



**Economic and Social
Council**

Distr.
GENERAL

EB.AIR/WG.5/1999/1
25 February 1999

Original: ENGLISH

ECONOMIC COMMISSION FOR EUROPE

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

Working Group on Strategies
(Twenty-ninth session, 22 - 26 March 1999)
Item 2 of the provisional agenda

**COMMENTS ON THE DRAFT COMPOSITE NEGOTIATING TEXT
FOR A PROTOCOL ON NITROGEN OXIDES AND RELATED SUBSTANCES**

Introduction

At its twenty-eighth session, the Working Group on Strategies agreed on a set of work elements to be carried out in preparation of its twenty-ninth session (EB.AIR/WG.5/58, annex II). The results of this work are proposals for the draft protocol to replace the text in EB.AIR/WG.5/R.80. In addition to the proposed elements set out below, some of the technical annexes have been revised since the twenty-eighth session and will be presented in document EB.AIR/WG.5/1999/2. A revised draft of article 3, basic obligations, was prepared by the Working Group on Strategies at its twenty-eighth session (EB.AIR/WG.5/58, annex I).

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. PROPOSAL FOR THE PREAMBLE

The following draft preamble was proposed by Ms. J. BARTON (Canada):

"The Parties,

Determined to implement the Convention on Long-range Transboundary Air Pollution,

Aware that nitrogen oxides, [sulphur,] volatile organic compounds and reduced nitrogen compounds have been associated with adverse effects on human health or the environment,

Concerned that critical loads for acidification, critical loads for nutrient nitrogen and critical levels for ozone are still exceeded in many areas of the UN/ECE region,

Concerned also that emissions of nitrogen oxides, [sulphur,] volatile organic compounds and reduced nitrogen compounds are transported in the atmosphere across international boundaries and are deposited far from their site of origin,

Resolved to apply a multi-pollutant/multi-effect approach to preventing or minimizing the exceedances of critical loads and levels,

Aware that techniques and management practices are available to reduce emissions of these substances,

Resolved to take measures to anticipate, prevent or minimize emissions of these substances, taking into account the application of the precautionary approach, as set forth in principle 15 of the Rio Declaration on Environment and Development,

Reaffirming that States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental and development policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction,

Conscious of the need for a cost-effective regional approach to combating air pollution that takes account of the variations in effects and abatement costs between countries,

Noting the important contribution of the private and non-governmental sectors to knowledge of the effects associated with these substances and available abatement techniques, and their role in assisting in the reduction of emissions to the atmosphere,

Taking into consideration best available scientific and technical knowledge and data on emissions, atmospheric processes and effects on human health or the environment of these substances, as well as on abatement costs, and acknowledging the need to continue scientific and technical cooperation to further the understanding of these issues,

Noting that abating the emissions of these substances may provide additional benefits for the abatement of emissions of other pollutants,

Noting also that under the Protocol concerning the Control of Emissions of Nitrogen Oxides or their Transboundary Fluxes, adopted at Sofia on 31 October 1988, and the Protocol concerning the Control of Emissions of Volatile Organic Compounds or their Transboundary Fluxes, adopted at Geneva on 18 November 1991, there are already agreements to control emissions of nitrogen oxides and volatile organic compounds, and that the technical annexes to both Protocols already contain technical guidance for reducing these emissions,

Bearing in mind that under the Protocol on Further Reduction of Sulphur Emissions, adopted at Oslo on 14 June 1994, there is already agreement to reduce sulphur emissions in order to contribute to the abatement of acid deposition by diminishing the exceedances of critical sulphur depositions, which have been derived from critical loads of acidity according to the contribution of oxidized sulphur compounds to the total acid deposition in 1990,

Aware that methane and carbon monoxide emitted by human activities contribute, in the presence of nitrogen oxides and volatile organic compounds, to the formation of tropospheric ozone, and

Aware also that methane and nitrous oxide are expected to become the subject of control actions in other forums,

Have agreed as follows:"

II. PROPOSAL FOR ARTICLES 1 AND 2

The following two articles were compiled by the secretariat based on comments made by Parties at the twenty-eighth session and changes made to article 3 (EB.AIR/WG.5/58, annex I). The definition of substances in draft article 1 was prepared in consultation with the Chairman of the Task Force on Emission Inventories. Draft article 2 takes into account comments received from experts of the Task Force on Mapping as a result of the consultations by the Chairman of the Working Group on Effects (EB.AIR/WG.5/58, annex II, para. 1 (g)).

