OPEN-ENDED WORKING GROUP OF THE PARTIES TO
THE MONTREAL PROTOCOL ON SUBSTANCES THAT
DEPLETE THE OZONE LAYER
Thirteenth meeting
Geneva, 26-29 August 1996

ISSUES FOR CONSIDERATION BY THE OPEN-ENDED WORKING GROUP
OF THE PARTIES TO THE MONTREAL PROTOCOL

Note by the Secretariat

Addendum

1. The present addendum supplements the note by the Secretariat on issues
for consideration by the Open-ended Working Group of the Parties to the
Montreal Protocol by presenting the conclusions and recommendations of the Technology and Economic Assessment Panel (TEAP), as contained in its June 1996 report, on a number of issues relating to items 3, 5, 6, 7, 8 and 9 of the provisional agenda for the thirteenth meeting of the Working Group (UNEP/OzL.Pro/WG.1/13/1).

**Replenishment of the Multilateral Fund**

2. The report of the Technology and Economic Assessment Panel on replenishment of the Multilateral Fund, prepared pursuant to decision VII/24 of the Seventh Meeting of the Parties, gives a level of funding required over the period 1997-1999 to enable Parties operating under Article 5, paragraph 1, of the Montreal Protocol to comply with the control measures of the Montreal for this period, as well as to contribute towards the compliance of those countries with the next stage of control measures. The TEAP analysis took into account the investment projects financed by the Multilateral Fund, the production sector investments, the non-investment projects, the administrative charges paid to the Implementing Agencies and the operating costs of the Executive Committee and the Multilateral Fund Secretariat. It also took into account the time lag between approval and implementation of projects. The figures arrived at are as follows:

<table>
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<th>Requirements (US$ millions)</th>
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<tr>
<td>(a) Investment projects</td>
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<tr>
<td>(b) Production sector</td>
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<td>(c) Non-investment projects: institutional strengthening, clearing-house activities, training, project preparation and methyl-bromide demonstration projects</td>
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<tr>
<td>(d) Administrative charges for the Implementing Agencies</td>
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<td>(e) Costs of the Executive Committee and the Fund Secretariat</td>
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<td><strong>Total</strong></td>
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3. The TEAP report also states that several Article 5 Parties are implementing projects to phase out in advance of the Montreal Protocol schedules, and estimates that a further US$ 40-60 million will be required in the period 1997-1999 to maintain the existing momentum towards the ODS phase-outs in such countries.

4. The Working Group may wish to consider the issue of replenishment of the Multilateral Fund and the three-year rolling business plan of the Executive Committee for the period 1997-1999.

II. ITEM 5 OF THE PROVISIONAL AGENDA: CONSIDERATION OF THE REPORT
OF THE TECHNOLOGY AND ECONOMIC ASSESSMENT PANEL ON ESSENTIAL-USE NOMINATIONS AND METERED-DOSE INHALERS (MDIs) (DECISIONS VII/28 AND VII/34, PARAGRAPHS 5 (a) AND (b))

Essential-use nominations: transitional strategy for metered-dose inhalers (MDIs)

5. In response to decision VII/34, paragraph 5 (b) (iv), by which the Seventh Meeting of the Parties requested it to consider options for a transitional strategy for metered-dose inhalers, TEAP reports that, at this time, it is unable to estimate when CFCs will no longer be necessary for MDIs, and that it could do a more detailed evaluation for submission to the Ninth Meeting of the Parties, in 1997. TEAP recommends that the Parties consider the following actions:

(a) Require reports on compliance with an industry transitional code of conduct as part of data-reporting for existing essential uses and for new nominations for essential uses of CFCs in MDIs;

(b) Manage the trade in finished MDI products containing CFCs;

(c) Prepare to halt regulatory approval by national health authorities of new CFC MDI products or brand names with non-CFC MDI alternatives are available;

(d) Request the Parties to report to TEAP on the success of national transition strategies as possible models for a global transition under the Protocol.

