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UNEP Ad Hoc Working Group of Legal
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protection of the ozone layer

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SOME OBSERVATIONS ON THE PREPARATION
OF A GLOBAL FRAMEWORK CONVENTION FOR THE
PROTECTION OF THE STRATOSPHERIC OZONE LAYER

Paper prepared by the

UNEP Secretariat

A. STATE OF PREPARATION

1. The existence of the atmospheric ozone layer, the earth's security blanket filtering and absorbing wavelength of ultraviolet radiation (UV) harmful to living matter is of vital importance to life on this planet. This fact has been known for many years. Over millions of years man and other living species have evolved and adapted to a particular level of ozone in the atmosphere and, as a consequence, to a particular level of exposure to ultraviolet radiation. But in recent decades it was suspected that some of man's activities resulting in atmospheric pollution could cause a significant reduction in stratospheric ozone amounts and change its distribution in the near future.
2. The results of the observations and research on ozone layer carried out independently by research centres in various countries have contributed to international co-operation in this respect. The nature of the problem requires co-operation on a global scale.
3. Of particular importance is the UNEP Governing Council's decision 84 C (V) of 25 May 1977 (A/32/25) on the establishment of the Co-ordinating Committee on the Ozone Layer (CCOL) and on the adoption and promotion of the World Plan of Action on the Ozone Layer. In that decision the Governing Council recalled that the Meeting of Experts designated by Governments, Intergovernmental and Non-Governmental Organizations on the Ozone Layer held at Washington, D.C., from 1 to 7 March 1977 recommended ^{1/} the adoption of a world plan of action on the ozone layer and the establishment by UNEP of a committee to enable UNEP to exercise a broad co-ordinating and catalytic role aimed at the integration and co-ordination of research efforts related to the ozone layer. Since 1977 CCOL has met five times, its fifth session having been held in Copenhagen from 12 to 16 October 1981.
4. The need for further co-operation on the ozone layer on or global scale was confirmed by UNEP Governing Council decision 8/7 B of 29 April 1980 (A/35/25). In that decision the Governing Council recommended that Governments, especially those of countries where use of the chlorofluorocarbons CFC-11 and 12 was high, should achieve significant reduction in their use and encourage the development of ways to control their releases into the atmosphere, and also that production capacity for these chlorofluorocarbons should not be increased.
5. During the UNEP Governing Council's eighth session some delegations expressed the view that recent and alarming scientific data called urgently for the taking of adequate steps to reduce the world-wide emission of chlorofluorocarbons, both from aerosol and non-aerosol sources, in accordance with the conclusions of the meeting held in Oslo in April 1980 on that question. In the view of those delegation a national objective in the development of international co-operation might be the negotiation of an international convention for the protection of the ozone layer.
6. By its decision 9/13 B the UNEP Governing Council decided to initiate work aimed at the elaboration of a global framework convention for the protection of the ozone layer and, to this end, decided to establish an ad hoc working group of legal and technical experts nominated by interested governments and intergovernmental organizations, to report, through the Executive Director, to the Governing Council on the progress of its work. At the same

^{1/} UNEP/WG.7/25/Rev.1, annex III, sect.4, paras. 2 and 3.

time the Governing Council requested the Executive Director:

"(a) to ensure that in the work so initiated all relevant information and related work currently under way in other forums, as well as the results of any discussions on this subject at the Ad Hoc Meeting of Senior Government Officials Expert in Environmental Law are taken into account;

(b) to invite the Co-ordinating Committee on the Ozone Layer, as part of its activities under its mandate:

(i) to contribute to the work of the ad hoc working group;

(ii) to compile all relevant information, including statistical and technical data, on the implementation of the recommendations contained in decision 8/7 B of 29 April 1980, in particular that relating to reduction in the use of chlorofluorocarbons 11 and 12, as well as to production capacity on the basis of an agreed definition; ..."

