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FIRST MEETING OF THE PARTIES TO THE
MONTREAL PROTOCOL ON SUBSTANCES
THAT DEplete THE OZONE LAYER

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REPORT OF THE EXECUTIVE DIRECTOR OF THE UNITED NATIONS ENVIRONMENT
PROGRAMME TO THE FIRST MEETING OF THE PARTIES TO THE MONTREAL
PROTOCOL ON SUBSTANCES THAT DEplete THE OZONE LAYER

Introduction

1. This report covers the following main issues:
 - (a) Status of the Montreal Protocol on Substances that Deplete the Ozone Layer;
 - (b) Activities since the adoption of the Protocol;
 - (c) Draft rules of procedure and financial rules;
 - (d) Preparation for the review of control measures for ozone-depleting substances;
 - (e) Non-compliance with Protocol provisions;
 - (f) Workplans for research, development, public awareness, exchange of information and technical assistance;
 - (g) Review of annex A to the Protocol:
 - (i) Determination of the ozone depleting potential for halon 2404;

* UNEP/OzL.Pro.1/1/Rev.1.

- (ii) Ozone-depleting capacities of CFCs and halons and characteristics of other atmospheric constituents;
- (h) Reporting and confidentiality of data;
- (i) Clarification of the following terms and definitions:
 - (i) "Controlled substances" (in bulk);
 - (ii) "Controlled substances produced";
 - (iii) "Basic domestic needs";
 - (iv) "Industrial rationalization";
 - (v) "Developing countries";
 - (vi) "Destruction";
- (j) Clarification of article 2, paragraph 6, of the Protocol (Production from new facilities);
- (k) Exports and imports of used controlled substances;
- (l) Other issues;
- (m) Recommendations of the Executive Director.

A. Status of ratification and entry into force of the Protocol

2. The Montreal Protocol on Substances that Deplete the Ozone Layer was adopted in Montreal on 16 September 1988 within the framework of the Vienna Convention for the Protection of the Ozone Layer (1985) and was signed by 24 countries and the European Economic Community (EEC).

3. Article 16 of the Protocol states that the Protocol shall enter into force on 1 January 1989, provided that at least eleven 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 controlled substances, and the provisions of paragraph 1 of Article 17 of the Convention have been fulfilled". The conditions for entry into force were met before the end of December 1988, and the Protocol entered into force 1 January 1989.

4. The Vienna Convention entered into force on 22 September 1988, following the deposit of the twentieth instrument of ratification, by Uganda, on 24 June 1988. Details of the status of both the Convention and the Protocol are attached as annex I to the present report.

5. The estimated global consumption of the controlled substances was based on the figures reported by countries. By 31 December 1988, 70 countries and EEC had reported data, and estimates had been made for the remaining countries. On 24 May and 6 June 1988, the Executive Director sent letters to all countries that had not reported, together with UNEP estimates based on

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available data, and requested those countries to confirm whether the estimates were accurate. The letter indicated that the available estimates would be treated as the correct data if countries did not object to them by 30 August. On this basis, the UNEP secretariat estimated the 1986 global consumption of CFCs and halons controlled by the Protocol at approximately 1,140,000 metric tonnes.

6. By the end of December 1988, 29 countries and EEC had ratified, accepted, approved or acceded to the Protocol. These countries together accounted for 83 per cent of the estimated global consumption of the controlled substances.

B. Activities since the adoption of the Protocol: Ad Hoc Working Group meetings, the Scientific Review Meeting and the Workshop on Substitutes

7. In its resolution 3, on reporting on data, the Conference of Plenipotentiaries that adopted the Montreal Protocol requested the Executive Director of UNEP to convene, within six months of the adoption of the resolution, a meeting of governmental experts with the assistance of experts from relevant international organizations to make recommendations for the harmonization of data on production, imports and exports to ensure consistency and comparability of data on controlled substances.

8. The first session of the Ad Hoc Working Group of Legal and Technical Experts for the Harmonization of Data on Production, Imports and Exports of Substances that Deplete the Ozone Layer (the Working Group on Data Harmonization), convened in accordance with that resolution, was held in Nairobi from 9 to 11 March 1988.

9. The Working Group agreed on procedures for data reporting and also addressed several issues for the clarification of some of the Protocol provisions, including the definition of "controlled substances" (in bulk) and the terms "basic domestic needs" and "developing countries".

10. The Working Group also discussed recycling, technology transfer, destruction, confidentiality of data and the ozone-depleting potential of halon 2402. The full report on the work of the first session has been circulated as document UNEP/WG.185/5/Rev.1.

11. The second session of the Ad Hoc Working Group was held in The Hague, from 24 to 26 October 1988. It further addressed the above subjects and provided the UNEP secretariat with recommendations for the Executive Director to consider and present at the first meeting of the Parties to the Protocol. The report of the Working Group on the work of its second session is contained in document UNEP/OzL.WG.Data.2/3/Rev.2.

12. Prior to the second session of the Working Group, the Executive Director of UNEP had convened, in co-operation with the World Meteorological Organization (WMO), a meeting of scientific experts. A summary report of that meeting, which was held in The Hague on 17 and 18 October 1988, is contained in document UNEP/OzL.WG.Data.2/Inf.1.

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13. In accordance with resolution 2, on the exchange of technical information, of the Conference of Plenipotentiaries that adopted the Protocol, the Executive Director of UNEP also convened a Workshop on Substitutes and Alternatives to CFCs and Halons which was held in The Hague from 19 to 21 October 1988. The report of the workshop may be found in document UNEP/OzL.WG.2/Inf.2.

C. Adoption of rules of procedure and financial rules

14. The draft rules of procedure for the Conference of the Parties to the Protocol have been circulated as document UNEP/OzL.Pro.1/3. Although these rules are almost identical to the draft rules of procedure for the meetings of the Conference of the Parties to the Convention, the Secretariat deems it appropriate for the two bodies to adopt separate rules of procedure. The differences arise merely from the fact that the rules refer to two different legal instruments.

15. The draft rules are prepared on the basis of the rules of procedure for the Conference of Plenipotentiaries on the Protection of the Ozone Layer (UNEP/IG.53/2 and Corr.1), which were themselves prepared with reference to, inter alia, the rules of procedure for meetings and conferences of the Contracting Parties to the Convention for the Protection of the Mediterranean Sea against Pollution and its related protocols and the rules of procedure for meetings and Conferences of the Contracting Parties to the Convention for Co-operation in the Protection and Development of the Marine and Coastal Environment of the West and Central African region.

16. Draft financial rules (UNEP/OzL.Pro.1/4) are also being presented to the Contracting Parties for their consideration and adoption.

17. With regard to the financial implications and arrangements, the Executive Director wishes to refer to his letter of 27 October 1987 by which he requested the signatories of the Montreal Protocol to contribute towards the cost of implementing the Protocol. Developed countries and the EEC were asked to contribute \$15,000 each per year and developing countries were asked to contribute \$10,000 each per year over the three-year period 1988-1990. During the same period UNEP would contribute \$25,000 per year.

18. The signatories were reminded of this request by cable of 15 January 1988 and by letter of 30 November 1988.

19. By the end of 1988 only eight countries - Finland, Mexico, Netherlands, Norway, Portugal, Sweden, United Kingdom and the United States of America - had paid their contributions, while France and Panama had pledged but not paid their contributions.

D. Preparation for the review of the control measures
for ozone depleting substances

20. According to article 6 of the Montreal Protocol ("Assessment and review of control measures"), the Parties beginning in 1990, and at least every four years thereafter, have to assess the control measures provided for in article 2 of the Protocol on the basis of available scientific, environmental, technical and economic information. At least one year before each assessment, the Parties are to 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.

21. The Executive Director of UNEP presented his plan for the assessment process to the Scientific Review Meeting of the Depletion of the Ozone Layer, the Workshop on Substitutes and Alternatives to CFC's and Halons, and the second session of the Ad Hoc Working Group on Data Harmonization, referred to in paragraphs 11-13.

