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I

(Acts whose publication is obligatory)

COUNCIL REGULATION (EEC) No 3322/88

of 14 October 1988

on certain chlorofluorocarbons and halons which deplete the ozone layer

THE COUNCIL OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community, and in particular Article 130s thereof,

Having regard to the proposal from the Commission,

Having regard to the opinion of the European Parliament ⁽¹⁾,

Having regard to the opinion of the Economic and Social Committee ⁽²⁾,

Whereas the Community together with several of its Member States signed, on 22 March 1985, the Vienna Convention for the protection of the ozone layer;

Whereas it is established that continued emissions of certain chlorofluorocarbons and halons at current levels are likely to cause significant damage to the ozone layer; whereas there is an international consensus that significant reductions in both production and consumption of such substances are necessary; whereas Decisions 80/372/EEC ⁽³⁾ and 82/795/EEC ⁽⁴⁾ provide for controls which are of limited effect and which cover only two such substances (CFC 11 and CFC 12);

Whereas a Protocol supplementary to the Vienna Convention, the Montreal Protocol on substances that deplete the ozone layer, was negotiated and adopted on 16 September 1987; whereas the Protocol has been signed by the Community and by several of its Member States;

Whereas in view of the responsibilities of the Community for the environment and trade, the Community has approved by

Decision 88/540/EEC ⁽⁵⁾ the Vienna Convention and the Montreal Protocol;

Whereas it is necessary for action to be taken at Community level to carry out the Community's obligations under the Convention and the Protocol, in particular to control production and consumption within the Community of certain chlorofluorocarbons and halons;

Whereas, in accordance with Article 130t of the Treaty, the adoption of such Community action will not prevent any Member State from maintaining or introducing more stringent measures for the protection of the environment compatible with the Treaty;

Whereas bearing in mind the market structure for certain chlorofluorocarbons and halons, it is appropriate to control consumption of these substances by controlling supply rather than demand; whereas supply can be controlled by limiting sales and use by producers in the Community, and by limiting imports;

Whereas it is necessary to keep under review the evolution of the market in chlorofluorocarbons and halons, particularly with regard to sufficient supply for essential uses, and the state of development of appropriate substitutes;

Whereas the Protocol also requires certain restrictions to be imposed on trade with States which are not Parties to the Protocol, and requires certain data to be reported;

Whereas additional Community measures may be needed to carry out the Community's obligations under the Protocol in respect of research and development, and technical assistance;

Whereas the reductions in production and consumption envisaged for the year 1 July 1998 to 30 June 1999 and in each period of 12 months thereafter will be reconsidered in the light of any decision of the Parties in accordance with Article 2 (4) of the Protocol,

⁽¹⁾ OJ No C 187, 18. 7. 1988, p. 46.

⁽²⁾ OJ No C 208, 8. 8. 1988, p. 3.

⁽³⁾ OJ No L 90, 3. 4. 1980, p. 45.

⁽⁴⁾ OJ No L 329, 25. 11. 1982, p. 29.

⁽⁵⁾ See page 8 of this Official Journal.

HAS ADOPTED THIS REGULATION:

Article 1

This Regulation applies to the importation, exportation, production and consumption of the chlorofluorocarbons and halons referred to in Annex I.

Article 2

Definitions

In this Regulation:

- 'the Protocol' means the Montreal Protocol on substances that deplete the ozone layer,
- 'chlorofluorocarbons' means the substances listed in Group I of Annex I,
- 'halons' means the substances listed in Group II of Annex I,
- 'producer' means any natural or legal person manufacturing chlorofluorocarbons or halons within the Community,
- 'undertaking' means any natural or legal person which produces or uses in the Community chlorofluorocarbons or halons for industrial or commercial purposes or which imports those substances into, or exports them from, the Community for industrial or commercial purposes,
- 'ozone-depleting potential' means the figure specified in the final column of Annex I representing the potential effect of each substance on the ozone layer,
- 'calculated level' means a quantity determined by multiplying the quantity of each substance by the ozone-depleting potential of that substance specified in Annex I and by adding together, for each group of substances in Annex I separately, the resulting figures,
- 'industrial rationalization' means the transfer either between Parties to the Protocol or within a Member State of all or a portion of the calculated level of production of one producer to another, for the purpose of achieving economic efficiencies or responding to anticipated shortfalls in supply as a result of plant closures.

PART I

Import regime

Article 3

1. The importation into the Community of chlorofluorocarbons and halons originating in third countries shall be subject to quantitative limits.

2. For this purpose the Community shall open the quotas set out in Annex II which shall be applicable during the period laid down in that Annex.

3. The Commission, according to the procedure set out in Article 10, may modify the quotas set out in Annex II.

Article 4

1. With effect from 1 January 1990, the importation into the Community of chlorofluorocarbons and halons originating in third countries not Parties to the Protocol is prohibited.

2. By derogation from paragraph 1 above, the importation into the Community of chlorofluorocarbons and halons originating in a third country not a Party to the Protocol may be permitted by the Commission if that country is determined by a meeting of the Parties to the Protocol to be in full compliance with Articles 2 and 4 of the Protocol, and has submitted data to that effect as specified in Article 7 of the Protocol. The Commission shall act in accordance with the procedure set out in Article 10.

Article 5

1. Subject to the decision referred to in paragraph 2, the importation into the Community of products originating in third countries which are not Parties to the Protocol, containing chlorofluorocarbons or halons, is prohibited with effect from 1 January 1993.

2. The Council, on the proposal of the Commission, shall adopt before that date the list of these products in the light of the list established by the Parties to the Protocol. The Council shall act by a qualified majority.

Article 6

In the light of the decision of the Parties to the Protocol, the Council, on the proposal of the Commission, shall adopt rules applicable to the importation into the Community of products originating in third countries which are not Parties to the Protocol, which are produced with chlorofluorocarbons or halons but which do not contain these substances. The Council shall act by a qualified majority.

Article 7

1. The release into free circulation in the Community of chlorofluorocarbons or halons which are subject to the quotas referred to in Article 3 shall be subject to presentation of an import licence issued by the competent authority of the Member State in which the chlorofluorocarbons or halons

are to be released into free circulation in the Community. This licence shall be issued in accordance with the quotas allocated to importers by the Commission following the procedure set out in Article 10.

2. A request for a licence shall contain:
- (a) the name and address of the importer;
 - (b) the description of each substance stating:
 - the commercial description,
 - the heading in the combined nomenclature,
 - the country of origin,
 - the country from which the substance is imported;
 - (c) a statement of the quantity of each substance to be imported in tonnes;
 - (d) the place and date of proposed importation, if known.

PART II

Article 8

Control of production

1. Each producer shall, subject to the provisions of paragraphs 3 and 4, ensure that:
 - the calculated level of its production of chlorofluorocarbons in the period 1 July 1989 to 30 June 1990 and in each 12-month period thereafter, does not exceed the calculated level of its production in 1986,
 - the calculated level of its production of chlorofluorocarbons in the period 1 July 1993 to 30 June 1994 and in each 12-month period thereafter, does not exceed 80 % of the calculated level of its production in 1986;
 - the calculated level of its production of chlorofluorocarbons in the period 1 July 1998 to 30 June 1999 and in each 12-month period thereafter, does not exceed 50 % of the calculated level of its production in 1986.
2. Each producer shall, subject to the provisions of paragraphs 3 and 4, ensure that the calculated level of its production of halons in the period 1 January to 31 December 1992 and in each 12-month period thereafter, does not exceed the calculated level of its production of halons in 1986.
3. A producer may be authorized by the Commission in agreement with the competent authority of the Member State in which it is situated, to exceed the calculated levels of production set out in paragraphs 1 and 2 for the purposes of

industrial rationalization between Parties to the Protocol or so as to satisfy the basic domestic needs of States operating under Article 5 of the Protocol, provided that the calculated levels of production of chlorofluorocarbons and halons respectively of the Member State concerned do not exceed the levels permitted by Article 2 of the Protocol for the periods in question.

In the case of authorization for industrial rationalization, the agreement of the competent authority of the Member State in which it is intended to reduce production shall also be required.

4. A producer may exceed the calculated levels of production set out in paragraphs 1 and 2 for the purposes of industrial rationalization within the Member State in whose territory the producer is established, provided that the obligations of that Member State under the Protocol are not thereby infringed. The competent authority of the Member State and the Commission shall be notified beforehand.

Article 9

Control on consumption through control of supply in the Community

1. Each producer shall ensure that the quantity of chlorofluorocarbons which it places on the market or uses for its own account within the Community from quantities produced by it shall not exceed:
 - in the period 1 July 1989 to 30 June 1990, and in each 12-month period thereafter, the calculated level of the quantity which it placed on the market or used for its own account within the Community in 1986,
 - in the period 1 July 1993 to 30 June 1994, and in each 12-month period thereafter, 80 % of the calculated level of the quantity which it placed on the market or used for its own account in 1986,
 - in the period 1 July 1998 to 30 June 1999, and in each 12-month period thereafter, 50 % of the calculated level of the quantity which it placed on the market or used for its own account in 1986.
2. Each producer shall ensure that the quantity of halons which it places on the market or uses for its own account within the Community, from quantities produced by it in the period 1 January to 31 December 1992, and in each 12-month period thereafter, shall not exceed the calculated level of the quantity which it placed on the market or used for its own account within the Community in 1986.