6. The Working Group may wish to consider and take action as appropriate on the above recommendations.

Control of trade with non-Parties in methyl bromide or products containing/...
methyl bromide

7. In its report, the Technology and Economic Assessment Panel states that the only products identified containing methyl bromide are canisters and tanks used to transport and store the chemical prior to use as a fumigant or in industrial transformation processes where it is used as a feedstock.

8. TEAP further states that trade restrictions between Parties and non-Parties could lead to adverse effects on trade, and hence effects on food production and availability, given the small number of countries, currently 56 out of the 156 Parties to the Protocol, which have ratified the Copenhagen Amendment, and the regulations in many countries that mandate the use of methyl bromide for fumigation. TEAP has requested the Parties to decide, in the light of these factors, whether to amend the Protocol in order to extend the measures in Article 4 of the Montreal Protocol to trade in methyl bromide with States not party to the Protocol.

9. In this regard, the Secretariat would like to point out that the adverse effects on trade, as well as on ozone layer, can be avoided if the measures for control of trade with non-Parties are extended, but from a future date, say 1 January 1998, allowing sufficient time for all Parties to ratify the Copenhagen Amendment.

10. The Working Group may wish to discuss this issue in the light of the foregoing.

Further clarification of the definition of "bulk substances" under decision I/12 A in relation to trade in methyl bromide

11. Methyl bromide is normally supplied and transported as a liquid in pressurized steel cylinders or canisters. Typically, the cylinders used range in size from 10 kg to 200 kg in capacity. There is also trade in larger cylinders with a capacity of up to 18 tonnes and in small disposable steel cans, with a typical capacity of between 0.4 kg and 1 kg. Methyl bromide is usually applied directly from the cans or cylinders in which it is transported, although it may also be decanted from large cylinders, from which it is then directly applied. Decanting is not permitted in some countries.

12. In its decision I/12 A, the First Meeting of the Parties clarified that controlled substances in use systems are excluded from the definition of controlled substances. The purpose of this exclusion is to avoid double-counting. In the case of methyl bromide, which is traded in its end use containers, usually cylinders with a capacity of up to 100 kg, this exclusion would nullify any control of trade with non-Parties. Hence, TEAP recommended in its report of March 1994 that the trade and supply of methyl bromide in any container in units greater than 2 kg net be counted as trade and supply of methyl bromide and not excluded, even though the container itself may be a use system.

13. The Working Group may also wish to discuss this issue.
Critical agricultural uses of methyl bromide

14. TEAP reports that there is no need to fully identify the critical agricultural uses until the methyl bromide phase-out is at hand in the year 2010. It is anticipated that market pressures and government-sponsored research will narrow the range of currently critical methyl bromide uses and will allow Parties to focus the criteria on actual situations of critical use, if any, rather than hypothetical situations. Furthermore, because several Parties have national phase-out schedules that are more stringent than the Protocol, it is likely that there will be valuable experience in considering exemptions that can guide the decisions of Parties.

15. TEAP assumed that pre-shipment and quarantine would remain separately exempt after phase-out and also that a possible critical-use exemption would potentially apply to methyl bromide used in a wide variety of uses, not just crop-growing (e.g. structural fumigation and treatment of logs), in considering the possible terms of reference for critical uses of methyl bromide.

16. There are particular uses and properties of methyl bromide that distinguish it from other ozone-depleting substances, and which must therefore be considered when developing the concepts of a critical-use exemption system after including: registration and acceptability of alternatives and substitutes to methyl bromide, which can be country-specific; a large number of locality-specific methyl bromide uses; the necessity to return to methyl bromide in the event of failure of an alternative, e.g., in the event of the development of pest resistance to an alternative or the emergence of a new pest; the specific physical constraints, e.g., soil type and climate, that often currently dictates methyl bromide use; the fact that some uses of methyl bromide are urgent, sporadic or unexpected, e.g., to respond to sudden pest outbreaks requiring emergency treatment; and significant use of methyl bromide in intra-country trade. Loss of methyl bromide is likely to be disruptive if alternatives do not exist.