22. In view of current concerns that the existing control measures may be insufficient to stabilize the ozone layer within acceptable bounds, based particularly on the executive summary of the report of the Ozone Trends Panel, the Executive Director has anticipated the needs of the Parties to receive, at the earliest possible time, the reviews of scientific, environmental, technical and economic information and has taken appropriate measures after consultations at the above-mentioned meetings to accelerate the assessment process by establishing four panels to start the review of the available scientific, environmental, technical and economic information. The schedule for the process is set forth in annex II to the present report.

23. The Parties are invited to consider and endorse the establishment of the following four panels:

- (a) A panel for atmospheric science assessment;
- (b) A panel for environmental effects assessment;
- (c) A panel for technology assessment;
- (d) A panel for economic assessment.

The composition of these panels is presented in annex III.

24. The Parties are also invited to consider and adopt the terms of reference for these panels. Draft terms of reference are contained in annex IV.

25. The Parties are further invited to establish a working group to integrate the reports of the four expert panels and make recommendations on any required changes in the control measures on the basis of the assessment of the control measures at least six months prior to the convening of the second meeting of the Parties to the Montreal Protocol. The Parties may wish to authorize the Secretariat to convene meetings of the working group in order to facilitate the preparation of decisions which the Parties may take at their second meeting, if deemed necessary, on the amendment of the control measures in accordance with article 6 of the Protocol. The same working group would be authorized to develop the workplans discussed in paragraphs 28-34 of this report.

E. Non-compliance with Protocol provisions

26. According to article 8 of the Protocol, the Parties, at their first meeting, are to consider and approve procedures and institutional mechanisms for determining non-compliance with the provisions of the Protocol and for treatment of Parties found to be in non-compliance. The matter was briefly discussed by the Legal Group established by the Ad Hoc Working Group on Data Harmonization during its second session. The Legal Group was of the opinion "that the procedures and constitutional mechanisms for determining non-compliance and for treatment of non-complying Parties to be agreed upon by the Contracting Parties at their First Meeting were likely to be of such a nature that they should only become effective if formalized as an amendment to the Protocol (for instance, in the form of a new annex in accordance with the procedure prescribed for amendments)" (UNEP/OzL.WG.Data.2/3/Rev.2, annex II).

27. The Parties are requested to consider procedures and institutional mechanisms to deal with non-compliance with the Protocol. A proposal by the United States is contained in annex V to the present report.

F. Workplans for research, development, public awareness, exchange of information and technical assistance (articles 9, 10 and 11, paragraph 3 (e), of the Protocol)

28. According to article 11, paragraph 3 (e), of the Protocol, the Parties to the Protocol, at their first meeting, shall begin preparation of workplans pursuant to article 10, paragraph 3. These workplans concern in the first place co-operation prescribed under article 9 of the Protocol in promoting research, development and exchange of information on:

- (a) Technologies to reduce emissions of controlled resources;
- (b) Possible alternatives to the controlled substances;
- (c) Costs and benefits of relevant control strategies;
- (d) Public awareness of environmental effects of the emissions of substances that deplete the ozone layer.

29. According to Article 10 of the Protocol, the workplans should also promote technical assistance to facilitate participation in and implementation of the Protocol and should 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.

30. Since the adoption of the Montreal Protocol a number of activities have been undertaken to facilitate the exchange of information and the transfer to technology, including the Workshop on Substitutes and Alternatives referred to in paragraph 13 above, highlights of which are available in document UNEP/OzL.Alt.1/3.

31. At its second session, held in The Hague from 24 to 26 October 1988, the Ad Hoc Working Group on data harmonization endorsed the Executive Director's proposal to speed up the assessment process (UNEP/OzL.WG.Data 2/3/Rev.2, para. 25). The outcome of the work of the economic Review Panel and the Technology Review Panel will constitute an important contribution to the information exchange and technology transfer.

32. It is also important to note the other activities currently taking place around the world such as the London Conference on Saving the Ozone Layer, held from 5 to 7 March 1989, and the planned conference in Japan on alternative technologies.

33. In making a start with the preparation of these workplans the Parties to the Protocol at their first meeting may wish to draw on the report submitted by the Working Group on Information and Technology Transfer established by the Ad Hoc Working Group on Data Harmonization during its second session in The Hague. The report of this Working Group (UNEP/OzL.WG.Data.2/3/Rev.2, annex IV) was adopted by the Ad Hoc Working Group.

34. The Parties are invited to consider the following elements for inclusion in the workplan, bearing in mind their obligation to submit a summary of activities in this field according to article 9, paragraph 3, of the Protocol.

(a) Dissemination of the reports of the expert panels on atmospheric science, environmental effects, technology and economics, as well as the assessment report, and their follow-up;

(b) Regular updating of the expert panel reports, taking into account in particular the developments in the fields of production of environmentally sound substitutes or alternative technological solutions to the use of CFC's or halons;

(c) Development of a programme, including workshops, demonstration projects, training courses, exchange of experts and provision of consultants on control options, taking into account the special needs of developing countries, for the consideration by the Parties at their second meeting;

(d) Preparation of a study of retrofit technologies applicable to existing manufacturing facilities that produce controlled substances or products made with or containing such substances, to be presented to the Parties for their consideration at their second meeting;

(e) Facilitation of the production and wide dissemination of material for public information;

(f) Exploration of specific ways of promoting exchange and transfer of environmentally sound substitutes and alternative technologies;

(g) Initiatives to support activities in programmes of international organizations and financing agencies that could contribute towards implementing the provisions of the Protocol, and defining means by which the Secretariat can initiate concrete contacts with the appropriate international organizations, programmes and financing agencies for this purpose.

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As mentioned in paragraph 25 above, the working group to be established to prepare the integrated report on the assessment of the control measures and to make recommendations on any required change in such measures would be authorized to develop these workplans for consideration by the Contracting Parties at its second meeting.

G. Review of the annex A to the Protocol

(i) Determination of the ozone-depleting potential for halon 2402

35. The Parties to the Protocol at their first meeting are requested to determine the value of the ozone-depleting potential (ODP) for halon 2402 as well as the procedure for inserting this value into annex A of the Protocol.

36. At its second session, the Ad Hoc Working Group on Data Harmonization was informed that the UNEP/WMO Meeting on the Scientific Review of the Depletion of the Ozone Layer, held on 17-18 October 1988, had recommended the use of the ODP of 6.0 for halon 2402.

37. Some delegates drew the attention of the meeting to the intent of the negotiations in Montreal that due to the way annex A was structured, the ODP for halon 2402 should replace the words "to be determined". Once the ODP was decided upon by the scientific community this information would be conveyed to the signatories of the Protocol by the Depositary. The negotiations in Montreal emphasized this point since an ODP for halon 2402 was necessary to be able to complete the obligations for halon on the intended basket approach. The delegates underlined that a notification to the signatories of the decided ODP figure was the only necessary step (see UNEP/OzL.WG.Data.2/3/Rev.2, paras. 12-13).

38. In its report (UNEP/OzL.WG.Data.2/3/Rev.2, annex II) the Legal Group established by the Ad Hoc Working Group stated its opinion that the filling in of the figure 6.0 for halon 2402 in annex A to the Protocol as recommended by the scientists could be accomplished by a variety of means including:

(a) An amendment of the annex adopted in accordance with the amendment procedure provided for in the Protocol;

(b) Consensus agreement by the Parties at their first meeting to accept the halon 2402 figure, thereby implementing the annex by making the determination called for, so that the Depositary could fill in the halon 2402 figure by interpreting the text.

If the amendment procedure were followed, the UNEP secretariat and the Parties could use the halon 2402 figures on a provisional basis without prejudice to the position of the Parties pending the completion of the amendment procedure.

39. One delegation in the Ad Hoc Working Group reserved the right to come back to the subject pending further scientific consultations in its country regarding the ODP for halon 2402. That delegation stated that it would be advisable to consider the inclusion of the ODP for halon 2402 into annex A of the Protocol at the same time as consideration of the inclusion of the new figures for the ODP for CFC 114 and 115 as indicated in the summary report of the UNEP/WMO scientific review meeting (UNEP/OzL.WG.Data.2/Inf.1).

