

No. 26164

MULTILATERAL

**Vienna Convention for the Protection of the Ozone Layer
(with annexes and Final Act). Concluded at Vienna on
22 March 1985**

*Authentic texts: Arabic, Chinese, English, French, Russian and Spanish.
Registered ex officio on 22 September 1988.*

MULTILATÉRAL

**Convention de Vienne pour la protection de la couche d'ozone
(avec annexes et Acte final). Conclue à Vienne le 22 mars
1985**

*Textes authentiques : arabe, chinois, anglais, français, russe et espagnol.
Enregistrée d'office le 22 septembre 1988.*

VIENNA CONVENTION¹ 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,

¹ Came into force on 22 September 1988, i.e., the ninetieth day following the date of deposit with the Secretary-General of the United Nations of the twentieth instrument of ratification, acceptance, approval or accession, in accordance with article 17 (1):

<i>State</i>	<i>Date of deposit of the instrument of ratification, acceptance (A), approval (AA) or accession (a)</i>	<i>State</i>	<i>Date of deposit of the instrument of ratification, acceptance (A), approval (AA) or accession (a)</i>
Australia	16 September 1987 <i>a</i>	United Kingdom of Great Britain and Northern Ireland	15 May 1987
Austria	19 August 1987	(In respect of the United Kingdom of Great Britain and Northern Ireland and the following territories: Bailiwick of Jersey, Isle of Man, Anguilla, Bermuda, British Antarctic Territory, British Indian Ocean Territory, British Virgin Islands, Cayman Islands, Falkland Islands, Gibraltar, Hong Kong, Montserrat, Pitcairn, Henderson, Ducie and Oeno Islands, Saint Helena, Saint Helena Dependencies, South Georgia and South Sandwich Islands, Turks and Caicos Islands, and United Kingdom Sovereign Base Areas of Akrotiri and Dhekelia in the Island of Cyprus.)	
Byelorussian Soviet Socialist Republic	20 June 1986 <i>A</i>	United States of America	27 August 1986
Canada	4 June 1986		
Egypt	9 May 1988		
Finland*	26 September 1986		
France	4 December 1987 <i>AA</i>		
Guatemala	11 September 1987 <i>a</i>		
Hungary	4 May 1988 <i>a</i>		
Maldives	26 April 1988 <i>a</i>		
Mexico	14 September 1987		
New Zealand	2 June 1987		
(With a declaration of application to the Cook Islands and Niue.)			
Norway*	23 September 1986		
Sweden*	26 November 1986		
Switzerland	17 December 1987		
Uganda	24 June 1988 <i>a</i>		
Ukrainian Soviet Socialist Republic	18 June 1986 <i>A</i>		
Union of Soviet Socialist Republics	18 June 1986 <i>A</i>		

* See p. 422 of this volume for the texts of the declarations made upon ratification.

Subsequently, the Convention came into force in respect of each of the States listed below the ninetieth day following the date of deposit with the Secretary-General of the United Nations of its instrument of ratification, acceptance, approval or accession, in accordance with article 17 (3):

<i>State</i>	<i>Date of deposit of the instrument of ratification or accession (a)</i>
Spain	25 July 1988 (<i>a</i>)
(With effect from 23 October 1988.)	
Equatorial Guinea	17 August 1988 (<i>a</i>)
(With effect from 15 November 1988.)	
Venezuela	1 September 1988 (<i>a</i>)
(With effect from 30 November 1988.)	
Ireland	15 September 1988 (<i>a</i>)
(With effect from 14 December 1988.)	
Malta	15 September 1988 (<i>a</i>)
(With effect from 14 December 1988.)	
Italy	19 September 1988
(With effect from 18 December 1988.)	

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 co-operation 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 modifications 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) Co-operate 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 co-operate 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) Co-operate 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) Co-operate 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 co-operate 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 ultra-violet 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 or natural and synthetic materials useful to mankind;

(e) Substances, 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 observation of the state of the ozone layer and other relevant parameters, as elaborated in annex I.

3. The Parties undertake to co-operate, 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. CO-OPERATION 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 co-operate, 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 co-operation 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 co-operation, 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;

(j) Seek, where appropriate, the services of competent international bodies and scientific committees, in particular the World Meteorological Organization and the World Health Organization, as well as the Co-ordinating 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 co-ordination 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 ninetieth 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 ninetieth day after the 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 considerations.

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 paragraph 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 Depositary 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 Depositary.

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 Depositary 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 ninetieth day after the date of deposit of the twentieth instrument of ratification, acceptance, approval or accession.

