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**Open-ended Working Group of the Parties to  
the Montreal Protocol on Substances that  
Deplete the Ozone Layer**  
Twenty-sixth meeting  
Montreal, 3–6 July 2006  
Items 3–10 of the provisional agenda\*

**Summary of issues for discussion by the Open-ended Working  
Group of the Parties to the Montreal Protocol**

**Note by the Secretariat**

**Introduction**

1. The present note provides, in chapter I below, a summary for delegates of issues for discussion by the Open-ended Working Group of the Parties to the Montreal Protocol at its twenty-sixth meeting relating to items 3–10 of the provisional agenda. Recommendations made by the Working Group in relation to the items of the provisional agenda will be forwarded to the Eighteenth Meeting of the Parties to the Montreal Protocol, to be held in New Delhi from 30 October to 3 November 2006.

2. The present note also includes a chapter II, containing information on matters which the Secretariat would like to bring to the attention of the Parties. One critical issue covered in that chapter is the status of the phase-out, which may have significant implications for a variety of institutions of the Montreal Protocol. Given the significant issues which have been raised by a number of such institutions over the last few years, i.e., the assessment panels, that section will review the implications which the impending phase-out may have for the continuing operation of those bodies. The section will, among other things, review the problems which the assessment panels have been experiencing in maintaining the participation of the human resources required by their existing structure and mode of operation, and suggest that the Parties may wish to consider various options to ensure that they are able to procure the information that they need to take future decisions. Chapter II also includes a review of issues related to the preparations for the Nineteenth Meeting of the Parties, which could take place as early as September 2007, and the matter of the Secretariat's treatment of e-mail submissions by the Parties.

\* UNEP/OzL.Pro.WG.1/26/1.

## **I. Summary of issues for discussion by the Open-ended Working Group at its twenty-sixth meeting**

### **A. Item 3: Consideration of issues arising out of the 2006 progress report of the Technology and Economic Assessment Panel**

3. The Technology and Economic Assessment Panel met in Beijing from 24 to 28 April 2006 to consider the work of its technical options Committees and to finalize its 2006 progress report.

#### **1. Item 3 (a): Review of any new nominations for essential use exemptions for 2007 and 2008**

4. In accordance with decision IV/25, two Parties, the European Community and the United States of America, have submitted requests for essential-use exemptions for chlorofluorocarbons (CFCs) for metered-dose inhalers applicable to the years 2007 and 2008. In accordance with the criteria of decision IV/25, the Technology and Economic Assessment Panel reviewed those nominations, and its discussion on matters related to the nominations and the essential use exemptions for metered dose inhalers can be found in pages 23–51 of its 2006 progress report. Specifically, the European Community has requested an exemption for 535 metric tonnes for 2007 and the United States of America has requested an exemption for 384.97 metric tonnes for 2008. Based on their review, the Technology and Economic Assessment Panel and its Medical Technical Options Committee are recommending approval of those nominations. Among other things, however, they note that for similar nominations to be approved in the future, they should address the issues of remaining stocks and combination products in a more robust manner and should provide assurance that CFC metered-dose inhalers are not being marketed by firms also marketing CFC-free inhalers of the same moiety in the same market.

5. Also related to essential use exemptions for metered-dose inhalers, the Committee reviewed issues associated with the possible need for CFC-based metered-dose inhalers in the future. While suggesting that it might be difficult to achieve the full phase-out of CFCs for this use in all Parties operating under paragraph 1 of Article 5 of the Montreal Protocol (Article 5 Parties) by 2010, the Panel concluded that the likely high cost of continuing production of pharmaceutical grade CFCs after 2009 might necessitate consideration of campaign production in that year or an earlier year to meet any estimated continuing need for CFCs for that use after 2009. The Panel also suggested that while Article-5 Parties had made significant progress in the transition to CFC-free metered-dose inhalers, those Parties, especially those that were themselves producing metered-dose inhalers, should work on transition strategies that addressed their specific circumstances.

6. In addition to essential use exemption requests for metered-dose inhalers, on 15 April 2006, the Ozone Secretariat received an essential use nomination from the Russian Federation requesting an exemption for the use of CFC-113 for the years 2007–2010 for aerospace applications. That nomination was promptly brought to the attention of the Technology and Economic Assessment Panel. Owing to timing constraints, the Panel agreed that it could not give the request the full consideration it deserved, but it did recommend that the Parties consider granting the requested exemption for 2007 on the understanding that in its next report the Panel would thoroughly examine the request as it pertained to the years 2008–2010.

7. The Open-ended Working Group will be expected to consider the nominations for essential uses together with the recommendations of the Technology and Economic Assessment Panel thereon and to make recommendations as appropriate to the Eighteenth Meeting of the Parties.

#### **2. Item 3 (b): Review of draft terms of reference for case studies called for under decision XVII/17 on environmentally sound destruction of ozone-depleting substances**

8. In decision XVII/17 the Meeting of the Parties called on the Technology and Economic Assessment Panel to prepare terms of reference for the conduct of case studies on the technology and costs associated with a process for replacement of chlorofluorocarbon-containing refrigeration and air conditioning equipment, including the environmentally sound recovery, transport and final disposal of such equipment and of the associated chlorofluorocarbons, and to submit said terms of reference to the Parties at the twenty-sixth meeting of the Open-ended Working Group.

9. In this same decision, a request was made to the Technology and Economic Assessment Panel to consider the synergies between the Montreal Protocol and various other multilateral environmental agreements. The Panel's consideration of these issues can be found on pages 227–228 and 92–96, respectively, of its 2006 progress report.

10. The proposed terms of reference for the study called for by decision XVII/17 are set out in the annex to the present note. The Working Group is expected to consider the terms of reference, which have been prepared by the Technical and Economic Assessment Panel, and recommend action as deemed appropriate.

**3. Item 3 (c): Sources of carbon tetrachloride emissions and opportunities for reductions (decision XVI/14)**

11. In decision XVI/14, the Sixteenth Meeting of the Parties called on the Technology and Economic Assessment Panel to assess global emissions of carbon tetrachloride from certain specific use categories and to report to the Eighteenth Meeting of the Parties with an assessment of potential solutions for reductions of emissions. The report of the Technology and Economic Assessment Panel and its Chemicals Technical Options Committee on this matter can be found on pages 78–90 of the Panel's 2006 progress report.

12. The report includes a review of the sources of the production of carbon tetrachloride, the Parties reporting on its production and consumption and its various current uses. Specifically, the Panel noted, among other things, its prior findings that a significant continuing use of carbon tetrachloride as a feedstock to produce CFCs is expected to decrease by 8,090 tonnes between 2006 and 2009 as the phase-out of CFC production continues. It noted, however, that continuing demand for carbon tetrachloride for non-CFC feedstock, process agent, and other emissive uses after 2009 may still amount to between 60,000 and 92,000 tonnes. In terms of overall emissions, it noted that emissions estimated from known carbon tetrachloride requirements for 2006 were between 13,728 and 21,960 metric tonnes. Back calculations from observed atmospheric concentrations, however, yielded the conclusion that while emissions had been coming down, as of 2002 they were still on the order of 70,000 tonnes (plus or minus 6000 tonnes). Among other things, the report concluded that there appeared to be a discrepancy between reported emissions and observed atmospheric concentrations, with an underestimation of industrial emissions being a likely cause and that emissions from Article 5 Parties, which dominate emissions profiles, will be reduced significantly through the implementation of sector-based agreements with the Multilateral Fund. In terms of possible future work, the Panel suggested further investigation into carbon tetrachloride production (including its production as a by-product and its subsequent use, recycling or destruction); any additional requirements for carbon tetrachloride and emissions from other sources such as landfills. The Working Group may wish to consider the work of the Panel and make recommendations to the Eighteenth Meeting of the Parties as deemed appropriate.