7. The Ad Hoc Meeting of Senior Government Officials Expert in Environmental Law which was held in Montevideo from 28 October to 6 November 1981 to establish a framework, methods and programme (including global, regional and national efforts) for the development and periodic review of environmental law, and to contribute to the preparation and implementation of the environmental law components of the system-wide medium-term environment programme, selected the protection of the stratospheric ozone layer as one of three major subject areas for which guidelines, principles or agreements should be developed in accordance with certain agreed objectives and strategies. The agreed objective for this subject is to limit, reduce and prevent activities which have or are likely to have adverse effects upon the stratospheric ozone layer, and the strategy continuation of the work already initiated by the Governing Council aimed at the elaboration and establishment of a global framework convention (Decision 9/13 B). The elements of strategy agreed for the subject are as follows: (i) promotion of dissemination of information and public awareness on the protection of the stratospheric ozone layer; (ii) continuation on the basis of available scientific data of the work already initiated aimed at the elaboration of a global framework convention which would cover monitoring, scientific research and the development of best available and economically feasible technologies to limit and reduce emissions of ozone-depleting substances, as well as the development of appropriate policies and strategies; (iii) establishment ~~by~~ any such convention of appropriate international machinery to ensure the implementation and development of the convention for the protection of the stratospheric ozone layer; and (iv) development and adoption of national laws and regulations to implement the provisions of the convention for the protection of the stratospheric ozone layer.^{2/}

8. The Ad Hoc Meeting's specific recommendations for initial action in respect of protection of the stratospheric ozone layer are that UNEP should continue to strengthen its co-ordinating role as regards research, monitoring and assessment of the ozone layer, in particular through the CCOL mechanism, and expand the dissemination of information on the problems of the stratospheric ozone layer.^{3/}

^{2/} Report of the Ad Hoc Meeting of Senior Government Officials Expert in Environmental Law, UNEP/GC.10/5/Add.2.

^{3/} Id.

9. In connection with the Meeting's discussion on the protection of the ozone layer, the delegations of Finland and Sweden introduced a document entitled "Protection of the Ozone Layer". ^{4/} In addition, the delegations of Finland, Sweden and Switzerland submitted a document entitled "Draft recommendations on legal aspects and elements of a global framework convention for the protection of the stratospheric ozone layer". ^{5/}

10. Among international organizations which have worked on the problem of ozone layer depletion, a major role is being played by the World Meteorologic Organization (WMO), which was designated lead agency in several fields of the World Plan of Action on the Ozone Layer. Its activities are being carried out within the WMO Global Ozone Research and Monitoring Project established by the WMO Executive Committee in its Resolution 8 (EC-XXXIII) in 1976. ^{6/}

11. The World Health Organization (WHO) is another organization in the United Nations system that is taking part in the World Plan of Action on the Ozone Layer. It is engaged in work of investigation of the impact of ozone depletion and increased ultraviolet radiation on man and the biosphere. During 1981, WHO prepared a project proposal for monitoring health effects of UV radiation and submitted it to UNEP for consideration. ^{7/}

12. The Commission of the European Communities (CEC) also participated in international co-operation on the ozone layer. CEC's concern about the emission of chlorofluorocarbons led first of all to the adoption by the EEC Council of Ministers of Council Resolution of 30 May 1978 ^{8/} on the limitation of the production capacity of CFCs 11 and 12, the intensification of research into alternative products and alternative methods of application, and the elimination of discharge in all sectors. The Council of Ministers adopted a decision on 26 March 1980 stipulating that the production capacity of CFCs 11 and 12 should not be increased in any Member State and that by 31 December 1981 there should be a reduction in the use of the CFCs in aerosols of at least 30 per cent compared with 1976 levels. ^{9/} Article 2 of that Council Decision provided for a re-examination, during the first half of 1980, of the scientific and economic data available. The Commission also sent two communications to the Council (16 June 1980 ^{10/} and 26 May 1981 ^{11/}). The

^{4/} Id., Appendix I.

^{5/} Id., appendix II.

^{6/} See UNEP/CCOL/V, pp. 51-55 for detailed information.

^{7/} Id., p. 50.

^{8/} Official Journal of the European Communities, No. C 133/1-7.6.78.

^{9/} Official Journal of the European Communities, No. L 90/45-3.4.80.

^{10/} Chlorofluorocarbons in the environment (Communication from the Commission to the Council), COM/80/339 final, Brussels, 16 June 1980.

^{11/} Chlorofluorocarbons in the Environment: Information and basis for evaluation for the pursuit of Community policy (Communication from the Commission to the Council). COM/81/261 final, Brussels, 26 May 1981.

second communication contains the information and the basis for evaluation for the pursuit of Community's policy. The Council then instructed the Commission to submit, at the earliest opportunity, a proposal for a Council Decision on preventive and precautionary measures concerning chlorofluorocarbons, to be applied by the Member States after 31 December 1981. ^{12/} This proposal was made in October 1981. The Council also invited the Commission to submit a proposal for a Council Decision authorizing the Commission to participate on behalf of the Community in the negotiations for a global framework convention on the protection of the ozone layer.