2. Any protocol, except as otherwise provided in such protocol, shall enter into force on the ninetieth day after the date of deposit of the eleventh 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 twentieth instrument of ratification, acceptance, approval or accession, it shall enter into force on the ninetieth 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 ninetieth 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 purposes 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 Depositary.

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) Notifications 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 thereto.

(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 ultra-violet 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 Convention, in accordance with article 3, shall co-operate 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 co-ordinated 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 ultra-violet 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 ultra-violet 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 co-operate, 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 affects 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 plays 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 stratosphere 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. CCl₄, CFCI₃ (CFC-11), CF₂CI₂ (CFC-12), C₂F₃CI₃ (CFC-113), C₂F₄CI₂ (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 30-50 km altitude region.

(ii) *Partially halogenated alkanes, e.g. CH₃CI, CHF₂CI (CFC-22), CH₃CCl₃ (CHFCI₂ (CFC-21))*. The sources of CH₃CI 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. CF₃Br. 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 (H₂)*. Hydrogen, the source of which is natural and anthropogenic, plays a minor role in stratospheric photochemistry.

(ii) *Water (H₂O)*. 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 co-operation 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 co-ordination 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.

[For the signatures, see p. 386 of this volume.]

DECLARATIONS MADE UPON
RATIFICATION

FINLAND

“With respect to Article 11 paragraph 3 of the Convention Finland declares that it accepts both of the said means of dispute settlement as compulsory.”

NORWAY

“Norway accepts the means of dispute settlement as described in art. 11, para. 3 (a) and (b) of the Convention as compulsory; that is a) arbitration in accordance with procedures to be adopted by the Conference of the Parties at its first ordinary meeting, or b) submission of the dispute to the International Court of Justice.”

SWEDEN

“Sweden accepts the following means of dispute settlement as compulsory:

“Submission of the dispute to the International Court of Justice (Article 11, paragraph 3 (b)).

“It is, however, the intention of the Swedish Government to accept also the following means of dispute settlement as compulsory;

“Arbitration in accordance with procedures to be adopted by the Conference of the Parties at its first ordinary meeting (Article 11, paragraph 3 (a)).

“A declaration in this latter respect will, however, not be given until the procedures for arbitration have been adopted by the Conference of the Parties at its first ordinary meeting.”

DÉCLARATIONS FAÏTES LORS
DE LA RATIFICATION

FINLANDE

[TRADUCTION — TRANSLATION]

En référence au paragraphe 3 de l'article 11 de la Convention, la Finlande déclare qu'elle accepte comme obligatoires les deux modes de règlement des différends qui ont été prévus.

NORVÈGE

[TRADUCTION — TRANSLATION]

La Norvège accepte de considérer comme obligatoires les modes de règlement des différends décrits dans les alinéas a et b du paragraphe 3 de l'article 11 de la Convention; a) l'arbitrage conformément à la procédure qui sera adoptée par la Conférence des Parties à sa première session ordinaire ou b) soumission du différend à la Cour internationale de Justice.

SUÈDE

[TRADUCTION — TRANSLATION]

La Suède accepte de considérer comme obligatoire le mode de règlement ci-après :

Soumission du différend à la Cour internationale de Justice (alinéa b du paragraphe 3 de l'article 11).

Le Gouvernement suédois a toutefois l'intention de considérer également comme obligatoire le mode de règlement ci-après :

Arbitrage, conformément à la procédure qui sera adoptée par la Conférence des Parties, à sa première session ordinaire (alinéa a du paragraphe 3 de l'article 11).

La Suède attendra toutefois pour faire une déclaration sur ce dernier point que la procédure d'arbitrage ait été adoptée par la Conférence des Parties, à sa première session ordinaire.

FINAL ACT OF THE CONFERENCE OF PLENIPOTENTIARIES ON THE PROTECTION OF THE OZONE LAYER

1. The Conference of Plenipotentiaries on the Protection of the Ozone Layer was convened by the Executive Director of the United Nations Environment Programme (UNEP) pursuant to decision 12/14, section 1, paragraph 4, adopted by the Governing Council of UNEP on 28 May 1984.

2. The Conference met at the Vienna International Centre, Vienna, with the kind support of the Government of the Republic of Austria, from 18 to 22 March 1985.

3. All States were invited to participate in the Conference. The following States accepted the invitation and participated in the Conference: Algeria, Argentina, Australia, Austria, Belgium, Brazil, Byelorussian Soviet Socialist Republic, Canada, Chile, Denmark, Egypt, Finland, France, Germany, Federal Republic of, Greece, Ireland, Italy, Japan, Luxembourg, Mexico, Morocco, Netherlands, New Zealand, Nigeria, Norway, Peru, Philippines, Senegal, Spain, Sweden, Switzerland, Ukrainian Soviet Socialist Republic, Union of Soviet Socialist Republics, United Kingdom of Great Britain and Northern Ireland, United States of America, Venezuela.