**4. Item 3 (d): Any other issues arising out of Technology and Economic Assessment Panel reports**

13. Among other issues discussed in the Technology and Economic Assessment Panel's progress report were process agent requests by Brazil and Turkey and the Panel's membership and budget.

14. As agreed at the Seventeenth Meeting of the Parties, the Chemicals Technical Options Committee and the Technology and Economic Assessment Panel reviewed outstanding process agent requests from Brazil and Turkey. With regard to the process described by Brazil, the Chemicals Technical Options Committee agreed that the addition of carbon tetrachloride to the process of manufacturing vinyl chloride monomers constituted, from a technical standpoint, a process agent use, as it served to enhance the related conversion. The Committee noted, however, that the use of carbon tetrachloride for this purpose had been phased out by Brazil in 2000. The Committee also reviewed Turkey's use of bromochloromethane in the production of Sultamicillin and agreed that while the use constituted both a process agent and a feedstock use, only a small part of the chemical was consumed in the reaction as a feedstock. It therefore recommended that the use of bromochloromethane in the process described by Turkey be classified as a process agent use. In so doing, it noted that most recent (2002–2004) emissions of its use as a process agent amounted to some 13 ODP-tonnes per year. Finally, the Technology and Economic Assessment Panel noted that there might be instances in which HCFCs could be used as a less ozone-depleting substitute for the use of fully halogenated ozone-depleting substances as process agents.

15. On page 229 of its report, the Technical and Economic Assessment Panel noted that some companies and Governments were reluctant to continue funding the time and travel for their employees to participate as members of the Panel and its technical options committees, as a result of which those bodies were facing the imminent loss of some of their most experienced members, who were critically important to the quality of the work of the Panel and its committees. The Panel conducted a survey at its April 2006 meeting to estimate the time donated by members of the Panel and its committees to produce an assessment report for the Parties, and to identify those critical non-Article 5 Parties who were without travel support. The Panel estimates that over 4,000 person-days of effort by 176 people are

necessary to perform the tasks assigned to the Panel by the Parties in the current assessment year. That includes participation in meetings as well as the non-meeting time needed to conduct research and write and edit reports. The Panel has identified an ongoing need for funding for 13 members from non-Article 5 Parties to make 26 travels for 2007 in order to ensure that critical expertise in implementing alternatives is available and to enable production of a high quantity of high-quality work.

## **B. Item 4: Consideration of methyl bromide-related issues**

### **1. Item 4 (a): Review of nominations for critical use exemptions for methyl bromide for 2007 and/or 2008**

16. Pursuant to paragraph 2 of decision IX/6 and decision XIII/11, new 2007 and 2008 nominations for critical use exemptions for methyl bromide were submitted by or on behalf of the following 14 Parties: Australia, Canada, France, Greece, Ireland, Israel, Italy, Japan, Netherlands, New Zealand, Poland, Spain, United Kingdom and United States of America. The Methyl Bromide Technical Options Committee met from 3 to 8 April in Dubrovnik, Croatia, to evaluate those nominations, and its evaluation and report was considered by the Technology and Economic Assessment Panel. The Panel's discussion on related matters can be found on pages 145–217 of its 2006 progress report. Specifically, fourteen Parties submitted 60 new or additional critical-use nominations for 2007 and 30 for 2008. These totalled 2,557 and 7,098 metric tonnes, respectively. All Parties submitting nominations had submitted nominations in previous rounds. One Party, Australia, submitted nominations for two years, for cut flowers and rice. The Methyl Bromide Technical Options Committee and the Technical and Economic Assessment Panel assessed the 90 critical use nominations and agreed to recommend approval of 47, totalling 1,721 tonnes of methyl bromide; to place 32, totalling 7,043 tonnes, in the "unable to assess" category; and not to recommend 11, totalling 891 tonnes.

17. In accordance with the procedures for review by the Methyl Bromide Technical Options Committee adopted in decision XVI/14 of the Sixteenth Meeting of the Parties, the Committee will meet 28 August–2 September 2006 in Yokohama, Japan, to consider any further information related to those nominations in the unable to assess category and to produce a final report for this round of critical use nominations.

18. The Open-ended Working Group is expected to review the nominations and the recommendations by the Methyl Bromide Technical Options Committee and make recommendations as appropriate to the Eighteenth Meeting of the Parties.

### **2. Item 4 (b): Report on the possible need for methyl bromide critical-use exemptions over the next few years based on a review of methyl bromide national management strategies (decision Ex.1/4, subparagraph 9(d))**

19. In decision Ex.1/4, the First Extraordinary Meeting of the Parties requested the Technology and Economic Assessment Panel to submit a report to the Open-ended Working Group at its twenty-sixth meeting on the possible need for methyl bromide critical uses over the next few years, based on a review of the management strategies submitted by Parties pursuant to paragraph 3 of that decision. As requested by the Parties, the Panel undertook the requested review and summarized the strategies submitted by Australia, Canada, Japan, New Zealand and the United States of America (see pages 159–161 of the Panel's 2006 progress report). The Panel, however, noted that it was unable to provide a quantitative estimate of methyl bromide demand until further information is received from Parties to complete the current round of nominations. A further assessment will be made by the Methyl Bromide Technical Options Committee at its August meeting.

20. The Working Group may wish to consider the report of the Technology and Economic Assessment Panel on the matter.

### **3. Item 4 (c): Reporting on quarantine and pre-shipment matters (decisions XI/13 paragraph 4, XVI/10, and XVII/9, paragraph 8)**

21. In decisions XI/13 and XVI/10, the Meeting of the Parties called on the Technology and Economic Assessment Panel to establish a task force to evaluate data submitted by the Parties on the use of methyl bromide for quarantine and pre-shipment purposes in an effort to establish global use patterns and delineate the quantity of commodity-specific methyl bromide use that could be replaced by technically and economically feasible alternative treatments and procedures. In addition, in decision XVII/9, the Meeting of the Parties called on the task force to evaluate and report to the Open-ended Working Group at its twenty-sixth meeting on the long-term effectiveness of soil applications of methyl bromide to control quarantine pests on living plant material. The report of the

Technical and Economic Assessment Panel on these issues can be found on pages 133–144 of its 2006 progress report.

22. As regards the effectiveness of methyl bromide in controlling quarantine pests on living plant material, the panel has reported that it has not had sufficient time to consider the issue but expects to report on it in the 2006 assessment report. As regards the evaluation of data related to quarantine and pre-shipment uses, the Panel reported that in response to its requests for related information since 2004, a total of 54 Parties had reported the use of 6,893 tonnes of methyl bromide for quarantine and pre-shipment uses. This level is significantly less than the total tonnes reported to the Ozone Secretariat for 2002–2004. Of the 6,893 tonnes, 70 per cent was reported as used for quarantine uses on commodities, 24 per cent for quarantine uses on soils and 5.8 per cent for pre-shipment uses. While only 60 per cent of the submissions were detailed enough to enable analysis of more specific uses, the following major uses of methyl bromide, each accounting for more than 1 per cent of total use, were noted: soils (29 per cent), grain and cereals for consumption (24 per cent), wood (16 per cent), fresh fruits and vegetables (14 per cent), wooden packaging material (6.4 per cent), whole logs (4 per cent), dried foodstuffs (3 per cent), cotton and fibre (1.7 per cent). In terms of limitations of the data, the Panel noted that the survey covered years prior to the widespread adoption of ISPM 15, the international phytosanitary standard adopted by the Food and Agricultural Organization of the United Nations for solid wood packaging. Further, the panel suggested that the above-noted numbers might be biased due to the fact that some major consumers of methyl bromide were not covered by the survey.