17. The Methyl Bromide Technical Options Committee (MBTOC) suggests that the following criteria may be considered for critical agricultural uses, in addition to the criteria noted by the Parties in their decision VII/29:

   (a) There are no available technically and economically feasible alternatives, considering environment, health, commercial availability and regulatory issues;

   (b) The use is critical for the maintenance of the food supply and economic survival of society;

   (c) There is a demonstration of a serious concerted effort to evaluate feasible alternatives, with a well defined programme for continuing research;
(d) There is demonstrated need to deal with an unexpected appearance of pests for which no suitable alternatives exist.

18. TEAP suggests four options for the critical-use exemptions for methyl bromide:

(a) The first option is a modification of the current essential-use criteria, as contained in decision IV/25, paragraph (a), of the Fourth Meeting of the Parties, by adding the words "encompassing national food supply in brackets after the word "health", and adding the word "economic", before the word "cultural" in subparagraph (a) (i), and adding a new subparagraph, reading:

"It is demonstrated that a concerted effort is being made to evaluate, commercialize and secure national regulatory approval of alternatives and substitutes."

(b) The second option is to allow a temporary emergency use by a Party subject to review at subsequent meetings of Parties;

(c) The third option considers "global exemptions" for listed uses with periodic review of the list. MBTOC noted that a positive list would place the burden of proof on the proponents of alternatives. A negative list places the burden of proof on the user/applicant to show that an alternative is not feasible. The following points should be taken into account in considering this option:

(i) A global exemption would provide for immediate approval;

(ii) It would allow for planning of methyl bromide production;

(iii) It would require the development of an exhaustive list and annual/periodic review;

(iv) It could miss particular critical uses;

(v) It would require positive action to remove a use;

(vi) It would tend to institutionalize use and restrict research in alternatives, but could highlight areas where research is needed; and

(vii) It may be very complex because of regional differences and the large number of uses;

(d) The fourth option involves global exemptions for all uses not included on a list of prohibited uses. The following points should be taken into account when considering this option:

(i) No critical uses can be accidentally omitted or can inadvertently allow uses for which there are alternatives until the list is revised;
(ii) It would provide for minor uses;
(iii) It would require a definite assessment of alternatives;
(iv) It would be very complex in view of regional differences and the large number of uses;
(v) A combination of positive and negative lists can also be envisaged.

The Technology and Economic Assessment Panel considers that this approach may provide the flexibility required for both rapid approval of applications which meet the criteria and overall monitoring of methyl bromide use. MBTOC noted that there is potential for a black-market trade in methyl bromide as supplies become increasingly scarce, and some members of MBTOC noted that advance warning of an application for critical-use exemption for a particular use may provide a focus for research.

19. The Working Group may wish to consider the recommendations of the Technology and Economic Assessment Panel on this issue.

IV. ITEM 7 OF THE PROVISIONAL AGENDA: ANNUAL REPORTS BY THE ASSESSMENT PANELS, INCLUDING REPORTS OF THE TECHNOLOGY AND ECONOMIC ASSESSMENT PANEL ON MINIMIZING EMISSIONS OF HALONS AND APPLICATIONS OF HYDROCHLOROFLUOROCARBONS (DECISIONS VII/12 AND VII/34, PARAGRAPHS 5 (c) AND (f))

Minimizing emissions of halons

20. The purpose of the TEAP report on minimizing emissions of halons was to:

(a) To evaluate the viability of an accelerated retirement of halon systems and equipment and the ability to do this in a safe and environmentally sound manner within the existing protection technology and anticipated outcome of such a strategy; and

(c) To describe current efforts to minimize or prevent emissions of halons to the atmosphere and, where possible, provide additional guidance.

