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**Open-ended Working Group of the Parties to
the Montreal Protocol on Substances that
Deplete the Ozone Layer**
Twenty-fifth meeting
Montreal, 27–30 June 2005

Note by the Secretariat

Introduction

1. The present note provides, in chapter I, a summary for delegates of issues for discussion by the Open-ended Working Group of the Parties to the Montreal Protocol at its twenty-fifth meeting relating to items 3–13 of the provisional agenda*. Recommendations made by the Working Group in relation to the agenda items will be submitted to the Seventeenth Meeting of the Parties to the Montreal Protocol, to be held in Dakar, Senegal, from 12 to 16 December 2005. The present note also includes a chapter II, containing information addressing specific requests that have been made by the Parties and on issues that the Secretariat would like to bring to the attention of the Parties.

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

A. Item 3: Consideration of issues arising out the 2005 progress report of the Technology and Economic Assessment Panel

2. Items 3 (a)–(f) of the provisional agenda are addressed in the May 2005 progress report of the Technology and Economic Assessment Panel¹ and are summarized in the present note. The progress report, which has been communicated to the Parties, contains important information and suggestions that are not repeated in the present document; accordingly, the Parties are encouraged to study the full progress report.

¹ The May 2005 progress report is contained in volume 1 of the May 2005 Report of the Technology and Economic Assessment Panel.

1. Item 3 (a): Essential-use nominations for non-Article 5 Parties

3. In their report on essential use issues (pages 33-47 of the Technology and Economic Assessment Panel's May 2005 progress report), the Technology and Economic Assessment Panel and its new Medical Technical Options Committee made a number of observations regarding the final stages of the transition to metered-dose inhalers (MDIs) free of chlorofluorocarbons (CFCs). For example, the Medical Technical Options Committee expressed the belief that it was critical during the final stages of the phase-out of CFC MDIs that stockpiles of CFCs meeting quality requirements be utilized in preference to the production of new CFCs. To facilitate the depletion of stockpiles, the Committee suggested that the Parties might wish to consider allowing the transfer of allocations and stockpiles between MDI manufacturers and between different active ingredients. The Committee also suggested that the Parties might wish to reconsider the decision XV/5 requirement to split essential use allocations between salbutamol and non-salbutamol uses, as that might deprive parties of flexibility needed to manage allocations and achieve stockpile reductions.

4. The Committee also indicated that it was important to remind CFC MDI producers that any CFCs obtained under essential use exemptions must be used for an authorized essential use, transferred to a Party operating under Article 5, paragraph 1, for basic domestic needs, or destroyed by processes approved by the Parties. In its review, the Committee also expressed a concern with both the status and the existence of previously unreported pre-1996 stockpiles of CFCs that it believed should have been utilized earlier in the phase-out. Finally, it expressed the belief that, given uncertainties in the late stages of the transition, it would be better able to make its technical assessment pursuant to essential use decisions if it could consider nominations for 2007 in 2006; thus, submitting nominations in the prior year, rather than two years prior, would be appropriate.

(a) Item 3 (a) (i): Second review of the essential use nominations for 2006 taking into account decision XV/5 (decision XVI/12, paragraph 1)

5. At their Sixteenth Meeting, the Parties to the Protocol approved the 2006 essential use nominations of the European Community and the United States of America "subject to a second review of the 2006 levels consistent with decision XV/5". Decision XV/5 requires, among other things, that no quantity of CFCs for essential uses should be authorized after the commencement of the Seventeenth Meeting of the Parties if the nominating Party has not submitted, by the time of the twenty-fifth meeting of the Open-ended Working Group, a plan of action regarding the phase-out of the domestic use of CFC-based MDIs whose sole active ingredient is salbutamol.

6. The Secretariat received a letter explaining the plans of the European Community and a copy of a final ruling detailing the plans of the United States of America. The European Community's letter, which was submitted on behalf of its 25 member States and Norway, indicated that the European Community would not make nominations for 2006, or any year thereafter, for MDIs whose sole active ingredient was salbutamol for sale or distribution in the European Community or Parties not operating under Article 5, and that the import of such MDIs would be prohibited from 1 January 2006. The detailed plan submitted by the United States of America indicated that from the end of 2008, it would no longer be legal to sell CFC-based salbutamol MDIs in the United States. The submissions of the European Community and the United States of America may be viewed in full on the Ozone Secretariat's website.

7. The Technology and Economic Assessment Panel and its new Medical Technical Options Committee have undertaken a secondary review of the 2006 nominations that were authorized at the Sixteenth Meeting of the Parties, subject to the conditions contained in decision VII/28 and consistent with decision XV/5. They have also reviewed the 2004 nomination of the Russian Federation on the basis of further information provided by that Party. Their recommendations are as follows:

Party	2006 nominated	2006 amounts authorized in 2004	2006 recommended after second review
European Community	550/539 tonnes (a)	550 tonnes	539 tonnes, including 181 tonnes for salbutamol CFC MDIs for export to non-Article 5, paragraph 1, Parties
United States of America	1,900/1702 tonnes (b)	1,900 tonnes	1,242 tonnes for 2006, minus any available pre-1996 stockpiles that satisfy United States regulatory requirements sold into the United States market for use in MDIs, plus up to 180 tonnes if salbutamol CFC MDIs are not imported from the European Community in 2006
Russian Federation	286 tonnes	Unable to assess	upward revised quantity of 400 tonnes

(a) In January 2005, the European Community submitted a new downward request of 539 tonnes for 2006 based on a revised estimate of need. The recommendation includes 180 tonnes for export of salbutamol to non-Article 5 Parties.

(b) The original quantity of 1,900 tonnes authorized by the Parties in 2004, and subject to review, was revised to 1,702 tonnes in a letter from the United States Environmental Protection Agency dated 25 April 2005 and received by the Technology and Economic Assessment Panel during its meeting.

8. With regard to the European Community's nomination for 2006, the Medical Technical Options Committee noted that the Community's stockpiles at the end of 2004 were 733 tonnes, which was substantially higher than the projected need for 2006. It also noted that the sum requested for 2006 included 181 tonnes of CFCs for production of salbutamol MDIs for export to the United States of America and other non-Article 5 Parties, and that the request seemed to conflict with the European Community's action plan, which stated that from 2006, the European Community would not be requesting an essential use exemption for exports to Parties not operating under Article 5, paragraph 1. Accordingly, the Medical Technical Options Committee suggested that the European Community might wish to clarify that matter prior to the meeting of the Open-ended Working Group, and expressed the belief that the European Community might be able to provide the 181 tonnes for the purpose of export of CFC salbutamol MDIs to non-Article 5 Parties in 2006 from its existing stockpiles.

9. With regard to the 2006 nomination of the United States of America, the Medical Technical Options Committee noted that the nomination of 1,702 tonnes is in excess of reported actual use of CFCs for MDIs in the United States of America in 2004 (1,242 tonnes), and that the use of CFCs for MDIs in the United States had shown a continuing downward trend in use in recent years. In that regard, the Technology and Economic Assessment Panel concluded that actual CFC use in 2006 was not expected to exceed 1,242 tonnes, provided that the 180 tonnes for salbutamol MDIs, which was included in the European Community allocation, was manufactured and exported to the United States. The Panel also noted that the United States stockpiles amounted to 1,521 tonnes at the end of 2004, and that that figure did not include pre-1996 stockpiles, which might satisfy regulatory requirements for use in MDIs. Given these facts, and after considering a number of options and scenarios, the Technology and Economic Assessment Panel recommended an essential use exemption of 1,242 tonnes for 2006, minus any available pre-1996 stockpiles that satisfied United States regulatory requirements sold into the United States market for use in MDIs, plus up to 180 tonnes if salbutamol CFC MDIs were not imported from the European Community in 2006.

10. With regard to the Russian Federation, it submitted its request for an exemption for 2006 to the Technology and Economic Assessment Panel in 2004, but the request arrived late and the Panel was not able to give it full consideration. When it did review the request, the Panel had several questions. While the Medical Technical Options Committee did not have the responses to those questions in time for its 2005 meeting, they were provided in time for consideration at the 2005 Panel meeting. Among other things, the Panel noted in its 2005 progress report that the Russian Federation had finalized a transition strategy in late 2004, and that the strategy would continue to be refined during 2005 and would be resubmitted to the Ozone Secretariat. The Panel also noted that the nomination for 2006 represents a significant reduction on the quantity exempted for 2004, and was about 15 per cent below actual use in 2004. In addition, the Panel noted that stockpiles held by the Russian Federation represented only a four-month supply, and might be insufficient to guarantee adequate supply of MDIs. In view of the concern that an adequate supply of medication should be available to patients in the Russian Federation, the Panel recommended an upward revised essential use exemption of up to 400 tonnes for 2006, which would provide for one year's actual use and augment the stockpile to six months' operational supply.