23. In terms of alternatives, the task force noted that development of alternatives for quarantine and pre-shipment applications was difficult and exacerbated by many factors, including the multitude of commodities being treated; the diverse situations in which treatments are applied; the constantly changing trade and regulatory landscape; uncertainty about phytotoxic effects and effectiveness of potential alternatives against target pests; the considerable cost, effort and time required to gain the registrations and approvals that are required for many quarantine uses; and the high standard of efficacy that alternatives must have given the potentially catastrophic consequences of exotic pests surviving treatment. Pre-shipment uses on the other hand, are usually for cosmopolitan pests, and it would appear that there are fewer obstacles to adopting alternatives for pre-shipment methyl bromide uses.

24. The Technical and Economic Assessment Panel also asked Parties to comment on availability of non-methyl bromide alternatives. While limited responses have been received, in the 2004 survey, Parties reported that alternatives are available for 54 per cent of the 1,665 tonnes devoted to quarantine and pre-shipment uses. Information on alternatives noted by some Parties as being available include: 1,3-D/chloropicrin for soil; phosphine for grain and cereals for consumption and for dried food stuffs; heat treatment for wood and wood packaging materials; and a systems approach for fresh fruit and vegetables.

25. An updated, comprehensive discussion on alternatives for quarantine and pre-shipment uses will be included in the 2006 Methyl Bromide Technical Options Committee assessment.

26. The Working Group may wish to consider these matters and make recommendations as appropriate.

**4. Item 4 (d): Multi-year exemptions for methyl bromide use (decision XVI/3)**

27. At the Fifteenth and Sixteenth Meetings of the Parties, the Parties considered the issue of agreeing criteria for the approval of multi-year critical-use exemptions for methyl bromide. At the Sixteenth Meeting, the Parties decided that they would elaborate, as far as possible, at the Seventeenth Meeting of the Parties, a framework for spreading critical-use exemptions over more than one year taking into account a large number of criteria set forth in decision XVI/3. Owing to time limitations at the Seventeenth Meeting of the Parties, however, the delegation of the United States of America agreed to withdraw its proposal on the understanding that it would be reconsidered in 2006. The Open-ended Working Group may wish to consider this issue and make recommendations, as warranted, to the Eighteenth Meeting of the Parties.

**5. Item 4 (e): Options which Parties may consider for preventing potential harmful trade in methyl bromide stocks to Article 5 Parties as consumption is reduced in non-Article 5 Parties (decision Ex.I/4, subparagraph 9 (a))<sup>1</sup>**

28. In accordance with decision Ex.1/4, the Seventeenth Meeting of the Parties was to consider a report by the Technology and Economic Assessment Panel on this issue. The Panel, however, was not

<sup>1</sup> UNEP/OzL.Pro.ExMP/1/3.

able to complete its report last year, and suggested that the report could be completed during the course of 2006. This issue is covered in the Panel's 2006 progress report on pages 124–125. Specifically, the Technical and Economic Assessment Panel defined harmful trade as any trade that adversely impacts the implementation of control measures by any Party, allows a backsliding from implementation already achieved or is counter to the domestic policy of either the importing or exporting Party. The Panel suggested that the methyl bromide involved in such trade may have three sources: stockpiles in non-Article 5 Parties (these have already phased out the consumption of methyl bromide except for critical uses and quarantine and pre-shipment uses); production allowed for the non-Article 5 Parties for meeting the basic domestic needs of Article 5 Parties; or production and stockpiles of Article 5 Parties.

29. Regarding stockpiles of non-Article 5 Parties, the Panel noted that these are taken into account before requests for critical use exemptions are approved and that if Parties make special efforts to ensure that all stockpiles are declared, they should not be a source of harmful trade, since the stocks will be needed by those Parties themselves for their critical uses. Regarding basic domestic needs production by non-Article 5 Parties and production by Article 5 Parties, the Panel suggested that the quantity of allowable production under the related Protocol provisions needed to be regulated carefully to prevent production in excess of actual need, which could encourage backsliding in phase-out by Article 5 Parties. In consideration of these matters, the Panel suggested that the Parties might wish to consider the following options to prevent harmful trade in methyl bromide:

- (a) Article 5 Parties could put strong systems in place for licensing trade in methyl bromide as a part of the licensing regimes they already have or intend to have for CFCs;
- (b) All producing Parties could insist on prior informed consent by importing Parties before allowing shipment and delivery;
- (c) Parties could levy appropriate taxes on trade in methyl bromide and grant tax concessions for alternatives to promote adoption of alternatives. The revenue from a methyl bromide tax could be used to finance customs enforcement and to subsidize alternatives and alternatives research;
- (d) Article 5 Parties could report periodically on their actual methyl bromide needs and the information so provided could be used to set the level allowed by the Protocol for production for the purposes of basic domestic needs. The Ozone Secretariat could be the repository for this information.

30. The Open-ended Working Group may wish to consider the status of these matters and make recommendations, as warranted, to the Eighteenth Meeting of the Parties.

**6. Item 4 (f): Technology and Economic Assessment Panel report on laboratory and analytical uses of methyl bromide (decision XVII/10)**

31. In decision XVII/10, the Meeting of the Parties authorized a laboratory and analytical critical use exemption for certain categories of methyl bromide until 31 December 2006 subject to the conditions currently applied to the essential-use exemption for laboratory and analytical uses. In that regard, the decision called on the Technology and Economic Assessment Panel to report to the Open-ended Working Group at its twenty-sixth meeting on these and other possible laboratory and analytical critical uses, and also on the relevance of the laboratory and analytical essential-use conditions to laboratory and analytical critical uses. The review of this issue by the Technology and Economic Assessment Panel can be found on pages 69–73 of its 2006 progress report. The review considered the analytical and laboratory uses of methyl bromide, as well as the criteria that had been established for the laboratory and analytical use exemption of other chemicals. In that regard, it suggested that the criteria applied to the non-methyl bromide exemption seemed to have as their intent a desire to impose increased costs for very small, very pure quantities, and that they thereby militated against the use of the exemption in large scale operations such as field trials. The Parties may wish to consider whether the categories and criteria established for the exemption for laboratory and analytical uses of other ozone-depleting substances should apply to such an exemption for uses of methyl bromide and to make recommendations, as warranted, to the Eighteenth Meeting of the Parties.

**C. Item 5: Difficulties faced by some Article 5 Parties manufacturing metered-dose inhalers which use chlorofluorocarbons (decision XVII/14)**

32. In decision XVII/14, the Meeting of the Parties called on the Parties to consider a possible decision to address the situation of certain Article 5 Parties which are producing CFC-based metered-dose inhalers but may have problems phasing out that use of CFCs. The decision also called on the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol to examine options which might assist potential related cases of non-compliance and consider appropriate

regional workshops to create awareness and educate stakeholders on alternatives to CFC-based metered-dose inhalers. At its forty-eighth Meeting, the Executive Committee considered this issue and decided to request the Multilateral Fund Secretariat to prepare a paper on related matters for the consideration of the Executive Committee at its forty-ninth meeting (10–14 July 2006). The Open-ended Working Group may wish to note the status of the work on this matter and undertake further consideration of the issue at the Eighteenth Meeting of the Parties when the results of the Executive Committee discussions may be available for its consideration.