4. Observers from the following States attended the proceedings of the Conference: Bulgaria, China, Ecuador, Indonesia, Tunisia, Uruguay, Yugoslavia.

5. Observers from the following United Nations bodies, specialized agencies, intergovernmental and non-governmental organizations also attended the Conference: United Nations Industrial Development Organization, World Meteorological Organization, European Economic Community, Organization for Economic Co-operation and Development, European Council of Chemical Manufacturers' Federations, International Chamber of Commerce, Federation of European Aerosol Associations.

6. In the course of the inaugural ceremony, the Conference heard a welcoming address by Dr. Kurt Stöyrer, Federal Minister for Health and Environmental Protection on behalf of the Government of the Republic of Austria. The Conference was formally opened by Dr. Mostafa K. Tolba, the Executive Director of UNEP, who served as Secretary-General of the Conference and appointed Mr. Jerry O'Dell as Executive Secretary.

7. The Conference unanimously elected Dr. Winfried Lang (Austria) as its President.

8. The Conference also elected the following officers:

Vice-Presidents:

Mr. Geraldo Eulalio do Nascimento e Silva (Brazil)

Mr. Mohamed El-Taher Shash (Egypt)

Mr. Rune Lönngren (Sweden)

Mr. Yuri Sedunov (Union of Soviet Socialist Republics)

Rapporteur:

Mr. Willem Kakebeeke (Netherlands)

9. The Conference adopted the following agenda:

1. Opening of the Conference.
2. Organizational matters:
 - (a) Adoption of the rules of procedure;
 - (b) Election of the President;
 - (c) Election of Vice-Presidents and Rapporteur;
 - (d) Adoption of the agenda;
 - (e) Appointment of the Credentials Committee;
 - (f) Appointment of the Drafting Committee;
 - (g) Organization of the work of the Conference.
3. Consideration of the draft Convention for the Protection of the Ozone Layer, and its technical annexes.
4. Consideration of the report of the *Ad Hoc* Working Group of Legal and Technical Experts for the Elaboration of a Global Framework for the Protection of the Ozone Layer, concerning a draft Protocol on Chlorofluorocarbons.
5. Consideration of the report of the Credentials Committee.
6. Adoption of the Convention and other instruments, as appropriate.
7. Adoption of the Final Act of the Conference.
8. Signature of final instruments.
9. Closing of the Conference.

10. The Conference adopted as its rules of procedure document UNEP/IG.53/2 proposed by the secretariat, as amended (UNEP/IG.53/2/Corr.1).

11. In conformity with the rules of procedure, the Conference established the following Committees:

Committee of the Whole

Chairman: The President of the Conference

General Committee

Chairman: The President of the Conference

Members: The Vice-Presidents of the Conference, the Rapporteur and the Chairman of the Drafting Committee

Drafting Committee

Chairman:

Mr. Alberto L. Davèrède (Argentina)

Members:

Mr. Waguih Saïd Hanafi (Egypt)

Ms. Satu Nurmi (Finland)

Mr. Philippe Seigneurin (France)

Mr. Vadim Bakoumov (USSR)

Mr. Patrick Széll (United Kingdom)

Mr. Scott A. Hajost (USA)

12. The main documents which served as the basis for the deliberations of the Conference were:

- Fifth Revised Draft Convention for the Protection of the Ozone Layer (UNEP/IG.53/3)
- Final Report of the *Ad Hoc* Working Group of Legal and Technical Experts for the Elaboration of a Global Framework Convention for the Protection of the Ozone Layer (UNEP/IG.53/4).

13. In addition, the Conference had before it a number of other documents that were made available to it by the Secretariat of UNEP.^(*)

14. The Conference approved the recommendation of its Credentials Committee that the credentials of the representatives of the participating States as listed in paragraph 3 should be recognized as being in order.

15. On the basis of the deliberations of the Committee of the Whole, the Conference, on 22 March 1985, adopted the Vienna Convention for the Protection of the Ozone Layer. The Convention, which is appended to this Final Act, will be open for signature at the Federal Ministry for Foreign Affairs of the Republic of Austria in Vienna from 22 March 1985 to 21 September 1985, and at the United Nations Headquarters in New York from 22 September 1985 to 21 March 1986.