21. The Halon Technical Options Committee (HTOC) supported the aim of the Parties to minimize the total quantity of halon ultimately emitted to the atmosphere, whilst at the same time not compromising the safety needs of critical uses. In response to paragraph 2 of decision VII/12, HTOC offered the guidelines contained in annex I to the draft recommendations of the
Open-ended Working Group to the Eighth Meeting of the Parties, as proposed by the Secretariat, which have been circulated as document UNEP/OzL.Pro/WG.1/13/5.

22. The Halon Technical Options Committee states that, while a sizeable part of the halon-1211 bank could be destroyed, it is not yet clear that there is an excess in the halon-1301 bank over the needs for critical uses and it is impossible to endorse destruction of halon-1301 on the basis of available data. Only with more information from the Parties on their future needs for critical uses could a recommendation for a destruction policy be put forward for halon-1301.

23. The Working Group may wish to consider the guidelines proposed by TEAP (UNEP/OzL.Pro/WG.1/13/5, annex I).

24. The Technology and Economic Assessment Panel (TEAP) was unable to identify any products containing hydrobromofluorocarbons (HBFCs). The only known commercially available HBFC was a halon substitute produced and marked by the Great Lakes Chemicals as "FM-100". The Working Group may wish to consider whether it is feasible to elaborate lists in accordance with Article 4, paragraphs 3 ter and 4 ter.


25. As authorized by the paragraph 5 (e) (iii) of decision VII/34 of the Seventh Meeting of the Parties to the Montreal Protocol, the Secretariat appointed an Informal Advisory Group (IAG) to meet with the Technology and Economic Assessment Panel and report back to the Parties on the progress made by TEAP with regard to its organization and functioning in accordance with paragraphs 5 (e) (i) and (ii) of the same decision. The Advisory Group consists of Burkina Faso, Colombia, Germany, Malaysia, Norway, Poland, Switzerland and Zimbabwe. The Secretariat chose the members so as to give representation to countries not currently represented in TEAP.

26. The Secretariat had informed all the Parties of the appointment of the Advisory Group and its meeting with TEAP on 22 March 1996 and invited suggestions with regard to the organization and functioning of the Panel. Hungary, India, Pakistan, Poland, United Kingdom and the United States responded with suggestions. At the meeting, the TEAP Co-Chairs presented a paper containing a list of issues to be discussed and the terms of reference for TEAP.

27. The meeting of the IAG with the TEAP discussed all the issues regarding
organization and functioning of TEAP and finalized its report based on these discussions. The report is contained in annex II to the draft recommendations of the Open-ended Working Group to the Eighth Meeting of the Parties, as proposed by the Secretariat (UNEP/OzL.Pro/WG.1/13/5).

28. In the report, the Advisory Group suggests specific modalities for the organization and functioning of TEAP, together with options on two specific modalities with regard to subsidiary bodies of TEAP. It may be noted that the First Meeting of the Parties, in 1989, adopted, in its decision I/3, the terms of reference for all the assessment panels (UNEP/OzL.Pro.1/5, annex VI). The Scientific and Environmental Effects Panels are continuing with the same terms of reference.

29. At its meeting on 12-14 June 1996, TEAP considered revised terms of reference for itself, incorporating all the IAG recommendations. It has also prepared a note on the option preferred by it with regard to the subsidiary bodies and on one issue concerning eligibility for membership of TEAP where it disagrees with the IAG recommendations, namely, that the TEAP members should not be paid employees or consultants of firms manufacturing ozone-depleting substances or alternatives or products containing these substances. TEAP considers that this recommendation of the IAG will affect its effective functioning, as well as adequate balanced representation, particularly from the developing countries. It considers that the detailed code of conduct, which is part of its terms of reference, is adequate to ensure its objective functioning. The terms of reference and the note presented by the Panel are contained in its report, which was circulated by the Secretariat in June 1996.

30. The Working Group may wish to finalize its recommendations on this subject.