**D. Item 6: Treatment of stockpiled ozone-depleting substances relative to compliance (UNEP/OzL.Conv.7/7-UNEP/OzL.Pro.17/11, paragraphs 180 and 188)**

33. At the thirty-fourth meeting of the Implementation Committee, the Secretariat presented information showing that in the past, some Parties with apparent deviations from control provisions had noted that the related ozone-depleting substances were being stockpiled for an exempted use in a future year. In an effort to clarify the status of such actions, the Secretariat sought the views of the Implementation Committee and in response was asked to prepare a paper on the issue. At the thirty-fifth meeting of the Implementation Committee, the Secretariat presented a document which, among other things, summarized the circumstances which were reported by some Parties as leading to stockpiling of ozone-depleting substances produced in one year for disposition in another year in a manner which apparently caused them not to meet their related production and consumption phase-out obligations. In that paper, which has been renumbered and made available for the current meeting as document UNEP/OzL.WG.1/26/5, the Secretariat explained that those deviations fell into the following categories:

- (a) Ozone-depleting substances production in a given year which had been stockpiled for domestic destruction or export for destruction in a future year;
- (b) Ozone-depleting substances production in a given year which had been stockpiled for domestic feedstock use or export for that use in a future year;
- (c) Ozone-depleting substances production in a given year which had been stockpiled for export to meet basic domestic needs of developing countries in a future year;
- (d) Ozone-depleting substances imported in a given year which had been stockpiled for domestic feedstock use in a future year.

34. The Secretariat observed that, in previous years, when those explanations were included in the Secretariat's data reports to the Implementation Committee and the Meeting of the Parties, they had merely been noted and had not been highlighted by the Secretariat as possible cases of non-compliance; accordingly, they were not discussed by those bodies. So as to ensure that the Secretariat was correctly discharging its obligation under the Protocol's non-compliance procedure to identify and report to the Parties possible cases of non-compliance, it invited the Implementation Committee to consider whether, in the future, the Secretariat should report these types of deviation as cases of possible non-compliance.

35. After deliberating on the issue, the Implementation Committee tentatively concluded that only one case, the case of excess ozone-depleting substances imported in one year and stockpiled for domestic use as feedstock in a future year, should be considered to be consistent with the provisions of the Protocol. Accordingly, it concluded that in the future, the Secretariat should report the remaining cases to the Implementation Committee for case-by-case consideration as possible cases of non-compliance.

36. The Committee recognized, however, that its conclusions might cause practical difficulties for Parties in their efforts to ensure compliance, and that there was a need to reach a pragmatic solution. Accordingly, it suggested that the Meeting of the Parties might wish to give further consideration to the issue. The Seventeenth Meeting of the Parties agreed that the issue of stockpiling relative to compliance was an important topic but also a complex one requiring further consideration. It was proposed that it should be taken up again at the twenty-sixth meeting of the Open-ended Working Group. The Working Group may wish to consider the issue based on the background information contained in document UNEP/OzL.Pro.WG.1/26/5.

**E. Item 7: Guidelines for disclosure of interest for groups such as the Technology and Economic Assessment Panel and its technical options committees**

37. At the Seventeenth Meeting of the Parties, the delegation of Canada proposed specific guidelines for disclosure of interest of groups such as the Technology and Economic Assessment Panel and its technical options committees, and it was agreed that the Secretariat would post that proposal on its website and solicit comments so that a new version of the proposal might be ready for consideration at the twenty-sixth meeting of the Open-ended Working Group. The Canadian proposal can be found on the Secretariat's website at <http://www.unep.ch/ozone/> or <http://ozone.unep.org>. Comments received by the Secretariat are being considered by Canada and the new version will be made available to the Parties shortly. At its meeting in April, the Technology and Economic Assessment Panel discussed the Canadian proposal, and the Panel is likely to be collaborating further with Canada on this issue (see pages 229–230 of the Panel's 2006 progress report). The Working Group may wish to review related matters and consider recommendations to the Eighteenth Meeting of the Parties, as deemed appropriate.

**F. Item 8: Discussion of any proposed adjustments of the Montreal Protocol**

**G. Item 9: Discussion of any proposed amendments of the Montreal Protocol**

38. In February 2006, the Executive Secretary of the Ozone Secretariat sent a letter to all Parties regarding the application of Article 2, paragraph 9, of the Montreal Protocol, which requires that any proposed adjustments and amendments be communicated to the Parties not less than six months before the Meeting of the Parties at which it is to be considered. In that letter, the Secretariat urged all Parties to submit any proposed adjustments and amendments to the Secretariat at least seven months before the beginning of the Eighteenth Meeting of the Parties on 30 October 2006 to enable the Secretariat to ensure that all Parties receive appropriate notice of such amendments and adjustments within the time frame required under Article 2. Regarding possible adjustments and amendments, it may be recalled that the Seventeenth Meeting of the Parties agreed to withdraw from its agenda consideration of the European Community's proposed methyl bromide amendment on the understanding that it might be discussed by the Eighteenth Meeting of the Parties. In addition, in decision XVII/12 it was suggested that a proposed adjustment on basic domestic needs might be considered by the Eighteenth Meeting of the Parties.

39. On 15 April, the Secretariat received from Canada a proposed adjustment to Article 2 entitled "Advancing the Phase-out of the production of CFCs by Parties Not Operating Under paragraph 1 of Article 5 of the Montreal Protocol to Meet the Basic Domestic Needs of Parties Operating Under paragraph 1 of Article 5: Adjustments relating to controlled substances in Annex A". That proposal was promptly put on the Secretariat's website and each Party was sent a copy of it via electronic mail and regular mail. If the Secretariat receives any other proposals for adjustment or amendment, they will be communicated to the Parties as expeditiously as possible.

**H. Item 10: Other matters**

40. The Parties may wish to discuss other matters which have been identified and agreed for consideration.

## II. Issues which the Secretariat would like to bring to the attention of the Parties

### A. Status of the phase-out of ozone-depleting substances

41. In 1987, 19 years ago, the Parties to the Protocol faced a very daunting task. In a precautionary effort to address the threat from ozone depletion, they agreed to reduce chlorofluorocarbon production and consumption by 50 per cent and to freeze halon production and consumption at 1986 levels. At the time the Protocol was adopted, global consumption of ozone-depleting substances was estimated at over 1.7 million tonnes per year. While the efforts of the Parties to achieve the goals of the Montreal Protocol clearly constitute a work in progress rather than a work that has been completed, it is clear that the picture which we faced in 1987 has changed dramatically, as demonstrated by the table below.

