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ECONOMIC COMMISSION FOR EUROPE
EXECUTIVE BODY FOR THE CONVENTION ON
LONG-RANGE TRANSBOUNDARY AIR POLLUTION
Steering Body to the Cooperative Programme for Monitoring and Evaluation
of the Long-range Transmission of Air Pollutants in Europe (EMEP)
(Twenty-ninth session, Geneva, 5-7 September 2005)
Item 4 (g) of the provisional agenda

PRESENT STATE OF EMISSION DATA

Note by the Meteorological Synthesizing Centre-West
prepared in consultation with the secretariat

Introduction

1. This document provides information on the emissions reporting round of 2005 including information on the completeness and timeliness of submissions. In section III, information on Parties emission reductions between 1990 and 2003 are reported. In section IV, draft decisions for the EMEP Steering Body and Executive Body are introduced for defining the periodic basis, the methods and the temporal and spatial resolution of reporting by Parties to the Protocol on Heavy Metals, the Protocol on Persistent Organic Pollutants (POPs) and the Gothenburg Protocol. The draft decisions are annexed.

2. The Executive Body, at its twenty-second session, invited the secretariat to discuss with the Bureaux of its subsidiary bodies the possibilities of streamlining documentation and making better use of the Internet for dissemination of information (ECE/EB.AIR/83, para 56(i)). Following discussions with the Bureau of the EMEP Steering Body in February 2005, it was agreed that the officially submitted emission data from the 2005 reporting round would be made available on the EMEP website at: <http://webdab.emep.int/> and not reported in documents submitted to the Steering Body.

Documents prepared under the auspices or at the request of the Executive Body for the Convention on Long-range Transboundary Air Pollution for GENERAL circulation should be considered provisional unless APPROVED by the Executive Body.

I. REPORTING EMISSIONS UNDER THE CONVENTION

3. The Executive Body, at its twenty-second session, recognized the importance of further developing the inventory improvement programme and took note of the future need to revise the Emission Reporting Guidelines. It urged all Parties to report emission data on POPs, heavy metals and particulate matter (PM) and make efforts to improve the quality of emission data. It requested Parties to report emission data for 2003 and any necessary revisions to historical data in accordance with the Emission Reporting Guidelines and the letter sent to the heads of delegation by the secretariat, including memo items, by 15 February 2005 (ECE/EB.AIR/83, paras. 17(j)-(l))

4. In its letter to heads of delegation, the secretariat stressed the importance of reporting data on POPs, heavy metals and PM, not only because of the entry into force of the Protocol on POPs and the Protocol on Heavy Metals, but also because of the significant data gaps for these substances as previously noted by the Task Force on Emission Inventory and Projections.

5. In accordance with paragraph 38 of the Emission Reporting Guidelines, Parties were encouraged to submit, no later than three months after submitting their emission data report (i.e. by 15 May 2005), an Informative Inventory Report (IIR). The information in these reports cover, inter alia, methodologies used, uncertainties and recalculations. The IIR is increasingly considered an important part of the submission, containing crucial information for inventory review.

6. To facilitate emission reporting, the EMEP Meteorological Synthesizing Centre-West (MSC-West) prepared electronic reporting templates, covering both quantitative data and items for the IIR, and made them available at: <http://www.emep.int/emis2005/reportinginstructions.html>. Experts were strongly encouraged to use the templates to enable efficient processing and review of submissions as well as to record completeness, internal consistency, timeliness and correctness of formatting for compliance purposes. An electronic data-checking tool, REPDAB, designed to assist experts verify their submissions, was available at: <http://webdab.emep.int/repdab.html>. REPDAB was updated and made more user-friendly following feedback from designated experts in the 2004 reporting round. Experts were encouraged to use REPDAB to quality control their submissions and complete corrections before submitting data to the secretariat. About half of the submissions received had used REPDAB. As in previous years, Parties were requested to report according to the formats in the Emission Reporting Guidelines. All but two Parties reporting in 2005 were able to use, at least partially, the required formats.