11. The Open-ended Working Group may wish to consider the recommendations of the Medical Technical Options Committee and the Technology and Economic Assessment Panel on the 2006 nominations of the European Community, the Russian Federation and the United States, and forward any recommendations it may have to the Seventeenth Meeting of the Parties.

(b) Item 3 (a) (ii): Review of new nominations for essential use exemptions for 2006 and 2007 taking into account decision XV/5

12. No new 2006 nominations for essential use exemptions were submitted. Two Parties, the United States and the Russian Federation, submitted new requests for essential-use exemptions for CFCs for MDIs applicable to the year 2007. An overview of those nominations and the related recommendations made by the Committee and the Panel is provided in the table below.

Initial review of essential-use nominations for 2007 submitted by non-Article 5 Parties (in metric tonnes)

Party	2007	Recommendation for 2007 requests
	Nominated	
Russian Federation	243 tonnes	Unable to recommend exemption for 2007 at this time, with an assessment in 2006 if a nomination for 2007 is submitted
United States of America	1,483 tonnes	Unable to recommend exemption for 2007 at this time, with an assessment in 2006 if a nomination for 2007 is submitted

13. Regarding the requests of the United States of America and the Russian Federation for a 2007 exemption, the Technology and Economic Assessment Panel stated the belief that, given the rapidly changing technical and economic environment in the final stages of transition, it would be better able to make its technical assessment pursuant to essential use decisions if it could consider nominations for 2007 in 2006. Therefore, the Panel was unable to recommend an exemption for 2007 at the time, but could provide an assessment in 2006 if a nomination for 2007 is submitted by the Russian Federation and the United States of America.

14. The Open-ended Working Group may wish to consider the conclusions and recommendations of the Panel and the Medical Technical Options Committee on the 2007 nominations of the Russian Federation and the United States of America and make recommendations, as appropriate, to the Seventeenth Meeting of the Parties.

2. Item 3 (b): Review of the status of destruction technologies identified by the Technology and Economic Assessment Panel in its 2002 report as emerging (decision XVI/15)

15. In 2002, the Technology and Economic Assessment Panel’s Task Force on Destruction Technologies identified 29 emerging technologies that, while theoretically efficacious, had been “screened out” of the list of approved technologies because they had not demonstrated evidence of technical capability. Decision XVI/15 called for a review of any new information on those emerging technologies, and, if new information was available, an evaluation in order to determine whether they warranted consideration for inclusion on the Parties’ list of approved destruction technologies. The Technology and Economic Assessment Panel’s progress report (pages 97-101 of volume 1 of the May 2005 Technology and Economic Assessment Panel progress report) stated that, according to limited surveys, none of the technologies that had been categorized as emerging had as yet met the recommended technical capability criteria on a pilot or demonstration-scale. However, because the destruction of fluorinated gases (hydrofluorocarbons (HFCs), perchlorofluoro-carbons (PFCs) and sulfur hexafluoride (SF₆)) might be required for mitigation of global warming, the Panel suggested that related technologies might undergo further development, and should therefore be reassessed in the near future.

16. The Open-ended Working Group may wish to consider the Panel’s findings on this issue and consider making recommendations, as appropriate, to the Seventeenth Meeting of the Parties.

3. Item 3 (c): Process agent issues**(a) Item 3 (c) (i): Review of requests related to process agent uses and tables A and B of decisions X/14 and XV/6 (decision XV/7 paragraphs 3, 6 and 7)**

17. Paragraph 3 of decision XV/7 requested the Technology and Economic Assessment Panel to review specific applications submitted by Parties against the criteria included in decision X/14 for process agents, and to make recommendations annually on uses that could be added to or removed from Table A of decision X/14. On that basis, in 2004, the Panel and its Process Agents Task Force reviewed nominations from the Democratic Peoples' Republic of Korea, Romania, the United Kingdom of Great Britain and Northern Ireland and the United States of America, and concluded that all the processes reviewed met the criteria to enable their designation as process agents. The Sixteenth Meeting of the Parties was invited to include these process agent uses on the list of exempted uses (table A of decisions X/14 and XV/6). However, due to a lack of time, and a concern by some Parties that the dates when the process agent uses started were not clearly indicated for all uses, the Sixteenth Meeting did not take any decision on the matter. Of the Parties that made nominations in 2003 and 2004, only the United States of America resubmitted its request with additional information. The 2005 report by the Panel and the Chemicals Technical Options Committee, contained in the Panel's May 2005 progress report, reaffirmed the earlier evaluation regarding the classification of the applications reviewed in the 2004 Process Agent Task Force report and considered the new information submitted by the United States.

18. Regarding the request of the United States of America for consideration of CFC-113 use in high modulus polyethylene fibre production as a process agent, the information it submitted showed that the plant using ozone-depleting substances as a process agent for this use had commenced commercial operation in 1985, and that output had grown steadily with expansion of the plant to increase spinning capacity and thereby increase output. Information also showed that several stages of expansion of the plant were accompanied by a substantial reduction in emissions of CFC-113, and that over the past 15 years, hundreds of materials that do not contain ozone-depleting substances have been tested as replacements for CFC-113, but none was able to achieve the technical performance necessary to maintain product quality.

19. While noting that the CFC-113 application used in this plant constituted a process agent use, the Panel stated that the determination of whether this plant qualified for the process agent exemption could depend on the Parties' interpretation of decision X/14, which stated in paragraph 7 that "Parties should not install or commission new plant using controlled substances as process agents after 30 June 1999, unless the Meeting of the Parties has decided that the use in question meets the criteria for essential uses under decision IV/25."

20. The Panel suggested that if the Parties decide that the term "new plant" in the above quoted decision was intended to include expansion of existing plants, the Parties might wish to provide a temporary process agent exemption for this application until an essential use request can be submitted and reviewed by the Nineteenth Meeting of the Parties.

21. The Panel and the Chemicals Technical Options Committee (CTOC) also reviewed several new submissions, including a submission by the Government of Turkey for the use of bromochloromethane in the production of sultamillicine. The Panel and the Committee recommended that this application be classified as a feedstock rather than a process agent. The Committee also recommended that table B of decision XV/7 be updated to reflect any changes made to table A and that Israel be included in table B because its use of carbon tetrachloride (CTC) for removing nitrogen trichloride (NCL₃) in the production of chlorine was a well known process agent use. Finally, the Committee noted that the European Community had submitted a request for an emergency exemption to the Ozone Secretariat to authorize the use of the eight litres of CTC required for the manufacture of radiolabelled cyanocobalamin, and that such use was recommended by the Panel and the Committee co-chairs. In this regard, the Committee suggested that the Parties might wish to consider granting a long-term exemption for such use, or conversely, consider whether there should be any limit to the continued renewal of an emergency exemption.

22. The Open-ended Working Group may wish to consider the Panel's findings on these process agent-related issues and consider making recommendations, as appropriate, to the Seventeenth Meeting of the Parties.

(b) Item 3 (c) (ii): Reconsideration of the process agent uses listed in decision XV/7

23. Decision XV/7 directed that a specific list of process agent applications that had non-negligible emissions or that had not been formally reviewed by the Technology and Economic Assessment Panel should be considered as process agent uses in accordance with the provisions of decision X/14 for 2005 and 2006 only. That decision also called on the Panel and the Parties to reconsider the status of those applications at the Seventeenth Meeting of the Parties, based on information reported by the relevant Parties on the levels of emissions from those uses and the containment technologies used to minimize those emissions, as required by decision X/14. No new information from related Parties has been put forward on those uses. The Technology and Economic Assessment Panel and its Chemicals Technical Options Committee have reviewed the 31 processes listed in the table of decision XV/6, which cover the uses listed in the table of decision XV/7, and noted in their 2005 progress report that only 12 were reported as being used by Parties not operating under Article 5, one of which had not been used since 2001. One further application is found in an Article 5 Party. The Chemicals Technical Options Committee also noted that if the Parties wished, they could further investigate and report to the Parties in 2006 on whether the remaining processes, for which there has been no reporting by any Party, are actually used commercially.