(ii) Ozone-depleting capacities of CFCs and halons and characteristics of other atmospheric constituents

40. Some mathematical modelling groups have recently suggested modifications to the ozone-depleting potentials (ODPs) of all the controlled substances relative to the ODP of CFC 11. The ODPs, as originally calculated, contained in annex A of the Protocol, lie within the range of new calculations of ODPs. Thus, the original values are not invalidated, and may be used in calculations using the formulae in article 3 for estimating consumption, production, imports and exports of the controlled substances.

41. It is recommended, however, that the Atmospheric Science Panel give full consideration to the question of ODPs, greenhouse-warming potential and atmospheric life-time of the various atmospheric constituents whether controlled or not and advise the Parties as to the environmental characteristics, both currently and in the light of projections of future production and emission, of all relevant atmospheric constituents. In this regard, particular attention should be paid to potential substitutes for the presently controlled substances, particularly HCFC 22. Similarly, the importance of methyl chloroform and carbon tetrachloride in controlling the volume of atmospheric ozone should be quantified.

H. Reporting and confidentiality of data

42. The Ad Hoc Working Group on Data Harmonization has not been able to agree on the question of the form of submission and extent of confidentiality of the statistical data to be submitted annually by the Parties on their production, imports and exports of the controlled substances under article 7, paragraph 2, of the Protocol.

43. The subject was addressed by the Ad Hoc Working Group at its second session and the discussion is reflected in annex III of its report (UNEP/OzL.WG.Data.2/3/Rev.2).

44. The Parties to the Protocol at their first meeting are requested to consider and reach agreement on:

(a) The question of whether article 7, paragraph 2, of the Protocol obliges each Party to submit to the secretariat statistical data on annual production, import and export of the controlled substances on a chemical basis or on a group by group basis;

(b) The question of whether, and if so to what extent and in what form, guarantees should be created in order to safeguard the commercial confidentiality of the statistical data submitted to the Secretariat.

45. In the Ad Hoc Working Group, views were divided over the legal obligations imposed by article 7. Some participants considered that article 7 clearly required Parties to report on a chemical by chemical basis; others were of the view that article 7 only required reporting on the basis of a basket of chemicals. This legal issue aside, it was accepted by all that the control measures under article 2 operated on and therefore required only aggregate data. At the same time, the Working Group identified a number of additional objectives, consistent with the purpose of the Protocol, which would be advanced by a more detailed reporting of data by parties. These included:

- (a) Stimulation of competition to cut back the use of certain substances;
- (b) Assistance in the development of replacement technologies and control strategies;
- (c) Assistance to scientists in modelling changes in the ozone layer;
- (d) Reassurance to the Parties that other Parties were complying with their obligations.

46. Balanced against these benefits however was the issue of confidentiality of information. Several mechanisms, in addition to the compromise proposal involving UNEP's aggregation of the raw national data, were considered. These included:

- (a) The use of a private firm of auditors to carry out the responsibilities assigned to UNEP in the compromise proposal;
- (b) The use of national audit certificates;
- (c) Provision for Parties to choose whether to report in detail or in aggregate, but in the latter case, to open themselves to the possibility of external audit.

47. A number of participants felt that the original compromise involving UNEP as the recipient of detailed data appeared to balance appropriately the need for confidentiality against the wider objectives of the Protocol; others considered that even under this option the requirements for confidentiality were not sufficiently protected and they preferred therefore that reporting on the basis of a basket of chemicals. The Contracting Parties are invited to make a decision on this issue.

48. In order to facilitate the reporting of imports and exports of controlled substances, the Parties to the Protocol at their first meeting may wish to consider a modification of the Harmonized Commodity Description and Coding System, developed under the auspices of the Customs Co-operation Council. In this connection, their attention is drawn to a proposal on the subject submitted by a working group at the second session of the Ad Hoc Working Group on Data Harmonization and which is attached to the present report as annex VI. It has to be noted however that the proposal was not discussed by the Ad Hoc Working Group at that session.

I. Clarification of terms and definitions

49. The following clarifications were agreed upon by the Ad Hoc Working Group on Data Harmonization at its second session and are proposed for adoption by the Parties to the Protocol at their first meeting. The sub-working group referred to below was established by the Ad Hoc Working Group at its second session and its recommendations were adopted by the Ad Hoc Working Group.

(i) Clarification of the definition of controlled substances (in bulk) in article 1, paragraph 4, of the Protocol

50. The Parties to the Protocol are requested to consider and reach agreement on a clarification of the definition of controlled substances in Article 1, paragraph 4, of the Protocol. The following clarification was agreed on by the Ad Hoc Working Group on Data Harmonization at its second session (UNEP/OzL.WG.Data.2/3/Rev.2, para. 21):

"(a) Article 1 of the Montreal Protocol excludes from consideration as a "controlled substance" any listed substance, whether alone or in a mixture, which is in a manufactured product other than a container used for transportation or storage;

"(b) Any amount of a controlled substance or a mixture of controlled substances which is not part of a use system containing the substance is a controlled substance for the purpose of the Protocol (i.e. a bulk chemical);

"(c) If a substance or mixture must first be transferred from a bulk container to another container, vessel or piece of equipment in order to realize its intended use, the first container is in fact utilized only for storage and/or transport, and the substance or mixture so packaged is covered by article 1, paragraph 4, of the Protocol;

"(d) If, on the other hand, the mere dispensing of the product from a container constitutes the intended use of the substance, then that container is itself part of a use system and the substance contained in it is therefore excluded from the definition;

"(e) Examples of use systems to be considered as products for the purposes of article 4, paragraph 3, are inter alia:

"(i) An aerosol can;

"(ii) A refrigerator or refrigerating plant, air conditioner or air-conditioning plant, heat pump, etc.;

"(iii) A polyurethane prepolymer or any foam containing, or manufactured with, a controlled substance;

"(iv) A fire extinguisher (wheeled or hand-operated) or an installed container incorporating a release device (automatic or hand-operated);

"(f) Bulk containers for shipment of controlled substances and mixtures containing controlled substances to users include (numbers being illustrative), inter alia:

"(i) Tanks installed on board ships;

"(ii) Rail tank cars (10-40 metric tons);

"(iii) Road tankers (up to 20 metric tons);

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"(iv) Cylinders from 0.4 kg to one metric ton;

"(v) Drums (5-300 kg);

"(g) Because containers of all sizes are used for either bulk or manufactured products, distinguishing on the basis of size is not consistent with the definition in the Protocol. Similarly, since containers for bulk or manufactured products can be designed to be rechargeable or not rechargeable, rechargeability is not sufficient for a consistent definition;

"(h) If the purpose of the container is used as the distinguishing characteristic as in the Protocol definition, such CFC or halon-containing products as aerosol spray cans and fire extinguishers, whether of the portable or flooding type, would therefore be excluded, because it is the mere release from such containers which constitute the intended use."

(ii) Guidance on the definition of "controlled substances produced" article 1, paragraph 5)"

51. A sub-working group examined the issues of transformation and recycling in the context of the Protocol's definition of "production" in article 1, paragraph 5. While this definition is silent on the treatment of controlled substances that are transformed or recycled as part of the manufacturing process, the sub-working Group sought to clarify the fact that controlled substances used as a feedstock in the manufacture of other chemicals or recycled from used controlled substances should be excluded from the amount of "controlled substances produced" as defined in article 1, paragraph 5.

52. The sub-working group developed the following recommendation:

The term "controlled substances produced" as used in article 1, paragraph 5, is the calculated level of controlled substances manufactured by a Party excludes the calculated level of controlled substances entirely used by that party as a feedstock in the manufacture of other chemicals. Excluded also from the term "controlled substances produced" is the calculated level of controlled substances derived from used controlled substances through recycling or recovery process.

53. The sub-working group recommended that each Party should establish accounting procedures to implement this definition.

54. The definition would allow each Party to exclude from its production totals, any controlled substances [it]* manufactured that is "entirely used as feedstocks" or that it produced from "used controlled substances". The sub-working group suggested that each Party should establish procedures for the implementation of this definition.

* There was a disagreement within the sub-working group on whether the definition agreed upon was intended to allow a manufacturer transforming a controlled substance into another chemical to claim a production credit for this regardless of whether the controlled substance was produced by the same party or imported.