II. OFFICIAL SUBMISSIONS OF 2003 DATA

7. As noted above, the deadline for submissions of data was 15 February 2005. In addition, gridded data were due on 1 March 2005 and final revisions and corrections by 10 March 2005.

8. By 23 June 2005, 37 Parties out of a total of 49 (76%) had submitted their official emission data, compared with 35 (71%) in 2004. Of those reporting, 27 (73%) reported on time, slightly more than in 2004 (26 Parties, 74%) and slightly fewer than in 2003 (29 Parties, 81%). All but two Parties (Armenia and Greece) reported emission data according to the templates provided on the EMEP website. Twenty-six Parties (70% of those reporting) reported both on time and with the requested reporting tables, an increase from the 50% of 2003.

9. Regarding emission data for POPs and heavy metals, this was the first year of reporting on these substances following the entry into force of the two Protocols for these substances. Out of 37 Parties reporting, 31 (84%) submitted data on at least one of the priority POPs (i.e. the POPs in annex III to the Protocol) in accordance with paragraph 6(g) of the Emission Reporting Guidelines: polycyclic aromatic hydrocarbons (PAHs), dioxins and furans (PCDD/F) and hexachlorobenzene (HCB). Thirty Parties (81%) submitted data on the three priority heavy metals (i.e. the heavy metals in annex I to the Protocol) in accordance with paragraph 6(f) of the Guidelines: cadmium, lead and mercury.

III. NATIONAL EMISSION REDUCTIONS FROM 1990 TO 2003

10. Decreasing emissions is a basic obligation for Parties to the Convention as well as a requirement under most of the protocols. To illustrate Parties efforts to achieve cuts, percentage emission reductions were calculated for sulphur, nitrogen oxides, ammonia and non-methane volatile organic compounds (NMVOCs) between the Gothenburg Protocol base year, 1990, and the reporting year (see table 1 and figures 1-4). The calculations used the officially reported data for the two years as held in the Convention's emission database. The Parties ratifying the Protocol and the Signatories to the Protocol are grouped separately in the figures.

11. The Gothenburg Protocol sets emission ceilings for the four pollutants for 2010. Based on the the most recent submissions, many Parties to that Protocol have already made progress towards meeting their obligations, especially for some pollutants, whilst others still have much left to do.

IV. DRAFT DECISIONS ON EMISSION DATA REPORTING UNDER THE 1998 PROTOCOL ON HEAVY METALS, THE 1998 PROTOCOL ON PERSISTENT ORGANIC POLLUTANTS(POPs) AND THE 1999 GOTHENBURG PROTOCOL

12. At its twenty-sixth session, the Steering Body adopted a decision on the legal status of the Guidelines for Estimating and Reporting Emissions Data (EB.AIR/GE.1/2002/2, annex), taking note of the information in the secretariat note (EB.AIR/GE.1/2002/13). By virtue of this decision, the EMEP Steering Body made use of the legal authority delegated to it by article 5, paragraph 2, of the 1994 Oslo Protocol and proposed similar steps to the Executive Body.

13. Furthermore, on the recommendation of the EMEP Steering Body, the Executive Body, at its twentieth session, adopted Decision 2002/10 on Emission Data Reporting under the Convention

and the Protocols in Force. By virtue of that decision, the Executive Body made use of the legal authority delegated to it under article 8(a) of the Convention, article 8 of the 1991 Protocol on VOCs, and article 5 of the 1994 Oslo Protocol.

14. In view of the entry into force of the Protocol on Heavy Metals, the Protocol on POPs and the Gothenburg Protocol, it is proposed that the EMEP Steering Body adopt a decision whereby it implements the authority delegated to it by the Protocols, with particular reference to reporting requirements. The EMEP Steering Body may also wish to propose similar steps to the Executive Body. As the relevant provisions under the three Protocols are essentially the same, they are integrated into decisions which cover all three Protocols.

15. The following provisions (annexes I and II) of the three Protocols expressly authorize either the Parties at a session of the Executive Body, the EMEP Steering Body, or the EMEP Steering Body with the approval of the Parties at a session of the Executive Body, to take decisions with legally binding effect, with particular reference to reporting requirements.