24. Although it did not have new information from the Parties on the uses listed in decision XV/7, the Technology and Economic Assessment Panel noted that, pursuant to decision XV/7, paragraph 5, the Executive Committee had commissioned a study on emissions of controlled substances from identified process agent uses in Parties operating under Article 5 (see document UNEP/OzL.Pro.WG.1/25/INF/4). The study surveyed 26 countries, including those Parties operating under Article 5 that have process agent uses listed in the table in decision XV/7. The study noted, among other things, that while there was a great discrepancy between the process agent figures provided by the Parties operating under Article 5 to the Ozone Secretariat and the secretariat of the Multilateral Fund for the Implementation of the Montreal Protocol, the three major consumers accounting for 97 per cent of the total consumption either had national carbon tetrachloride phase-out plans in place or in prospect for new uses. Accordingly, the CTOC report cites the Executive Committee report (UNEP/OzL.Pro/ExCom.45/53) to the effect that related consumption for identified process agent uses as defined under the Montreal Protocol will cease in these countries when the related Multilateral Fund phase-out plans are completed, irrespective of current data discrepancies. The study also noted that, to date, the Fund had chosen to fund alternative processes rather than emission abatement to phase out process agent uses, and that, at the present time, only one emission reduction project is foreseen.

25. The Open-ended Working Group may wish to consider the findings of the Technology and Economic Assessment Panel and its Chemicals Technical Options Committee and make recommendations to the Meeting of the Parties, as appropriate, on these process agent applications.

4. Item 3 (d): Consideration of the Technology and Economic Assessment Panel/Intergovernmental Panel on Climate Change assessment report as it relates to actions to address ozone depletion (decision XIV/10)

26. It has long been understood that stratospheric ozone depletion and climate change are linked. Ozone-depleting substances and some of their alternatives contribute to climate change. In recognition of this fact, the Eighth Conference of the Parties to the United Nations Framework Convention on Climate Change took decision 12/CP.8 in October 2002, inviting the Intergovernmental Panel on Climate Change and the Technology and Economic Assessment Panel to develop a balanced, scientific technical and policy-relevant special report. Later in 2002, the Parties to the Montreal Protocol, through decision XIV/10, authorized the Technology and Economic Assessment Panel to work with the Intergovernmental Panel on Climate Change in preparing a fully integrated report, and to forward that special report for consideration by the Open-ended Working Group insofar as it related to actions to address ozone depletion. The special report by the Intergovernmental Panel on Climate Change and the Technology and Economic Assessment Panel has now been finalized and was considered by the Intergovernmental Panel on Climate Change at its plenary meeting in April 2005, where appreciation was expressed for the expert work of the Technology and Economic Assessment Panel in helping prepare the special report, a summary of which can be found on pages 263–298 of the May 2005 progress report of the Technology and Economic Assessment Panel.

27. The special report by the Intergovernmental Panel on Climate Change and the Technology and Economic Assessment Panel concluded that the reductions in ozone-depleting substances being implemented under the Montreal Protocol had and would continue to have substantial benefits for the global climate system. The report stated that ozone-depleting substance replacements such as

hydrofluorocarbons (HFCs) and hydrochlorofluorocarbons (HCFCs) generally had lower global warming potential than the ozone-depleting substances they replace² and that the energy efficiency of products made with alternatives to ozone-depleting substances could generally be maintained. However, the growth in the use of these ozone-depleting substance replacements will make a substantial contribution to the positive direct radiative forcing of climate and will contribute to global warming. In consideration of these facts, the special report by the Intergovernmental Panel on Climate Change and the Technology and Economic Assessment Panel considered actions that could be taken with regard to ozone-depleting substances and their replacements. The summary that follows was prepared in accordance with decision XIV/10 and outlines actions that address ozone depletion and at the same time have the supplementary benefit of reducing climate change.

28. The primary opportunity suggested in the special report as it relates to ozone-depleting substances and protection of the ozone layer is the reduction of emissions from banked ozone-depleting substances through improved containment of substances; reduced charge of substances in equipment; end of life recovery and recycling or destruction; increased use of alternatives with zero ozone-depleting potential and, ideally, a low or negligible global warming potential; use of not-in-kind technologies; or a combination of the above. Banked ozone-depleting substances are defined in the report to include substances that have been produced but not yet released to the atmosphere, including CFCs stored in existing equipment as a pure chemical and distributed within the cells of foams. The special report noted that a substantial fraction of ozone-depleting substance emissions were and would continue to come from ozone-depleting substances being emitted from banked sources, but that there were currently no requirements under the Montreal Protocol for Parties to apply best practices when it came to bank management or end-of-life treatment.

29. In the case of ozone-depleting substances with high global warming potential, greenhouse gas emissions can also be directly avoided or reduced through accelerating the phase-out of such substances. More limited production and consumption of HCFC-22 in the period prior to phase-out would further protect the ozone layer and reduce greenhouse gas emissions of HCFC-22 and HFC-23 produced as an unwanted by-product of HCFC-22 production.

30. While none of the potential measures related to climate and ozone layer protection identified in the special report are currently required or rewarded by the Montreal Protocol, a number are currently being implemented by some Parties. The special report includes quantitative estimates of the impact that the possible measures it describes would have on climate change if they were implemented. The Montreal Protocol's scientific assessments have previously included estimates of the potential benefits that some of the suggested actions would have on ozone depletion, and the Parties could request the next full assessments by the Scientific Assessment Panel to further aggregate impacts associated with both ozone-depleting substances and non-ozone-depleting substances.

31. While noting that there were significant uncertainties in emission projections, the special report estimated that, under a business-as-usual scenario, the total direct emissions of CFCs and HCFCs were expected to decrease significantly over the period from 2002 to 2015 (from about 2.1 Gt CO₂ eq in 2002 to about 1.2 Gt CO₂ eq in 2015).³ This is mainly caused by a steep decrease in the emissions of CFCs, primarily from refrigeration plants (from 1.6 Gt CO₂ eq to 0.3 Gt CO₂ eq), responding to the requirements of the Montreal Protocol. On the other hand, HCFC emissions are expected to increase by almost a factor of two, since HCFC controls apply to developed but not to developing countries in the period up to 2015. These residual emissions will be due mainly to release in the atmosphere from banks, with any reductions in those emissions due to limited and continued end-of-life recovery and destruction.

² For example, CFC-11 has an estimated global warming potential of 4,680, CFC-12 has an estimated global warming potential of 10,720. This compares with their major alternatives, HCFC 22 (global warming potential 1,780), HFC 134a (global warming potential 1,410), and HFC 141b (global warming potential 713). These values are taken from the most recent assessment, published in the Intergovernmental Panel on Climate Change/Technology and Economic Assessment Panel special report, and are considered valid for a 100-year time horizon.

³ Like the Montreal Protocol, which designates the impact of each ozone-depleting substance relative to CFC 11, the United Nations Framework Convention on Climate Change designates the impact of the global warming potential of the gases it controls relative to carbon dioxide (CO₂). 1 GT (or gigatonne) CO₂ equivalent means 1,000 million of tonnes of CO₂. MT (or mega tonne) of CO₂ equivalent means 1,000,000 tonnes of CO₂. For purposes of comparison, a single 100 MW power plant could emit 0.4-0.6 Gt of CO₂ annually.

32. The special report estimated that in a mitigation scenario (with the global utilization of best practices and recovery methods to address these residual emissions), related direct greenhouse gas emissions of CFCs, HCFCs and HFCs could be reduced by about 50 per cent compared to the business-as-usual scenario.⁴ This is due to a decrease in the emission of CFCs and, particularly, to a stabilization of HCFC emissions between 2002 and 2015. For the latter two gases, it would result in an emission of 0.7 Gt CO₂ eq in 2015 in the mitigation scenario, compared to an emission of 1.2 Gt CO₂ eq in the business-as-usual scenario. This implies a decrease of 0.5 Gt CO₂ eq by 2015, or as much as 40 per cent. The bulk of this reduction will occur in the commercial refrigeration sector and the stationary air conditioning sector; it will occur less in the mobile air conditioning sector, where mainly reductions in HFC emissions will take place.

33. The special report suggests that the cost of obtaining reductions from these more cost-effective refrigeration sector interventions would be from \$10–300/t CO₂ eq in the commercial refrigeration sector, from \$3–170/t CO₂ eq for the residential and commercial air conditioning and heating equipment sector, and from \$20–250/t CO₂ eq for the mobile air conditioning sector. Because of the long life span of most foam applications, the application of best practices would produce only a limited emission reduction by 2015 (in the order of 15–20 Mt CO₂ eq) at costs ranging from \$10–100/t CO₂ eq, with more substantial benefits (up to 1.2 Gt CO₂ eq cumulatively by 2100) in the years beyond 2015. In medical aerosols, the potential for reduction is limited due to medical constraints, low emission levels and the high cost of alternatives. The special report notes further that the major contribution to both ozone layer protection and climate protection in this area will come from the completion of the transition from CFC to HFC-based MDIs. In fire fighting, the potential for reductions is also small due to relatively low emissions, significant shifts to not-in-kind technologies and lengthy procedures for introducing new equipment. Finally, in non-medical aerosols and solvents, the reduction potentials are noted as being likely to be rather small because most of the remaining uses are critical to performance or safety.