	Non-Article 5 base year consumption	2004 ODP consumption/ exemptions	Article 5 baseline consumption	2004 ODP consumption	ODP tonnes remaining after MLF projects implemented (1)
CFCs (all)	942,843	1,693 (2)	164,167	64,112	4,362
Halons	172,734	0	46,421	5,578	62
CCl <sub>4</sub>	253,087	120 (3)	55,053	15,907	2,443
Methyl chloroform	60,573	2 (4)	1,862	1,304	395
HCFC	36,848	10,954	2,318 (5)	19,803 (6)	19,803
Methyl bromide	33,650	11,072	9,410	6,314	3,491
Totals	1,499,735	23,841	279,231	113,018	30,556/10,753
% reduction		98.4 %		59.5 %	89/96 % (7)

(1) From Multilateral Fund – based on country programme data submitted by Parties, including approvals in principle through 2008.

(2) Includes 2004 use of essential-use grant agreed by the Parties and 235 tonnes estimated for laboratory use.

(3) Includes decision X/14, table B allowances for process-agent emissions.

(4) Approximately 2 tonnes are offset annually from an exempted stockpile.

(5) Consumption for the base year 1989.

(6) Actual ODP remaining in Article 5 Parties based on 2004 data.

(7) 96% is the total reduced without HCFCs, which are essentially uncontrolled until 2015.

### B. Secretariat review of available data and analysis of remaining ODS consumption: identification of continuing issue areas and possible course of phase-out

#### 1. CFCs

42. **Non-Article 5 Parties:** To date, the Parties not operating under Article 5 have achieved a CFC reduction of 98 per cent from baseline levels of consumption. Remaining CFC consumption is primarily in the area of metered-dose inhalers, with a small residual amount in process agents and laboratory and analytical uses. By the end of 2008, the remaining CFC consumption in metered-dose inhalers is expected to be reduced by over 50 per cent from currently exempted levels, leaving residual CFC consumption at under 1,000 tonnes for all remaining uses. Even that residual consumption may not last for long, however; the imminent closure of CFC production plants before that time should provide a strong impetus for users to either stockpile for long-term residual use, convert immediately to non-ozone-depleting substances or cease production of those few highly specialized metered-dose-inhaler types for which direct replacements have not been approved.

43. **Article 5 Parties:** The analysis of data given above indicates that by 2004 the Parties operating under Article 5 had already achieved a 62 per cent reduction in CFCs, and with full implementation of projects either approved or approved in principle by the Multilateral Fund, Article 5 Parties will have achieved a 97 per cent reduction in the consumption of CFCs. With parallel or accelerated reductions

taking place in the production sector and assuming significant progress continues to be made in the penetration of comparable-cost CFC-free metered-dose inhalers into Article 5 Parties, it is likely that the Article 5 Parties will indeed achieve a total or near-total phase-out of CFCs by 2010 if not before. While signs are very positive, however, it is widely understood that despite planning and the implementation of refrigerant management plans in almost all Article 5 Parties, a great deal of work will remain to address what are likely to be significant challenges in achieving total phase-out in the refrigeration sector in a minimally disruptive manner.

## 2. Halons

44. **Non-Article 5 Parties:** While “consumption” of halons has been nearly eliminated in non-Article 5 Parties, the fact is that use of banked or stockpiled halons continues in some countries and for some uses which are still being served by stockpiled halons it has proved extremely difficult to find alternatives. It is likely that more work will be needed in this area to find suitable alternatives for all uses.

45. **Article 5 Parties:** The analysis of data shown above indicates that by 2004 the Parties operating under Article 5 had already achieved an 88 per cent reduction in halons and that with full implementation of projects either approved or approved in principle by the Multilateral Fund Article 5 Parties will have achieved a 99 per cent reduction in the consumption of halons. Indeed, as of January 2005, only 9 Parties operating under Article 5 had consumption over 50 ODP-tonnes, and one Party, which has an early phase-out agreement with the Multilateral Fund, accounts for over 40 per cent of all remaining halon consumption. With parallel or accelerated reductions in the halon production sector, it is likely that the Article 5 Parties will achieve a near total phase-out in halons much earlier than 2010. That said, a degree of uncertainty exists regarding halon consumption by the military, and existing and potentially critical needs in this area may be worthy of fuller investigation in the years agreed.

## 3. Carbon tetrachloride

46. **Non-Article 5 Parties:** In terms of controlled uses, the primary historic use of CCl<sub>4</sub>, as a solvent, has been almost completely phased out. There is, however, some continued use of CCl<sub>4</sub> for process agents, which is allowed consistent with decision X/14 and related decisions. The intent of those decisions was to allow existing uses to continue to the extent that related emissions did not exceed 221 tonnes in non-Article 5 Parties. In fact, related emissions have been much lower than that target level. In addition, alternative, non-ODS production processes are being put into place for many process agent uses when new facilities are built. Accordingly, it is likely that, over the next 10 to 15 years, the current 100-plus tonnes of emissions from CCl<sub>4</sub> used as process agents will be significantly reduced with the retirement of the existing plants and their replacement with non-ODS processes.

47. **Article 5 Parties:** In terms of controlled uses, the Multilateral Fund has been approving solvent and process agent projects which are eliminating most CCl<sub>4</sub> uses. The data above suggest that Article 5 Parties have already achieved a 75 per cent reduction in CCl<sub>4</sub>, and with projects either approved or approved in principle by the Multilateral Fund, a reduction of almost 96 per cent of baseline CCl<sub>4</sub> consumption will have been achieved. There is, however, a great deal of uncertainty regarding CCl<sub>4</sub> data in Article 5 Parties, largely stemming from questions related to the categorization of related use (feedstock, process agent or otherwise controlled use). In addition, the extent and reporting on co-production of CCl<sub>4</sub> is uncertain, and may be worthy of further investigation.

## 4. Methyl chloroform

48. **Non-Article 5 Parties:** Methyl chloroform has been almost completely phased out in non-Article 5 Parties save for a small exemption. Stockpiles of methyl chloroform for the related use are expected to last through the remaining life of the related equipment.

49. **Article 5 Parties:** As the above analysis demonstrates, by 2004 the Parties operating under paragraph 1 of Article 5 had already achieved a reduction of approximately 30 per cent. This compares to the 30 per cent reduction in 2005 which is required by the Protocol’s control provisions for Article 5 Parties. Also, with the implementation of projects either approved or approved in principle by the Multilateral Fund, a reduction of almost 80 per cent of baseline methyl chloroform consumption will have been achieved. With the help of the Multilateral Fund and the experience of the achievement of the near total phase-out of this chemical in non-Article 5 Parties, a virtual phase-out in Article 5 Parties is more likely than not by the end of the decade.

## 5. HCFCs

50. **Non-Article 5 Parties:** HCFCs in non-Article 5 Parties have been reduced much faster than required by the Montreal Protocol. While non-Article 5 Parties were not required to achieve a

35 per cent phase-out until 2004, as of 2004 they had already achieved a 70 per cent reduction. In accordance with the control regime agreed, non-Article 5 Parties must achieve a 65 per cent reduction by 2010, a 90 per cent reduction by 2015, a 99 per cent reduction by 2020 and a total phase-out by 2030. Whereas, as noted above, the non-Article 5 Parties have made great progress in their early reductions, a great deal of work will have to be done to find and implement alternatives for fast-growing sectors such as home comfort cooling (the Technology and Economic Assessment Panel estimated that approximately 34 million window units using HCFC22 were produced in 2003). Nevertheless, at least for the near term (up to 2014 inclusive), reductions are likely to exceed Protocol targets.