A. 1998 Protocol on Heavy Metals, article 7 (Reporting)

16. Under article 7.1(a), each Party is to report to the Executive Body, on a periodic basis as determined by the Parties at a session of the Executive Body, information on the measures it has taken to implement the Protocol. According to article 7.2 this information is to be reported in conformity with a decision on format and content to be approved by the Parties at a session of the Executive Body.

17. Under article 7.1(b), each EMEP Party is to report to EMEP, on a periodic basis to be determined by the EMEP Steering Body and approved by the Parties at a session of the Executive Body, information on emissions levels, using the methodologies and temporal and spatial resolution specified by the EMEP Steering Body.

B. 1998 Protocol on POPs, article 9 (Reporting)

18. Under article 9.1(a), each Party is to report to the Executive Body, on a periodic basis as determined by the Parties at a session of the Executive Body, information on the measures it has taken to implement the Protocol. According to article 9.2, this information is to be reported in conformity with a decision on format and content to be approved by the Parties at a session of the Executive Body.

19. Under article 9.1(b), each EMEP Party is to report to EMEP, on a periodic basis to be determined by the EMEP Steering Body and approved by the Parties at a session of the Executive Body, information on emissions levels, using the methodologies and temporal and spatial resolution specified by the EMEP Steering Body.

C. 1999 Gothenburg Protocol, article 7 (Reporting)

20. Under article 7.1(a), each Party is to report to the Executive Body, on a periodic basis as determined by the Parties at a session of the Executive Body, information on the measures it has taken to implement the Protocol. According to Article 7.2, this information is to be reported in conformity with a decision on format and content to be approved by the Parties at a session of the Executive Body.

21. Under article 7.1(b), each EMEP Party is to report to EMEP, on a periodic basis to be determined by the EMEP Steering Body and approved by the Parties at a session of the Executive Body, information on emission levels (including emissions of each substance in the reference year of 1990), using the methodologies and temporal and spatial resolution specified by the EMEP Steering Body.

22. The appended draft decision, if adopted, would make the relevant provisions of the Guidelines legally binding for Parties to the three Protocols within the geographic scope of EMEP. In the decision, the secretariat is also requested to prepare a similar draft decision for consideration by the Executive Body at its twenty-third session, which would approve the decision of the EMEP Steering Body, and it is recommended that the Executive Body consider adopting such a decision.

23. A draft decision for the Executive Body is also appended.

Table 1. Percentage reduction (1990-2003) of 1990 levels (a negative number indicates an increase)¹