34. The special report noted that there were a wide range of policies, measures and instruments that could reduce related emissions, including: regulations (e.g., mandatory technology and performance standards; production restrictions); financial incentives (e.g., taxes on emissions, production, import or consumption; subsidies and direct Government spending and investment; deposit refund systems and tradable and non-tradable permits); and, voluntary agreements.

35. The special report also noted that the assessment of business-as-usual emissions and evaluation of emissions reductions would be assisted by a better understanding of continued use patterns in ozone-depleting substances and substitutes to ozone-depleting substances in developing countries.

36. The Open-ended Working Group may wish to discuss the special report as it relates to efforts to protect the ozone layer and forward recommendations, as appropriate, to the Seventeenth Meeting of the Parties.

5. Item 3 (e): Technology and Economic Assessment Panel administrative issues

37. In its 2005 progress report, (pages 254–246) the Technology and Economic Assessment Panel noted that it is currently operating with two temporary co-chairs for the Chemical Technical Options Committee and the Halon Technical Options Committee and one temporary co-chair for MBTOC. The Secretariat would note that in accordance with section 2.7 of the Technology and Economic Assessment Panel terms of reference, temporary co-chairs may only serve up to the time of the next meeting of the Parties.

38. The Technology and Economic Assessment Panel also notes that continuing national sponsorship of TEAP members, including technical options committee co-chairs, will be vital to enable related bodies to complete their tasks, and that special financing for timely completion of significant tasks might be considered, as it was for the Methyl Bromide Technical Options Committee in 2005.

4

Emissions in Gt CO ₂ eq			
	2002	2015 (BAU)	2015 (Mitigation)
CFC	1.6	0.3	0.2
HCFC	0.5	0.9	0.5
HFC	0.4	1.2	0.5
Total	2.5	2.4	1.2

Finally, the Technology and Economic Assessment Panel noted that in some cases, funding for the Technology and Economic Assessment Panel and the technical options committee co-chairs and members from non-Article 5 Parties is becoming difficult to obtain.

39. The Open-ended Working Group may wish to consider these issues and make recommendations as appropriate to the Seventeenth Meeting of the Parties.

6. Item 3 (f): Any other issues arising out of the Technology and Economic Assessment Panel reports

40. In its progress report, the Technology and Economic Assessment Panel raised a number of additional issues of interest. While some of those issues are covered in chapter II of the present note, the Secretariat encourages all Parties to give careful consideration to the full 2005 progress report by the Technology and Economic Assessment Panel.

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

1. Item 4 (a): Review of new nominations for critical use exemptions for methyl bromide for 2006 and 2007

41. Pursuant to paragraph 2 of decision IX/6 and decision XIII/11, 89 new 2006 and 2007 nominations for critical use exemptions for methyl bromide were submitted by 15 Parties. The Methyl Bromide Technical Options Committee met from 11 to 15 April 2005 in Buenos Aires, Argentina, to evaluate those nominations. A detailed nomination-by-nomination review of the recommendations by the Technology and Economic Assessment Panel and the Committee can be found on pages 203–241 of the 2005 progress report by the Technology and Economic Assessment Panel.

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

42. The Fifteenth and Sixteenth Meetings of the Parties considered the issue of criteria for the approval of multi-year critical use exemptions for methyl bromide. The Sixteenth Meeting of the Parties adopted decision XVI/3, in which it decided that it would elaborate, as far as possible at the Seventeenth Meeting of the Parties, a framework for spreading a critical-use exemption over more than one year, taking into account a large number of specific elements delineated in the decision.

43. The Open-ended Working Group may wish to consider this issue and make recommendations, as warranted, to the Meeting of the Parties.

3. Item 4 (c): Options which Parties may consider for preventing potential harmful trade of methyl bromide stocks to Article 5 Parties as consumption is reduced in non-Article 5 Parties (decision Ex.I/4 paragraph 9)⁵

44. The Methyl Bromide Technical Options Committee reviewed this issue (see pages 111 and 246 of the May 2005 progress report), but determined that it did not have the full range of expertise necessary to address it fully. It therefore suggested that the Technology and Economic Assessment Panel work as a committee or assemble a task force to respond to this decision in its 2006 progress report. The Open-ended Working Group may wish to consider the Committee's suggestion on this issue and make recommendations, as appropriate, to the Seventeenth Meeting of the Parties.

4. Item 4 (d): Modification of the handbook on critical use nominations (paragraph 113 of the report of the Sixteenth Meeting of the Parties)⁶

45. At their Sixteenth Meeting, the Parties agreed that they needed more time to review the handbook on critical use nominations for methyl bromide and its appendices before they could consider its adoption. They therefore agreed that they would take up the approval of the revised handbook at their Seventeenth meeting. An electronic copy of the revised handbook will be available shortly on the ozone secretariat website, and the document will be made available at the meeting in document UNEP/OzL.Pro.WG.1/25/7. The Open-ended Working Group may wish to consider the handbook and make recommendations, as warranted, to the Meeting of the Parties.

⁵ UNEP/OzL.Pro.ExMP/1/3

⁶ UNEP/OzL.Pro.16/17

5. Item 4 (e): Standard presumptions that underlie the Methyl Bromide Technical Options Committee's recommendations on critical-use nominations (annex I, paragraph 2 of the report of the Sixteenth Meeting of the Parties)⁴

46. At their Sixteenth Meeting, the Parties agreed that standard presumptions which underlie the recommendations of the Methyl Bromide Technical Options Committee needed to be transparent, technically and economically justified, clearly stated in the Committee's reports, and submitted for approval by each Meeting of the Parties. On pages 197–201 of the May 2005 progress report, the Committee delineated the standard presumptions used in its 2004 and 2005 review. The Methyl Bromide Technical Options Committee also noted that proposed changes to these standard presumptions, along with supporting documentation, would be provided in a later report for the consideration of the Seventeenth Meeting of the Parties. The Open-ended Working Group may wish to consider this issue, as appropriate.

C. Item 5: Consideration of issues related to the Multilateral Fund for the Implementation of the Montreal Protocol

1. Item 5(a): Technology and Economic Assessment Panel study on the 2006–2008 replenishment of the Multilateral Fund for the Implementation of the Montreal Protocol (decision XVI/35)

47. At their Sixteenth meeting, the Parties took decision XVI/35, directing the Technology and Economic Assessment Panel to perform a study on the replenishment of the Multilateral Fund for the period 2006–2008, in accordance with the terms of reference contained in that decision. The Panel established a replenishment task force comprising six members, from Belgium, the Bolivarian Republic of Venezuela, China, Hungary, India and the Netherlands, and appointed an advisor from Egypt to prepare the study.

48. The task force carried out consultations with a wide range of financial and technical experts. Interviews were conducted during the forty-fifth meeting of the Executive Committee, held in Montreal, Canada, in April 2005. The task force extensively consulted the secretariat of the Multilateral Fund, regional network coordinators, the Ozone Secretariat and the implementing agencies. A small group of experts, selected by the task force, in consultation with the Technology and Economic Assessment Panel, reviewed the drafts of the study.

49. The task force used data provided by the Multilateral Fund secretariat on the remaining eligible consumption of CFCs, particularly for countries with no fixed multi-year agreements, as well as data on forward financial commitments. It also used the data reported to the Ozone Secretariat on the consumption and production of all ozone-depleting substances in all Article 5, paragraph 1, countries that will apply for funding, including the most recent reports for the year 2003 and some for 2004.

50. The report, which has been distributed as volume 2 of the Technology and Economic Assessment Panel's 2005 report, provided estimates for all the cost elements of the funding requirement for the 2006-2008 replenishment of the Multilateral Fund. Seven cost elements were addressed, including the cost related to investment projects to phase out consumption and production completely (including bilateral programmes), non-investment activities, administrative costs, project preparation costs, core units funding for implementing agencies, operating costs of the Multilateral Fund secretariat and for holding meetings of the Executive Committee, as well as Treasurer's fees. Based on its analysis, the replenishment task force estimated that a total of \$419.44 million would be needed to enable the Parties operating under Article 5, paragraph 1, to comply with the control schedules under the Montreal Protocol, with the cost elements as set out in the summary table below.