13. The Organisation for Economic Co-operation and Development (OECD) also carries out research on the problem of the protection of the ozone layer. During 1981 OECD prepared a report on emissions scenarios for chlorocarbon releases which was presented to its Environment Committee in December 1981. The Committee will determine what future work in this area will be carried out. ^{13/}

14. In many countries research is carried out on the impact of chlorofluorocarbons on the atmosphere. In some of them, measures to limit CFC releases have been adopted. In the United States of America, the first scientific report expressing concern about a possible significant reduction in stratospheric ozone as a result of fluorocarbon releases to the environment, was published in June 1974. In January 1975, the Council on Environmental Quality (CEC) and the Federal Council for Science and Technology (FCST) jointly created the Federal Interagency Task Force on Inadvertent Modification of the Stratosphere (IMOS). A special Federal Action was undertaken in order to restrict uses of CFC-11 and 12. ^{14/}

15. At its fifth session, CCOL drew up a list of problems it considers to be the most important, and which it would like the Ad Hoc Working Group of Legal and Technical Experts to consider during its deliberations on a global framework convention on the protection of the ozone layer.

B. SCIENTIFIC BACKGROUND AND TECHNICAL INFORMATION

16. It is a well-established fact that the ozone layer in the atmosphere acts as a filter absorbing damaging solar UV-B radiation. If there is a depletion of stratospheric ozone all areas of the world will be exposed to increased doses of this radiation, which could have biological effects on living species, influencing agricultural production, fisheries and human health.

17. Extensive research has been carried out by numerous research centres in many countries, on the effects of increased UV-B radiation on terrestrial

^{12/} Proposal for a Council Decision on the consolidation of precautionary measures concerning chlorofluorocarbons in the environment (submitted to the Council by the Commission). COM/81/558 final, Brussels, 8 October 1981.

^{13/} UNEP/CCOL/V, p. 25.

^{14/} Fluorocarbons and the Environment, Report of Federal Task Force on Inadvertent Modification of the Stratosphere, Council on Environmental Quality, Federal Council for Science and Technology, June 1975.

plants and aquatic organisms. The results of this work in respect of the latter show the sensitivity of such organisms to increased UV radiation, particularly in the early stages of growth. Before any firm conclusions can be drawn about effects on agricultural productivity, however, it will be necessary to conduct further experiments simulating natural radiation conditions and to continue investigations involving the range of natural ecological uncertainties.

18. Among many effects of UV radiation on human health, skin cancer is the most important one. Epidemiological data have shown that the incidence of non-melanoma skin cancer is connected with exposure to sunlight, and statistical studies of these data indicate that for every 1 per cent increase in effective UV-B irradiation, the incidence of non-melanoma skin cancer will ultimately increase by more than 2 per cent. Some data suggest that increased UV-B irradiation may also be one of the causative factors of malignant melanoma, but this possibility cannot be substantiated on the basis of currently available data.

19. Some scientists postulate that changes in stratospheric ozone levels would cause changes in temperature, wind patterns, precipitation and other weather elements. The nature and extent of such changes and their effects on the earth's climate, however, cannot be predicted on the basis of present knowledge.

20. The ultimate test of ozone depletion depends on the detection of long-term changes, both in total global ozone and in vertical ozone distribution, which requires a continuous and comprehensive flow of reliable data from the Global Ozone Observing System (GOOS). Various types of detection methods and techniques are applied, such as ground-based measurements, balloon ozone-sondes, rocket-borne ozone-sondes and satellite measurements. However, good ozone measurements are difficult to make and their interpretation is subject to many uncertainties.

21. The existing network of ground-based total ozone measuring stations needs some improvement - both in quantity and quality. The spatial distribution of the stations is uneven, about two thirds of the total number being located between 30° N and 60° N. About one third of the existing ground-based stations do not report regularly to the World Ozone Data Center in Toronto and data from them could not be used in trend analyses. Most of the incoming data are derived from measurements obtained from Dobson ozone spectrophotometers. In order to give reliable measurements, these instruments have to be accurately calibrated through intercomparison with either the world primary standard instrument located at NOAA-Boulder, Colorado, United States of America or with a regional secondary standard instrument. During calibration, quite large errors are often detected. It is estimated that about 20 per cent of the reported data come from lower quality filter instruments. The International Ozone Commission has recommended the inclusion of another type of instrument (the Brewer spectrophotometer) in the existing network in order to supplement it.