Party	SO ₂			NO ₂			NH ₃			NMVOC		
	1990	2003	Reduction	1990	2003	Reduction	1990	2003	Reduction	1990	2003	Reduction
Units	Gg SO ₂		%	Gg NO ₂		%	Gg NH ₃		%	Gg NMVOC		%
Parties to the 1999 Gothenburg Protocol (as of 14th June 2005)												
Czech Republic	1881	232	88	544	324	40	156	82	47	441	203	54
Denmark	177	31	83	283	209	26	133	98	27	229	158	31
Finland	260	99	62	300	219	27	38	33	13	224	145	35
Germany	5326	616	88	2846	1428	50	736	601	18	3534	1460	59
Latvia	99	8	92	70	37	47	52	15	71	121	79	34
Lithuania	222	43	81	158	53	67	84	34	59	108	74	31
Netherlands	189	65	66	559	364	35	249	128	49	486	225	54
Norway	52	23	56	224	220	2	20	23	-12	295	300	-2
Slovakia	542	106	80	216	98	55	63	30	52	252	82	67
Slovenia	196	66	67	63	56	11	24	19	20	44	46	-4
Spain	2166	1353	38	1247	1519	-22	329	399	-21	1135	1146	-1
Sweden	112	52	54	315	206	35	55	56	-2	517	303	41
Switzerland	42	18	57	154	89	42	65	52	20	279	111	60
United States ³	21481	14464	33	23161	18804	19	3926	3366	14	19099	14566	24
Signatories to the 1999 Gothenburg Protocol (as of 14th June 2005)												
Armenia	72	10	86	46	15	68	25	15	42	81	28	65
Austria	76	34	55	211	229	-9	57	54	5	286	182	36
Belgium	354	153	57	368	297	19	109	77	30	399	226	43
Bulgaria	2008	968	52	361	209	42	144	52	64	217	119	45
Canada ^{2,3}	1872	1093	42	2759	2559	7		612		3093	2705	13
France	1330	492	63	1830	1220	33	787	753	4	2416	1400	42
Hungary	1010	347	66	238	180	25	124	67	46	205	155	24
Ireland	186	76	59	118	120	-1	112	116	-4	110	78	29
Republic of Moldova	265	21	92	100	30	70	49	28	43	157	29	82
United Kingdom	3711	979	74	2828	1570	44	370	300	19	2421	1089	55
Non-signatories to the 1999 Gothenburg Protocol (as of 14th June 2005)												
Belarus	637	131	79	285	140	51	(4)	120	X	533	308	42
Cyprus	46	46	1	18	22	-21		6			16	
Estonia	252	101	60	68	39	42	24	8	68	88	40	55
Monaco ⁴	0.06	0.08	-20.83	0.53	0.66	-24.78	0.00	0.01	-493.62	0.70	0.45	35.92
Serbia and Montenegro	508	396	22	66	52	21						
Ukraine	2783	1252	55	1097	523	52	729	242	67	1369	318	77

¹ Only Parties reporting emissions (including main sources) both for 1990 and 2003 are listed.² For SO₂ only the Sulphur Oxides Management Area (SOMA) emissions are listed.³ Special notes for NH₃ and NMVOC are stated in the Gothenburg Protocol.⁴ The NH₃ increase is not included in the reduction histograms.