Funding requirement elements for the replenishment of:	\$ Million
CFC consumption sector projects - non-LVCs	63.205
CFC consumption LVC activities - TPMPs, others	32.113
CFC MDI and pharmaceutical aerosols	19.786
MB consumption sector projects	24.022
Halon consumption sector projects	0.954
CTC consumption sector projects	58.904
TCA consumption sector projects	0.413
BCM consumption sector projects	0.700
Investments: production sector	
1- CFC	83.345
2- Halon	0.800
3- CTC	17.188
4- TCA	0.700
5- MB	3.000
Non-investment activities; supporting activities	55.524
Administrative costs of implementing agencies	27.939
Project preparation cost	3.020
MLF secretariat/ExCom operation/treasurer's fees	14.325
Core unit funding	13.500
Total	419.44

51. In addition, the terms of reference for the replenishment study agreed in decision XVI/35 called on the Technology and Economic Assessment Panel to consider how much extra funding would be required if the Parties were to agree on an adjustment to the Methyl Bromide phase-out schedule corresponding to the proposal put forward by the European Community at the Fifteenth Meeting of the Parties (namely, to add interim reduction steps in 2008, 2010 and 2012 into the methyl bromide phase-out schedule that applies to Parties operating under Article 5). For this, the Panel has estimated that an amount of \$ 10.58 million (including agency support costs) would have to be added to the total amount given above. The replenishment study is available on the Ozone Secretariat's website and has been circulated to the Parties.

52. The Open-ended Working Group may wish to discuss the study and make recommendations, as appropriate, to the Seventeenth Meeting of the Parties.

2. Item 5 (b): Need to ensure equitable geographical representation in the Executive Committee of the Multilateral Fund (decision XVI/38)

53. In decision XVI/38, the Parties decided to include Eastern European and Central Asian countries within the rotation of the seventh seat, for Parties operating under Article 5, on the Executive Committee. In that same decision, they also agreed that the issue of seats for Parties operating under Article 5 of the Montreal Protocol and Parties not so operating should be added to the agenda of the twenty-fifth meeting of the Open-ended Working Group. The Working Group may wish to consider this issue and make recommendations, as appropriate, to the Seventeenth Meeting of the Parties.

3. Item 5 (c): Executive Committee report on the evaluation of customs officers training and licensing system projects (decision XIV/7)

54. The Fourteenth Meeting of the Parties requested the Executive Committee to consider making an evaluation of customs officer training and licensing systems projects a priority and to report on the evaluation, if possible, to the Sixteenth Meeting of the Parties. At the Sixteenth Meeting of the Parties, the Multilateral Fund secretariat reported that a report on the requested evaluation would be presented to the Seventeenth Meeting of the Parties. A report on this subject has now been prepared by the Executive Committee and is being presented to the Parties as document UNEP/OzL.Pro.WG.1/25/6. Among the report's findings are that, thus far, 181 licensing system and customs training and related projects have been approved by the Executive Committee. In addition, seven annual tranches of 41 ongoing national phase-out plans, which also include customs training and licensing activities, have been completed. Due to these activities, illegal imports of CFCs have been detected and seized in several cases. The report noted that close cooperation and coordination between national ozone units and customs authorities had proven to be very important for controlling and monitoring imports of ozone-depleting substances, and that import licensing systems that had been developed had several positive effects on the reduction of the consumption of ozone-depleting substances and on the prevention of illegal imports.

55. The report also noted that, in countries visited, electronic monitoring systems with related software was in place, but that specific regulations requiring lists of licensed importers, quota allocations and degressive schedules have generally only been introduced for the import of CFCs, and not other ozone-depleting substances. Furthermore, it noted that training of customs officers focuses mainly on refrigerants, while other ozone-depleting substances are dealt with only in general terms, and that the lower ranking customs officers who are on the front lines are generally trained only on the spot and do not always benefit from training seminars. The report includes a number of suggestions that have been considered by the Executive Committee. These include: improving the involvement of customs authorities, including higher level officials, in the phase-out of ozone-depleting substances; amending and upgrading the legislative frameworks in those Parties operating under Article 5 where they are incomplete; improving enforcement and regional cooperation; accelerating and assisting implementation of customs training, including regional activities, where appropriate; and amending training materials and contents and putting information materials and identifiers to more effective use.

56. The Open-ended Working Group may wish to discuss this report and make recommendations as appropriate.

D. Item 6: Monitoring and preventing illegal trade in ozone-depleting substances (decision XVI/33)

57. Decision XVI/33 requested the Secretariat, among other things, to convene a workshop of experts from Parties (funds permitting) to develop specific areas and a conceptual framework of cooperation for addressing illegal trade and to produce draft terms of reference for a study on the feasibility of developing systems for tracking trade in ozone-depleting substances and its cost.

58. On 3 April 2005, the Secretariat hosted a workshop of experts from Parties to develop specific areas and a conceptual framework of cooperation for addressing illegal trade. Twenty-three delegates from 15 Parties participated in the workshop, and observers were present from the secretariat of the Convention on Biological Diversity (CBD), the Environmental Investigation Agency, the secretariat of the Multilateral Fund for the Implementation of the Montreal Protocol, the Technology and Economic Assessment Panel, the United Nations Development Programme (UNDP), the United Nations Environment Programme (UNEP), the United Nations Industrial Development Organization (UNIDO) and the World Bank. The report of that workshop is contained in document UNEP/OZL.Pro.WG.1/25/3. Experts participating in the workshop considered comments submitted by many Parties before the meeting and developed a list of items which it believed could form the basis of a conceptual framework on cooperation addressing illegal trade. Comments submitted by Parties after the meeting were very similar to the comments considered during the workshop. The list of items that the experts at the workshop believed might form the basis of a conceptual framework on illegal trade appears in chapter V of the workshop report.

59. In March 2005, the Secretariat posted on its website, and dispatched to all Parties, draft terms of reference for a study on the feasibility of developing a system to track the trade in ozone-depleting substances. As required by decision XVI/33, those terms of reference were used as a source of information during the above-mentioned workshop. The terms of reference and the comments of the experts present at the workshop can be found in annexes II and III, respectively, of document UNEP/OzL.Pro.WG.1/25/3.

60. The Open-ended Working Group may wish to discuss the outcomes of the workshop of experts and make recommendations, as appropriate, to the Seventeenth Meeting of the Parties on two specific items: the areas that the experts at the workshop believed could form the basis of a conceptual framework on cooperation for addressing illegal trade; and the draft terms of reference for a study on the feasibility of developing a system to track the trade in ozone-depleting substances.

E. Item 7: Discussion of any proposed adjustments of the Montreal Protocol

61. The Secretariat has received one formal proposal for an adjustment to the Protocol from the European Community, calling for the addition of three interim reduction steps in the current methyl bromide phase-out schedule that applies to Parties operating under Article 5. The specific submission containing the proposal by the European Community for an adjustment to the Protocol, together with related background material prepared by the European Community, can be found in document UNEP/OzL.Pro.WG.1/25/5.

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

62. The Secretariat has received one formal proposal for amendment of the Protocol from the European Community, which calls for an expedited procedure for listing new ozone-depleting substances in the Protocol. The specific submission containing the proposal by the European Community for amendment, together with related background material submitted by the European Community, can be found in document UNEP/OzL.Pro.WG.1/25/4.

G. Item 9: Obligations of Parties to the Beijing Amendment under Article 4 of the Montreal Protocol with respect to hydrochlorofluorocarbons (decision XV/3).

63. Decision XV/3 allows a Party that has not yet ratified the Copenhagen or Beijing Amendment not to be excluded from the definition of “State not party to this Protocol” for the purposes of the Article 4 bans on trade in HCFCs, if that Party: (i) notifies the Secretariat that it intends to ratify, accede to or accept the Beijing Amendment as soon as possible; (ii) certifies that it is in full compliance with Articles 2(a)–(g) and Article 4 of the Protocol as amended by the Copenhagen Amendment; (iii) has submitted to the Secretariat data on (i) and (ii) above to be updated on 31 March 2005. At its last meeting, the Implementation Committee under the Non-compliance Procedure of the Protocol reviewed the submissions of Parties relative to this decision and agreed to forward the following comments to the Sixteenth Meeting of the Parties pursuant to paragraph 3 of decision XV/3; any updated information as of 24 May 2005 is included in square brackets following the relevant Implementation Committee comments:

(a) “The following Parties to the Montreal Protocol which are not party to the Copenhagen or Beijing Amendments to the Protocol have submitted the information prescribed in paragraph 1(c) of decision XV/3 to the Secretariat before 31 March 2004, and would therefore appear to fall outside of the definition of “State not party to this Protocol” until the Seventeenth Meeting of the Parties, provided that they update their submissions to the Secretariat by 31 March 2005: Australia, Greece, Italy, Kazakhstan, Poland, Portugal, Russian Federation and Ukraine.” [Subsequent to the time this paragraph was produced by the Implementation Committee, Italy ratified the amendments. In addition, consistent with paragraph 1(c)(iii) and 2 of decision XV/3, the following Parties submitted updated information to the Secretariat by 31 March 2005: Australia, Belgium, Greece, Poland, Portugal, Russian Federation, Tajikistan and Ukraine. This information will be considered by the Implementation Committee on 2 July 2005].