(iii) Clarification of the term "basic domestic needs" in articles 2 and 5 of the Protocol

55. It was a wide held opinion among the experts of the Ad Hoc Working Group on Data Harmonization that "basic domestic needs" in articles 2 and 5 of the Protocol should be understood as not to allow production of products containing controlled substances to expand for the purpose of supplying other countries. However, in the understanding of certain delegates "domestic needs" could be understood in a wider sense to include the exports and imports of developing countries. It was decided that this term should be further considered by the first meeting of the Parties to the Protocol.

(iv) Clarification of the definition of "industrial rationalization" in article 1, paragraph 8, and Article 2, paragraphs 1 to 5, of the Protocol

56. The Parties to the Protocol at their first meeting are requested to consider and agree on the proper meaning of the term "industrial rationalization".

57. During the second session of the Ad Hoc Working Group on Data Harmonization (see UNEP/OzL.WG.Data.2/3/Rev.2, paras 22-24) several delegations were of the opinion that in interpreting the definition of industrial rationalization, it is not possible for one country to increase its production without a corresponding reduction of production in another country.

58. Some countries were of the view that Parties could meet their industrial rationalization requirements without formal and burdensome production transfer mechanisms provided, that Parties do not defeat the purpose of the Protocol by increasing exports to non-Parties during the period prior to 1 January 1993. These countries considered that a more rigid approach could discourage more economically efficient compliance responses.

59. It was suggested that the meeting of the Parties might benefit from legal clarification on this issue.

(v) Clarification of the term "developing countries"

60. The Parties to the Protocol at their first meeting are requested to consider and reach agreement on the exact list of "developing countries" relative to, inter alia, article 5 of the Protocol.

61. In his note dated 6 September 1988 (UNEP/OzL.WG.Data.2/2), the Executive Director of UNEP proposed the use of the list of countries currently members of the Group of 77 as attached as annex II to that note as a basis for considering which countries should be included on the list of developing countries to be presented at the first meeting of the Parties to the Protocol. The Executive Director noted that Romania and Yugoslavia were on the list but that China, Mongolia and Namibia were not.

62. The Ad Hoc Working Group on Data Harmonization, supported by its Legal Group, decided during its second session (see UNEP/OzL.WG.Data.2/3/Rev.2, paras. 17-19 and annex II) that Albania, China, Mongolia and Namibia should be

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added to the list and this recommendation should be submitted to the first meeting of the Parties to the Protocol. The list would, however, be used on an interim basis for determining the applicability of article 5. The list should be reviewed in the light of economic criteria and the per capita consumption of the controlled substances.

63. On the basis of the list received by the UNEP secretariat from the Office of the Chairman of the Group of 77 in New York by telex dated 10 August 1988, and with the addition of Albania, China, Mongolia and Namibia, the following countries would be considered to be developing countries for the purpose of the Protocol: Afghanistan, Albania, Algeria, Angola, Antigua and Barbuda, Argentina, Bahamas, Brazil, Brunei Darussalam, Burkina Faso, Burma, Burundi, Cameroon, Cape Verde, Central African Republic, Chad, Chile, China, Colombia, Comoros, Congo, Costa Rica, Côte d'Ivoire, Cuba, Cyprus, Democratic Kampuchea, Democratic People's Republic of Korea, Democratic Yemen, Djibouti, Dominica, Dominican Republic, Ecuador, Egypt, El Salvador, Equatorial Guinea, Ethiopia, Fiji, Gabon, Gambia, Ghana, Grenada, Guatemala, Guinea, Guinea-Bissau, Guyana, Haiti, Honduras, India, Indonesia, Iran (Islamic Republic of), Iraq, Jamaica, Jordan, Kenya, Kuwait, Lao People's Democratic Republic, Lebanon, Lesotho, Liberia, Libyan Arab Jamahiriya, Madagascar, Malawi, Malaysia, Maldives, Mali, Malta, Mauritania, Mauritius, Mexico, Mongolia, Morocco, Mozambique, Namibia, Nepal, Nicaragua, Niger, Nigeria, Oman, Pakistan, Panama, Papua New Guinea, Paraguay, Peru, Philippines, Qatar, Republic of Korea, Romania, Rwanda, Saint Christopher and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Samoa, Sao Tome and Principe, Saudi Arabia, Senegal, Seychelles, Sierra Leone, Singapore, Solomon Islands, Somalia, Sri Lanka, Sudan, Suriname, Swaziland, Syrian Arab Republic, Thailand, Togo, Tonga, Trinidad and Tobago, Tunisia, Uganda, United Arab Emirates, United Republic of Tanzania, Uruguay, Vanuatu, Venezuela, Viet Nam, Yemen, Yugoslavia, Zaire, Zambia and Zimbabwe.

(vi) Definition of "destruction"

64. The sub-working group also sought to provide recommendations concerning implementation of that aspect of the definition of article 1, paragraph 5, which states that production is equal to the amount of controlled substances produced "minus the amount destroyed by technologies to be approved by the Parties".

65. The sub-working group first defined a destruction process in the following manner:

"A destruction process is one which, when applied to controlled substances, results in the permanent transformation or decomposition of all or a significant portion of such substances."

66. Furthermore, to implement the requirement that such technologies be approved by the Parties, the sub-working group recommended that a standing technical committee be formed to review and recommend for approval by the Parties methods for transformation and decomposition and determine the amount of controlled substances that are transformed or decomposed by each method. A production credit would be given equal to the net reduction in the calculated level of the controlled substances, as defined in article 3 of the Montreal Protocol, that is achieved by the transformation or decomposition of controlled substances.

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67. The sub-working group recommended that the technical committee should review transformation and decomposition technologies and make recommendations to the Parties concerning their approval. It also suggested that the amount of production credit should be equal to the net reduction in the calculated substances (as defined in article 3 of the Protocol) that is actually achieved by the transformation or decomposition.

J. Clarification of article 2, paragraph 6, of the Protocol
(Production from new facilities)

68. Article 2, paragraph 6, of the Protocol allows a Party not operating under article 5 to add to its 1986 production level (for calculation purposes) production from new facilities completed by 31 December 1990, provided that the facilities were under construction and contracted for prior to 16 September 1987 and explicitly provided for in national legislation prior to 1 January 1987. Such production may not raise a Party's annual calculated level of consumption of the controlled substances above 0.5 kilograms per capita.

69. The wording of the Article opens the possibility of increasing the production for export purposes, and, since the Protocol does not explicitly ban exports from countries not operating under its article 5, this could appear to be a loophole in the Protocol.

70. In his note to the second session of the Ad Hoc Working Group on Data Harmonization, (UNEP/OzL.WG.Data.2/2) the Executive Director emphasized two points:

(a) Paragraphs 1 to 4 of article 2 of the Protocol freeze and then reduce annual production and therefore do not allow any increase of such production under article 2, paragraph 2.

(b) In accordance with article 18 of the 1969 Vienna Convention on the Law of Treaties, the signature or ratification of a treaty obliges countries to abstain from acts which would defeat its object and purpose. Since the object and purpose of the Protocol is to significantly reduce the production and use of CFCs and halons, neither article 2, paragraph 6, nor any other provision allows an increase in production to be exported to non-Parties so that the reduction in global consumption is not obtained in accordance with the object of the Protocol.

71. The Ad Hoc Working Group considered this clarification of article 2, paragraph 6, by the Executive Director as being correct (UNEP/OzL.WG.Data.2/3/Rev.2 para. 20). It was, moreover, emphasized by the Ad Hoc Working Group that only countries that notify the Secretariat that the facilities were under construction or contracted prior to 16 September 1987, provided for in national legislation prior to 1 January 1987 and completed by 31 December 1990 were allowed to operate under article 2, paragraph 6.

K. Exports and imports of used controlled substances

72. At its second session, the Ad Hoc Working Group in Data Harmonization recommended that imports and exports of bulk used controlled substances should be treated and recorded in the same manner as virgin controlled substances and included in the calculation of a Party's consumption limits.

L. Other issues

73. The Parties are also requested to consider the desirability of establishing a technical committee for the purpose of securing and recommending for approval by the Parties methods for transformation and decomposition and for determining the amounts of controlled substances that are transformed or decomposed by all methods (see para. 66 above).