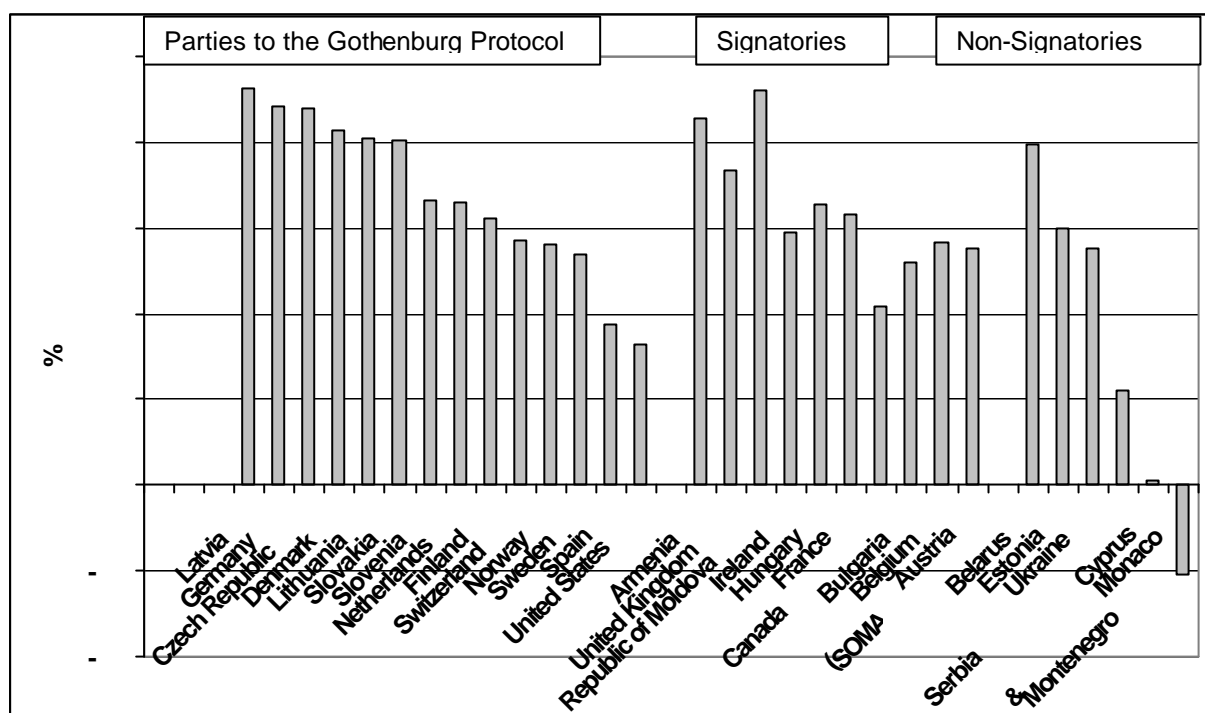


Figure 1. Emission reductions of sulphur in the ECE region for the period 1990-2003 (based on the latest data available). Parties to the 1999 Gothenburg Protocol are on the left, Signatories are in the middle and Non-Signatories are on the right. Only countries that have reported national total emission data including main sources for both 1990 and 2003 are listed

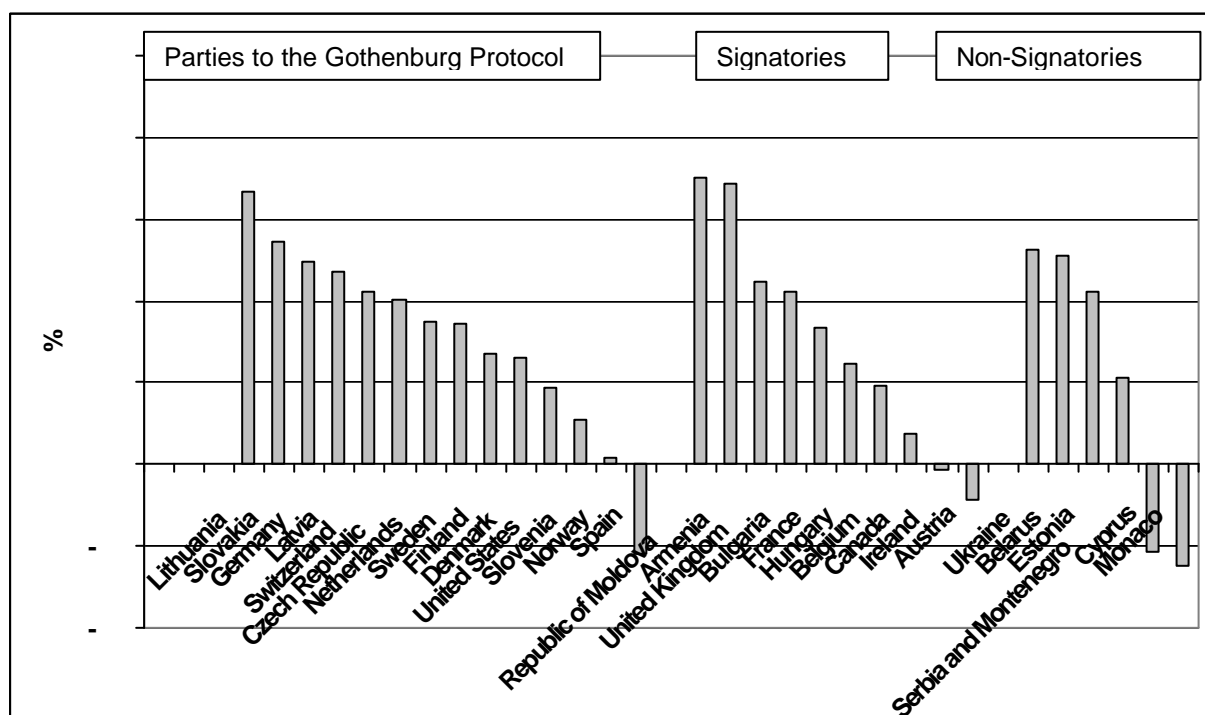


Figure 2. Emission reductions of nitrogen oxides in the ECE region for the period 1990-2003 (based on the latest data available). Parties to the 1999 Gothenburg Protocol are on the left, Signatories are in the middle and Non-Signatories are on the right. Only countries that have reported national total emission data including main sources for both 1990 and 2003 are listed