(b) “The following Parties to the Montreal Protocol which are not party to the Copenhagen or Beijing Amendments to the Protocol have not submitted the information prescribed in paragraph 1(c) of decision XV/3 to the Secretariat before 31 March 2004; they are, however, member States of the European Union, which became a Party to the Beijing Amendment on 25 March 2004: Austria, Belgium, Ireland and Latvia.” [Subsequent to the time this paragraph was produced by the Implementation Committee, Austria and Latvia ratified the Beijing Amendment, and a note has been received by the United Nations Office of Legal Affairs on this issue, as discussed in paragraphs 65 and 66 below.]

(c) “The following Parties to the Montreal Protocol which are not party to the Copenhagen or Beijing Amendments to the Protocol have not submitted the information prescribed in paragraph 1(c) of decision XV/3 to the Secretariat before 31 March 2004, and would therefore appear to fall within the definition of “State not party to this Protocol”: Austria, Azerbaijan, Belarus, Belgium, Ireland, Latvia, Tajikistan, Turkmenistan and Uzbekistan.” [Subsequent to the time that this paragraph was produced by the Implementation Committee, Austria and Latvia ratified the Beijing Amendment, and Turkmenistan was reclassified as a Party operating under Article 5, paragraph 1, of the Montreal Protocol.]

(d) “Noting that under the provisions of Article 4, paragraph 8, of the Protocol, Parties to the Beijing Amendment are permitted to import and export HCFCs from “any State not party to this Protocol” if that State is determined by a Meeting of the Parties to be in full compliance with Article 2(a)–(i) and this article, and have submitted data to that effect as specified in Article 7, those Parties that had not submitted the information prescribed in paragraph 1(c) of decision XV/3 to the Secretariat before 31 March 2004, may wish to consider submitting a request to the Sixteenth Meeting of the Parties pursuant to Article 4, paragraph 8 of the Protocol.”

64. Decision XV/3 required the Sixteenth Meeting of the Parties to consider the implementation and operation of the foregoing decision, taking into account the comments of the Implementation Committee on the submissions made pursuant to paragraph 1(c) of that decision. Unfortunately, the Sixteenth Meeting of the Parties did not have sufficient time to consider this issue carefully.

65. The Secretariat would at this point like to update the Parties on one additional action that has taken place since the last Meeting of the Parties relative to this agenda item. At the Sixteenth Meeting of the Parties, a discussion took place regarding the status of member States of the European Community which had not independently ratified the Copenhagen and Beijing Amendments or submitted the information called for under decision XV/3. This discussion arose because, although the European Community had ratified the Copenhagen and Beijing Amendments and most member States had independently ratified both amendments, certain member States had not independently ratified the Copenhagen and Beijing Amendments or submitted the information called for under decision XV/3. Some Parties thought that this made the status of those latter countries unclear as it related to the operation of decision XV/3. After consultation with the delegation of the European Community present at the Sixteenth Meeting of the Parties, and at the suggestion of that delegation, the Secretariat sought the views of the depositary, the United Nations Secretary-General, on this issue. In March, the Secretariat received the views of the Treaty Section of the United Nations Office of Legal Affairs. The determination of the Office of Legal Affairs, which is available upon request, is that “there is no provision of the Beijing Amendment, Montreal Protocol or Vienna Convention to enable the European Community to sign, ratify, accede to or approve or in any way express consent to be bound on behalf of its member States.”

66. The Parties should note that in the event that no further action is taken, the authorization allowed by paragraph 1(c) of decision XV/3 will expire at the Seventeenth Meeting of the Parties. The Open-ended Working Group may wish to consider this issue and make any recommendations, as appropriate, to the Seventeenth Meeting of the Parties.

H. Item 10: Other matters

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

II. Information on issues that the Secretariat would like to bring to the attention of the Parties

68. The sixteenth Meeting of the Parties demonstrated to the Secretariat the difficulty of adding an agenda item to respond to each and every request for information contained in decisions of the Parties. This year, in an effort to streamline the agenda and allow the Parties to focus their attention on items that require action at their meetings, the Secretariat has included this information section as part of the Secretariat’s note. It provides an opportunity for the Secretariat to report to the Parties on the relevant items, as requested, in a manner that will not necessarily take up undue time during the meeting. We hope that this information section proves useful and effective in facilitating the deliberations of the Parties on the important issues that they must consider at their meetings.

1. The Technology and Economic Assessment Panel review of the status of discussions with the International Civil Aviation Organization (ICAO) on the modification of the regulatory requirements on halon use in new airframes pursuant to decision XV/11

69. Although halons have been phased out in Parties not operating under Article 5 since 1994 and have been significantly reduced in Parties operating under Article 5, halons continue to be used in the aviation industry, both in existing planes and even in the planning of new airframe designs. This would imply a need for halons for as long as 30 years into the future. In an effort to address this issue, the Parties took a decision in 2003 requesting the Technology and Economic Assessment Panel to discuss with ICAO the possibility of joint work leading to the development of a work plan focused on the modification of the current requirements for halon, if such a modification could be implemented in a safe manner. Last year, the Panel reported that initial meetings had been held with ICAO and that potential components of an action plan had been discussed. Since that time, an action plan has been developed and agreed with the goal of requiring States to use proven alternatives in new airframe designs beginning in 2009. The plan includes action by ICAO, with the support of the Halon Technical Options Committee and the Ozone Secretariat as necessary, in the form of issuing “State letters” inviting States to require the use of proven alternatives in new aircraft designs. In addition, in 2007,

ICAO and the Halon Technical Options Committee will prepare a working paper for consideration by the ICAO General Assembly. Currently, the Committee is preparing an article on halon alternatives and their current use status for the ICAO journal.

2. Report by the Technology and Economic Assessment Panel on the methyl bromide quarantine and pre-shipment data submitted by the Parties, pursuant to decision XVI/10

70. In decision XI/13, the Parties requested the Technology and Economic Assessment Panel to evaluate the technical and economic feasibility of alternative treatments and procedures that could replace methyl bromide for quarantine and pre-shipment treatment and to estimate the volume of methyl bromide that would be replaced by the implementation of technically and economically feasible alternatives. In its 2003 report, the Panel and its Methyl Bromide Technical Options Committee reported that individual tonnages for uses of methyl bromide for quarantine and pre-shipment treatment of particular commodities were not available on a worldwide basis. In subsequent reporting, the Panel and its Committee noted that a survey had been commissioned by the European Community, and in 2004, the Parties were requested, through the Ozone Secretariat, to provide data and information on quarantine and pre-shipment uses and their alternatives.

71. Decision XVI/10 set out a timetable for completing the survey and the Technology and Economic Assessment Panel assessment. It requested Parties that had not yet done so to submit detailed quarantine and pre-shipment data to the Panel before 31 March 2005, using the best available data. The decision further requested the Panel to establish a task force to analyse the data and to provide a first report on the initial data for the information of the Open-ended Working Group. A task force has been established, and its first report on initial data may be found on pages 171–179 of the May 2005 Technology and Economic Assessment Panel progress report.

3. Secretariat report on budget related issues pursuant to decision XVI/44

72. Decision XVI/44 requested the Secretariat to inform the Open-ended Working Group of “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 is contained in document UNEP/OzL.Pro.WG.1/25/INF/1.

4. Status report on the interaction between the Chair of the Executive Committee to the Meeting of the Parties to the Montreal Protocol and the United Nations Secretariat related to the process for the nomination and appointment of the Chief Officer of the Multilateral Fund pursuant to decision XV/48

73. The terms of reference of the Executive Committee establish a process by which the Executive Committee is to nominate a candidate for Chief Officer of the Multilateral Fund secretariat for appointment by the Executive Director of the United Nations Environment Programme (UNEP). Since those terms of reference were adopted by the Parties in 1990, the system for hiring United Nations personnel has changed, removing some of the discretion of the Executive Director of UNEP to appoint personnel at the level of the Chief Officer of the Multilateral Fund. To address this issue, in 2003, the then Chair of the Executive Committee made a proposal to change the terms of reference, and decision XV/48 requested the Executive Committee to liaise with United Nations headquarters in New York to determine if such a change would be acceptable from the standpoint of the organization, and to report back to the Sixteenth Meeting of the Parties. At the Sixteenth Meeting, the former Chair sought and was given assurances by the 2004 and 2005 Chairs of the Executive Committee that they would pursue this issue further, which they did. To date, there has been no response from the United Nations on this issue.