74. They are, moreover, requested to consider the following future issues, which were raised at the second session of the Ad Hoc Working Group when the above recommendations on transformation, destruction and recycling were developed:

(a) The Parties should consider the extent to which other environmental considerations should be considered as part of the process for approving transformation or decomposition processes and the methods for so doing;

(b) Parties that are non-producers of controlled substances may receive production credits for either permanent transformation or decomposition of controlled substances that they have imported. Although these production credits would allow these Parties to increase imports of controlled substances, the issue was raised of whether the Protocol should be amended to allow for the transfer of such production credits to Parties with the capacity of produce controlled substances;

(c) Several industry representatives raised the issue of the need to approve transformation or decomposition technologies in a manner consistent with preserving proprietary business information.

M. Recommendations of the Executive Director

75. The Executive Director of UNEP recommends that after considering this report the Contracting Parties to the Montreal Protocol may wish to consider:

(a) Adopting the rules of procedure;

(b) Adopting the financial rules and budget;

(c) Deciding on the establishment of the assessment panels, the terms of reference and the working group on the integrated report and recommended changes to the control measures;

(d) Adopting procedures and mechanisms for determining non-compliance with the Protocol;

(e) Deciding on the preparation of workplans on research, development, public awareness, exchange of information and technical assistance;

(f) Adopting the ODP for halon 2402;

(g) Deciding on the submission and confidentiality of data;

/...

- (h) Deciding on the required clarification of the following terms and
 - (i) Controlled substances in bulk;
 - (ii) Transformation, recycling and destruction of controlled substances;
 - (iii) Basic domestic needs;
 - (iv) Industrial rationalization;
 - (v) Developing countries;
- (i) Deciding on production from new facilities;
- (j) Deciding on the modification of the Harmonized Commodity Description and Coding System.

Annex I

STATUS OF THE 1985 VIENNA CONVENTION FOR THE PROTECTION
OF THE OZONE LAYER AND THE 1987 MONTREAL PROTOCOL
ON SUBSTANCES THAT DEplete THE OZONE LAYER*

Vienna Convention for the Protection of the Ozone Layer <u>a/</u>		Montreal Protocol on Substances that Deplete the Ozone Layer <u>b/</u>		
	<u>Date of signature</u>	<u>Date of ratification (R), accession (Ac), approval (Ap) or acceptance (At)</u>	<u>Date of signature</u>	<u>Date of ratification (R), accession (Ac), approval (Ap) or acceptance (At)</u>
Argentina	22. 3.1985		29. 6.1988	
Australia		16. 9.1987(Ac)	8. 6.1988	
Austria	16. 9.1985	19. 8.1987(R)	29. 8.1988	
Belgium	22. 3.1985	17.10.1988(R)	16. 9.1987	30.12.88(R)
Burkina Faso	12.12.1985		14. 9.1988	
Byelorussian SSR	22. 3.1985	20. 6.1986(Ac)	22. 1.1988	31.10.1988(At)
Canada	22. 3.1985	4. 6.1985(R)	16. 9.1987	30. 6.1988(R)
Chile	22. 3.1985		14. 6.1988	
Congo		<u>1/</u>	15. 8.1988	
Denmark <u>2/</u>	22. 3.1985	29. 9.1988(R)	16. 9.1987	16.12.1988(R)
Egypt	22. 3.1985	9. 5.1988(R)	16. 9.1987	2. 8.1988(R)
Equatorial Guinea		17. 8.1988(Ac)		
Finland	22. 3.1985	26. 9.1986(R)	16. 9.1987	23.12.1988(R)
France	22. 3.1985	4.12.1987(Ap)	16. 9.1987	28.12.1988(Ap)
German Democratic Republic		25. 1.1989(Ac)		25. 1.1989(Ac)
Germany, Federal Republic of <u>3/</u>	22. 3.1985	30. 9.1988(R)	16. 9.1987	16.12.1988(R)
Ghana			16. 9.1987	8. 3.1989(R)
Greece	22. 3.1985	29.12.1988(R)	29.10.1987	16.12.1988(R)
Guatemala		11. 9.1987(Ac)		
Hungary		4. 5.1988(Ac)		
Indonesia			21. 7.1988	
Ireland		15. 9.1988(Ac)	15. 9.1988	16.12.1988(R)

* Information provided by the Depository, the United Nations Legal Office, New York, as of 28 March 1989.

	Vienna Convention for the Protection of the Ozone Layer <u>a/</u>		Montreal Protocol on Substances that Deplete the Ozone Layer <u>b/</u>	
	<u>Date of signature</u>	<u>Date of Ratification (R), accession (Ac), approval (Ap) or acceptance (At)</u>	<u>Date of Signature</u>	<u>Date of Ratification (R), accession (Ac), approval (Ap) or acceptance (At)</u>
Israel			14. 1.1988	
Italy	22. 3.1985	19. 9.1988(R)	16. 9.1987	16.12.1988(R)
Japan		30. 9.1988(Ac)	16. 9.1987	29. 9.1988(At)
Kenya		9.11.1988(Ac)	16. 9.1987	9.11.1988(R)
Liechtenstein		8. 2.1989(Ac)		8. 2.1989(Ac)
Luxembourg	17. 4.1985	17.10.1988(R)	29. 1.1988	17.10.1988(R)
Maldives		26. 4.1988(Ac)	12. 7.1988	
Malta		15. 9.1988(Ac)	15. 9.1988	15. 9.1988(R)
Mexico	1. 4.1985	14. 9.1987(R)	16. 9.1987	31. 3.1988(R)
Morocco	7. 2.1986	<u>1/</u>	7. 1.1987	<u>1/</u>
Netherlands <u>4/</u>	22. 3.1985	28. 9.1988(R)	16. 9.1987	16.12.1988(At)
New Zealand	21. 3.1986	2. 6.1987(R)	16. 9.1987	21. 7.1988(R)
Nigeria <u>5/</u>		31.10.1988(Ac)		31.10.1988(Ac)
Norway	22. 3.1985	23. 9.1987(R)	16. 9.1987	24. 6.1988(R)
Panama		13.2.1989(Ac)	16. 9.1987	3. 3.1989(R)
Philippines			14. 9.1988	
Portugal		17.10.1988(Ac)	16. 9.1987	31.10.1988(R)
Peru	22. 3.1985			
Senegal			16. 9.1987	
Singapore		5. 1.1989(Ac)		5. 1.1989(Ac)
Spain		25. 7.1988(Ac)	21. 9.1988	16.12.1988(R)
Sweden	22. 3.1985	26.11.1986(R)	16. 9.1987	29. 6.1988(R)
Switzerland	22. 3.1985	17.12.1987(R)	16. 9.1987	28.12.1988(R)
Thailand			16. 9.1987	
Togo			16. 9.1987	
Uganda		23. 6.1988(Ac)	15. 9.1988	15. 9.1988(R)
Ukrainian SSR	22. 3.1985	18. 6.1986(At)	18. 2.1988	20. 9.1988(At)
USSR	22. 3.1985	18. 6.1986(At)	29.12.1987	10.11.1988(At)
United Kingdom <u>6/</u>	20. 5.1985	15. 5.1987(R)	16. 9.1987	16.12.1988(R)
United States of America	22. 3.1985	27. 8.1986(R)	16. 9.1987	21. 4.1988(R)
Uruguay		27. 2.1989(Ac)		
Venezuela		1. 9.1988(Ac)	16. 9.1987	6. 2.1989(R)
Yugoslavia		<u>1/</u>		<u>1/</u>
EEC	22. 3.1985	17.10.1988(Ap)	16. 9.1987	16.12.1988(Ap)
Total	28	42	46	36

Notes

(a) The Vienna Convention for the Protection of the Ozone Layer was adopted in Vienna on 22 March 1985 and entered into force on 22 September 1988.

(b) The Montreal Protocol on Substances that Deplete the Ozone Layer was adopted in Montreal on 16 September 1987 and entered into force on 1 January 1989 as at least 11 instruments of ratification, acceptance, approval or accession representing two thirds of the estimated 1986 global consumption of the controlled substances had been deposited. The 35 States and EEC that have to date deposited their instruments of ratification, acceptance, approval or accession account for approximately 84 per cent of the estimated global consumption.