3. Any imports permitted in accordance with Part I of this Regulation shall be in addition to the quantities which producers may place on the market or use for their own account in accordance with this Article.

4. The quantities resulting from the application of paragraphs 1 and 2 may be increased by the Commission if imports of chlorofluorocarbons or halons into the Community in any 12-month period to which paragraph 1 or 2 applies shall be less than the respective quantitative limits fixed in Annex II.

The Commission shall act in accordance with the procedure set out in Article 10.

5. Any producer having the right to place on the market or use may transfer its right in respect of all or any of the quantity fixed in accordance with this Article to any other producer within the Community. The producer acquiring the right shall immediately notify the Commission. A transfer of the right to place on the market or use does not imply additional right to produce.

PART III

Management, data reporting and final provisions

Article 10

The Commission shall be assisted by a committee composed of the representatives of the Member States and chaired by the representative of the Commission.

The representative of the Commission shall submit to the committee a draft of the measures to be taken. The committee shall deliver its opinion on the draft within a time limit which the chairman may lay down according to the urgency of the matter. The opinion shall be delivered by the majority laid down in Article 148 (2) of the Treaty in the case of decisions which the Council is required to adopt on a proposal from the Commission. The votes of the representatives of the Member States within the Committee shall be weighted in the manner set out in that Article. The chairman shall not vote.

The Commission shall adopt measures which shall apply immediately. However, if these measures are not in accordance with the opinion of the committee, they shall be communicated by the Commission to the Council forthwith. In that event, the Commission may defer application of the measure which it has decided for a period of not more than one month from the date of such communication.

The Council, acting by a qualified majority, may take a different decision within the time limit referred to in the third paragraph.

Article 11

Data reporting

1. Each producer, importer and exporter of chlorofluorocarbons and halons shall communicate to the Commission, with a copy to the competent authority of the Member State concerned, not later than 31 August and 28 February of every year the figures of its:

- production,
- quantities placed on the market or used for the producer's own account within the Community,
- imports into the Community,
- exports from the Community, separately to countries Parties and non-parties to the Montreal Protocol,
- stocks,
- quantities destroyed, in accordance with technologies approved by the Parties to the Protocol,

of each of the chlorofluorocarbons and halons listed in Annex I in respect of the period 1 January to 30 June 1989 and for each six-month period thereafter.

2. Each company which produced, imported or exported chlorofluorocarbons or halons in 1986 shall communicate to the Commission the data referred to in paragraph 1 in respect of that year not later than 30 November 1988.

3. The communications referred to in the last indent of paragraph 1 shall be made to the Commission for the first time on 31 August or 28 February, whichever is applicable, following the date on which approval is granted.

4. The Commission will take the appropriate measures to protect the confidentiality of the submitted data.

Article 12

Inspection

1. In carrying out the tasks assigned to it by this Regulation, the Commission may obtain all necessary information from the governments and competent authorities of the Member States and from undertakings.

2. When sending a request for information to an undertaking the Commission shall at the same time forward a copy of the request to the competent authority of the Member State in whose territory the seat of the undertaking is situated, together with a statement of why this information is required.

3. The competent authorities of the Member States will undertake the investigations which the Commission considers to be necessary under this Regulation.

4. If agreed by the Commission and the competent authority of the Member State in whose territory the investigation is to be made, the officials of the Commission shall assist the officials of such authority in carrying out their duties.

5. The Commission will take the appropriate measures to protect the confidentiality of information obtained pursuant to this Article.

Article 13

Member States shall take appropriate legal or administrative action in case of infringement of the provisions of this Regulation.

Article 14

This Regulation shall come into force on 1 January 1989.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Luxembourg, 14 October 1988.

For the Council
The President
V. PAPANDREOU

ANNEX I

Substances covered by the Regulation

The Regulation applies to the substances listed in this Annex, whether alone or in a mixture; it does not apply to any such substance which is in a manufactured product other than a container used for the transport or storage of the substance listed.

Group	Substance	Ozone-depleting potential ⁽¹⁾
Group I	CFCl ₃ (CFC- 11)	1,0
	CF ₂ Cl ₂ (CFC- 12)	1,0
	C ₂ F ₃ Cl ₃ (CFC-113)	0,8
	C ₂ F ₄ Cl ₂ (CFC-114)	1,0
	C ₂ F ₅ Cl (CFC-115)	0,6
Group II	CF ₂ BrCl (halon-1211)	3,0
	CF ₃ Br (halon-1301)	10,0
	C ₂ F ₄ Br ₂ (halon-2402)	6,0 ⁽²⁾

⁽¹⁾ These ozone-depleting potentials are estimates based on existing knowledge and will be reviewed and revised periodically.

⁽²⁾ Provisional figure pending decision of the Parties to the Protocol.

ANNEX II

Quantitative limits on imports from third countries

Description ⁽²⁾	Units	For 12-month periods from 1 July 1989 to 30 June 1993	For 12-month periods from 1 July 1993 to 30 June 1998	For 12-month periods from 1 July 1988
Group I of Annex I (Chlorofluorocarbons)	Weighted tonnes ⁽¹⁾	2 321 (a)	1 857 (b)	1 161 (c)
Group II of Annex I (Halons)	Weighted tonnes ⁽¹⁾	For 12-month periods from 1 January 1992 700 (a)		

(a) Equals imports in 1986.

(b) Equals imports in 1986 minus 20%.

(c) Equals imports in 1986 minus 50%.

⁽¹⁾ Weighted according to the ozone-depleting potentials specified in Annex I. This is equivalent to the calculated levels mentioned in the Regulation.

⁽²⁾ The codes and the descriptions of the combined nomenclature are indicated in Annex III.

ANNEX III

Codes and descriptions of the combined nomenclature for the substances referred to in Annexes I and II

CN code	Description
2903 40 10	- - - Trichlorofluoromethane
2903 40 20	- - - Dichlorodifluoromethane
2903 40 30	- - - Trichlorotrifluoroethane
2903 40 40	- - - Dichlorotetrafluoroethane
2903 40 50	- - - Chloropentafluoroethane
2903 40 70	- - - Bromotrifluoromethane
2903 40 80	- - - Dibromotetrafluoroethane
2903 40 91	- - - Bromochlorodifluoromethane
ex 3823 90 96	Mixtures containing products falling within codes 2903 40 10, 2903 40 20, 2903 40 30, 2903 40 40 or 2903 40 50
ex 3823 90 97	Mixtures containing products falling within codes 2903 40 70, 2903 40 80, 2903 40 91 or 3823 90 96

II

(Acts whose publication is not obligatory)

COUNCIL

COUNCIL DECISION

of 14 October 1988

concerning the conclusion of the Vienna Convention for the protection of the ozone layer and the Montreal Protocol on substances that deplete the ozone layer

(88/540/EEC)

THE COUNCIL OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community, and in particular Article 130s thereof,

Having regard to the proposal from the Commission,

Having regard to the opinion of the European Parliament ⁽¹⁾,

Having regard to the opinion of the Economic and Social Committee ⁽²⁾,

Whereas the Community together with several of its Member States signed, on 22 March 1985, the Vienna Convention for the protection of the ozone layer;

Whereas it is established that continued emissions of certain chlorofluorocarbons and halons at current levels are likely to cause significant damage to the ozone layer; whereas there is an international consensus that significant reductions in both production and consumption of such substances are necessary; whereas Decisions 80/372/EEC ⁽³⁾ and 82/795/EEC ⁽⁴⁾ provide for controls which are of limited effect and which cover only two such substances (CFC 11 and CFC 12);

Whereas a Protocol supplementary to the Vienna Convention, the Montreal Protocol on substances that

deplete the ozone layer, was negotiated and adopted on 16 September 1987; whereas the Protocol was signed by the Community and by several of its Member States;

Whereas it is necessary for the protection, promotion and improvement of the environment to bring into force the Vienna Convention and the Montreal Protocol, which is based on the principle of preventive action to avoid further damage to the ozone layer and on the scientific and technical data which were available at the time of its adoption;

Whereas to that end the Community must approve the said Convention and Protocol;

Whereas it is, in particular, necessary for the Community to become a Contracting Party to the Protocol because certain of its provisions can only be carried out if the Community and all its Member States become Contracting Parties;

Whereas in order for all the obligations under the Convention and the Protocol to be appropriately carried out, it is necessary that all Member States should also become Contracting Parties;

Whereas, furthermore, certain provisions of the Protocol, in particular Article 2 (8), will apply in the Community only if all Member States become Parties to that Protocol;

Whereas all Member States should conclude as rapidly as possible their procedures for accession to and ratification of the Convention and the Protocol respectively, with a view to permit the deposit, as far as possible simultaneously, of the instruments of approval, acceptance, ratification or accession by the Community and the Member States,

⁽¹⁾ OJ No C 187, 18. 7. 1988, p. 46.