5. Status of global laboratory and analytical use exemptions pursuant to decision XV/8

74. 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 had been identified. Specifically, the Technology and Economic Assessment Panel was asked to report annually on the availability of any new alternatives for laboratory and analytical uses. If the Parties agreed that there were effective alternatives to ozone-depleting substances, they would put all Parties on notice that after three years, the specific use would no longer qualify for the exemption.

75. This year the Technology and Economic Assessment Panel is reporting (on pages 87 and 88 of its May 2005 progress report) that no new methods using non-ozone depleting substances have emerged which would enable the Technology and Economic Assessment Panel to recommend the elimination of further uses of controlled substances for laboratory and analytical uses.

76. With regard to the continuing operation of this decision, the Chemicals Technical Options Committee notes that 22 standard laboratory practices still require the use of carbon tetrachloride and that it would welcome any information on new methods for testing ozone-depleting substances that are brought to the attention of Parties. It also suggests that the Parties may wish to extend the laboratory and analytical use exemption to allow an exemption for uses of methyl bromide that meet appropriate standards. Finally, as in 2003, it suggests that the Parties should consider holding a workshop on the elimination of controlled substances in laboratory and analytical uses.

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

77. N-propyl bromide (n-PB) is a non-controlled ozone-depleting substance. It has a very short atmospheric lifespan of 11–14 days. This makes its ozone depletion potential very dependent on both the latitude of emissions (relative to the tropical tropopause where trace gases enter the stratosphere) and on the season in which the 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.

78. The Technology and Economic Assessment Panel has reported that, over the past few years, the use of n-PB has grown in some areas, including as an industrial solvent, and that current use estimates range from 2,200 metric tonnes to 9,100 metric tonnes. The Panel has also reported that, according to the Science Assessment Panel, the ozone-depleting potential of n-PB ranges from 0.013 to 0.1.

79. Long term chronic testing of n-PB has shown it to be both neurotoxic and toxic to the reproductive systems of both males and females, and strict exposure limits have been set.

7. Summary of actions taken by the Executive Committee on the recommendations of the study on the financial mechanism pursuant to decision XVI/36

80. In decision XVI/36, the Parties requested the Executive Committee to consider the evaluation and review of the financial mechanism. In that decision, the Parties also requested the Executive Committee to adopt its 28 recommendations, whenever appropriate. They also requested the Executive Committee to report back regularly to the Parties on the subject, and to submit a preliminary assessment to the twenty-fifth meeting of the Open-ended Working Group. The Executive Committee's preliminary assessment can be found in document UNEP/OzL.Pro.WG.1/25/INF/3.

81. In summary, the Executive Committee found that 11 of the 28 recommendations in the evaluation were being addressed by the continuing activities of the Committee and did not require any further action, but would nonetheless be included in future reports to the Meeting of the Parties as appropriate. It found that 10 general recommendations contained in the evaluation were being addressed by the continued activities of the Committee but might require further action in the short term; consequently, it agreed to include updates on related items in the Executive Committee's annual report to the Parties, as appropriate. Finally, the Executive Committee decided that the following seven recommendations would either be redundant or counterproductive:

(a) The evaluators suggested that the Secretariat should develop a prescriptive approach for dealing with project implementation delays. The Executive Committee disagreed, noting that it, rather than the Secretariat, should make such decisions, and that it already had a useful prescriptive approach in place;

(b) The Executive Committee noted that its decision to reclassify Executive Committee meeting documents as general distribution documents from the time of its forty-sixth meeting, unless restricted at the request of a Party, made the evaluators suggestion on this issue redundant;

(c) The evaluators recommended that the results of all Executive Committee performance evaluations should be shared with the upper management of the implementing agencies. The Executive Committee believed that this should be done only as needed;

(d) The evaluators suggested that performance indicators should be added to address project identification. The Executive Committee disagreed, noting that project identification and development were tied to compliance needs and were coordinated effectively by the agencies and the Secretariat;

(e) The evaluators suggested that administrative indicators should be discontinued in cases where the relevant administrative problem had apparently been solved. The Executive Committee disagreed, noting that this might encourage poorer performance on those matters;

(f) The evaluators recommended that the Executive Committee should engage an independent auditor to assist with account reconciliation. The Executive Committee disagreed, noting that this was impossible to implement, as any United Nations audit had to be conducted under the United Nations financial rules;

(g) The evaluators suggested that the implementing agencies should explain significant increases in their core budget expenses. The Executive Committee believed that the implementing agencies already provided such explanations, thus rendering the evaluators' suggestion in this regard redundant.

8. Report of the Executive Committee and the Technology and Economic Assessment Panel, pursuant to paragraph 5 of decision XV/7, on the progress made in reducing emissions from process agent uses and implementation and development of emission reduction techniques and processes using substances that do not deplete the ozone layer

82. Decision XV/7 requested the Technology and Economic Assessment Panel and the Executive Committee to report to the Open-ended Working Group at its twenty-fifth session on the progress made in reducing emissions of controlled substances from process agent uses and on the implementation and development of emissions reduction techniques and alternative processes not using ozone-depleting substances. The Executive Committee commissioned a study on this issue, which is contained in document OzL.Pro.25.WG.1/25/INF/5. The Executive Committee study noted, among other things, that 97 per cent of all identified process agent emissions in Parties operating under Article 5 were found in three Parties which were the subject of national phase-out projects. The report concluded that progress had been made in the reduction of process agent related emissions through Executive Committee projects aimed at converting existing processes using ozone-depleting substances to processes that do not use ozone-depleting substances. To date, no projects have been submitted to the Executive Committee that propose emissions reduction techniques as a way forward, but at least one such project is foreseen in the future.

83. The report by the Technology and Economic Assessment Panel and the Chemicals Technical Options Committee includes some excerpts and comments on the Executive Committee study.

9. Note by the Ozone Secretariat on events to celebrate the twentieth anniversary of the Vienna Convention being planned in conjunction with the third session of the Preparatory Committee for the Development of a Strategic Approach to International Chemicals Management (SAICM), to be held in Vienna in September 2005

84. The Secretariat would like to inform the Parties to the Vienna Convention and its Montreal Protocol that it has received a generous offer by the Government of Austria to host, concurrent with the upcoming September session of the SAICM Preparatory Committee, events to commemorate the twentieth anniversary of the adoption of the Vienna Convention. Efforts are being made to facilitate this event and to share the experience with the participants at the session of the SAICM Preparatory Committee. In addition, the Ozone Secretariat, in cooperation with the World Meteorological Organization (WMO), is attempting to organize the Vienna Convention Bureau meeting and the Vienna Convention's Ozone Research Managers' meeting in conjunction with the anniversary ceremony. These activities in Vienna are additional to the celebrations that will be held in connection with the seventh meeting of the Conference of the Parties to the Vienna Convention this year in Dakar, Senegal. Further information on related events will be sent to all Parties when plans for them have become more firm.

10. Preparations for the joint Seventeenth Meeting of the Parties to the Montreal Protocol and the Seventh Meeting of the Conference of the Parties to the Vienna Convention to be held in Dakar, Senegal, 12–16 December, 2005

85. Pursuant to decision XVI/47 of the Sixteenth Meeting of the Parties to the Montreal Protocol, the Secretariat has agreed with the Government of Senegal on the terms of the host Government agreement relevant to the convening of the seventeenth meeting of the Parties to the Montreal Protocol,

which will be held jointly with the Seventh Meeting of the Conference of the Parties to the Vienna Convention. The Government has offered to host the meetings at the hotel Le Meridien President Dakar, 12–16 December 2005.

86. A representative of the Government of Senegal will be making a short presentation about the country and the meeting venue at the twenty-fifth meeting of the Open-ended Working Group in Montreal. General information about the meeting will also be available at that time on the Secretariat website.

11. Revised essential use handbook

87. In accordance with decision XV/5, the Technology and Economic Assessment Panel and its Medical Technical Options Committee have provided an updated handbook on essential use nominations. This handbook was posted on the Ozone Secretariat website in May, and is contained in document UNEP/OzL.Pro.WG.1/25/INF/3.

12. Foam end of useful life issues

88. Decision XV/10 requested the Technology and Economic Assessment Panel to provide additional information on the handling and destruction of ozone-depleting substances contained in thermal insulation foams, with particular focus on economic and technological aspects of those contained in buildings, and to clarify the distinction between destruction efficiencies achieved when blowing agents are extracted from foams prior to destruction (re-concentrated sources) and those achieved when foams themselves are destroyed directly (dilute sources).