Article 1

DEFINITIONS

For the purposes of the present Protocol,

1. "Convention" means the Convention on Long-range Transboundary Air Pollution, adopted in Geneva on 13 November 1979;
2. "EMEP" means the Cooperative Programme for Monitoring and Evaluation of Long-range Transmission of Air Pollutants in Europe;
3. "Executive Body" means the Executive Body for the Convention constituted under article 10, paragraph 1, of the Convention;

4. "Commission" means the United Nations Economic Commission for Europe;
5. "Parties" means, unless the context otherwise requires, the Parties to the present Protocol;
6. "Geographical scope of EMEP" means the area defined in article 1, paragraph 4, of the Protocol to the 1979 Convention on Long-range Transboundary Air Pollution on Long-term Financing of the Cooperative Programme for Monitoring and Evaluation of the Long-range Transmission of Air Pollutants in Europe (EMEP), adopted in Geneva on 28 September 1984;
7. "Emission" means a release from a point or diffuse source into the atmosphere; 1/
- [8. "Nitrogen oxides" means ... ;]
- [9. "Ammonia" means ... ;]
- [10. "Nitrogen compounds" means, unless otherwise specified, the oxidized nitrogen compounds nitrogen oxide and nitrogen dioxide and their reaction products, and the reduced nitrogen compounds ammonia and its reaction products;]
- [11. "Sulphur" means all sulphur compounds, expressed as kilotonnes of sulphur dioxide (kt SO₂); 2/]
12. "Volatile organic compounds", or "VOCs", means, unless otherwise specified, all organic compounds of an anthropogenic nature, other than methane, that are capable of producing photochemical oxidants by reaction with nitrogen oxides in the presence of sunlight; 3/
13. "Critical load" means a quantitative estimate of an exposure to one or more pollutants below which significant harmful effects on specified sensitive elements of the environment do not occur, according to present knowledge; 2/
14. "Critical levels" means the concentration of pollutants in the atmosphere above which direct adverse effects on receptors, such as human beings, plants, ecosystems or materials, may occur, according to present knowledge; 2/
- [15. "Stationary source" means any fixed building, structure, facility, installation, or equipment that emits or may emit [sulphur,] nitrogen oxides, volatile organic compounds or ammonia directly or indirectly into the atmosphere; 4/
16. "New stationary source" means any stationary source of which the construction or substantial modification is commenced after the expiry of two years from the date of entry into force of this Protocol. It shall be a matter for the competent national authorities to decide whether a modification is substantial or not, taking into account such factors as the environmental benefits of the modification; 4/
17. "Major stationary source" means any stationary source that is listed in annex [...] and that contributes at least one per cent to a Party's total emissions from stationary sources in [1990]. 4/]

Article 2

OBJECTIVE

The objective of the present Protocol is to control and reduce emissions of [sulphur,] nitrogen oxides, ammonia and volatile organic compounds (VOCs) in order to protect human health and the environment, including natural ecosystems, materials and crops, from adverse effects, in particular those of acidification, eutrophication and tropospheric ozone, and to ensure, as far as possible, without entailing excessive cost, that in the long term, taking into account advances in scientific knowledge, atmospheric depositions or concentrations do not exceed:

- The critical loads for acidity [, as illustrated by the critical load map in annex (critical loads acidity)]; 5/
- The critical loads for nutrient nitrogen [, as illustrated by the critical load map in annex (critical loads eutrophication)];
- The critical levels for ozone, as given in annex (critical level ozone);

and that measures taken to reduce the emissions of nitrogen compounds do not lead to a significant increase in the total national nitrous oxides emissions.

