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**Open-ended Working Group of the Parties to
the Montreal Protocol on Substances that
Deplete the Ozone Layer**
Twenty-seventh meeting
Nairobi, 4–7 June 2007

**Report of the twenty-seventh meeting of the Open-ended
Working Group of the Parties to the Montreal Protocol**

I. Opening of the meeting

1. The twenty-seventh meeting of the Open-ended Working Group of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer was held in Nairobi, Kenya, from 4 to 7 June 2007, at the headquarters of the United Nations Environment Programme (UNEP). The meeting was co-chaired by Ms. Marcia Levaggi (Argentina) and Mr. Mikkel Sorensen (Denmark).
2. The meeting was opened at 10.10 a.m. on 4 June by Mr. Sorensen, who welcomed the meeting participants to Kenya.
3. Opening statements were made by Mr. Kivutha Kibwana, Minister for the Environment and Natural Resources of Kenya, and Mr. Marco González, Executive Secretary of the Ozone Secretariat.
4. Mr. Kibwana welcomed the meeting participants on behalf of the Government and people of Kenya. He said that Kenya continued to support the Montreal Protocol and that national consumption of ozone-depleting substances had fallen below the country's baseline levels, with complete phase-out of CFCs expected by 2010. Regarding the future of the Montreal Protocol, he said that the Government of Kenya, believing that the relationship between the depletion of the ozone layer and climate change posed a challenge requiring continued global attention, supported the future strengthening of the Protocol. He also noted Kenya's support for the further strengthening of UNEP headquarters in Kenya.
5. On behalf of the Executive Director of UNEP, Mr. González welcomed the participants to the headquarters of UNEP and of the Ozone Secretariat. He noted that discussions on the future of the Montreal Protocol at the current meeting would follow on from similar discussions held at the dialogue on future challenges to be faced by the Montreal Protocol that had been held over the weekend preceding the current meeting, a summary of which would be presented by the dialogue co-Chairs during the following days. The current meeting, he said, was a challenging one, with items on the agenda that would affect the future of the Protocol. In that regard, he congratulated all members of the assessment panels on their sterling work in producing the quadrennial assessment in 2006, which he said would help guide the parties in their consideration of important issues and gave clear proof of the reduction of levels of ozone-depleting substances in the stratosphere. It was important, however, to keep in mind that the recovery of the ozone layer was dependent on Parties continuing to implement the provisions of the Montreal Protocol.

6. He then outlined the agenda of the meeting in some detail, noting in particular the need for the Parties to consider carefully the six proposals by nine parties for adjustments to the Montreal Protocol relating to the schedule for phasing out hydrochlorofluorocarbons (HCFCs), agreement on which could accelerate recovery of the ozone layer. He also noted the need for the working group to consider the essential and critical use exemption nominations of the parties and the assessment panel recommendations thereon, as well as the future of the exemption for laboratory and analytical uses and the short-term consideration that had been undertaken with respect to the analytical and laboratory uses of carbon tetrachloride by Article 5 Parties. Finally, he noted the assessment panels' work on n-propyl bromide and the need for the parties to address two issues related to the Multilateral Fund for the Implementation of the Montreal Protocol: the request by the Executive Committee of the Multilateral Fund for consideration of a change to its terms of reference relating to meetings of that body; and the need for a study on the 2009–2011 replenishment of the Multilateral Fund, which might prove to be decisive with respect to the continued implementation of the Montreal Protocol.

7. In closing, he urged Parties to report their ozone-depleting substances data by 30 June 2007 or as soon as possible in order to enable the Implementation Committee to provide an exhaustive report for the consideration of the Nineteenth Meeting of the Parties. He expressed his gratitude to Mr. Kibwana for his Government's support and he wished the participants fruitful deliberations.