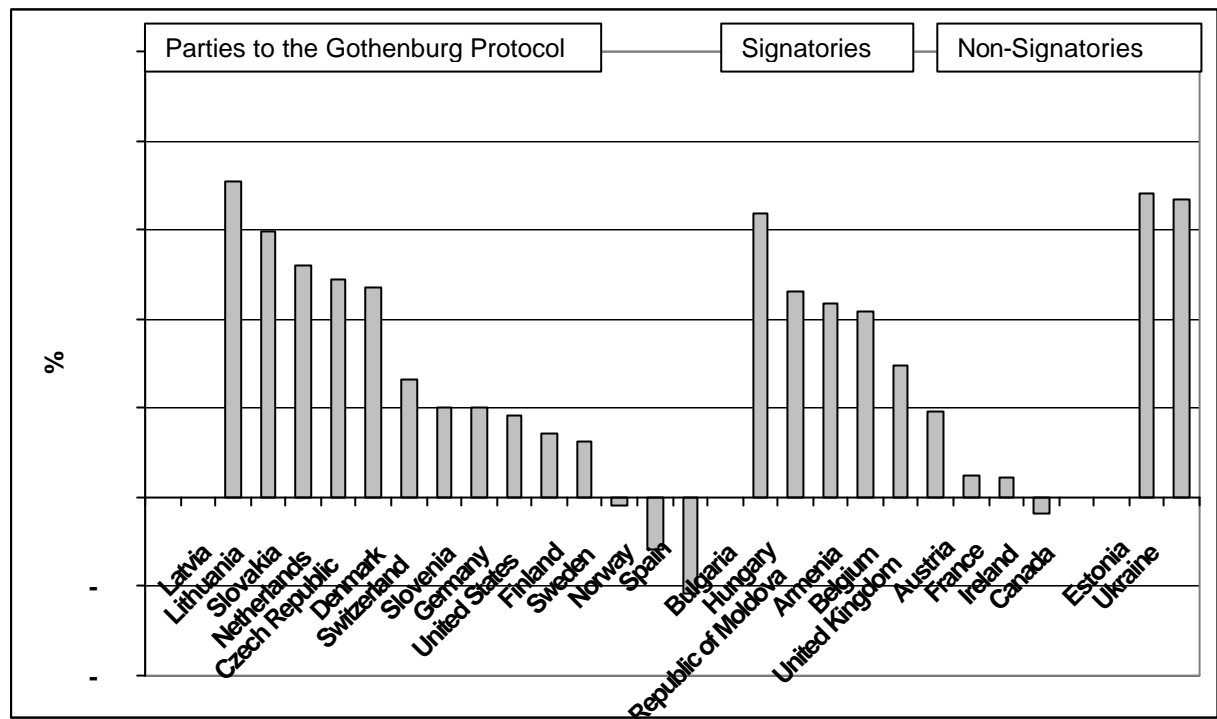


Figure 3. Emission reductions of ammonia in the ECE region for the period 1990-2003 (based on the latest data available). Parties to the 1999 Gothenburg Protocol are on the left, Signatories are in the middle and Non-Signatories are on the right. Only countries that have reported national total emission data including main sources for both 1990 and 2003 are listed