22. Only about a dozen stations make regular measurements of the vertical ozone distribution. It is estimated that such measurements provide the most sensitive information for ozone perturbations caused by chlorofluorocarbon releases. These measurements are carried out by means of the indirect Umkehr method and by balloon ozone-sondes. The network of ozone-sondes is considered inadequate, and efforts should be directed towards improving it. International intercomparisons of various types of ozone-sondes have been conducted twice already and the next are scheduled for 1982.

23. In recent years satellite-borne instruments have been used for both total ozone and vertical ozone distribution measurements. The data obtained from these instruments seem to be very useful and their consistency with data obtained from conventional methods is now being validated. It seems that in coming years, satellite systems will play an increasing role in ozone data determination and their development should be supported.

24. The analysis of ozone data is extremely difficult because of the large natural variability of atmospheric ozone (due, for example, to a possible solar cycle variation). Measurements carried out so far indicate no changes greater than 2 per cent in total ozone (Dobson monitoring network data). It is hoped that as the data record becomes longer, the statistical analysis for the detection of trends may be more precise. A data record of only twenty years does not make it possible to distinguish between ozone natural variability and anthropogenic influences.

25. Scientists have listed a number of chemicals which could most likely influence the ozone layer due to their chemical reactivity and to their wide availability. The most important are considered to be the chlorofluorocarbons CFC 11 and 12. They are used as propellants in aerosol spray cans, in refrigerators, in the manufacture of foamed plastics and as solvents. Other chemicals containing chlorine, such as carbon tetrachloride and methyl chloroform, have also a potential to affect the ozone layer. The present model estimates predict an eventual ozone depletion in the range of 5 to 10 per cent, depending on the model chosen, if current release rates for CFCs 11 and 12 continue at their present rate, and this depletion could be increased by another third by the uncontrolled release of other chemicals. World production of CFCs 11 and 12 is currently monitored by the Chemical Manufacturers Association (CMA) and is estimated to have decreased by 18 per cent between 1974 and 1980 although only 1 per cent decrease occurred in 1980. No organization currently collects global production data for halocarbons, other than for CFCs 11 and 12, which may affect the ozone layer and there is a clear need to acquire such global release data.

26. At present, development of consistent and realistic strategies for studying all the perturbations to the ozone layer is a long way off. However, model scenarios, taking into account most probable ratios of chemical releases to the atmosphere, predict very small changes in total ozone and large changes of vertical ozone distribution. It is possible that this might have a noticeable climatic impact. Other model estimates indicate that for each one per cent reduction of total ozone layer, there would be an increase of from 1.6 to 3 per cent in the UV-B radiation to the earth's surface, this increase varying with latitude and season.

27. This summary of the present state of the ozone layer depletion theory, based on the report of the work of CCOL, allows the following conclusions to be drawn:

- there is experimental evidence of the damaging effect of the increased UV-B radiation on man, plants and aquatic organisms, but there are not enough data to enable quantitative evaluation of these effects to be made;

- the limited accuracy of equipment for and methods of ozone measurement and the relatively large natural variability in total ozone makes the detection of man-induced changes in the ozone layer extremely difficult even by sophisticated statistical techniques;
- it has been established that the release to the atmosphere of chemicals such as chlorofluorocarbons, nitrogen oxides, carbon-dioxide and others, could eventually cause changes in the total ozone layer and vertical ozone distribution;
- the data concerning the world production of chlorofluorocarbons and other chemicals which may possibly influence the ozone layer, and their release into the atmosphere are far from being complete;
- the atmospheric photochemistry data (for example, life-times of CFCs 11 and 12 in the atmosphere) which are used as input to various model estimations are not yet complete, and it is not possible, therefore to establish precisely the critical limits for CFC releases to the atmosphere;
- the model predictions based on currently available data cannot give precise estimations on future levels of ozone layer depletion. However, there is little doubt that a one per cent decrease in ozone layer thickness could cause an increase of from 1.6 to 3 per cent UV-B radiation reaching the earth surface.