⁽²⁾ OJ No C 208, 8. 8. 1988, p. 3.

⁽³⁾ OJ No L 90, 3. 4. 1980, p. 45.

⁽⁴⁾ OJ No L 329, 25. 11. 1982, p. 29.

HAS ADOPTED THIS DECISION:

Article 1

The Vienna Convention for the protection of the ozone layer and the Montreal Protocol on substances that deplete the ozone layer are hereby approved on behalf of the Community.

The texts of the Convention and of the Protocol appear in Annex I to this Decision.

Article 2

The President of the Council shall deposit the acts of approval of the Vienna Convention and the Montreal Protocol on behalf of the Community with the Secretary General of the United Nations in accordance with Article 13 of the Vienna Convention, as read in conjunction with Articles 14 and 16 of the Montreal Protocol.

At the same time, the President shall deposit the statement of competence set out in Annex II to this Decision, in accordance with Article 13 (3) of the Vienna Convention as read in conjunction with Article 14 of the Montreal Protocol.

Article 3

1. Member States, which have not already done so, shall take, at the latest by 31 October 1988, the necessary steps to permit the deposit, as far as possible simultaneously, of the instruments of ratification, acceptance, approval or accession to the Vienna Convention by the Community and the Member States.

Member States will inform the Commission, as soon as possible, of their decision to accede to or to ratify the Convention, as appropriate, or of the prospective date of finalization of those procedures. The Commission, in cooperation with Member States, shall arrange a date for the simultaneous deposit of the instruments, which shall in any case be before 1 January 1989.

2. Member States shall take the necessary steps to permit the deposit, as far as possible simultaneously, before 1 January 1989, of the instruments of ratification, acceptance or approval of the Montreal Protocol by the Community and the Member States.

Member States will inform the Commission, before 1 November 1988, of their decision to ratify or of the prospective date of finalization of their ratification procedures. The Commission, in cooperation with Member States, shall arrange a date for the simultaneous deposit of the instruments which shall in any case be before 1 January 1989.

Article 4

This Decision is addressed to the Member States.

Done at Luxembourg, 14 October 1988.

For the Council
The President
V. PAPANDREOU

ANNEX I

VIENNA CONVENTION FOR THE PROTECTION OF THE OZONE LAYER

PREAMBLE

THE PARTIES TO THIS CONVENTION,

AWARE of the potentially harmful impact on human health and the environment through modification of the ozone layer,

RECALLING the pertinent provisions of the Declaration of the United Nations Conference on the Human Environment, and in particular principle 21, which provides 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 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',

TAKING INTO ACCOUNT the circumstances and particular requirements of developing countries,

MINDFUL of the work and studies proceeding within both international and national organizations and, in particular, of the World Plan of Action on the Ozone Layer of the United Nations Environment Programme,

MINDFUL ALSO of the precautionary measures for the protection of the ozone layer which have already been taken at the national and international levels,

AWARE that measures to protect the ozone layer from modifications due to human activities require international cooperation and action, and should be based on relevant scientific and technical considerations,

AWARE ALSO of the need for further research and systematic observations to further develop scientific knowledge of the ozone layer and possible adverse effects resulting from its modification,

DETERMINED to protect human health and the environment against adverse effects resulting from modification of the ozone layer,

HAVE AGREED AS FOLLOWS:

*Article 1***Definitions**

For the purposes of this Convention:

1. 'The ozone layer' means the layer of atmospheric ozone above the planetary boundary layer.
2. 'Adverse effects' means changes in the physical environment or biota, including changes in climate, which have significant deleterious effects on human health or on the composition, resilience and productivity of natural and managed ecosystems, or on materials useful to mankind.
3. 'Alternative technologies or equipment' means technologies or equipment the use of which makes it possible to reduce or effectively eliminate emissions of substances which have or are likely to have adverse effects on the ozone layer.
4. 'Alternative substances' means substances which reduce, eliminate or avoid adverse effects on the ozone layer.
5. 'Parties' means, unless the text otherwise indicates, Parties to this Convention.
6. 'Regional economic integration organization' means an organization constituted by sovereign States of a given region which has competence in respect of matters governed by this Convention or its protocols and has been duly authorized, in accordance with its internal procedures, to sign, ratify, accept, approve or accede to the instruments concerned.
7. 'Protocols' means protocols to this Convention

*Article 2***General obligations**

1. The Parties shall take appropriate measures in accordance with the provisions of this Convention and of

those protocols in force to which they are party to protect human health and the environment against adverse effects resulting or likely to result from human activities which modify or are likely to modify the ozone layer.

2. To this end the Parties shall, in accordance with the means at their disposal and their capabilities:

- (a) cooperate by means of systematic observations, research and information exchange in order to better understand and assess the effects of human activities on the ozone layer and the effects on human health and the environment from modification of the ozone layer;
- (b) adopt appropriate legislative or administrative measures and cooperate in harmonizing appropriate policies to control, limit, reduce or prevent human activities under their jurisdiction or control should it be found that these activities have or are likely to have adverse effects resulting from modification or likely modification of the ozone layer;
- (c) cooperate in the formulation of agreed measures, procedures and standards for the implementation of this Convention, with a view to the adoption of protocols and annexes;
- (d) cooperate with competent international bodies to implement effectively this Convention and protocols to which they are party.

3. The provisions of this Convention shall in no way affect the right of Parties to adopt, in accordance with international law, domestic measures additional to those referred to in paragraphs 1 and 2 above, nor shall they affect additional domestic measures already taken by a Party, provided that these measures are not incompatible with their obligations under this Convention.

4. The application of this Article shall be based on relevant scientific and technical considerations.

Article 3

Research and systematic observations

1. The Parties undertake, as appropriate, to initiate and cooperate in, directly or through competent international bodies, the conduct of research and scientific assessments on:

- (a) the physical and chemical processes that may affect the ozone layer;
- (b) the human health and other biological effects deriving from any modifications of the ozone layer, particularly

those resulting from changes in ultraviolet solar radiation having biological effects (UV-B);

- (c) climatic effects deriving from any modifications of the ozone layer;
- (d) effects deriving from any modifications of the ozone layer and any consequent change in UV-B radiation on natural and synthetic materials useful to mankind;
- (e) substance, practices, processes and activities that may affect the ozone layer, and their cumulative effects;
- (f) alternative substances and technologies;
- (g) related socio-economic matters;

and as further elaborated in Annexes I and II.

2. The Parties undertake to promote or establish, as appropriate, directly or through competent international bodies and taking fully into account national legislation and relevant ongoing activities at both the national and international levels, joint or complementary programmes for systematic observations of the state of the ozone layer and other relevant parameters, as elaborated in Annex I.

3. The Parties undertake to cooperate, directly or through competent international bodies, in ensuring the collection, validation and transmission of research and observational data through appropriate world data centres in a regular and timely fashion.

Article 4

Cooperation in the legal, scientific and technical fields

1. The Parties shall facilitate and encourage the exchange of scientific, technical, socio-economic, commercial and legal information relevant to this Convention as further elaborated in Annex II. Such information shall be supplied to bodies agreed upon by the Parties. Any such body receiving information regarded as confidential by the supplying Party shall ensure that such information is not disclosed and shall aggregate it to protect its confidentiality before it is made available to all Parties.

2. The Parties shall cooperate, consistent with their national laws, regulations and practices and taking into account in particular the needs of the developing countries, in promoting, directly or through competent international

bodies, the development and transfer of technology and knowledge. Such cooperation shall be carried out particularly through:

- (a) facilitation of the acquisition of alternative technologies by other Parties;
- (b) provision of information on alternative technologies and equipment, and supply of special manuals or guides to them;
- (c) the supply of necessary equipment and facilities for research and systematic observations;
- (d) appropriate training of scientific and technical personnel.

Article 5

Transmission of information

The Parties shall transmit, through the secretariat, to the Conference of the Parties established under Article 6, information on the measures adopted by them in implementation of this Convention and of protocols to which they are party in such form and at such intervals as the meetings of the parties to the relevant instruments may determine.

Article 6

Conference of the Parties

1. A Conference of the Parties is hereby established. The first meeting of the Conference of the Parties shall be convened by the secretariat designated on an interim basis under Article 7 not later than one year after entry into force of this Convention. Thereafter, ordinary meetings of the Conference of the Parties shall be held at regular intervals to be determined by the Conference at its first meeting.

2. Extraordinary meetings of the Conference of the Parties shall be held at such other times as may be deemed necessary by the Conference, or at the written request of any Party, provided that, within six months of the request being communicated to them by the secretariat, it is supported by at least one-third of the Parties.

3. The Conference of the Parties shall by consensus agree upon and adopt rules of procedure and financial rules for itself and for any subsidiary bodies it may establish, as well as financial provisions governing the functioning of the secretariat.