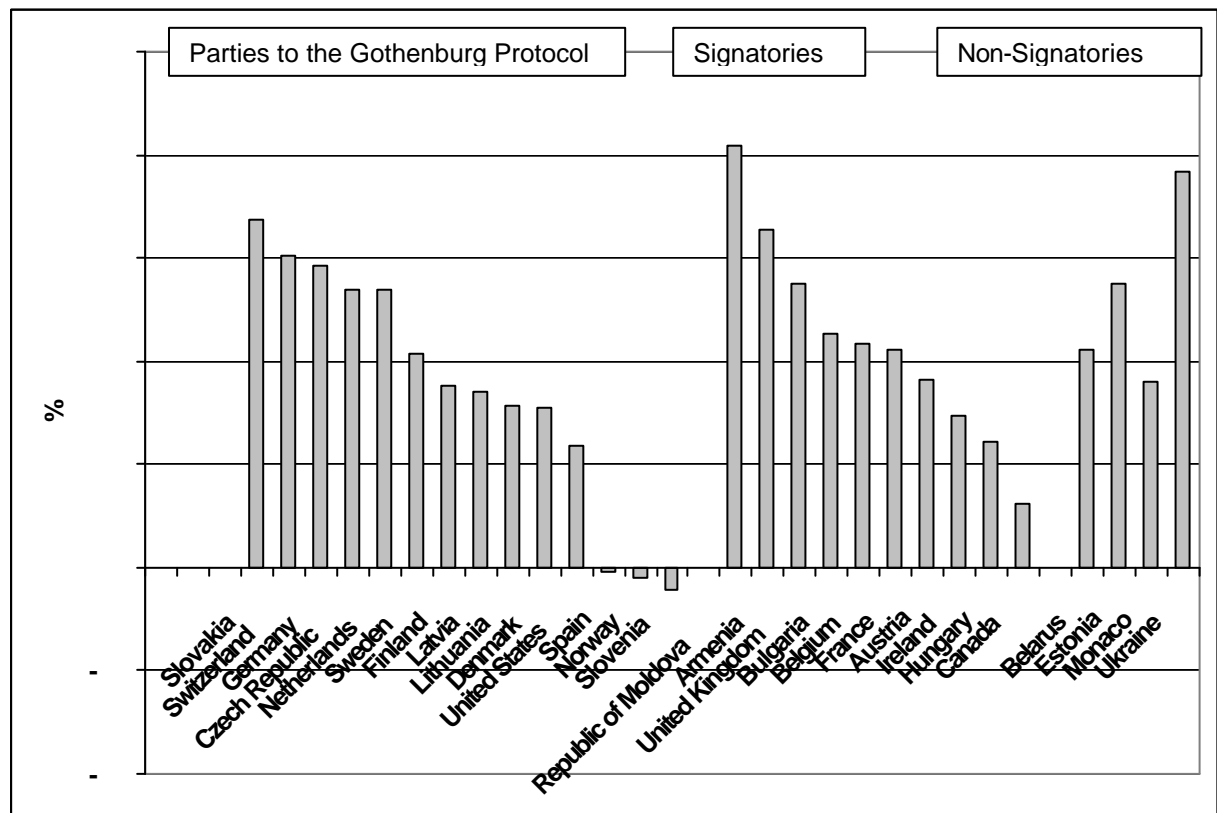


Figure 4. Emission reductions of non-methane volatile organic compounds in the ECE region for the period 1990-2003 (based on the latest data available). Parties to the 1999 Gothenburg Protocol are on the left, Signatories are in the middle and Non-Signatories are on the right. Only countries that have reported national total emission data including main sources for both 1990 and 2003 are listed

Annex I

Draft Decision for the EMEP Steering Body

**DRAFT DECISION ON EMISSION DATA REPORTING UNDER
THE PROTOCOL ON HEAVY METALS, THE PROTOCOL ON POPs
AND THE GOTHENBURG PROTOCOL**

The EMEP Steering Body,

Referring to the Guidelines for Estimating and Reporting Emissions, adopted at its twenty-sixth session and approved by the Executive Body at its twentieth session,

Acting under article 7, paragraph 1 (b), of the 1998 Protocol on Heavy Metals, article 9, paragraph 1 (b) of the 1998 Protocol on POPs and article 7, paragraph 1(b) of the Gothenburg Protocol,

1. Determines the periodic basis referred to in article 7, paragraph 1 (b), of the 1998 Protocol on Heavy Metals, article 9, paragraph 1 (b), of the 1998 Protocol on POPs and article 7, paragraph 1 (b), of the Gothenburg Protocol for the reporting by Parties within the geographic scope of EMEP to be that given in paragraph 37 of the Guidelines;