1/ Formal indication received by UNEP that the ratification, acceptance, approval or accession procedures are in progress.

2/ Except the Faeroe Islands and Greenland.

3/ With application to Berlin (West).

4/ For the Kingdom in Europe, the Netherlands Antilles and Aruba.

5/ The Protocol shall not apply to the Cook Islands and Niue.

6/ On behalf of the United Kingdom of Great Britain and Northern Ireland, the Bailiwick of Jersey, the 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 and dependencies, South Georgia and the South Sandwich Islands, and the Turks and Caicos Islands.

Annex II

RECOMMENDATIONS FOR THE ASSESSMENT OF THE CONTROL MEASURES

Timetable for the assessment process

- October 1988 Four ad hoc panels established to review scientific, economic, environmental and technical aspects of ozone depletion with the concurrence of the Ad Hoc Working Group of Legal and Technical Experts for the Harmonization of Data on Production, Imports and Exports of Substances that Deplete the Ozone Layer
- January 1989 Montreal Protocol enters into force
- February 1989 Advisory group meeting for the preparation of documents for the first meeting of the Parties
- April/May 1989 First Meeting of the Parties convenes panels of experts under article 6 of the Protocol (and establishes a working group of the Parties for integrating the reports of the panels)
- June/July 1989 Finalization of draft reports from the four panels of experts
- July/August 1989 Working Group of the Parties integrates the reports of the four panels of experts and makes recommendations for the amendment of control measures, as appropriate
- August/September 1989 Reports of the panels circulated to the Parties
- October 1989 Integrated report and recommendations circulated to the Parties
- April/May 1989 Second Meeting of the Contracting Parties to assess the control measures in article 2 and decide on any adjustments to article 2 or amendments of other provisions of the Montreal Protocol

Annex III

COMPOSITION OF THE PANELS

I. Environmental Effects Panel

A. Participating countries

Developed countries:

- Netherlands
- United States
- Federal Republic of Germany
- Sweden
- Australia
- Norway
- Israel
- Japan
- USSR

Developing countries:

- Kenya
- India
- Malaysia
- Saudi Arabia
- Panama
- Chad
- Philippines
- Bangladesh
- Nigeria
- Egypt

B. Participating experts

J.C. van der Leun	(Netherlands)
Anthony L. Andrady	(United States)
Martyn M. Caldwell	(United States)
Michael W. Gery	(United States)
D.P. Haeder	(Federal Republic of Germany)
John S. Hoffman	(United States)
Janice Longstreth	(United States)
Allen H. Teramura	(United States)
M. Tevini	(Federal Republic of Germany)
Robert C. Worrest	(United States)
Peter Usher	(UNEP)
Katie Smythe	(United States)
Susan Morschauer	(United States)
Lars O. Bjorn	(Sweden)
Dallas English	(Australia)
Ivar Isaksen	(Norway)
T. Berman	(Israel)
G. Dohler	(Federal Republic of Germany)
M. Furuya	(Japan)
H.D. Kumar	(India)
V. Skulachev	(USSR)

Toru Hashimoto	(Japan)
G. Kulandaivelu	(India)
Mohammad Ilyas	(Malaysia)
Kenji Fueki	(Japan)
Mohammed B. Amin	(Saudi Arabia)
Claudia Candanedo	(Panama)
Eloy Gibs	(Panama)
Ali Ngaram	(Chad)
Mahamat Ali	(Chad)
Bayani S. Lomotan	(Philippines)
Rodito D. Buan	(Philippines)
Jamilur Reza Chowdhury	(Bangladesh)
Adefolalu	(Nigeria)
Ahmed Amin Aljamal	(Egypt)

II. Atmospheric Science Panel

A. Participating countries

Developed countries

United States
Norway
France
United Kingdom
Australia
Canada
Federal Republic of Germany
USSR

Developing countries

Kenya
Panama
Chad
Chile
India
Philippines
Bangladesh
Nigeria
Egypt

B. Participating experts

R. Bojkov	(WHO)
Daniel L. Albritton	(United States)
Ivar S.A. Isaksen	(Norway)
Gerard Megie	(France)
Guy Brasseur	(United States)
Vicky Pope	(United Kingdom)
Rod Jones	(United Kingdom)
Paul Fraser	(Australia)
John E. Frederick	(United States)
Carl Mateer	(Canada)
Dieter H. Khhalt	(Federal Republic of Germany)
R.A. (Tony) Cox	(United Kingdom)
Peter Usher	(UNEP)
Robert Watson	(United States)
David Warrilow	(United Kingdom)
Shelagh Varney	(United Kingdom)

M. Muller	(France)
V.U. Khattatov	(USSR)
Claudia Candanedo	(Panama)
Eloy Gibs	(Panama)
Ali Ngaram	(Chad)
Mahamat Ali	(Chad)
Margarita Prendez	(Chile)
Subbaraya	(India)
J.A. Pyle	(United Kingdom)
Susan Solomon	(United States)
J.M. Russell III	(United States)
Matsuno	(Japan)
Bayani S. Lomotan	(Philippines)
Rodito D. Buan	(Philippines)
Jamilur Reza Chowdhury	(Bangladesh)
Adefolalu	(Nigeria)
Abdel M. Abdel Rahman Ibrahim	(Egypt)

III. Economic Review Panel

A. Participating countries

Canada
France
Japan
Netherlands
Norway
United Kingdom
United States

B. Participating experts

George Strongylis	(Commission of the European Communities)
	(United States)
Stephen Andersen	(United States)
John B. Hoffman	(United States)
Yusuf J. Ahmad	(UNEP)
Dalphe Lynn Colemann	(United Kingdom)
Stephen De Canio	(United States)
(Huib Jansen)	(Netherlands)
Kazuo Katao	(Japan)
Wiel Klerken	(Netherlands)
Serge Langdau	(Canada)
Espen Langtvat	(Norway)
Kai N. Lee	(United States)
Irving Minstzer	(United States)
Franz Nader	(Federal Republic of Germany)
Sylvain Rault	(France)
Masahiro Sato	(Japan)
Salah El Serafy	(World Bank)

IV. Technology Review Panel

A. Panel members

Chairman: Mr. V. Buxton (Canada)
Chapter chairmen: Dr. L. Kuijpers (Netherlands)
Ms. J. Lupinacci (United States)
Dr. S. Andersen (United States) (Co-chairman)
Ms. I. Kokeritz (Sweden)
Mr. G. Taylor (Canada)

B. Participants and advisors

	<u>Refrigerants</u>	<u>Foams</u>	<u>Solvents</u>	<u>Aerosols, etc.</u>	<u>Halons</u>
Canada	-	1	1	-	1
United States	13	5	6	3	3
Mexico *					
Venezuela*					
Brazil	1	-	-	-	-
EEC	-	1	-	-	-
Austria	2	-	-	-	-
Belgium	1	1	-	-	-
France	2	-	-	-	-
German Democratic Republic *	4	1	-	-	2
Germany, Federal Republic of					
Netherlands	1	-	-	-	-
United Kingdom	4	1	5	1	-
Switzerland	1	1	1	-	1
Italy	1	-	-	-	-
USSR *					
Australia	-	-	1	-	2
New Zealand	1	-	-	-	-
Japan	3	-	3	-	2
China	1	-	-	-	-
Singapore *					
Norway	2	-	1	-	-
Sweden	4	-	1	3	1
Denmark	1	-	-	-	-
TOTALS (including chairmen)	42	11	19	7	12

* Requested to participate.

Annex IV

DRAFT TERMS OF REFERENCE FOR THE PANELS

I. Atmospheric Science Panel

1. The Atmospheric Science Panel shall be responsible for undertaking the review of the scientific knowledge in a timely manner as dictated by the needs of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer.

2. The currently available new scientific knowledge acquired since the adoption of the Montreal Protocol shall be compiled into a report which shall be ready for submission to the Integration Working Group of the Parties ten months prior to the second meeting of the Parties to the Protocol, at which the assessment of the control measures will be undertaken.