4. The Conference of the Parties shall keep under continuous review the implementation of this Convention, and, in addition, shall:

- (a) establish the form and the intervals for transmitting the information to be submitted in accordance with Article 5 and consider such information as well as reports submitted by any subsidiary body;

- (b) review the scientific information on the ozone layer, on its possible modification and on possible effects of any such modification;

- (c) promote, in accordance with Article 2, the harmonization of appropriate policies, strategies and measures for minimizing the release of substances causing or likely to cause modification of the ozone layer, and make recommendations on any other measures relating to this Convention;

- (d) adopt, in accordance with Articles 3 and 4, programmes for research, systematic observations, scientific and technological cooperation, the exchange of information and the transfer of technology and knowledge;

- (e) consider and adopt, as required, in accordance with Articles 9 and 10, amendments to this Convention and its annexes;

- (f) consider amendments to any protocol, as well as to any annexes thereto, and, if so decided, recommend their adoption to the parties to the protocol concerned;

- (g) consider and adopt, as required, in accordance with Article 10, additional annexes to this Convention;

- (h) consider and adopt, as required, protocols in accordance with Article 8;

- (i) establish such subsidiary bodies as are deemed necessary for the implementation of this Convention;

- (i) seek, where appropriate, the service of competent international bodies and scientific committees, in particular the World Meteorological Organization and the World Health Organization, as well as the Coordinating Committee on the Ozone Layer, in scientific research, systematic observations and other activities pertinent to the objectives of this Convention, and make use as appropriate of information from these bodies and committees;

- (k) consider and undertake any additional action that may be required for the achievement of the purposes of this Convention.

5. The United Nations, its specialized agencies and the International Atomic Energy Agency, as well as any State not party to this Convention, may be represented at meetings of the Conference of the Parties by observers. Any body or agency, whether national or international, governmental or non-governmental, qualified in fields relating to the protection of the ozone layer which has informed the secretariat of its wish to be represented at a meeting of the Conference of the Parties as an observer may be admitted unless at least one-third of the Parties present object. The admission and participation of observers shall be subject to the rules of procedure adopted by the Conference of the Parties.

*Article 7***Secretariat**

1. The functions of the secretariat shall be:
 - (a) to arrange for and service meetings provided for in Articles 6, 8, 9 and 10;
 - (b) to prepare and transmit reports based upon information received in accordance with Articles 4 and 5, as well as upon information derived from meetings of subsidiary bodies established under Article 6;
 - (c) to perform the functions assigned to it by any protocol;
 - (d) to prepare reports on its activities carried out in implementation of its functions under this Convention and present them to the Conference of the Parties;
 - (e) to ensure the necessary coordination with other relevant international bodies, and in particular to enter into such administrative and contractual arrangements as may be required for the effective discharge of its functions;
 - (f) to perform such other functions as may be determined by the Conference of the Parties.

2. The secretariat functions will be carried out on an interim basis by the United Nations Environment Programme until the completion of the first ordinary meeting of the Conference of the Parties held pursuant to Article 6. At its first ordinary meeting, the Conference of the Parties shall designate the secretariat from amongst those existing competent international organizations which have signified their willingness to carry out the secretariat functions under this Convention.

*Article 8***Adoption of protocols**

1. The Conference of the Parties may at a meeting adopt protocols pursuant to Article 2.
2. The text of any proposed protocol shall be communicated to the Parties by the secretariat at least six months before such a meeting.

*Article 9***Amendment of the Convention or protocols**

1. Any Party may propose amendments to this Convention or to any protocol. Such amendments shall take due account, *inter alia*, of relevant scientific and technical considerations.

2. Amendments to this Convention shall be adopted at a meeting of the Conference of the Parties. Amendments to any protocol shall be adopted at a meeting of the Parties to the protocol in question. The text of any proposed amendment to this Convention or to any protocol, except as may otherwise be provided in such protocol, shall be communicated to the Parties by the secretariat at least six months before the meeting at which it is proposed for adoption. The secretariat shall also communicate proposed amendments to the signatories to this Convention for information.

3. The Parties shall make every effort to reach agreement on any proposed amendment to this Convention by consensus. If all efforts at consensus have been exhausted, and no agreement reached, the amendment shall as a last resort be adopted by a three-fourths majority vote of the Parties present and voting at the meeting, and shall be submitted by the Depositary to all Parties for ratification, approval or acceptance.

4. The procedure mentioned in paragraph 3 above shall apply to amendments to any protocol, except that a two-thirds majority of the parties to that protocol present and voting at the meeting shall suffice for their adoption.

5. Ratification, approval or acceptance of amendments shall be notified to the Depositary in writing. Amendments adopted in accordance with paragraphs 3 or 4 above shall enter into force between parties having accepted them on the 90th day after the receipt by the Depositary of notification of their ratification, approval or acceptance by at least three-fourths of the Parties to this Convention or by at least two-thirds of the parties to the protocol concerned, except as may otherwise be provided in such protocol. Thereafter the amendments shall enter into force for any other Party on the 90th day after that Party deposits its instrument of ratification, approval or acceptance of the amendments.

6. For the purposes of this Article 'Parties present and voting' means Parties present and casting an affirmative or negative vote.

*Article 10***Adoption and amendment of annexes**

1. The annexes to this Convention or to any protocol shall form an integral part of this Convention or of such protocol, as the case may be, and, unless expressly provided otherwise, a reference to this Convention or its protocols constitutes at the same time a reference to any annexes thereto. Such annexes shall be restricted to scientific, technical and administrative matters.

2. Except as may be otherwise provided in any protocol with respect to its annexes, the following procedure shall apply to the proposal, adoption and entry into force of additional annexes to this Convention or of annexes to a protocol:

- (a) annexes to this Convention shall be proposed and adopted according to the procedure laid down in Article 9, paragraphs 2 and 3, while annexes to any protocol shall be proposed and adopted according to the procedure laid down in Article 9, paragraphs 2 and 4;
- (b) any party that is unable to approve an additional annex to this Convention or an annex to any protocol to which it is party shall so notify the Depositary, in writing, within six months from the date of the communication of the adoption by the Depositary. The Depositary shall without delay notify all Parties of any such notification received. A Party may at any time substitute an acceptance for a previous declaration of objection and the annexes shall thereupon enter into force for that Party;
- (c) on the expiry of six months from the date of the circulation of the communication by the Depositary, the annex shall become effective for all Parties to this Convention or to any protocol concerned which have not submitted a notification in accordance with the provision of subparagraph (b) above.

3. The proposal, adoption and entry into force of amendments to annexes to this Convention or to any protocol shall be subject to the same procedure as for the proposal, adoption and entry into force of annexes to the Convention or annexes to a protocol. Annexes and amendments thereto shall take due account, *inter alia*, of relevant scientific and technical consideration.

4. If an additional annex or an amendment to an annex involves an amendment to this Convention or to any protocol, the additional annex or amended annex shall not enter into force until such time as the amendment to this Convention or to the protocol concerned enters into force.

Article 11

Settlement of disputes

1. In the event of a dispute between Parties concerning the interpretation or application of this Convention, the parties concerned shall seek solution by negotiation.
2. If the parties concerned cannot reach agreement by negotiation, they may jointly seek the good offices of, or request mediation by, a third party.
3. When ratifying, accepting, approving or acceding to this Convention, or at any time thereafter, a State or regional

economic integration organization may declare in writing to the Depositary that for a dispute not resolved in accordance with paragraph 1 or 2 above, it accepts one or both of the following means of dispute settlement as compulsory:

- (a) arbitration in accordance with procedures to be adopted by the Conference of the Parties at its first ordinary meeting;
- (b) submission of the dispute to the International Court of Justice.

4. If the parties have not, in accordance with paragraph 3 above, accepted the same or any procedure, the dispute shall be submitted to conciliation in accordance with paragraph 5 below unless the parties otherwise agree.

5. A conciliation commission shall be created upon the request of one of the parties to the dispute. The commission shall be composed of an equal number of members appointed by each party concerned and a chairman chosen jointly by the members appointed by each party. The commission shall render a final and recommendatory award, which the parties shall consider in good faith.

6. The provisions of this Article shall apply with respect to any protocol except as otherwise provided in the protocol concerned.

Article 12

Signature

This Convention shall be open for signature by States and by regional economic integration organizations at the Federal Ministry for Foreign Affairs of the Republic of Austria in Vienna from 22 March 1985 to 21 September 1985, and at United Nations Headquarters in New York from 22 September 1985 to 21 March 1986.

Article 13

Ratification, acceptance or approval

1. This Convention and any protocol shall be subject to ratification, acceptance or approval by States and by regional economic integration organizations. Instruments of ratification, acceptance or approval shall be deposited with the Depositary.
2. Any organization referred to in paragraph 1 above which becomes a Party to this Convention or any protocol without any of its member States being a Party shall be bound by all the obligations under the Convention or the protocol, as the case may be. In the case of such organizations, one or more of whose member States is a Party to the Convention or

relevant protocol, the organization and its member States shall decide on their respective responsibilities for the performance of their obligation under the Convention or protocol, as the case may be. In such cases, the organization and the member States shall not be entitled to exercise rights under the Convention or relevant protocol concurrently.

3. In their instruments of ratification, acceptance or approval, the organizations referred to in paragraph 1 above shall declare the extent of their competence with respect to the matters governed by the Convention or the relevant protocol. These organizations shall also inform the Depository of any substantial modification in the extent of their competence.