2. Invites the Parties to the 1998 Protocol on Heavy Metals, at a session of the Executive Body, to approve the above decision on the periodic basis insofar as it relates to that Protocol, in accordance with article 7, paragraph 1 (b), of the Protocol;

2 bis. Invites the Parties to the 1998 Protocol on POPs, at a session of the Executive Body, to approve the above decision on the periodic basis insofar as it relates to that Protocol, in accordance with article 9, paragraph 1 (b), of the Protocol;

2 ter. Invites the Parties to the 1999 Gothenburg Protocol, at a session of the Executive Body, to approve the above decision on the periodic basis insofar as it relates to that Protocol, in accordance with article 7, paragraph 1 (b), of the Protocol;

3. Specifies the methodologies referred to in article 7, paragraph 1 (b), of the 1998 Protocol on Heavy Metals, article 9, paragraph 1 (b), of the 1998 Protocol on POPs and article 7, paragraph 1 (b), of the Gothenburg Protocol for the reporting by Parties within the geographic scope of EMEP to be those given in section IV of the Guidelines;

4. Specifies the temporal resolution referred to in article 7, paragraph 1 (b), of the 1998 Protocol on Heavy Metals, article 9, paragraph 1 (b), of the 1998 Protocol on POPs and article 7, paragraph 1 (b), of the Gothenburg Protocol for the reporting by Parties within the geographic scope of EMEP to be that given in paragraph 21 of the Guidelines;

5. Specifies the spatial resolution referred to in article 7, paragraph 1 (b), of the 1998 Protocol on Heavy Metals, article 9, paragraph 1 (b), of the 1998 Protocol on POPs and article 7, paragraph 1 (b), of the Gothenburg Protocol for the reporting by Parties within the geographic scope of EMEP to be that given in paragraph 22 of, and annex V to, the Guidelines;

6. Requests the secretariat, in consultation with the Implementation Committee, to prepare a draft decision, for consideration by the Executive Body, that would enable the Executive Body to make use of its delegated authority under article 7, paragraph 1 (b), of the 1998 Protocol on Heavy Metals, article 9, paragraph 1 (b), of the 1998 Protocol on POPs and article 7, paragraph 1 (b), of the Gothenburg Protocol;

7. Recommends that the Executive Body consider adopting the draft decision referred to in paragraph 6 above.

Annex II

Draft Decision for the Executive Body

**DRAFT DECISION ON EMISSION DATA REPORTING UNDER
THE PROTOCOL ON HEAVY METALS, THE PROTOCOL ON POPs
AND THE GOTHENBURG PROTOCOL**

The Parties to the Protocol on Heavy Metals, the Protocol on POPs, and the Gothenburg Protocol, respectively, meeting within the Executive Body,

Referring to the Guidelines for Estimating and Reporting Emissions Data, adopted at the twenty-sixth session of the EMEP Steering Body and approved by the Executive Body at its twentieth session,

Recalling the Executive Body's Decision 2002/10 on Emission Data Reporting under the Convention and the Protocols in force,

Noting the importance of reliable emission data both for the purpose of reviewing Parties' compliance with their obligations under the protocols and as a basis for scientific work to further develop abatement strategies under the Convention,

Acting under article 7, paragraph 1 (b) of the 1998 Protocol on Heavy Metals, article 9, paragraph 1 (b) of the 1998 Protocol on POPs and article 7, paragraph 1 (b) of the Gothenburg Protocol,

Approve the decision by the EMEP Steering Body that the periodic basis, determined in accordance with article 7, paragraph 1 (b) of the 1998 Protocol on Heavy Metals, article 9, paragraph 1 (b) of the 1998 Protocol on POPs and article 7, paragraph 1 (b) of the Gothenburg Protocol for the reporting by Parties within the geographic scope of EMEP:

(a) Shall be annual and that submissions shall reach the secretariat before 15 February, for data other than gridded data, on inventories for the calendar year that ended 13 months prior to that date and, if necessary, for updates to data for earlier years and the emission projections for 2010, 2015, and 2020 (every fifth year);

(b) Gridded data shall reach the secretariat no later than 1 March.