III. PROPOSAL FOR ARTICLES 4 AND 5

The following three articles were drafted by Mr. R. GUARDANS (Spain):

Article 4

EXCHANGE OF INFORMATION AND TECHNOLOGY

1. The Parties shall, in a manner consistent with their laws, regulations and practices, create favourable conditions to facilitate the exchange of information, technologies and techniques, designed to reduce the emission of sulphur, reduced and oxidized nitrogen and volatile organic compounds by promoting inter alia:

(a) The development and updating of databases on best available techniques, including those that increase energy efficiency, low-emission burners and good agricultural practices as described in annexes [VOC, sulphur, NOx BAT annexes and ammonia practice and techniques annexes];

(b) The exchange of information and experience in the development of more efficient transport systems;

(c) Direct industrial contacts and cooperation, including joint ventures;

(d) The provision of technical assistance.

2. In promoting the activities specified in paragraph 1 above, the Parties shall create favourable conditions by facilitating contacts and cooperation

among appropriate organizations and individuals in the private and public sectors that are capable of providing technology, design and engineering services, equipment or finance.

3. The Parties may be assisted by the Implementation Committee in the implementation of the provisions in this Protocol.

Article 4bis

PUBLIC AWARENESS

The Parties shall, consistent with their laws, regulations and practices, promote the provision of information to the general public [in accordance with the Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters]. This information may include, inter alia:

- (a) Information on renewable energies and the efficient use of energy, including in transport;
- (b) Information, including labelling, on volatile organic compounds in products;
- (c) Information on management options for VOC-containing wastes;
- (d) Information on good agricultural practices to reduce emissions of reduced nitrogen;
- (e) Information on levels of tropospheric ozone.

Article 5

STRATEGIES, POLICIES, PROGRAMMES, MEASURES AND INFORMATION

1. Each Party shall, in order to implement its obligations under article 3 above:

- (a) Adopt strategies, policies and programmes, without undue delay after the present Protocol enters into force for it;
- (b) Apply measures to control and reduce its emissions of sulphur and nitrogen compounds and volatile organic compounds;
- (c) Apply measures to increase energy efficiency and the use of renewable energy;
- (d) Apply measures to increase the use of less polluting fuels, particularly in the transport sector;
- (e) Develop and introduce less polluting transport systems, and promote traffic management systems to reduce overall emissions from road traffic;
- (f) Apply measures to improve the development and introduction of low-polluting processes using the guidance in annex (NO_x BAT);

(g) Encourage the implementation of management programmes to reduce emissions, including voluntary programmes, and the use of economic instruments, taking into account the guidance document adopted by the Parties at a session of the Executive Body; 6/

(h) Apply measures to reduce the emissions from waste products containing volatile organic compounds.

2. Each Party shall collect and maintain information on:

(a) Actual levels of emissions of sulphur, nitrogen compounds and volatile organic compounds, and of ambient concentrations and depositions of these compounds and ozone, taking into account, for those Parties within the geographical scope of EMEP, the work plan of EMEP; and

(b) The effects of ambient concentrations and of the deposition of sulphur, nitrogen compounds, volatile organic compounds and ozone on human health, terrestrial and aquatic ecosystems and materials.

3. The Parties may take more stringent measures than those required under the present Protocol.

IV. PROPOSAL FOR ARTICLE 6

The Chairman of the Steering Body of EMEP has proposed amendments to paragraphs 1 and 2 of article 6, as set out in the revised article 6 below. The work on articles 7 and 9 foreseen by the Working Group on Strategies (EB.AIR/WG.5/58, annex II, para. 1 (e)) had not been finalized in time to be included into this document.