Article 14

Accession

1. This Convention and any protocol shall be open for accession by States and by regional economic integration organizations from the date on which the Convention or the protocol concerned is closed for signature. The instruments of accession shall be deposited with the Depository.

2. In their instruments of accession, the organizations referred to in paragraph 1 above shall declare the extent of their competence with respect to the matters governed by the Convention or the relevant protocol. These organizations shall also inform the Depository of any substantial modification in the extent of their competence.

3. The provisions of Article 13, paragraph 2, shall apply to regional economic integration organizations which accede to this Convention or any protocol.

Article 15

Right to vote

1. Each Party to this Convention or to any protocol shall have one vote.

2. Except as provided for in paragraph 1 above, regional economic integration organizations, in matters within their competence, shall exercise their right to vote with a number of votes equal to the number of their member States which are Parties to the Convention or the relevant protocol. Such organizations shall not exercise their right to vote if their member States exercise theirs, and vice versa.

Article 16

Relationship between the Convention and its protocols

1. A State or a regional economic integration organization may not become a party to a protocol unless it

is, or becomes at the same time, a Party to the Convention.

2. Decisions concerning any protocol shall be taken only by the parties to the protocol concerned.

Article 17

Entry into force

1. This Convention shall enter into force on the 90th day after the date of deposit of the 20th instrument of ratification, acceptance, approval or accession.

2. Any protocol, except as otherwise provided in such protocol, shall enter into force on the 90th day after the date of deposit of the 11th instrument of ratification, acceptance or approval of such protocol or accession thereto.

3. For each Party which ratifies, accepts or approves this Convention or accedes thereto after the deposit of the 20th instrument of ratification, acceptance, approval or accession, it shall enter into force on the 90th day after the date of deposit by such Party of its instrument of ratification, acceptance, approval or accession.

4. Any protocol, except as otherwise provided in such protocol, shall enter into force for a party that ratifies, accepts or approves that protocol or accedes thereto after its entry into force pursuant to paragraph 2 above, on the 90th day after the date on which that party deposits its instrument of ratification, acceptance, approval or accession, or on the date on which the Convention enters into force for that Party, whichever shall be the later.

5. For the purpose of paragraphs 1 and 2 above, any instrument deposited by a regional economic integration organization shall not be counted as additional to those deposited by member States of such organization.

Article 18

Reservations

No reservations may be made to this Convention.

Article 19

Withdrawal

1. At any time after four years from the date on which this Convention has entered into force for a Party, that Party may withdraw from the Convention by giving written notification to the Depository.

2. Except as may be provided in any protocol, at any time after four years from the date on which such protocol has entered into force for a party, that party may withdraw from the protocol by giving written notification to the Depositary.

3. Any such withdrawal shall take effect upon expiry of one year after the date of its receipt by the Depositary, or on such later date as may be specified in the notification of the withdrawal.

4. Any Party which withdraws from this Convention shall be considered as also having withdrawn from any protocol to which it is party.

Article 20

Depositary

1. The Secretary-General of the United Nations shall assume the functions of depositary of this Convention and any protocols.

2. The Depositary shall inform the Parties, in particular, of:

(a) the signature of this Convention and of any protocol, and the deposit of instruments of ratification, acceptance, approval or accession in accordance with Articles 13 and 14;

(b) the date on which the Convention and any protocol will come into force in accordance with Article 17;

(c) notification of withdrawal made in accordance with Article 19;

(d) Amendments adopted with respect to the Convention and any protocol, their acceptance by the parties and their date of entry into force in accordance with Article 9;

(e) all communications relating to the adoption and approval of annexes and to the amendment of annexes in accordance with Article 10;

(f) notifications by regional economic integration organizations of the extent of their competence with respect to matters governed by this Convention and any protocols, and of any modifications thereof.

(g) declarations made in accordance with Article 11, paragraph 3.

Article 21

Authentic texts

The original of this Convention, of which the Arabic, Chinese, English, French, Russian and Spanish texts are equally authentic, shall be deposited with the Secretary-General of the United Nations.

In witness whereof the undersigned, being duly authorized to that effect, have signed this Convention.

Done at Vienna on the 22nd day of March 1985.

Annex I

RESEARCH AND SYSTEMATIC OBSERVATIONS

1. The Parties to the Convention recognize that the major scientific issues are:
 - (a) modification of the ozone layer which would result in a change in the amount of solar ultraviolet radiation having biological effects (UV-B) that reaches the Earth's surface and the potential consequences for human health, for organisms, ecosystems and materials useful to mankind;
 - (b) modification of the vertical distribution of ozone, which could change the temperature structure of the atmosphere and the potential consequences for weather and climate.

2. The Parties to the Conventions in accordance with Article 3, shall cooperate in conducting research and systematic observations and in formulating recommendations for future research and observation in such areas as:
 - (a) **Research into the physics and chemistry of the atmosphere**
 - (i) comprehensive theoretical models: further development of models which consider the interaction between radiative, dynamic and chemical processes; studies of the simultaneous effects of various man-made and naturally occurring species upon atmospheric ozone; interpretation of satellite and non-satellite measurement data sets; evaluation of trends in atmospheric and geophysical parameters, and the development of methods for attributing changes in these parameters to specific causes;
 - (ii) laboratory studies of: rate coefficients, absorption cross-sections and mechanisms of tropospheric and stratospheric chemical and photochemical processes; spectroscopic data to support field measurements in all relevant spectral regions;
 - (iii) field measurements: the concentration and fluxes of key source gases of both natural and anthropogenic origin; atmospheric dynamics studies; simultaneous measurements of photochemically related species down to the planetary boundary layer, using *in situ* and remote sensing instruments; intercomparison of different sensors, including coordinated correlative measurements for satellite instrumentation; three-dimensional fields of key atmospheric trace constituents, solar spectral flux and meteorological parameters;
 - (iv) instrument development, including satellite and non-satellite sensors for atmospheric trace constituents, solar flux and meteorological parameters;
 - (b) **Research into health, biological and photodegradation effects**
 - (i) the relationship between human exposure to visible and ultraviolet solar radiation and (a) the development of both non-melanoma and melanoma skin cancer and (b) the effects on the immunological system;
 - (ii) effects of UV-B radiation, including the wavelength dependence, upon (a) agricultural crops, forests and other terrestrial ecosystems, and (b) the aquatic food web and fisheries, as well as possible inhibition of oxygen production by marine phytoplankton;
 - (iii) the mechanisms by which UV-B radiation acts on biological materials, species and ecosystems, including: the relationship between dose, dose rate, and response; photorepair, adaptation, and protection;
 - (iv) studies of biological action spectra and the spectral response using polychromatic radiation in order to include possible interactions of the various wavelength regions;
 - (v) the influence of UV-B radiation on: the sensitivities and activities of biological species important to the biospheric balance; primary processes such as photosynthesis and biosynthesis;
 - (vi) the influence of UV-B radiation on the photodegradation of pollutants, agricultural chemicals and other materials;
 - (c) **Research on effects on climate**
 - (i) theoretical and observational studies of the radiative effects of ozone and other trace species and the impact on climate parameters, such as land and ocean surface temperatures, precipitation patterns, the exchange between the troposphere and stratosphere;

- (ii) the investigation of the effects of such climate impacts on various aspects of human activity;

(d) **Systematic observations on:**

- (i) the status of the ozone layer (i.e. the spatial and temporal variability of the total column content and vertical distribution) by making the Global Ozone Observing System, based on the integration of satellite and ground-based systems, fully operational;
- (ii) the tropospheric and stratospheric concentrations of source gases for the HO_x, NO_x, ClO_x and carbon families;
- (iii) the temperature from the ground to the mesosphere, utilizing both ground-based and satellite systems;
- (iv) wavelength-resolved solar flux reaching, and thermal radiation leaving, the Earth's atmosphere, utilizing satellite measurements;
- (v) wavelength-resolved solar flux reaching the Earth's surface in the ultraviolet range having biological effects (UV-B);
- (vi) aerosol properties and distribution from the ground to the mesosphere, utilizing ground-based, airborne and satellite systems;
- (vii) climatically important variables by the maintenance of programmes of high-quality meteorological surface measurements;
- (viii) trace species, temperatures, solar flux and aerosols utilizing improved methods for analysing global data.

3. The Parties to the Convention shall cooperate, taking into account the particular needs of the developing countries, in promoting the appropriate scientific and technical training required to participate in the research and systematic observations outlined in this annex. Particular emphasis should be given to the intercalibration of observational instrumentation and methods with a view to generating comparable or standardized scientific data sets.

4. The following chemical substances of natural and anthropogenic origin, not listed in order of priority, are thought to have the potential to modify the chemical and physical properties of the ozone layer.