51. **Article 5 Parties:** In the 14 years between 1989 and 2004, consumption of HCFCs in Article 5 Parties increased by over 17,000 tonnes. There are a few key reasons for this. First, as in non-Article 5 Parties, HCFCs have been used as a more ozone-friendly alternative to effectuate the early phase-out of CFCs. Indeed, during the years of the non-Article 5 CFC phase-out, (between 1989 and 1996), consumption of HCFCs in non-Article 5 Parties also rose significantly (by almost 16,000 tonnes). Second, between 1989 and 2004, a number of Article 5 Parties experienced significant economic growth and development. This has led to a significant increase in the use of certain refrigeration and comfort cooling equipment which has relied on HCFCs. Given the time lag for the implementation of conversion projects in developing countries, the continuing substitution of CFCs with HCFCs and the continuing development path of some larger Article 5 Parties, it is likely that HCFC consumption in Article 5 Parties will more than double before the end of 2010 from its current level of some 20,000 tonnes to some 40,000 tonnes. If that trend continues, the freeze level in 2016 may be achieved at a level higher than 40,000 tonnes. Beyond that, the reduction trend is likely to be dependent on the advance of technology and the encouragement which may be brought about by any trading preferences which individual importing Parties may independently promote. Given the expected lifetimes of industrial facilities which have invested in HCFC technology, however, unless there are low-cost innovations or strict trading requirements, it is likely that significant reductions in related HCFC consumption would not occur until as late as 2025. While, from the standpoint of ozone depletion, this extended use would not be preferable, in the year 2025 there would still be 15 years remaining for Article 5 Parties to eliminate their production and consumption in order to meet the Protocol's 2040 phase-out requirement.

## 6. Methyl bromide

52. **Non-Article 5 Parties:** In accordance with the Protocol, non-Article 5 Parties were to have achieved a phase-out of controlled uses of methyl bromide by 2005 save for uses agreed by the Parties to be critical uses. Considering the 2007/2008 exemption requests submitted by Parties this year, non-Article 5 Parties will, by 2006, have achieved a 77 per cent reduction. The speed of further reductions will depend largely on the re-registration status of methyl bromide and existing methyl bromide alternatives, and the registration status and price of new alternatives such as iodomethane.

53. **Article 5 Parties:** The Protocol required Article 5 Parties to achieve a 20 per cent reduction by 2005. In fact, based on 2004 data, aggregate Article 5 consumption of methyl bromide showing a 30 per cent reduction was achieved one year early. In terms of individual compliance, most Article 5 Parties were on track for achieving the 20 per cent reduction in methyl bromide required by 2005, and only 22 Article 5 Parties have methyl bromide consumption of over 25 tonnes. If it were possible for those countries to follow the reduction path of most non-Article 5 Parties, it might be possible for them to achieve further cost-effective reductions through the effective application of reduced dosages of methyl bromide or of mixtures with increased concentrations of chloropicrin. The timing of further reductions and the eventual phase-out are likely to be dependent on the registration status of efficacious alternatives and the extent to which firms choose not to import products treated with methyl bromide.

## 7. Summary

54. For most chemicals, the phase-out, in Protocol terms, is in sight. This does not mean, however, that there will not be continuing use or emissions of potential significance, as Parties may continue to rely on stocks (e.g., of halons and CFCs for refrigeration), and there may still be emissions from continued non-controlled uses of ODS (CCl<sub>4</sub> use as a feedstock). Also, end-of-life issues associated with foam-containing products, spent halons and CFCs and refrigeration equipment can have long-term ODS implications, which, in the case of foams in particular, appear to dwarf the remaining levels of consumption controlled by the Montreal Protocol.

### C. Implications of the above analysis for the assessment panels

55. Given the significant reductions in ozone-depleting substances achieved to date, it is clear that the remaining challenges are different in scope and character and that this may have implications for the institutions of the Montreal Protocol. The current stage of implementation may call for due consideration of different options to optimize the effectiveness of the now mature institutions which were established early in the history of the Montreal Protocol.

56. The assessment panels, in particular, have over the last several years brought to the Parties' attention some of the difficulties which they have experienced in maintaining their current structure and level of work. Accordingly, the present section of the present note will review some of the implications which the status of the phase-out may have for the continuing operation of these bodies.

57. The assessment process was developed to enable the Parties to keep abreast of fast-moving changes so as to enable them to react quickly to the evolving scientific understanding of ozone-depletion phenomena and also to the dynamic nature of the technological advances which would be needed to enable replacement of 1.7 million ton of ODS covering a wide variety of ODS uses.

58. To accomplish those tasks, the Parties created a Science Assessment Panel, an Environmental Effects Panel, a Technology Assessment Panel and an Economic Assessment Panel. In accordance with the Protocol, the assessment panels were required to make quadrennial reports to the Parties and the work of the panels was to be considered in making adjustments and amendments to the Protocol.

59. The work of the panels has been of fundamental importance to the success of the Montreal Protocol. It has enabled the Parties to the Protocol to take informed decisions on a broad range of topics, including the state of the art concerning the ozone layer, the state of the art of ozone-friendly technologies and the listing and control of ozone-depleting substances. The work of the assessment panels has been instrumental in the Parties' decisions to agree on new adjustments and amendments to the ozone treaties. It is clear to all that the Protocol would not have been nearly as successful as it has been without the robust participation of global public and private sector experts in the assessment process. Nevertheless, over time, the role and make-up of the panels have changed to adapt to the emerging needs of the instrument. For example, in 1990, the two assessment panels on Technology and Economics were merged to create the Technology and Economic Assessment Panel, and, over time, various technical options committees or task forces have been created, merged or disbanded in a thoughtful but rather ad hoc fashion.

60. Over the last several years, a number of factors have emerged which suggest that the assessment panels are reaching or have in fact reached a critical juncture:

(a) A broadly based factor which is having an impact on both the science- and technology-related assessment panels is that active participation by experts with significant historical experience has decreased. There appear to be many reasons for this. In a number of cases, long-term contributors with a broad historic perspective have retired. In addition, in many cases, companies which long ago solved some of the sector-specific issues which their sponsored Technology and Economic Assessment Panel members had worked on have shown a reduced willingness to fund the participation of their staff in the assessment process. Because of these and other factors, it has become much harder for experienced participants, particularly from non-Article 5 Parties, to find funding for their continued participation;

(b) An emerging factor on which the Parties are focusing more is the desirability of ensuring greater equity in representation on the assessment panels of experts from Parties operating under Article 5 and Parties not operating under that Article.

61. Taking into consideration the current reliance which the Parties have on the assessment panels (as shown by, among other things, the agendas of the Open-ended Working Group), the status of the phase-out discussed above and the aforementioned factors which impinge on the ability of the assessment panels to continue to operate effectively with their current structure, the Parties may wish to consider various options for the continued operation of the Assessment Panels. Among those options may be:

(a) Providing increased funding for the continued operation of the assessment panels in their present form;

(b) Relying on outsourcing for the conduct of specific tasks which the Parties would like to have done;

(c) Considering the desirability of a more streamlined operation of the panels to reflect the current status of the phase-out and to enable the panels to operate within the Parties' current funding levels.

62. In regard to the second option above, outsourcing for the conduct of specific tasks which the Parties now assign to the panels can be expected to be more expensive than continued reliance on the panels because, currently, a relatively small portion of the effort of the panels is paid by Parties while the largest part of the effort is contributed voluntarily by the members themselves and the organizations and institutions which employ them.