28. Because of the foregoing many uncertainties regarding the present state of the ozone depletion theory and data, CCOL prepared, at its fifth session, a list of specific recommendations for activities relevant to the implementation of the World Plan of Action on the Ozone Layer. 15/

C. DRAFT CONVENTION

29. The ozone layer is located in the atmosphere at an altitude ranging between 10 and 50 km. The question arises of what its legal status is. The need for determining the legal status of air space appeared at the beginning of the twentieth century when air space became the sphere of man's activity in connection with aviation development. Several concepts were presented at that time, amongst which were freedom of air space analogous to that of the sea, namely division of the air space into two spheres, with the lower sphere being under the sovereignty of a State and the upper sphere being free, or the territorial sovereignty of a State over the totality of its air space. The principle of territorial sovereignty became dominant in the practice of international law. Article 1 of the Convention for the Regulation of Aerial Navigation, signed in Paris on 13 October 1919, states that every State has complete and exclusive sovereignty over its air space. The same statement may be found in the Ibero-American Convention of 1 October 1926, in the Pan American Convention of 20 February 1928 and in article I of the Convention on International Civil Aviation of 7 December 1944, which states that: "each State has complete and exclusive sovereignty over the air space above its territory".

15/ UNEP/CCOL/V. pp. 28-31.

30. The principle of State sovereignty over its air space is not only the treaty norm, but also a commonly accepted norm of customary law; it may also be found in the domestic legislation of States. 16/

31. The frontiers of the air space belonging to a particular State are perpendicular to the earth's surface and follow the frontiers of the State's territory. On the other hand, the upper limits of the air space, for example the boundary between the air space and outer space has not yet been established. It may be concluded from international practice that the space where satellite orbits lie is no longer considered as air space. This means that the upper limit of air space would be about 80 km above the earth's surface at the height of the lowest satellite orbits. 17/ Accepting this reasoning, it may be said that the ozone layer above a State's territory forms part of its air space over which it has complete and exclusive sovereignty. 18/

32. On the other hand, the air space over the high seas and the waters above the continental shelf 19/ and other areas beyond the limits of national jurisdiction is not under the sovereignty of any State. In this context, it is worth recalling principle 21 of the Stockholm Declaration which stipulates 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." It may be suggested that the ozone layer should be delimited on the basis of existing State frontiers, but the nature of the ozone layer is such that depletion of or damage to it above the territory of a State is very likely to cause adverse effects in the air space above areas beyond the limits of the national jurisdiction of that State. To protect the ozone layer, it is necessary for action to be undertaken on a global scale. The result of any action undertaken to protect the ozone layer by individual States, or regionally, is likely to be reduced or neutralized by the effects of the activities of other States because of the rapidity with which pollutants are transported in the atmosphere.

33. There is no longer any doubt that an effective protection of the ozone layer is possible only with the close collaboration of States on a global scale. The CCOL data show that international co-operation in this field is indispensable. A global convention on the protection of the ozone layer could guarantee broad international co-operation and make protection of the ozone layer effective.

16/ e.g. Polish Aviation Law, 31 V 1962, Dz.U. 1962 nr 32.

17/ According to art. IX of the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies, of 27 January 1967, States have the duty to conduct the exploration and exploitation of outer space so as to avoid its harmful contamination.

18/ However, it should be noted that as yet there are no final or clear treaty norms on this question.

19/ According to the Convention of 1958 on the Continental Shelf, the waters above the continental shelf have the status of the high seas. Art. 3 of the Convention states: "The rights of the coastal State over the continental shelf do not affect the legal status of the air space above those waters".

34. On the other hand, some believe that the present state of knowledge is not sufficient to justify such action, and the feasibility of formulating specific legal obligations and proposing them to the different States of the world for acceptance, might be questioned.

35. In this context, the adoption in November 1979 of the Convention on Long-Range Transboundary Air Pollution by 35 States members of the Economic Commission for Europe is worth mentioning. ^{20/} This Convention provides for the broad co-operation of the Parties in the protection of the air by:

- Co-operation in the conduct of research into and/or development of existing and proposed technologies for reducing emissions, including technical and economic feasibility and environmental consequences, instrumentation and other techniques for monitoring emission rates and ambient concentrations of air pollutants; improved models for a better understanding of the transmission of air pollutants; the effects of air pollutants on human health and the environment; the economic, social and environmental assessment of alternative measures for attaining environmental objectives; education and training programmes related to the environmental aspects of pollution (art. 7 a-f).
- Exchange of information on and review of their policies, scientific activities and technical measures aimed at combating, as far as possible, the discharge of air pollutants; (art. 4); exchange available information on specific emissions, major changes in national policies and in general industrial development and their potential impact to, which would be likely to cause significant changes in air pollution, control technologies for reducing air pollution etc (art. 8);
- System of consultations to be held, upon request, between Contracting Parties which are actually affected by or exposed to a significant risk of long-range transboundary air pollution and, on the other hand, Contracting Parties within which and subject to whose jurisdiction a significant contribution to long-range transboundary air pollution originates, or could originate, in connection with activities carried on or contemplated therein (art. 5);
- Implementation and further development of the co-operative programme for the monitoring and evaluation of the long-range transmission of air-pollutants in Europe (EMEP); the need to use comparable or standardized procedures for monitoring, the desirability of basing the monitoring programme on the framework of both national and international programmes; the need to exchange data; the desirability of extending the national EMEP networks to make the operational for control and surveillance purposes (art. 9 a-i).