3. The report shall be consolidated with three other review reports on environmental, economic and technical knowledge. The Integration Working Group of the Parties will be responsible for consolidating the four reports and preparing recommendations to the Parties on the assessment of the control measures specified in the Montreal Protocol. The Secretariat will formally transmit the consolidated report to the Parties at least eight months before the second meeting of the Parties to the Protocol.

4. The report shall consist of four chapters as follows:

- Chapter 1 - Introduction
- Chapter 2 - Polar ozone
- Chapter 3 - Global trends
- Chapter 4 - Model prediction

Each chapter will be 50-100 pages in length with a 5-page summary of the chapter. The report will have a 10-page executive summary which will be written in a style understandable and useful to policy makers.

5. The Panel shall consist of selected experts who are qualified in the field of atmospheric science and internationally recognized as such. The experts who are best qualified in the subject-matter of the various chapters shall be selected ensuring the widest possible geographical balance of representation.

6. The Panel shall be organized in the following way:

- (a) The Executive Committee of the Chairmen;
- (b) The Chapter Chairmen;
- (c) The Contributing Authors.

7. The Executive Committee of the Chairmen shall select the experts to participate in the Panel, ensure co-ordination of the Chapter Chairmen, convene necessary meetings of the Panel and prepare the executive summary of the report.

8. The Chapter Chairmen shall ensure effective co-ordination among the Contributing Authors as well as ensuring co-ordination with the other review panels. They shall compile and prepare the summary of their respective chapters.

9. The Contributing Authors shall, as directed by the Chapter Chairmen, prepare and submit a brief report on current knowledge of their topic.

II. Environmental Effects Panel

1. The Environmental Effects Panel shall be responsible for undertaking the review of the knowledge concerning the environmental effects of the ozone depletion in a timely manner as dictated by the needs of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer.

2. The currently available new environmental knowledge acquired since the adoption of the Montreal Protocol shall be compiled into a report which shall be ready for submission to the Integration Working Group of the Parties ten months prior to the second meeting of the Parties to the Protocol, at which the assessment of the control measures will be undertaken.

3. The report shall be consolidated with three other review reports on scientific, economic and technical knowledge. The Integration Working Group of the Parties will be responsible for consolidating the four reports and preparing recommendations to the Parties on the assessment of the control measures specified in the Montreal Protocol. The Secretariat will formally transmit the consolidated report to the Parties at least eight months before the second meeting of the Parties to the Protocol.

4. The report shall consist of seven chapters as follows:

- Chapter 1 - Introduction
- Chapter 2 - Solar interactions
- Chapter 3 - Human health
- Chapter 4 - Terrestrial plants
- Chapter 5 - Aquatic ecosystems
- Chapter 6 - Tropospheric air quality
- Chapter 7 - Materials damage

Each chapter will be 5-25 pages in length and consist of the following:

- Summary
- Introduction or background
- State of science
- Assessment of results
- Research needs
- References

The report shall have an executive summary of approximately 10 pages written in a style understandable and useful to policy makers.

5. The Panel shall consist of selected experts who are qualified in the fields related to the environmental effects of ozone depletion and internationally recognized as such. The experts who are best qualified in the subject-matter of the various chapters shall be selected ensuring the widest possible geographical balance of representation.
6. The Panel shall be organized in the following way:
 - (a) The Chairman;
 - (b) The Chapter Chairmen;
 - (c) The Contributing Authors;
 - (d) The Reviewers.
7. The Chairman shall ensure co-ordination of the Chapter Chairmen, convene necessary meetings of the Panel, prepare the executive summary of the report with the Chapter Chairmen, and select the experts to participate in the Panel.
8. The Chapter Chairmen shall ensure effective co-ordination among the Contributing Authors as well as ensuring co-ordination with the other review panels. The Chapter Chairmen shall compile and lead the preparation of the summary of their respective chapters. The Chapter Chairmen shall also assist the Chairman in the preparation of the executive summary of the report.
9. The Contributing Authors shall, as directed by the Chapter Chairmen, prepare and submit a brief report of the current knowledge of their topic. The Contributing Authors shall also assist the Chapter Chairmen in the preparation of the chapter summary.
10. The Reviewers shall review the draft report and make necessary comments before the final submission of the report to the Integration Working Group of the Parties.

III. Economic Review Panel

1. The Economic Review Panel shall be responsible for undertaking review of the knowledge concerning the economic effects of the ozone-layer modification and economic aspects of the technology in a timely manner as dictated by the needs of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer.
2. The currently available economic knowledge acquired since the adoption of the Montreal Protocol shall be compiled into a report which shall be ready for submission to the Integration Working Group of the Parties ten months prior to the second meeting of the Parties to the Protocol, at which the assessment of the control measures will be undertaken.
3. The report shall be consolidated with three other review reports on scientific, environmental and technical knowledge. The Integration Working Group of the Parties will be responsible for consolidating the four reports and preparing recommendations to the Parties on the assessment of the control measures specified in the Montreal Protocol. The Secretariat will formally transmit the consolidated report to the Parties at least eight months before the second meeting of the Parties to the Protocol.

4. The report shall consist of nine chapters as follows:

- Chapter 1 - Introduction
- Chapter 2 - Consumption of CFC products
- Chapter 3 - Definition of policy scenarios
- Chapter 4 - Evaluation methodologies
- Chapter 5 - Economic costs of technical institutions
- Chapter 6 - Economic environmental benefits of reduced use of CFC
- Chapter 7 - Modular/regional approaches to cost-benefit analyses
- Chapter 8 - Economic evaluation of policy scenarios
- Chapter 9 - Effects of financing and technology transfer on the cost of reducing CFC use

The report shall have an executive summary of approximately 10 pages written in a style understandable and useful to policy makers.

5. The Panel shall consist of selected experts who are qualified in the fields related to the economic effects of ozone-layer modification or economic aspects of technology and internationally recognized as such. The experts who are best qualified in the subject-matter of the various chapters shall be selected ensuring the widest possible geographical balance of representation.

6. The Panel shall be organized in the following way:

- (a) The Chairman;
- (b) The Chapter Chairmen;
- (c) The Contributing Authors;
- (d) The Reviewers.

7. The Chairman shall ensure co-ordination of the Chapter Chairmen, convene necessary meetings of the Panel, prepare the executive summary of the report with the Chapter Chairmen, and select the experts to participate in the Panel.

8. The Chapter Chairmen shall ensure effective co-ordination among the Contributing Authors as well as ensuring co-ordination with the other review panels. The Chapter Chairmen shall compile and lead the preparation of the summary of their respective chapters. The Chapter Chairmen shall also assist the Chairman in the preparation of the executive summary of the report.

9. The Contributing Authors shall, as directed by the Chapter Chairmen, prepare and submit a brief report of the current knowledge of their topic. The Contributing Authors shall also assist the Chapter Chairmen in the preparation of the Chapter summary.

10. The Reviewers shall review the draft report and make necessary comments before the final submission of the report to the Integration Working Group of the Parties.

IV. Technology Review Panel

1. The Technology Review Panel shall be responsible for undertaking the review of knowledge concerning the state of the art of production and use technology and explore all options to phasing out the use of the controlled substances as well as recycling, reuse and ultimate destruction techniques, in a timely manner as dictated by the needs of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer.

2. The currently available new knowledge of technology acquired since the adoption of the Montreal Protocol shall be compiled into a report which shall be ready for submission to the Integration Working Group of the Parties 10 months prior to the second meeting of the Parties to the Protocol, at which the assessment of the control measures will be undertaken.

3. The report shall be consolidated with three other review reports on scientific, economic and environmental knowledge. The Integration Working Group of the Parties will be responsible for consolidating the four reports and preparing recommendations to the Parties on the assessment of the control measures specified in the Montreal Protocol. The Secretariat will formally transmit the consolidated report to the Parties at least eight months before the second meeting of the Parties to the Protocol.

4. The report shall consist of six chapters as follows:

- Chapter 1 - Introduction
- Chapter 2 - Refrigeration, air conditioning and heat-pumps
- Chapter 3 - Flexible and rigid foams
- Chapter 4 - Solvents
- Chapter 5 - Aerosols, sterilants
- Chapter 6 - Halons

Each chapter will be a comprehensive technical options report. The summary findings of each will form basis for the Technology Review Panel report, which will be of approximately 50-60 pages (maximum) in length.