16. The Conference also adopted the following resolutions which are appended to this Final Act:

1. Resolution on institutional and financial arrangements;
2. Resolution on a protocol concerning chlorofluorocarbons;
3. Tribute to the Government of the Republic of Austria.

17. At the time of the adoption of this Final Act, several States made declarations which are recorded in document UNEP/IG.53/5 appended hereto.¹

IN WITNESS WHEREOF the representatives have signed this Final Act.

DONE at Vienna this twenty-second day of March one thousand nine hundred and eighty-five in one original in the Arabic, Chinese, English, French, Russian and Spanish languages, each language version being equally authentic. The original text will be deposited with the Secretary-General of the United Nations.

(*) Financial implications of the implementation of the Convention for the Protection of the Ozone Layer: Revised estimates, and comments by WMO (documents UNEP/WG.94/13, UNEP/WG.94/13/Add.1 and UNEP/WG.94/13/Add.2/Rev.1).

¹ See page 446.

1. *Resolution on Institutional and Financial Arrangements*

The Conference,

Having adopted the Vienna Convention for the Protection of the Ozone Layer,

Recalling that under the Convention the United Nations Environment Programme (UNEP) is responsible for carrying out the secretariat functions until the completion of the first ordinary meeting of the Conference of the Parties held pursuant to article 6 of the Convention,

Recognizing that it is for the Parties to the Convention to finance the costs of the secretariat of the Convention and other administrative costs,

1. Notes the cost estimates for the first two years of the Convention secretariat, as presented by the secretariats of UNEP and the World Meteorological Organization (WMO);

2. Also notes the willingness of the Executive Director of UNEP to contribute towards the costs of the interim secretariat during its initial two to three years of operation, subject to the availability of resources in the Environment Fund;

3. Requests the Executive Director of UNEP, in consultation with the signatories to the Convention and in close co-operation with WMO and other relevant United Nations bodies, to make arrangements required for the interim secretariat in order to achieve the objectives of the Convention;

4. Further notes with appreciation the statements of the Executive Director of UNEP and the WMO Executive Council, offering to serve as the permanent secretariat for the Convention.

2. Resolution on a Protocol Concerning Chlorofluorocarbons

The Conference,

Noting with appreciation that the Convention for the Protection of the Ozone Layer was opened for signature in Vienna on 22 March 1985,

Bearing in mind decision 8/7B adopted on 29 April 1980 by the Governing Council of the United Nations Environment Programme (UNEP),

Considering that the Convention is an important step to protect the ozone layer from modifications due to human activities,

Noting that article 2 of the Convention establishes an obligation 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 the possibility that world-wide emissions and use of fully-halogenated chlorofluorocarbons (CFCs) and other chlorine-containing substances can significantly deplete and otherwise modify the ozone layer, leading to potentially adverse effects on human health, crops, marine life, materials and climate, and recognizing at the same time the need to further assess possible modifications and their potentially adverse effects,

Mindful of the precautionary measures for controlling emissions and use of CFCs that have already been taken at national and regional levels, but recognizing that such measures might not be sufficient for protecting the ozone layer,

Determined therefore to continue negotiations on the development of a protocol to control equitably global production, emissions and use of CFCs,

Mindful that special consideration should be given to the particular situation of developing countries,

Mindful also of the relationship between the level of industrialization of a State and its responsibilities for the protection of the ozone layer,

Noting the considerable progress made by the *Ad Hoc* Working Group of Legal and Technical Experts for the Elaboration of a Global Framework Convention for the Protection of the Ozone Layer to develop a protocol concerning CFCs, but further noting that the Working Group was not in a position to complete its work on the protocol,

1. Pending the entry into force of the Convention, requests the Executive Director of UNEP, on the basis of the work of the *Ad Hoc* Working Group, to convene a working group to continue work on a protocol that addresses both short and long term strategies to control equitably global production, emissions and use of CFCs, taking into account the particular situation of developing countries as well as updated scientific and economic research;

2. Urges all interested parties, in order to facilitate work on a protocol, to co-operate in studies leading to a more common understanding of possible scenarios for global production, emissions and use of CFCs and other substances affecting the ozone layer and the costs and effects of various control measures and, to this end, requests such parties to sponsor, under the patronage of UNEP, a workshop on this subject;

3. Requests the working group, in further developing a protocol, to take into account, *inter alia*, the report of the Co-ordinating Committee on the Ozone Layer on its eighth session as well as the 1985 World Meteorological Organization assessment of the current understanding of the physical and chemical processes which control atmospheric ozone;

4. Authorizes the Executive Director, in consultation with the signatories and pending the entry into force of the Convention, to convene a Diplomatic Conference, if possible in 1987, for the purpose of adopting such a protocol;

5. Appeals to signatories to the Convention and to other interested parties participating in the preparation of a protocol to make available financial means to support activities envisaged under the above paragraphs;

6. Urges all States and regional economic integration organizations, pending entry into force of a protocol, to control their emissions of CFCs, *inter alia* in aerosols, by any means at their disposal, including controls on production or use, to the maximum extent practicable.

