Latvia.** Preparation work for ratification is started. Due to limited financial resources ratification of the Protocol is envisaged on 2002 or 2003.
131. **Lithuania.** Yes, after accession into the EU.
132. **Monaco.** In this context, it must be pointed out that Monaco is a very small, entirely urbanized country, and as a result is considered to be a point source of pollution, most of which is transboundary. The Protocols' reduction targets are designed for large areas with many sources. Consequently, Monaco's pollutant emission assessment cannot be compared to those of the other Parties to the Convention and its Protocols. It is, therefore, difficult for Monaco to comply with the obligations as they are spelt out in the Protocols. However, the general obligations for abatement are part of its national sustainable development policy. Monaco, nevertheless, plans to ratify the Protocols on Heavy Metals, Volatile Organic Compounds and Sulphur.
133. **Netherlands.** The Netherlands has ratified the 1998 Protocol on Persistent Organic Pollutants on 23 June 2000.
134. **Poland.** Poland has signed the 1998 Protocol on Persistent Organic Pollutants on 24 June 1998 and is planning to ratify it in 2001. As soon as the strategy on POP emission reduction is approved by the Government the ratification procedure can be started.
135. **Republic of Moldova.** Republic of Moldova plans to ratify/accede to the 1998 Protocol on Persistent Organic Pollutants (POPs). We plan to ratify it this year. Presently we are effectuating the necessary procedures for that. Unfortunately, the greatest obstacle of the earlier ratification is the difficult economic situation in which we have been put now. That is why it's hard to undertake the monitoring and laboratory control, there is insufficiency of knowledge for estimating critical loads and levels, pollutants transfer assessment on long ranges, level of sedimentation and modelling.
136. **Slovakia.** Slovakia has to prepare the detailed emission inventory for POPs and then decide on appropriate measures to fulfil commitments of the protocol. We expect its acceptance or approval by the end of the year 2002 at the latest, most likely within the year 2001.
137. **Spain.** Yes
138. **Switzerland.** The 1998 persistent organic pollutants protocol will probably be ratified at the end of 2000 by Switzerland.

139. **Turkey.** See answer to question 69.

140. **Ukraine.** See answer to question 69.

141. **United Kingdom.** The UK anticipates ratifying the POPs Protocol in 2001. Further research is required to prepare the UK for ratification, and it may be that EC action is required to fulfil some aspects of the Protocol's obligations.

142. **United States.** At the conclusion of the Global POPs negotiations, the United States will begin the process to make the appropriate changes to U.S. law that are necessary to ratify both the 1998 POPs Protocol and Global POPs concurrently.

143. **European community.** Ratification on behalf of the European Community is planned. No precise timetable yet.