#### **D. Study on ozone-depleting substances tracking system**

63. By decision XVII/16, the Parties to the Montreal Protocol approved the terms of reference for a study on the feasibility of developing an international system for monitoring the transboundary movement of controlled ozone-depleting substances between Parties and requested the Secretariat to undertake such a study and present the results to the Eighteenth Meeting of the Parties. The Parties also approved a sum of \$200,000 from the Trust Fund of the Vienna Convention as a one-time measure to facilitate the study. In January 2006, the Secretariat, through the United Nations Office at Nairobi, invited 14 companies to submit proposals for carrying out the study.

64. The three companies which responded by submitting bids for the study had their proposals evaluated by the Secretariat. The evaluation addressed all components of the terms of reference approved by the Parties for the study and the technical and financial competency of each company. The company which was selected to carry out the study was Chatham House, in cooperation with the Environmental Investigation Agency. Their proposal appeared to include the most experience in ozone-related issues, especially on illegal trade in ozone-depleting substances. The bidders also appeared to have widespread international contacts with the ozone community to enable it perform the task in a comprehensive manner and its proposal demonstrated a clear understanding of what the Parties wanted from the study. The company is expected to present a progress report to the Secretariat on 1 June 2006, a draft report by 31 July and a final report for submission to the Eighteenth Meeting of the Parties by 15 September 2006.

#### **E. Preparations for the Eighteenth Meeting of the Parties to the Montreal Protocol, New Delhi, 30 October -3 November 2006**

65. Pursuant to decision XVII/48 of the Seventeenth Meeting of the Parties to the Montreal Protocol, a team from the Ozone Secretariat travelled to New Delhi in May and came to agreement with the Government of India on the terms of the host Government agreement relevant to convening the Eighteenth Meeting of the Parties to the Montreal Protocol, which will be held in New Delhi from 30 October to 3 November 2006.

66. It is expected that a representative of the Government of India will make a short presentation about the country and the meeting venue at the twenty-sixth meeting of the Open-ended Working Group. General information about the meeting will also be available at that time on the Secretariat website.

#### **F. Tentative dates for the 2007 meeting of the Parties and associated meetings**

67. At the Seventeenth Meeting of the Parties to the Montreal Protocol, the representative of the Government of Canada noted that his Government was considering the possibility of hosting the Nineteenth Meeting of the Parties to the Montreal Protocol in 2007, the year of the twentieth anniversary of the Protocol. The Parties welcomed that statement with appreciation. The twentieth anniversary of the Montreal Protocol falls on 17 September 2007, and it is possible that the meeting could be hosted during that week.

68. Most Meetings of the Parties have historically taken place in November or December and over the last several years the Parties have taken certain decisions, including those related to essential and critical uses, which have time-specific deadlines that presume a meeting late in the year. Consequently, if the Meeting of the Parties were to be held in mid-September, there would need to be some changes to some important deadlines associated with meetings and working procedures of the Technology and Economic Assessment Panel and technical options committees whose reports generate proposals for decisions to be taken by the Meeting of the Parties every year.

69. Specifically, according to the working procedures of the Methyl Bromide Technical Options Committee relating to the evaluation of nominations for critical uses of methyl bromide, Parties must submit their nominations for critical-use exemptions to the Secretariat by 24 January each year to enable preparation of the interim report on critical-use nominations by the Methyl Bromide Technical Options Committee by early May. In addition, the deadline for submission of nominations by Parties for essential uses of ozone-depleting substances is 31 January. These deadlines have enabled the Technology and Economic Assessment Panel to meet in April or May to consider the assessments carried out by the various technical options committees before submitting its report to the Secretariat. Similarly, the reporting on the accounting framework for essential uses other than laboratory and analytical applications of ozone-depleting substances is also due on 31 January each year. For the Technology and Economic Assessment Panel to do its work before a mid-September meeting, the submission of those nominations to the Panel and technical options committees would have to be brought forward to 15 December at the latest to enable them to review the data and present their reports to the Open-ended Working Group at its twenty-seventh meeting, which would have to be held at least by the middle of the first half of the year. In that regard, the Secretariat has made a tentative booking to hold the twenty-seventh meeting of the Open-ended Working Group of the Parties in Nairobi during the week of 30 April to 4 May 2007 and the Nineteenth Meeting of the Parties in Montreal, Canada in September 2007.

70. Another important date relates to data reporting under Article 7 of the Montreal Protocol. Under that Article, the Parties have until 30 September of the following year to report data on production and consumption of ozone-depleting substances for the previous year. While that date is legally binding, decision XVII/20 encouraged Parties to continue reporting data as soon as figures are available, and preferably by 30 June each year, and over the last two years over 100 Parties have been reporting in keeping with that request. It would, however, be important to the performance of the work of the Implementation Committee and the Meeting of the Parties if all Parties endeavoured to make their data available well in advance of a mid-September 2007 Meeting of the Parties.

71. Given those factors, and assuming that the Nineteenth Meeting of the Parties will take place in mid-September 2007, the Parties may wish to consider the issue and agree on a one-time modification to the working procedures of the Technology and Economic Assessment Panel and technical options committees for 2007 in respect of dates for submission and consideration of information by the Open-ended Working Group of the Parties next year. The Parties may also wish to reiterate decision XVII/20 by encouraging data reporting to the Secretariat under Article 7 of the Protocol as soon as figures are available and preferably by 30 June 2007 rather than waiting until the final deadline of 30 September.

## **G. Secretariat missions**

72. In accordance with the directives of the Parties for the participation in or monitoring of activities in other forums, the Secretariat was represented at the Inter-agency Coordination Meeting of the Multilateral Fund in Montreal, Canada, in January 2006 and the first session of the International Conference on Chemicals Management and the ninth Special Session of the United Nations Environment Programme Governing Council/Global Ministerial Environment Forum in Dubai, United Arab Emirates, in February 2006. The Secretariat would like to note that the International Conference on Chemicals Management invited the Montreal Protocol and its Multilateral Fund, within their mandates, to consider whether and how they might support implementation of appropriate and relevant objectives of the Strategic Approach to International Chemicals Management. The Secretariat has also been very active in attending ozone-related meetings, including the forty-eighth meeting of the Executive Committee of the Multilateral Fund, methyl bromide meetings in Latin America and meetings in the regional networks of Africa, Europe/Central Asia, South Asia, Southeast Asia and the Pacific and West Asia.

## **H. Secretariat treatment of e-mail submissions by Parties**

73. Since the onset of e-mail communication, the Secretariat has followed a gradual process in embracing electronic mail as one of the official means of communication with Parties to the Montreal Protocol. Initially, it was felt that since not all Parties had the capacity to adopt electronic communication and the process of communication transformation was very gradual, communication to and from Parties should continue by various means, including regular mail, telecopier and electronic mail. In the last few years, however, there has been a fundamental shift by almost all Parties towards the use of electronic communication as the fastest means. As a result, the Secretariat now receives most of its communications from Parties by electronic means and likewise sends out most communications,

including correspondence and meeting documents, by the same means. A few examples will illustrate this point.

74. For the last four years, almost all nominations for essential- and critical-use exemptions, including supporting documentation, were submitted by Parties to the Secretariat by electronic means, in addition to the hard copies which would be received later. Similarly, any additional information and documents sought by the Secretariat and the technical options committees of Technology and Economic Assessment Panel were transmitted electronically. Also, submissions of proposals to the Secretariat for the adjustment or amendment of the Montreal Protocol by the Parties have been made by electronic mail and accepted by the Secretariat provided they were received within the allowable deadline. Information requests by the Parties to the Secretariat and responses from the Secretariat are mostly by e-mail and to a lesser extent by fax. One of the benefits of e-mail communication has been a significant reduction in the amount of time involved in processing documents by both the Parties and the Secretariat. Another benefit of e-mail communication is a significant reduction in the Secretariat's budget on fax communication from the levels of 2001 and prior years to the current level, which was first proposed in 2002.