(a) **Carbon substances**

(i) Carbon monoxide (CO)

Carbon monoxide has significant natural and anthropogenic sources, and is thought to play a major direct role in tropospheric photochemistry, and an indirect role in stratospheric photochemistry;

(ii) Carbon dioxide (CO₂)

Carbon dioxide has significant natural and anthropogenic sources, and affects stratospheric ozone by influencing the thermal structure of the atmosphere;

(iii) Methane (CH₄)

Methane has both natural and anthropogenic sources, and effects both tropospheric and stratospheric ozone;

(iv) Non-methane hydrocarbon species

Non-methane hydrocarbon species, which consist of a large number of chemical substances, have both natural and anthropogenic sources, and play a direct role in tropospheric photochemistry and an indirect role in stratospheric photochemistry;

(b) **Nitrogen substances**

(i) Nitrous oxide (N₂O)

The dominant sources of N₂O are natural, but anthropogenic contributions are becoming increasingly important. Nitrous oxide is the primary source of stratospheric NO_x, which play a vital role in controlling the abundance of stratospheric ozone;

(ii) Nitrogen oxides (NO_x)

Ground-level sources of NO_x play a major direct role only in tropospheric photochemical processes and an indirect role in stratospheric photochemistry, whereas injection of NO_x close to the tropopause may lead directly to a change in upper tropospheric and stratospheric ozone;

(c) Chlorine substances

- (i) Fully halogenated alkanes, e.g. CCl_4 , CFCl_3 (CFC-11), CF_2Cl_2 (CFC-12), $\text{C}_2\text{F}_3\text{Cl}$ (CFC-113), $\text{C}_2\text{F}_4\text{Cl}_2$ (CFC-114)

Fully halogenated alkanes are anthropogenic and act as a source of ClO_x , which plays a vital role in ozone photochemistry, especially in the 30 to 50 kilometre altitude region;

- (ii) Partially halogenated alkanes, e.g. CH_3Cl , CHF_2Cl (CFC-22), CH_3CCl_3 , CHFCl_2 (CFC-21)

The sources of CH_3Cl are natural, whereas the other partially halogenated alkanes mentioned above are anthropogenic in origin. These gases also act as a source of stratospheric ClO_x ;

(d) Bromine substances

Fully halogenated alkanes, e.g. CF_3Br

These gases are anthropogenic and act as a source of BrO_x , which behaves in a manner similar to ClO_x ;

(e) Hydrogen substances

- (i) Hydrogen (H_2)

Hydrogen, the source of which is natural and anthropogenic, plays a minor role in stratospheric photochemistry;

- (ii) Water (H_2O)

Water, the source of which is natural, plays a vital role in both tropospheric and stratospheric photochemistry. Local sources of water vapour in the stratosphere include the oxidation of methane and, to a lesser extent, of hydrogen.

*Annex II***INFORMATION EXCHANGE**

1. The Parties to the Convention recognize that the collection and sharing of information is an important means of implementing the objectives of this Convention and of assuring that any actions that may be taken are appropriate and equitable. Therefore, Parties shall exchange scientific, technical, socio-economic, business, commercial and legal information.

2. The Parties to the Convention, in deciding what information is to be collected and exchanged, should take into account the usefulness of the information and the costs of obtaining it. The Parties further recognize that cooperation under this Annex has to be consistent with national laws, regulations and practices regarding patents, trade secrets, and protection of confidential and proprietary information.

3. Scientific information

This includes information on:

- (a) planned and ongoing research, both governmental and private, to facilitate the coordination of research programmes so as to make the most effective use of available national and international resources;
- (b) the emission data needed for research;
- (c) scientific results published in peer-reviewed literature on the understanding of the physics and chemistry of the Earth's atmosphere and of its susceptibility to change, in particular on the state of the ozone layer and effects on human health, environment and climate which would result from changes on all time-scales in either the total column content or the vertical distribution of ozone;
- (d) the assessment of research results and the recommendations for future research.

4. Technical information

This includes information on:

- (a) the availability and cost of chemical substitutes and of alternative technologies to reduce the emissions of ozone-modifying substances and related planned and ongoing research;
- (b) the limitations and any risks involved in using chemical or other substitutes and alternative technologies.

5. Socio-economic and commercial information on the substances referred to in Annex I

This includes information on:

- (a) production and production capacity;
- (b) use and use patterns;
- (c) imports/exports;
- (d) the costs, risks and benefits of human activities which may indirectly modify the ozone layer and of the impacts of regulatory actions taken or being considered to control these activities.

6. Legal information:

This includes information on:

- (a) national laws, administrative measures and legal research relevant to the protection of the ozone layer;
- (b) international agreements, including bilateral agreements, relevant to the protection of the ozone layer;
- (c) methods and terms of licensing and availability of patents relevant to the protection of the ozone layer.

MONTREAL PROTOCOL ON SUBSTANCES THAT DEplete THE OZONE LAYER

THE PARTIES TO THIS PROTOCOL,

BEING Parties to the Vienna Convention for the protection of the ozone layer,

MINDFUL of their obligations under that Convention to take appropriate measures to protect human health and the environment against adverse effects resulting or likely to result from human activities which modify or are likely to modify the ozone layer,

RECOGNIZING that world-wide emissions of certain substances can significantly deplete and otherwise modify the ozone layer in a manner that is likely to result in adverse effects on human health and the environment,

CONSCIOUS of the potential climatic effects of emissions of these substances,

AWARE that measures taken to protect the ozone layer from depletion should be based on relevant scientific knowledge, taking into account technical and economic considerations,

DETERMINED to protect the ozone layer by taking precautionary measures to control equitably total global emissions of substances that deplete it, with the ultimate objective of their elimination on the basis of developments in scientific knowledge, taking into account technical and economic considerations,

ACKNOWLEDGING that special provision is required to meet the needs of developing countries for these substances,

NOTING the precautionary measures for controlling emissions of certain chlorofluorocarbons that have already been taken at national and regional levels,

CONSIDERING the importance of promoting international cooperation in the research and development of science and technology relating to the control and reduction of emissions of substances that deplete the ozone layer, bearing in mind in particular the needs of developing countries,

HAVE AGREED AS FOLLOWS:

Article 1

Definitions

For the purposes of this Protocol:

1. 'Convention' means the Vienna Convention for the protection of the ozone layer, adopted on 22 March 1985.
2. 'Parties' means, unless the text indicates, Parties to this Protocol.
3. 'Secretariat' means the secretariat of the Convention.
4. 'Controlled substance' means a substance listed in Annex A to this Protocol, whether existing alone or in a mixture. It excludes, however, any such substance or mixture which is in a manufactured product other than a container used for the transportation or storage of the substance listed.
5. 'Production' means the amount of controlled substances produced minus the amount destroyed by technologies to be approved by the Parties.
6. 'Consumption' means production plus imports minus exports of controlled substances.
7. 'Calculated levels' of production, imports, exports and consumption means levels determined in accordance with Article 3.
8. 'Industrial rationalization' means the transfer of all or a portion of the calculated level of production of one Party to another, for the purpose of achieving economic efficiencies or responding to anticipated shortfalls in supply as a result of plant closures.

Article 2

Control measures

1. Each Party shall ensure that for the 12-month period commencing on the first day of the seventh month following

the date of the entry into force of this Protocol, and in each 12-month period thereafter, its calculated level of consumption of the controlled substances in Group I of Annex A does not exceed its calculated level of consumption in 1986. By the end of the same period, each Party producing one or more of these substances shall ensure that its calculated level of production of the substances does not exceed its calculated level of production in 1986, except that such level may have increased by no more than 10% based on the 1986 level. Such increase shall be permitted only so as to satisfy the basic domestic needs of the Parties operating under Article 5 and for the purposes of industrial rationalization between Parties.

2. Each Party shall ensure that for the 12-month period commencing on the first day of the 37th month following the date of the entry into force of this Protocol, and in each 12-month period thereafter, its calculated level of consumption of the controlled substances listed in Group II of Annex A does not exceed its calculated level of consumption in 1986. Each Party producing one or more of these substances shall ensure that its calculated level of production of the substances does not exceed its calculated level of production in 1986, except that such level may have increased by no more than 10% based on the 1986 level. Such increase shall be permitted only so as to satisfy the basic domestic needs of the Parties operating under Article 5 and for the purposes of industrial rationalization between Parties. The mechanisms for implementing these measures shall be decided by the Parties at their first meeting following the first scientific review.

3. Each Party shall ensure that for the period 1 July 1993 to 30 June 1994 and in each 12-month period thereafter, its calculated level of consumption of the controlled substances in Group I of Annex A does not exceed, annually, 80% of its calculated level of consumption in 1986. Each Party producing one or more of these substances shall, for the same periods, ensure that its calculated level of production of the substances does not exceed, annually, 80% of its calculated level of production in 1986. However, in order to satisfy the basic domestic needs of the Parties operating under Article 5 and for the purposes of industrial rationalization between Parties, its calculated level of production may exceed that limit by up to 10% of its calculated level of production in 1986.