5. The Panel shall consist of selected experts who are qualified in the fields related to the technology and internationally recognized as such. The experts who are best qualified in the subject-matter of the various chapters shall be selected ensuring the widest possible geographical balance of representation.

6. The Panel shall be organized in the following way:

- (a) The Chairman;
- (b) The Chapter Chairmen;
- (c) The Contributing Authors;
- (d) The Reviewers.

7. The Chairman shall ensure co-ordination of the Chapter Chairmen, convene necessary meetings of the Panel, prepare the executive summary of the report with the Chapter Chairmen and select the experts to participate in the Panel.

8. The Chapter Chairmen shall ensure effective co-ordination among the Contributing Authors as well as ensuring co-ordination with the other review panels. The Chapter Chairmen shall compile and lead the preparation of the summary of their respective chapters. The Chapter Chairmen shall also assist the Chairman in the preparation of the executive summary of the report.

9. The Contributing Authors shall, as directed by the Chapter Chairmen, prepare and submit a brief report of the current knowledge of their topic. The Contributing Authors shall also assist the Chapter Chairmen in the preparation of the chapter summary.

10. The Reviewers shall review the draft report and make necessary comments before the final submission of the report to the Integration Working Group of the Parties.

Annex V

A. Extract of the report of the Legal Group established by the Ad Hoc Working Group on Data Harmonization during its second session (UNEP/OzL.WG.Data 2/3/Rev.2, annex II)

"The Legal Group was of the opinion that agreement reached by the Parties at their first meeting on procedures and institutional mechanisms for determining non-compliance with the provisions of the Protocol and for treatment of Parties found to be in non-compliance were likely to be of such a nature that they could only become effective if formalized in the form of an amendment to the Protocol (for instance in the form of a new annex in accordance with the procedure prescribed for amendments)."

B. Proposal on non-compliance with the Montreal Protocol for the First Meeting of the Parties to the Protocol submitted by the United States

In order to facilitate preparations for the first meeting of the Parties to the Protocol, the United States would like to circulate the following proposal concerning non-compliance procedures and institutional mechanisms. This proposal was previously distributed to participants at the Montreal Diplomatic Conference, 12-16 September 1987:

"Text of United States proposed Article on non-compliance:

1. The Parties hereby establish a Compliance Committee. The function of the Committee shall be to consider complaints submitted to the Secretariat concerning non-compliance by a Party with the provisions of Articles 2, 4 and 7 of this Protocol.
2. The Committee shall be composed of representatives of [one third] of the Parties, due account being taken of geographical distribution. The Chairman of any given meeting of the Committee shall be selected by the Committee members.
3. The members of the Committee shall be elected at a meeting of the Parties for a four-year term, except that, at the first election held, one-half of the Committee members shall be elected for a two-year term. Outgoing members of the Committee may not be elected for consecutive terms unless such is required because of the limited number of States for which the Protocol is in force.
4. The Committee shall adopt its own rules of procedure, subject to approval by the Parties.
5. The Committee shall be convened as soon as possible after a complaint has been submitted by a Party that another Party is in breach of its obligations under Articles 2, 4 or 7 of this Protocol. Such a complaint shall be supported by evidence known to the complainant Party which corroborates the allegation on non-compliance.
6. The Committee shall afford the Party complained a reasonable opportunity to rebut any evidence supplied by the complainant Party.

/...

7. After consideration of all the evidence pertaining to the matter, the Committee shall submit a report to the Parties containing its findings, including any mitigating factors, and its conclusions regarding whether the Party complained of is in compliance with the provisions of Articles 2, 4 or 7 of this Protocol. The Committee's report may also contain a recommendation as to appropriate action.

8. If the Committee has concluded that the Party complained of is not in compliance with the provisions of Articles 2, 4 or 7, a meeting of the Parties shall be convened to determine whether the conclusions and any recommendation of the Committee should be accepted.

9. Any Party determined by the Parties at such a meeting to be in breach of its obligations under Articles 2, 4 or 7 of this Protocol shall be treated as a non-Party for purposes of voting and trade for a period of time at least equal in duration to the period of its non-compliance.

10. The procedures contained in this Article shall apply to any complaints regarding non-compliance with Articles 2, 4 or 7 of this Protocol. Complaints regarding compliance with other provisions of this Protocol shall be resolved in accordance with the procedures outlined in Article 11 of the Convention.

Insert following paragraph in Article 12: Secretariat

The Secretariat shall ... receive and transmit to members of the Compliance Committee any complaints concerning non-compliance by a Party with the provisions of Articles 2, 4 or 7 of this Protocol."

Annex VI

MODIFICATION OF THE HARMONIZED COMMODITY DESCRIPTION AND
CODING SYSTEM IN ORDER TO FACILITATE COLLECTION AND
COMPARISON OF DATA UNDER THE MONTREAL PROTOCOL

Proposal submitted by a Working Group with representatives
from United Kingdom, Sweden, United States, Switzerland,
Japan and EEC

1. Implementation of Articles 4 and 7 of the Montreal Protocol would be greatly facilitated if a regular system for the reporting of imports and exports could be used.
2. The Harmonized Commodity Description and Coding System (H), developed under the auspices of the Customs Co-operation Council, provides an opportunity for countries to report import and export information through an international trade record-keeping system. Both imports and exports are classified under the same nomenclature. Under the system, the classification for a product can be composed of 8 to 10 digits. All developed countries must have the same six digits for a group of products. Developing countries are required to have the same first four digits.
3. Under the system all the controlled substances fall under the following two headings.

"290340 Halogenated derivatives of acyclic hydrocarbons containing two or more different halogens."

382390 Other chemical mixtures not covered elsewhere.
4. HS290340 covers the pure controlled substances and HS382390 the mixtures of controlled substances. However both headings also include many other substances such as the non-fully halogenated CFCs.
5. The system is so designed that the two last digits ("40" in the case of pure substances) can be further broken down into different subgroups (by using the digits "41", "42", etc.). This possibility is used, for instance, for hexachlorobenzene and DDT. It has so far not been used for the heading 290340 or 382390.
6. This makes it possible to amend HS to identify the controlled substances within 290340 and to create separate headings for mixtures within 382390 by introducing the additional sub-headings. The Working Group is suggesting the following headings:
 - (a) Pure substances

290340 - Halogenated derivatives of acyclic hydrocarbons containing 2 or more different halogens

- - Perhalogenated derivates of acyclic hydrocarbons containing 2 or more different halogens.

- - - - Only fluorinated and chlorinated.

290341 - - - - Trichlorofluoromethane (CFC 11), Dichlorodifluoromethane (CFC 12), Trichlorotrifluoroethane (CFC 113), Dichlorotetrafluoroethane (CFC 114), Chloropentafluoroethane (CFC 115)

290342 - - - - Other
- - - - Other

290343 - - - - Bromotrifluoromethane (Halon 1211), Dibromotrifluoromethane (Halon 1301), Bromochlorodifluoromethane (Halon 2402)

290344 - - - - Other

290349 - - - - Other

(b) Mixtures

382370 - Mixtures comprising at least one prehalogenated derivative of an acyclic hydrocarbon containing 2 or more halogens

382371 - - - - Only fluorinated and chlorinated

382372 - - - - Other

7. Heading 290341 to 290348 identify the pure controlled substances as listed in Annex A to the Montreal Protocol and 382371 and 382372 identify mixtures of these substances. Heading 290349 covers all other products within 290340 which are not controlled substances. The notes to Chapter 38 of HS will need expanding to make clear that any mixture containing a controlled substance under the Montreal Protocol must be entered under 382371 or 382372 regardless of its size or proportion within the mixture.

Countries are encouraged in their national nomenclatures to go further and identify the controlled substances in more detail.

8. The Working Group suggests that the Parties, at their first meeting and after proper consideration by the Signatories and the Secretariat, request the Executive Director of UNEP to bring this matter to the attention of the Customs Co-operation Council which is the international authority responsible for the Harmonized Commodity Description and Coding System.