89. The Technology and Economic Assessment Panel established a task force to look at these issues. The report of the task force is volume III of the Technology and Economic Assessment Panel 2005 report. With regard to the issue of destruction efficiencies, the Panel has developed a new parameter – “recovery and destruction efficiency (RDE)” - to signify the portion of remaining blowing agent in the related item that is recovered in the overall end-of-life management. In that regard, the report noted that technological options for end-of-life management had been optimized since the last Panel report on this issue, and it listed the RDE of 5 recovery methods for specific foams as follows: mechanical recovery for general building foam, RDE > 90 per cent; direct incineration for general building foam, RDE >90 per cent; mechanical recovery for sandwich panels, RDE >94 per cent; direct incineration of sandwich panels, RDE >99 per cent; mechanical recovery of appliance foams, RDE >94 per cent; direct incineration of appliance foams, RDE >.95 per cent; and auto shredder plus managed attenuation for appliance foams, RDE >20 per cent. Given the fact that all but one of these technologies have the potential to reach a RDE of greater than 90 per cent, the Technology and Economic Assessment Panel suggested that a RDE of 90 level could be considered as a new maximum standard for determining approved destruction technologies in the foams sector.

90. With regard to the economic and technological aspects of destruction of building foam, the Technology and Economic Assessment Panel noted that because most of the foam in this area was still in use, there had been very little experience with recovery and destruction. It also noted that the current option of manual segregation of this foam from other demolition material made economies of recovery and destruction very marginal, especially in developed countries where manual labour rates were relatively high. One exception to this may be the salvaging of foam in steel faced sandwich panels and appliances where evidence suggests that recovery at \$25–40kg of blowing agent is an achievable goal, with the major barrier to wider use of such programs being the quality of infrastructure of collection and transport.

91. In the light of these factors, the task force cites the special report by the Intergovernmental Panel on Climate Change and the Technology and Economic Assessment Panel on HFC-related issues to estimate that the cumulative emissions reduction potential from foam end of life measures is in excess of 150,000 tonnes of ozone-depleting potential, based on an assumption that 20 per cent of the blowing agent currently in insulation in existing buildings can be recovered and destroyed economically.

92. The task force report also noted that in many countries, a large proportion of the refrigerators produced had already gone into landfills, and that issues related to the attenuation of landfill emissions through stimulation of breakdown of CFC 11 deserved further attention.

13. Interaction with the Secretariat of the International Plant Protection Convention

93. As requested in decision XVI/11, the Secretariat opened a dialogue with the secretariat of the International Plant Protection Convention, stressing the commitment of the Montreal Protocol Parties to the reduction of methyl bromide and noting in particular the International Plant Protection Convention’s

reference standard 15 related to the use of methyl bromide on wood packaging materials. In response, the secretariat of the International Plant Protection Convention requested the Ozone secretariat to prepare a background document for the April 2005 meeting of the International Plant Protection Convention's Interim Commission on Phytosanitary Measures, and the Commission included the issue of "coordination among United Nations bodies on quarantine and pre-shipment uses of methyl bromide" on the agenda for the April meeting. At the Ozone Secretariat's request, the Commission was invited to note decision XVI/11 and to request the secretariat of the International Plant Protection Convention to cooperate with the Ozone Secretariat to coordinate work on this issue. Following a discussion on this matter, the Commission agreed that the secretariats should cooperate, as appropriate, to coordinate work on this issue. The Commission also encouraged countries to liaise with appropriate research organizations and stress the importance and urgency of developing alternatives for quarantine purposes. During its meeting, the Commission considered proposals for amending the current requirement of standard 15 of the International Standards for Phytosanitary Measures, which set out guidelines for regulating wood packaging material in international trade. The proposals included increasing the duration of methyl bromide fumigation and increasing the minimum required gas concentrations at various stages of the fumigation to ensure efficacy. Accordingly, the Commission agreed to submit the proposed changes for expedited review by the Standards Committee. In an effort to alert Meetings of the Parties to the Montreal Protocol to this matter, the Secretariat sent an e-mail to all participants suggesting that they might wish to contact their national delegations to the Commission meeting to inform them of the interest of the Parties to the Montreal Protocol in this matter. With the help of participants at meetings under the Montreal Protocol who might also participate in the secretariat of the International Plant Protection Convention and its subsidiary bodies, the Secretariat will strive to keep the Parties to the Montreal Protocol informed of the status of ongoing work in this forum.

14. Information provided by the Ozone Secretariat on the timing of meetings and the feasibility of organizing meetings of the Parties back-to-back with meetings of the Executive Committee

94. The Secretariat understands that Parties are concerned that the increasing schedule of meetings under multilateral environmental agreements affects the timing of Montreal Protocol meetings. This information is being provided to allow Parties to understand more clearly some of the issues associated with the organization of meetings.

Meetings of the Open-ended Working Group

95. Over the years, the Parties to the Montreal Protocol and members of the Executive Committee have, on a great number of occasions, held the Executive Committee's second yearly meetings back-to-back with meetings of the Open-ended Working Group in Montreal or other venues where significant United Nations facilities are located. They have found this arrangement very practical in terms of logistics, which are usually more flexible in such venues, and in terms of travel. This practice has also enabled the Secretariat to schedule the meetings of the Implementation Committee before or even after the meetings of the Open-ended Working Group, as the report of the Implementation Committee does not have to be considered by the Meeting of the Parties until later in the year. In terms of overall cost, holding these meetings back to back in a United Nations venue, particularly in Montreal, often results in cost savings compared to holding the meetings independently. Given the satisfaction with this arrangement that has been expressed by the Parties, this would appear to be a practice that should be continued. However, the Secretariat has observed that the situation is significantly different when meetings are held back-to-back with a Meeting of the Parties.

Meetings of the Parties

96. When a Party offers to host the Meeting of the Parties to the Montreal Protocol, it does so after a great deal of careful consultation and planning within its Government, and with the understanding that it is often a costly and time-consuming endeavour. It has been the Secretariat's experience that a Party's offer to host the Meeting of the Parties is not intended to include the end-of- year Executive Committee meeting. Consequently, any costs arising from an additional meeting that the host Government has not anticipated, such as a meeting of the Executive Committee, have proven difficult to defray.

97. It should be noted that a host Government faces other constraints that make it difficult to hold an additional meeting. These include ensuring the availability of appropriate meeting venues and facilities in the country, and scheduling the meeting in a way that ensures that key Government ministries can be fully engaged in assisting to make the meeting a success. The Secretariat must consider these factors and the dates of the meetings under other relevant conventions in order to accommodate the host Government's offer in a manner that meets the needs of the Parties.

98. Aside from host Government issues, the November/December timing of the Meeting of the Parties is much more sensitive than the timing of the Open-ended Working Group, because at the end of the year when the Meeting of the Parties normally takes place, the international agenda is very busy, and the potential for overlapping meetings is great. Scheduling a back-to-back meeting that will not overlap with other international meetings is very difficult at that time of the year.

99. In addition, holding a meeting of the Executive Committee before a Meeting of the Parties raises problems with regard to overlap with the Implementation Committee meeting. The Implementation Committee now schedules at least three days for its second meeting of the year – the meeting which must occur before the Meeting of the Parties. Because the Implementation Committee needs the assistance of the Multilateral Fund secretariat and the Fund's implementing agencies, it is important that the meetings of the Executive Committee not overlap with the meetings of the Implementation Committee. Holding an Executive Committee meeting after a meeting of the Parties creates fewer, but nonetheless still significant, problems. Specifically, members of the Executive Committee who are members of the Implementation Committee could face up to 13 days of meetings without a break. The same would hold true for conference service staff such as interpreters, report writers, typists and conference officers who service these meetings. In fact, in addition to the salaries and per diems paid to the conference staff, the calculation of which would also include weekends, the contracts of these important service providers would mandate that additional experts be contracted, which would raise the price of the meetings for both the Secretariats.

100. Due to these factors, the Secretariat believes that holding meetings of the Executive Committee back-to-back with meetings of the Parties presents budgetary and logistical difficulties which make coordination of a host Government agreement and the effective operation of such combined meetings very difficult.

101. As regards dates for meetings, the Parties may wish to consider establishing indicative dates for future meetings of the Open-ended Working Group, as scheduling for this meeting at United Nations venues is easier, and this could provide more certainty for all participants in the protocol process. However, regarding the meeting of the Parties, while it may appear useful to establish indicative dates for two or three years in advance as a means of avoiding potential conflicts of dates with other international environmental conventions, the Parties should note that this may limit the flexibility and willingness of Parties to offer to host meetings of the Parties. If this were to happen, the meetings of the Parties would be less likely to rotate among member States, and would be more likely to be held in the seat of the Secretariat. Accordingly, the Parties may wish to urge Parties wishing to host a subsequent meeting to announce their intent to the Open-ended Working Group in the prior year, rather than to the Meeting of the Parties. This would enable the Secretariat to establish a firm meeting date at least a year in advance.