4. Each Party shall ensure that for the period 1 July 1998 to 30 June 1999, and in each 12-month period thereafter, its calculated level of consumption of the controlled substances in Group I of Annex A does not exceed, annually, 50% of its calculated level of consumption in 1986. Each Party producing one or more of these substances shall, for the same periods, ensure that its calculated level of production of the substances does not exceed, annually, 50% of its calculated level of production in 1986. However, in order to satisfy the basic domestic needs of the Parties operating under Article 5 and for the purposes of industrial rationalization between Parties, its calculated level of production may exceed that limit by up to 15% of its calculated level of production in

1986. This paragraph will apply unless the Parties decide otherwise at a meeting by a two-thirds majority of Parties present and voting, representing at least two-thirds of the total calculated level of consumption of these substances of the Parties. This decision shall be considered and made in the light of the assessments referred to in Article 6.

5. Any Party whose calculated level of production in 1986 of the controlled substances in Group I of Annex A was less than 25 kilotonnes may, for the purposes of industrial rationalization, transfer to or receive from any other Party, production in excess of the limits set out in paragraphs 1, 3 and 4 provided that the total combined calculated levels of production of the Parties concerned does not exceed the production limits set out in this Article. Any transfer of such production shall be notified to the secretariat, no later than the time of the transfer.

6. Any Party not operating under Article 5, that has facilities for the production of controlled substances under construction, or contracted for, prior to 16 September 1987, and provided for in national legislation prior to 1 January 1987, may add the production from such facilities to its 1986 production of such substances for the purposes of determining its calculated level of production for 1986, provided that such facilities are completed by 31 December 1990 and that such production does not raise that Party's annual calculated level of consumption of the controlled substances above 0,5 kilograms per capita.

7. Any transfer of production pursuant to paragraph 5 or any addition of production pursuant to paragraph 6 shall be notified to the secretariat, no later than the time of the transfer or addition.

8. (a) Any Parties which are Member States of a regional economic integration organization as defined in Article 1 (6) of the Convention may agree that they shall jointly fulfil their obligations respecting consumption under this Article provided that their total combined calculated level of consumption does not exceed the levels required by this Article.

(b) The Parties to any such agreement shall inform the secretariat of the terms of the agreement before the date of the reduction in consumption with which the agreement is concerned.

(c) Such agreement will become operative only if all Member States of the regional economic integration organization and the organization concerned are Parties to the Protocol and have notified the secretariat of their manner of implementation.

9. (a) Based on the assessment made pursuant to Article 6, the Parties may decide whether:

- (i) adjustments to the ozone-depleting potentials specified in Annex A should be made and, if so, what the adjustments should be; and
 - (ii) further adjustments and reductions of production or consumption of the controlled substances from 1986 levels should be undertaken and, if so, what the scope, amount and timing of any such adjustment and reductions should be.
- (b) Proposals for such adjustments shall be communicated to the Parties by the secretariat at least six months before the meeting of the Parties at which they are proposed for adoption.
- (c) In taking such decisions, the Parties shall make every effort to reach agreement by consensus. If all efforts at consensus have been exhausted, and no agreement reached, such decisions shall, as a last resort, be adopted by a two-thirds majority vote of the Parties present and voting representing at least 50% of the total consumption of the controlled substances of the Parties.
- (d) The decisions, which shall be binding on all Parties, shall forthwith be communicated to the Parties by the Depositary. Unless otherwise provided in the decisions, they shall enter into force on the expiry of six months from the date of the circulation of the communication by the Depositary.
10. (a) Based on the assessment made pursuant to Article 6 of this Protocol and in accordance with the procedure set out in Article 9 of the Convention, the Parties may decide:
- (i) whether any substances, and if so which, should be added to or removed from any annex to this Protocol; and
 - (ii) the mechanism, scope and timing of the control measures that should apply to those substances.
- (b) Any such decision shall become effective, provided that it has been accepted by a two-thirds majority vote of the Parties present and voting.

11. Notwithstanding the provisions contained in this Article, Parties may take more stringent measures than those required by this Article.

Article 3

Calculation of control levels

For the purposes of Articles 2 and 5, each Party shall, for each group of substances in Annex A, determine its calculated levels of:

- (a) production by:
 - (i) multiplying its annual production of each controlled substance by the ozone-depleting potential specified in respect of it in Annex A; and
 - (ii) adding together, for each such group, the resulting figures;
- (b) imports and exports, respectively, by following, *mutatis mutandis*, the procedure set out in subparagraph (a); and
- (c) consumption by adding together its calculated levels of production and imports and subtracting its calculated level of exports as determined in accordance with subparagraphs (a) and (b). However, beginning on 1 January 1993, any export of controlled substances to non-parties shall not be subtracted in calculating the consumption level of the exporting Party.

Article 4

Control of trade with non-parties

1. Within one year of the entry into force of this Protocol, each Party shall ban the import of controlled substances from any State not party to this Protocol.
2. Beginning on 1 January 1993, no Party operating under paragraph 1 of Article 5 may export any controlled substance to any State not party to this Protocol.
3. Within three years of the date of the entry into force of this Protocol, the Parties shall, following the procedures in Article 10 of the Convention, elaborate in an annex a list of products containing controlled substances. Parties that have not objected to the annex in accordance with those procedures shall ban, within one year of the annex having become effective, the import of those products from any State not party to this Protocol.
4. Within five years of the entry into force of this Protocol, the Parties shall determine the feasibility of banning or restricting, from States not party to this Protocol, the import of products produced with, but not containing, controlled substances. If determined feasible, the Parties shall, following the procedures in Article 10 of the Convention, elaborate in an annex a list of such products. Parties that have not objected to it in accordance with those procedures shall ban or restrict, within one year of the annex having become effective the import of those products from any State not party to this Protocol.
5. Each Party shall discourage the export, to any State not party to this Protocol, of technology for producing and for utilizing controlled substances.

6. Each Party shall refrain from providing new subsidies, aid, credits, guarantees or insurance programmes for the export to States not party to this Protocol of products, equipment, plants or technology that would facilitate the production of controlled substances.

7. Paragraphs 5 and 6 shall not apply to products, equipment, plants or technology that improve the containment, recovery, recycling or destruction of controlled substances, promote the development of alternative substances, or otherwise contribute to the reduction of emissions of controlled substances.

8. Notwithstanding the provisions of this Article, imports referred to in paragraphs 1, 3 and 4 may be permitted from any State not party to this Protocol if that State is determined, by a meeting of the Parties, to be in full compliance with Article 2 and this Article, and has submitted data to that effect as specified in Article 7.

Article 5

Special situation of developing countries

1. Any Party that is a developing country and whose annual calculated level of consumption of the controlled substances is less than 0,3 kilograms per capita on the date of the entry into force of the Protocol for it, or any time thereafter within 10 years of the date of entry into force of the Protocol shall, in order to meet its basic domestic needs, be entitled to delay its compliance with the control measures set out in paragraphs 1 to 4 of Article 2 by 10 years after that specified in those paragraphs. However, such Party shall not exceed an annual calculated level of consumption of 0,3 kilograms per capita. Any such Party shall be entitled to use either the average of its annual calculated level of consumption for the period 1995 to 1997 inclusive or a calculated level of consumption of 0,3 kilograms per capita, whichever is the lower, as the basis for its compliance with the control measures.

2. The Parties undertake to facilitate access to environmentally safe alternative substances and technology for Parties that are developing countries and assist them to make expeditious use of such alternatives.

3. The Parties undertake to facilitate bilaterally or multilaterally the provision of subsidies, aid, credits, guarantees or insurance programmes to Parties that are developing countries for the use of alternative technology and for substitute products.

Article 6

Assessment and review of control measures

Beginning in 1990, and at least every four years thereafter, the Parties shall assess the control measures provided for in

Article 2 on the basis of available scientific, environmental, technical and economic information. At least one year before each assessment, the Parties shall convene appropriate panels of experts qualified in the fields mentioned and determine the composition and terms of reference of any such panels. Within one year of being convened, the panels will report their conclusions, through the secretariat, to the Parties.

Article 7

Reporting of data

1. Each Party shall provide to the secretariat, within three months of becoming a Party, statistical data on its production, imports and exports of each of the controlled substances for the year 1986, or the best possible estimates of such data where actual data are not available.

2. Each Party shall provide statistical data to the secretariat on its annual production (with separate data on amounts destroyed by technologies to be approved by the Parties), imports, and exports to Parties and non-parties, respectively, of such substances for the year during which it becomes a Party and for each year thereafter. It shall forward the data no later than nine months after the end of the year to which the data relate.

Article 8

Non-compliance

The Parties, at their first meeting, shall consider and approve procedures and institutional mechanisms for determining non-compliance with the provisions of this Protocol and for treatment of Parties found to be in non-compliance.

Article 9

Research, development, public awareness and exchange of information

1. The Parties shall cooperate, consistent with their national laws, regulations and practices and taking into account in particular the needs of developing countries, in promoting, directly or through competent international bodies, research, development and exchange of information on:

- (a) best technologies for improving the containment, recovery, recycling or destruction of controlled substances or otherwise reducing their emissions;
- (b) possible alternatives to controlled substances, to products containing such substances, and to products manufactured with them; and

(c) costs and benefits of relevant control strategies.

2. The Parties, individually, jointly or through competent international bodies, shall cooperate in promoting public awareness of the environmental effects of the emissions of controlled substances and other substances that deplete the ozone layer.