3. *Tribute to the Government of the Republic of Austria*

The Conference,

Having met in Vienna from 18 to 22 March 1985 at the gracious invitation of the Government of the Republic of Austria,

Convinced that the efforts made by the Government of the Republic of Austria and by the civic authorities of Vienna in providing facilities, premises and other resources contributed significantly to the smooth conduct of its proceedings,

Deeply appreciative of the courtesy and hospitality extended by the Government of the Republic of Austria and the City of Vienna to the members of the delegations, observers and the secretariat attending the Conference,

Expresses its sincere gratitude to the Government of the Republic of Austria, to the authorities of Vienna and, through them, to the Austrian people and in particular to the population of Vienna for the cordial welcome which they accorded to the Conference and to those associated with its work and for their contribution to the success of the Conference.

DOCUMENT UNEP/IG.53/5

DECLARATIONS MADE AT THE TIME OF ADOPTION OF THE FINAL ACT OF THE CONFERENCE OF PLENIPOTENTIARIES ON THE PROTECTION OF THE OZONE LAYER

1. The delegations of Australia, Austria, Belgium, Canada, Chile, Denmark, Finland, France, Germany, Federal Republic of, Italy, Netherlands, New Zealand, Norway, Sweden, Switzerland, and United Kingdom of Great Britain and Northern Ireland express their regret at the absence from the Vienna Convention for the Protection of the Ozone Layer of any provision for the compulsory settlement of disputes by third parties, at the request of one party. Consistently with their traditional support for such a procedure, these delegations appeal to all Parties to the Convention to make use of the possibility of a declaration under article 11, paragraph 3, of the Convention.

2. The delegation of Egypt reiterates the importance attached by its Government to the international and national efforts to protect the environment, including the protection of the ozone layer. For that reason, it has participated from the outset in the preparatory work for the Conference of Plenipotentiaries on the Protection of the Ozone Layer, and in the adoption of the Convention and resolutions. While concurring with the consensus on article 1 of the Convention, the delegation of Egypt understands paragraph 6 of that article as being applicable to all regional organizations, including the Organization of African Unity and the League of Arab States, provided they fulfil the conditions laid down in that article, namely, that they have competence in respect of matters governed by the Convention and have been duly authorized by their member States in accordance with their internal rules of procedure. While concurring with the consensus on article 2 of the Convention, the delegation of Egypt states that the first sentence of paragraph 2 of that article should be read in the light of the third preambular paragraph. While concurring with the consensus on Resolution No. 1 on Institutional and Financial Arrangements, the delegation of Egypt states that its approval of the third preambular paragraph of that resolution is without prejudice to its position on the method of apportioning contributions among the member States, with particular reference to option 2, which it had supported during the discussions on preparatory document UNEP/WG.94/13, whereby 80 per cent of the costs would be covered by the industrialized countries and the remaining 20 per cent apportioned among the member States on the basis of the United Nations scale of assessment.

3. With regard to Resolution No. 2 on a Protocol Concerning Chlorofluorocarbons, the delegation of Japan is of the opinion that a decision whether or not to continue work on a protocol should await the results of the work of the Co-ordinating Committee on the Ozone Layer. Secondly, with regard to paragraph 6 of the above-mentioned resolution, the delegation of Japan is of the opinion that each country should itself decide how to control emissions of chlorofluorocarbons.

4. The delegation of Spain declares that, in accordance with the interpretation by the President of the Conference in his statement of 2 March 1985, its Government understands paragraph 6 of the Resolution on a Protocol Concerning Chlorofluorocarbons as being addressed exclusively to the individual countries themselves, which are urged to control their limits of production or use, and not to third countries or to regional organizations with respect to such countries.

5. The delegation of the United States of America declares that it understands article 15 of the Convention to mean that regional economic integration organizations, none of whose member States are parties to the Convention or relevant protocol, shall have one vote each. It further understands that article 15 does not allow any double voting by regional economic integration organizations and their member States; that is, regional economic integration organizations may never vote in addition to their member States which are party to the Convention or relevant protocol, and vice versa.

[For the signatures, see p. 475 of this volume.]