II. Organizational matters

A. Attendance

8. The following Parties to the Montreal Protocol were present: Afghanistan, Algeria, Angola, Argentina, Armenia, Australia, Austria, Azerbaijan, Bahrain, Bangladesh, Belarus, Belgium, Bhutan, Bolivia, Bosnia and Herzegovina, Botswana, Brazil, Burkina Faso, Burundi, Cambodia, Cameroon, Canada, Chile, China, Colombia, Comoros, Congo, Côte d'Ivoire, Cuba, Czech Republic, Democratic Republic of the Congo, Denmark, Djibouti, Dominica, Dominican Republic, Egypt, Equatorial Guinea, Estonia, European Community, Fiji, Finland, France, Gabon, Gambia, Georgia, Germany, Ghana, Grenada, Guatemala, Guinea, Guinea-Bissau, Honduras, Hungary, India, Indonesia, Iran (Islamic Republic of), Israel, Italy, Jamaica, Japan, Jordan, Kenya, Kiribati, Kuwait, Kyrgyzstan, Lao People's Democratic Republic, Madagascar, Malawi, Malaysia, Maldives, Mali, Mauritania, Mauritius, Mexico, Micronesia (Federated States of), Mongolia, Morocco, Mozambique, Netherlands, New Zealand, Niger, Nigeria, Norway, Oman, Pakistan, Palau, Panama, Papua New Guinea, Peru, Philippines, Poland, Portugal, Qatar, Republic of Korea, Russian Federation, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Samoa, Sao Tome and Principe, Senegal, Serbia, Seychelles, Sierra Leone, Slovenia, Somalia, South Africa, Sri Lanka, Swaziland, Sweden, Switzerland, Syrian Arab Republic, Tajikistan, Thailand, Togo, Tonga, Trinidad and Tobago, Tunisia, Turkey, Tuvalu, Uganda, Ukraine, United Kingdom of Great Britain and Northern Ireland, United Republic of Tanzania, United States of America, Uruguay, Uzbekistan, Viet Nam, Yemen, Zambia and Zimbabwe.

9. Observers from the following United Nations entities, organizations and specialized agencies were also present: Global Environment Facility, Secretariat of the Multilateral Fund for the Implementation of the Montreal Protocol, Secretariat of the United Nations Framework Convention on Climate Change, United Nations Development Programme, United Nations Environment Programme Division of Technology, Industry and Economics, United Nations Environment Programme Regional Office for West Africa, United Nations Industrial Development Organization, United Nations Office at Nairobi and the World Bank.

10. The Holy See and the Palestinian Authority were represented by observers.

11. The following individuals and intergovernmental and non-governmental organizations were also represented: Africa Centre for Rural Development, Albemarle Corporation, Alliance for Responsible Atmospheric Policy, Arcin Kenya, Bionic Centre for Environmental Policy, Bionic Networks, Boehringer Ingelheim GmbH, Business Council for Sustainable Energy, California Cut Flowers, Chemtura, California Strawberry Commission, Carewell Society, Centre for Human Development, Centre for Science and Environment, Children's Homes of Africa Network, Christian Union Organization, Community Based Organization, Community Livelihood Development Forum, Control Desert Africa, Disabled Peoples International, Dow Agrosience, LLC, DuPont International S.A., East Africa Youth Environment Forum, Ecological Agriculture Development Programme, Environmental Investigation Agency, Environmental Youth Programme and Capacity Building, Florida Fruit and Vegetable Association/Crop Protection Coalition, Florida Tomato Exchange/Crop Protection Coalition,

General Garbage Collectors, the Green Belt Movement, Human Development Centre, ICF Consulting, Industrial Technology Research Institute, International Pharmaceutical Aerosol Consortium, Institute for Governance and Sustainable Development, Interlink Rural Information Services, Japan Fluorocarbon Manufacturers Association, Japan Industrial Conference for Ozone Layer and Climate Protection, Japan Refrigeration and Air Conditioning Industry Association, Jomo Kenyatta University of Advanced Technology, Kenyatta University, Kenya Tenants Welfare Union, Kilifi Environment Forum Network, Kitui Environment Agency, Kivagala Women's Group, Lake Basin Environment Trust, the Learning Link, Madiany Environment Network for Sustainable Livelihood, Maendeleo ya Wanawake, Makueni Environment Agency, Mebrom MV, Meru Environmental Agency, Narasha Cultural Group, Natural Resources Defence Council, Nordiko Quarantine Systems Pty. Ltd, Ol Moran Environmental Organization, Revolutionized Youth Organization, Rift Valley Environmental Organization, Samaritan Environmental Organization, Skadden Arps Slate Meagher and Flom LLP, Shelter Self Help Group, Taveta Environment Group, Touchdown Consulting, University of Nairobi, Thika Environmental Organization, Ufadhili Trust, Umoja Organization and the World Scout Bureau, Africa Regional Office.