75. As a result of these developments and considering the advantages which the Parties have had in complying with various deadlines set in some decisions of the Meetings of the Parties by communicating through e-mail, unless otherwise advised the Secretariat will now treat all e-mail communications, including attachments to such communications to and from Parties, as official communications if properly signed by the originating sender and received within the prescribed deadlines. Despite this development, communication sent by other means, such as letters and faxes, continue to receive the same treatment as official communications.

76. While e-mail has become the dominant form in which the Secretariat receives information from the Parties, for the time being the Secretariat intends to continue to supplement its electronic mail delivery of signed invitation letters and meeting documents including reports to the Parties by regular postal means.

## **I. Changes to the Ozone Secretariat website**

77. As noted in the Secretariat's note (UNEP.OzL.Pro.17/2) for the Seventeenth Meeting of the Parties, the Secretariat has been making some changes to its website. These changes include the use of new servers and a new domain (resulting in the new web address <http://ozone.unep.org> while still retaining <http://www.unep.ch/ozone> as a mirror service), and the introduction of a new data access service. The transition to the new addresses has been implemented transparently and users accessing the old address <http://www.unep.org/ozone> are automatically redirected to the new address.

78. Some of the benefits of the shift to the new servers may not be too evident to the Parties, but will include reduced turnaround time for posting new material, increased reliability and greater flexibility in terms of the services which the Secretariat will be able to offer the Parties. An example of the ability to offer increased services is the implementation of the data access service, which can now provide the Parties with web-based query-driven access to the Article 7 data reported by the Parties. We hope that the Parties will find this service useful, and welcome suggestions for possible improvements or additional services. While it may not be possible to implement or adopt all suggestions which may be put forward, such information would give the Secretariat a better understanding of the needs of the Parties and would consequently allow it to plan better for resources and services which could be made available in the future through the website.

## **J. Publication of an updated Ozone Handbook**

79. The Secretariat has initiated arrangements for the preparation of a new edition of the Ozone Handbook. The updated version will include all decisions of the Parties up to and including those taken by the Seventeenth Meeting of the Parties. We are also investigating various formats for the Handbook, including the possibility of producing it in a more environmentally friendly format which would allow for the easy addition of new pages.

## **K. Status of global laboratory and analytical use exemptions pursuant to decision XV/8**

80. Since 1996, the Parties have allowed a global exemption for the small amount of ozone-depleting substances used for laboratory and analytical uses. In 1997, the Parties took decision X/19, which established a structure for eliminating this exemption when alternatives to

ozone-depleting substances used for these purposes are identified. Pursuant to the decision, the Technology and Economic Assessment Panel reports annually on the availability of new alternatives for laboratory and analytical uses. If the Parties agree that there are effective alternatives to ozone-depleting substances for a given use, they put all Parties on notice that after three years, the specific use for which alternatives are available will no longer qualify for the exemption.

81. This year the Technology and Economic Assessment Panel reports (on pages 72–73 of its 2006 progress report) that little progress has been made in finding non-ozone depleting alternatives to laboratory and analytical uses. It does note, however, that opportunities to reduce the use (and therefore emissions) of ozone depleting substances in preparative and analytical laboratories will arise as adoption of “green chemistry” practices, i.e., environmentally sound laboratory practices and management of chemical reactions, spreads from the United States of America, where it was initially developed, and become enshrined in regulations.

**L. The Technology and Economic Assessment Panel review of the status of n-propyl bromide pursuant to decision XIII/7**

82. N-propyl bromide (n-PB) is a non-controlled ozone-depleting substance. It has a very short atmospheric lifespan of 11–14 days, which makes its ozone-depleting potential highly dependent on both the latitude of emissions (relative to the tropical tropopause where trace gases enter the stratosphere) and on the season in which emissions take place. Given disparate assessments of its ozone-depleting potential, the Parties sought more information on both the related science and on the market penetration and places of likely use of this chemical. The Scientific Assessment Panel and the Technology and Economic Assessment Panel have subsequently provided more information and the Technology and Economic Assessment Panel was asked to report annually on n-PB use and emissions.

83. The Technology and Economic Assessment Panel has estimated annual use of this chemical as a solvent to be 5000 to 10,000 metric tonnes per year, with emissions estimated to be half that level. Depending on the ozone-depleting potential of n-PB (which the Scientific Assessment Panel has found ranges from .013 to .1), this would put related emissions at between 33 and 500 ODP-tonnes.

**M. Secretariat report on budget related issues pursuant to decision XVII/42**

84. Decision XVII/42 requested the Secretariat to inform the Open-ended Working Group on all sources of income received, including the reserve and fund balance and interest, as well as actual and projected expenditures and commitments, and to provide an indicative report on all expenditures against the agreed budget lines. The report on this issue can be found in document UNEP/OzL.Pro.WG.1/26/INF/2.

## Annex

### **Terms of reference for the study called for under decision XVII/17 on technical and financial implications of the environmentally sound destruction of concentrated and diluted sources of ozone-depleting substances<sup>1</sup>**

1. Studies should be developed “*in Parties operating under paragraph 1 of Article 5 of the Protocol, with regional representation*”, on the technology and costs associated with a process for the management, transport and final disposal of CFC-containing equipment and associated ODS at the end of life or earlier if feasible.
2. In carrying out these studies, the entity selected should:
  - (a) Review non Article 5(1) country experiences on ODS Recovery and Destruction Technologies with respect to refrigerant and/or blowing agent and specific reference to types and scale of operations, and transport (including relevant conventions), storage and disposal issues;
  - (b) Build models based on the studied real examples highlighting critical issues and factors for success.
  - (c) Collect relevant data for selected Article 5(1) regions based on inputs from local industry, national and local government, academia, energy supply companies and other stakeholders.
  - (d) Test the data gathered against the critical factors previously identified in (b).
  - (e) After preparing an indicative cost estimate assess the social, economic and environmental impact of the different recovery and destruction options in the specific regions and compare their cost-benefit.
3. In carrying out these studies, the entity selected should take into account:
  - (a) The economic incentives which may be available, either inherent or external to the process, that would encourage users to reduce emissions and/or phase-out specific categories of equipment.
  - (b) The viability and potential cost of using existing destruction facilities.
  - (c) The annual reductions of ODS which will likely be attained through the implementation of the various options using, where relevant, the recovery and destruction efficiency parameter proposed by the TEAP in its Report of the Task Force on Foam End-of-life Issues (May, 2005).
  - (d) The evaluations done by the MLF on issues associated with transport, recovery, recycling and disposal issues, and the related UNDP projects.
  - (e) The studies done by TEAP and other conventions on destruction technologies and related issues.
4. The conveners of the study should provide a progress report to the Secretariat, and through them, to the 27<sup>th</sup> meeting of the Open Ended Working Group at least six weeks before the meeting, and a final report to the Secretariat, and through them, to the 19<sup>th</sup> meeting of the Parties, at least 6 weeks prior to the meeting.

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<sup>1</sup> The terms of reference are reproduced in the present annex as prepared by the Technical and Economic Assessment Panel and have not been formally edited by the Secretariat.