Article 6

REPORTING

1. Each Party shall report, through the Executive Secretary of the Commission, to the Executive Body, on a periodic basis as determined by the Executive Body, information on:

(a) The implementation of strategies, policies, programmes and measures referred to in article 5, paragraph 1;

(b) The levels of national annual emissions of nitrogen compounds and volatile organic compounds, in accordance with guidelines adopted by the Executive Body, containing emission data for all relevant source categories; and

(c) The implementation of other obligations that it has entered into under the present Protocol, including the scientific and technical work it undertakes under the present Protocol,

in conformity with a decision regarding format and content to be adopted by the Parties at a session of the Executive Body. The terms of this decision shall be reviewed as necessary to identify any additional elements regarding the format and/or content of the information that are to be included in the reports.

2. Each Party within the geographical scope of EMEP shall report information on the levels of emissions of [sulphur,] nitrogen compounds and volatile organic compounds, through the Executive Secretary of the Commission, to EMEP, on a periodic basis to be determined by the Steering Body of EMEP and approved by the Parties at a session of the Executive Body. The methodologies, the temporal and spatial resolution, as well as the sectoral disaggregation should conform to those specified by the Steering Body of EMEP. The information shall also include data on projected emissions and current reduction plans as specified by the Steering Body of EMEP.

3. In good time before each annual session of the Executive Body, EMEP shall provide information on:

(a) Ambient concentrations and deposition of nitrogen compounds as well as ambient concentrations of volatile organic compounds and ozone; and

(b) Calculations of oxidized and reduced nitrogen budgets.

Parties in areas outside the geographical scope of EMEP shall make available similar information if requested to do so by the Executive Body.

4. The Executive Body shall, in accordance with article 10, paragraph 2 (b), of the Convention, arrange for the preparation of information on the effects of depositions of nitrogen compounds.

5. The Parties shall, at sessions of the Executive Body, arrange for the preparation, at regular intervals, of revised information on calculated and internationally optimized allocations of emissions reductions for the States within the geographical scope of EMEP, with integrated assessment models, with a view to reducing further, for the purposes of article 3, paragraph 2, of the present Protocol, the difference between actual depositions of nitrogen compounds and critical load values.

V. PROPOSAL FOR ARTICLES 8 AND 10 TO 18

Articles 8 and 10 to 18 were compared by the secretariat with the relevant provisions in the POPs Protocol. The article on compliance could be identical to that in the POPs Protocol and article 8 replaced by the draft presented below. In article 10, paragraph 2, the end of the first sentence could be amended in line with a suggestion made by the United Nations Office of Legal Affairs at the time of the finalization of the POPs Protocol, by replacing the words "without agreement" by "without special agreement". Article 12 differs significantly from the amendment article in the POPs Protocol, but, given the present draft for the basic obligations article, it seems more appropriate to follow the model of the Oslo Protocol as presented in EB.AIR/WG.5/R.80. Once the list of annexes has been agreed upon, the references to annexes in article 11 to 13 will have to be checked.

Article 8

COMPLIANCE

Compliance by each Party with its obligations under the present Protocol shall be reviewed regularly. The Implementation Committee established by decision 1997/2 of the Executive Body at its fifteenth session shall carry out such reviews and report to the Parties meeting within the Executive Body in accordance with the terms of the annex to that decision, including any amendments thereto.

Notes:

- 1/ As in the definitions used for the 1998 Heavy Metals Protocol.
- 2/ As in the definitions used for the 1994 Oslo Protocol.
- 3/ As in the definitions used for the 1991 VOC Protocol.
- 4/ Based on the definition used in the 1998 Heavy Metals Protocol. This may need to be adapted once agreement is reached on the term to be used.
- 5/ It is not possible to show the critical loads for acidity in a simple manner, such as a single map. A map of the 5-percentile equivalents per hectare per year could be included as an illustration.
- 6/ This guidance document would be based on the draft prepared by the Task Force on Economic Aspects of Abatement Strategies (EB.AIR/WG.5/1998/4).