3. Within two years of the entry into force of this Protocol and every two years thereafter, each Party shall submit to the secretariat a summary of the activities it has conducted pursuant to this Article

Article 10

Technical assistance

1. The Parties shall, in the context of the provisions of Article 4 of the Convention, and taking into account in particular the needs of developing countries, cooperate in promoting technical assistance to facilitate participation in and implementation of this Protocol.

2. Any Party or Signatory to this Protocol may submit a request to the secretariat for technical assistance for the purposes of implementing or participating in the Protocol.

3. The Parties, at their first meeting, shall begin deliberations on the means of fulfilling the obligations set out in Article 9, and paragraphs 1 and 2 of this Article, including the preparation of workplans. Such workplans shall pay special attention to the needs and circumstances of the developing countries. States and regional economic integration organizations not party to the Protocol should be encouraged to participate in activities specified in such workplans.

Article 11

Meetings of the Parties

1. The Parties shall hold meetings at regular intervals. The secretariat shall convene the first meeting of the Parties not later than one year after the date of the entry into force of this Protocol and in conjunction with a meeting of the Conference of the Parties to the Convention, if a meeting of the latter is scheduled within that period.

2. Subsequent ordinary meetings of the Parties shall be held, unless the Parties otherwise decide, in conjunction with meetings of the Conference of the Parties to the Convention. Extraordinary meetings of the Parties shall be held at such other times as may be deemed necessary by a meeting of the Parties, or at the written request of any Party, provided that, within six months of such a request being communicated to them by the secretariat, it is supported by at least one-third of the Parties.

3. The Parties, at their first meeting, shall:

- (a) adopt by consensus rules of procedure for their meetings;
- (b) adopt by consensus the financial rules referred to in paragraph 2 of Article 13;
- (c) establish the panels and determine the terms of reference referred to in Article 6;
- (d) consider and approve the procedures and institutional mechanisms specified in Article 8; and
- (e) begin preparation of workplans pursuant to paragraph 3 of Article 10.

4. The functions of the meetings of the Parties shall be to:

- (a) review the implementation of this Protocol;
- (b) decide on any adjustments or reductions referred to in paragraph 9 of Article 2;
- (c) decide on any addition to, insertion in or removal from any annex of substances and on related control measures in accordance with paragraph 10 of Article 2;
- (d) establish, where necessary, guidelines or procedures for reporting of information as provided for in Article 7 and paragraph 3 of Article 9;
- (e) review requests for technical assistance submitted pursuant to paragraph 2 of Article 10;
- (f) review reports prepared by the secretariat pursuant to subparagraph (c) of Article 12;
- (g) assess, in accordance with Article 6, the control measures provided for in Article 2;
- (h) consider and adopt, as required, proposals for amendment of this Protocol or any annex and for any new annex;
- (i) consider and adopt the budget for implementing this Protocol; and
- (j) consider and undertake any additional action that may be required for the achievement of the purposes of this Protocol.

5. The United Nations, its specialized agencies and the International Atomic Energy Agency, as well as any State not party to this Protocol, may be represented at meetings of the Parties as observers. Any body or agency, whether national or international, governmental or non-governmental, qualified in fields relating to the protection of the ozone layer which has informed the secretariat of its wish to be represented at a meeting of the Parties as an observer may be admitted unless at least one-third of the Parties present object. The admission and participation of observers shall be subject to the rules of procedure adopted by the Parties.

*Article 12***Secretariat**

For the purposes of this Protocol, the secretariat shall:

- (a) arrange for and service meetings of the Parties as provided for in Article 11;
- (b) receive and make available, upon request by a Party, data provided pursuant to Article 7;
- (c) prepare and distribute regularly to the Parties reports based on information received pursuant to Articles 7 and 9;
- (d) notify the Parties of any request for technical assistance received pursuant to Article 10 so as to facilitate the provision of such assistance;
- (e) encourage non-parties to attend the meetings of the Parties as observers and to act in accordance with the provisions of this Protocol;
- (f) provide, as appropriate, the information and requests referred to in subparagraphs (c) and (d) to such non-party observers; and
- (g) perform such other functions for the achievement of the purposes of this Protocol as may be assigned to it by the Parties.

*Article 13***Financial Provisions**

1. The funds required for the operation of this Protocol, including those for the functioning of the secretariat related to this Protocol, shall be charged exclusively against contributions from the Parties.
2. The Parties, at their first meeting, shall adopt by consensus financial rules for the operation of this Protocol

*Article 14***Relationship of this Protocol to the Convention**

Except as otherwise provided in this Protocol, the provisions of the Convention relating to its protocols shall apply to this Protocol.

*Article 15***Signature**

This Protocol shall be open for signature by States and by regional economic integration organizations in Montreal on

16 September 1987, in Ottawa from 17 September 1987 to 16 January 1988, and at United Nations Headquarters in New York from 17 January 1988 to 15 September 1988.

*Article 16***Entry into force**

1. This Protocol shall enter into force on 1 January 1989, provided that at least 11 instruments of ratification, acceptance, approval of the Protocol or accession thereto have been deposited by States or regional economic integration organizations representing at least two-thirds of 1986 estimated global consumption of the controlled substances, and the provisions of paragraph 1 of Article 17 of the Convention have been fulfilled. In the event that these conditions have not been fulfilled by that date, the Protocol shall enter into force on the 90th day following the date on which the conditions have been fulfilled.

2. For the purposes of paragraph 1, any such instrument deposited by a regional economic integration organization shall not be counted as additional to those deposited by member States of such organization.

3. After the entry into force of this Protocol, any State or regional economic integration organization shall become a Party to it on the 90th day following the date of deposit of its instrument of ratification, acceptance, approval or accession.

*Article 17***Parties joining after entry into force**

Subject to Article 5, any State or regional economic integration organization which becomes a Party to this Protocol after the date of its entry into force, shall fulfil forthwith the sum of the obligations under Article 2, as well as under Article 4, that apply at that date to the States and regional economic integration organizations that became Parties on the date the Protocol entered into force.

*Article 18***Reservations**

No reservations may be made to this Protocol.

*Article 19***Withdrawal**

For the purpose of this Protocol, the provisions of Articles 19 of the Convention relating to withdrawal shall

apply, except with respect to Parties referred to in paragraph 1 of Article 5. Any such Party may withdraw from this Protocol by giving written notification to the Depositary at any time after four years of assuming the obligations specified in paragraphs 1 to 4 of Article 2. Any such withdrawal shall take effect upon expiry of one year after the date of its receipt by the Depositary, or on such later date as may be specified in the notification of the withdrawal.

Article 20

Authentic texts

The original of this Protocol, of which the Arabic, Chinese, English, French, Russian and Spanish texts are equally authentic, shall be deposited with the Secretary-General of the United Nations.

In witness whereof the undersigned, being duly authorized to that effect, have signed this protocol.

Done at Montreal this sixteenth day of September, one thousand nine hundred and eighty-seven.

Annex A

CONTROLLED SUBSTANCES

Group	Substance	Ozone-depleting potential ⁽¹⁾
Group I	CFCl ₃ (CFC-11)	1,0
	CF ₂ Cl ₂ (CFC-12)	1,0
	C ₂ F ₃ Cl ₃ (CFC-113)	0,8
	C ₂ F ₄ Cl ₂ (CFC-114)	1,0
	C ₂ F ₅ Cl (CFC-115)	0,6
Group II	CF ₂ BrCl (halon-1211)	3,0
	CF ₃ Br (halon-1301)	10,0
	C ₂ F ₄ Br ₂ (halon-2402)	(to be determined)

⁽¹⁾ These ozone-depleting potentials are estimates based on existing knowledge and will be reviewed and revised periodically.

ANNEX II

Declaration by the European Economic Community in conformity with Article 13 (3) of the Vienna Convention for the protection of the ozone layer concerning the extent of its competence with respect to the matters covered by the Convention and by the Montreal Protocol on substances that deplete the ozone layer

In accordance with the relevant Articles of the EEC Treaty, the Community has competence to take action relating to the preservation, protection and improvement of the quality of the environment.

The Community has exercised its competence in the area covered by the Vienna Convention and the Montreal Protocol in adopting Council Decision 80/372/EEC of 26 March 1980 concerning chlorofluorocarbons in the environment ⁽¹⁾, Council Decision 82/795/EEC of 15 November 1982 on the consolidation of precautionary measures concerning chlorofluorocarbons in the environment ⁽²⁾ and Council Regulation (EEC) No 3322/88 of 14 October 1988 on certain chlorofluorocarbons and halons which deplete the ozone layer ⁽³⁾. The Community may well exercise its competence in the future by adopting further legislation in this area.

In the field of research in the environment, as referred to by the Convention, the Community has a certain competence by virtue of Council Decision 86/234/EEC of 10 June 1986 adopting multiannual R&D programmes in the field of the environment (1986 to 1990).

⁽¹⁾ OJ No L 90, 3. 4. 1980, p. 45.

⁽²⁾ OJ No L 329, 25. 11. 1982, p. 29.

⁽³⁾ See page 1 of this Official Journal.