36. It would seem desirable to include the same domains of State co-operation, for example the scientific and technical co-operation, the exchange of information, consultation and monitoring, in the framework convention. These provisions include the provisions proposed at the Ad Hoc Meeting of Senior

^{20/} Report of the High-Level Meeting within the framework of the ECE on the protection of the environment, Geneva 13-15 November 1979, ECE/HLM.1/2, pp. 1-9.

Government Officials Expert in Environmental Law by the delegations of Finland and Sweden in the document: "Protection of the Ozone Layer" and by the delegations of Finland, Sweden and Switzerland: "Draft Recommendations on legal aspects and elements of a global framework convention for the protection of the ozone layer" 21/. Such provisions are also included in the preliminary Draft Proposal for an International Convention for the Protection of the Stratospheric ozone layer prepared by Sweden at the beginning of 1981.*

37. The above-mentioned domains of co-operation, included in the ECE Convention on Long-Range Transboundary Air Pollution, should find a place in the appropriate articles of the convention on the ozone layer. Of particular importance in this context is scientific and technological co-operation, to which the following influence was made in UNEP Governing Council Decision 9/13 B: "...Recognizing to this effect the desirability of initiating work aimed at the elaboration of a global framework convention which would cover monitoring, scientific research and the development of best available and economically feasible technologies to limit and gradually reduce emissions of ozone-depleting substances, as well as the development of appropriate strategies and policies". Transfer of technology and knowledge is of particular importance to fulfil the intentions of a global convention in this new and relatively unexplored field. It is also very important for developing countries and should be promoted within the frame of the future convention. 22/

38. The main thrust of the future convention should be the protection of man and his environment against dangers resulting from a depletion of the stratospheric ozone layer. The fundamental obligation on States, as proposed by Finland, Norway and Sweden to "... limit, réduçe and prevent activities under their jurisdiction or control which have or are likely to have adverse effects upon the stratospheric ozone layer" 23/ should be thoroughly considered by the meeting in the light of the present state of knowledge concerning this problem.

39. Essential to the framework Convention concept is flexibility because many chemical, physical and biological processes and reactions are as yet unknown. A convention should be easily adaptable to new knowledge about their interactions.

40. The proposed formula of attaching a number of annexes to the convention seems appropriate, but more detailed knowledge is needed concerning the scientific and technical data to be placed in the annexes. Up until the present, most available data are linked to chlorofluorocarbon releases into the

21/ UNEP/GC.10/5/Add.2.

* Note by the Secretariat: These comments are based on the text of a draft proposal received informally in February 1981; a revised draft submitted by Finland, Norway and Sweden has since been received, which is before the Ad Hoc Working Group in document UNEP/WG.69/3.

22/ The need for a broad transfer of knowledge was stressed by two representatives of the developing countries during the preliminary discussion concerning the protection of the ozone layer at the Ad Hoc Meeting of Senior Government Officials Expert in Environmental Law.

23/ UNEP/WG.69/3.

atmosphere, but it is up to the technical experts to decide whether such data are sufficiently precise and complete to be introduced into the annexes. This problem should be carefully discussed during the meeting of the Ad Hoc Working Group of Legal and Technical Experts.

41. If the use or production of chlorofluorocarbons was to be limited or banned, the possible adverse effects caused by their eventual substitutes should be carefully considered as well as the socio-economic aspects of such action.

42. The draft convention prepared by Finland, Norway and Sweden suggests that UNEP should perform certain functions in the implementation of the Convention and should be designated as Depositary and entrusted with secretariat functions. The specific requirements of such functions as well as the possible financial and other implications should be carefully considered. The other relevant international organizations, in particular, WMO, WHO, OECD, CMEA and EEC should also co-operate actively in the implementation of the Convention by providing the necessary scientific and technical information.