B. Adoption of the agenda

12. The following agenda was adopted on the basis of the provisional agenda contained in document UNEP/OzL.Pro.WG.1/27/1, as amended as described in the following paragraph:

1. Opening of the meeting.
2. Organizational matters:
 - (a) Adoption of the agenda;
 - (b) Organization of work.
3. Presentation of the 2006 assessment report of the Technology and Economic Assessment Panel and the synthesis report of the 2006 assessments of the Scientific Assessment Panel, the Environmental Effects Assessment Panel and the Technology and Economic Assessment Panel.
4. Consideration of issues arising out of the 2007 progress report of the Technology and Economic Assessment Panel:
 - (a) Review of nominations for essential-use exemptions for 2008 and 2009;
 - (b) Technology and Economic Assessment Panel and Executive Committee review of progress made in reducing the emissions from and the use of ozone-depleting substances as process agents and the implementation of emissions reduction techniques and alternative processes and products (decision XVII/6);
 - (c) Technology and Economic Assessment Panel final report on carbon tetrachloride emissions and opportunities for reductions (decision XVIII/10);
 - (d) Technology and Economic Assessment Panel report on n-propyl bromide emissions, alternatives available and opportunities for reductions (decision XVIII/11);
 - (e) Technology and Economic Assessment Panel report on assessment of measures for addressing ozone depletion, with a focus on hydrochlorofluorocarbons (decision XVIII/12);
 - (f) Technology and Economic Assessment Panel report on campaign production of chlorofluorocarbons for production of metered-dose inhalers (decision XVIII/16);
 - (g) Very short-lived ozone-depleting substances;
 - (h) Any other issues arising out of the Technology and Economic Assessment Panel reports.

5. Consideration of methyl-bromide-related issues:
 - (a) Review of nominations for critical-use exemptions for methyl bromide for 2008 and 2009;
 - (b) Report on quarantine and pre-shipment definitions and contacts with the International Plant Protection Convention relative to quarantine and pre-shipment matters (decision XVIII/14);
 - (c) Report on the development of alternative procedures for laboratory and analytical applications currently using methyl bromide (decision XVII/10);
 - (d) Multi-year exemptions for methyl bromide use (Report of the Eighteenth Meeting of the Parties to the Montreal Protocol (UNEP/OzL.Pro.18/10), para. 94);
 - (e) Options for preventing harmful trade in methyl bromide stocks to Article 5 Parties (Report of the Eighteenth Meeting of the Parties to the Montreal Protocol (UNEP/OzL.Pro.18/10), para. 97).
6. Review of the deferral of consideration by the Implementation Committee and the Meeting of the Parties of the carbon-tetrachloride compliance status of Parties operating under Article 5 which provide evidence that their deviations are due to the use of that chemical for analytical and laboratory processes (decision XVII/13).
7. Future of the laboratory and analytical use exemption (decision XV/8).
8. Need for a study on the 2009–2011 replenishment of the Multilateral Fund for the Implementation of the Montreal Protocol.
9. Consideration of the request of the Executive Committee to change its terms of reference to modify if necessary the number of times that it meets.
10. Compilation of Parties' comments on systems for monitoring transboundary movements of ozone-depleting substances (decision XVIII/18).
11. Presentation of the summary of key issues arising from the dialogue on future challenges to be faced by the Montreal Protocol (decision XVIII/36).
12. Proposed areas of focus for the assessment panels' 2010 quadrennial reports (Article 6 and decision XV/53).
13. Discussion of any proposed adjustments to the Montreal Protocol.
14. Other matters.
15. Adoption of the report.
16. Closure of the meeting.

13. The Working Group agreed that, at an appropriate time during the meeting, the representative of Canada would be invited to make a presentation, under the agenda item for other matters, on arrangements for the Nineteenth Meeting of the Parties, to be held in Montreal, and that the representative of Qatar would be invited to make a presentation on arrangements for the Twentieth Meeting of the Parties, which would take place in his country. The Working Group agreed to include a comment on the press kit prepared by the Ozone Secretariat on the occasion of the twentieth anniversary of the Montreal Protocol. The Working Group also agreed to consider under item 4 the issues of very short-lived ozone-depleting substances and interaction with the international civil aviation organization on halons and to consider under other matters the issues of the reclassification of Romania, institutional matters and cooperation between the Ozone Secretariat and secretariats of other multilateral environmental agreements. There was also agreement to delete from the agenda item 14 of the provisional agenda, on consideration of any proposed amendments to the Protocol, as no such proposals had been submitted. Finally, the representative of Canada noted that it would be working with parties on a draft declaration and possible framework for future work under the Protocol.

C. Organization of work

14. The Co-Chair presented a proposal on the organization of work, which the Working Group adopted. The group agreed to establish such working groups as it deemed necessary to accomplish its work.

III. Presentation of the 2006 assessment report of the Technology and Economic Assessment Panel and the synthesis report of the 2006 assessments of the Scientific Assessment Panel, the Environmental Effects Assessment Panel and the Technology and Economic Assessment Panel

A. 2006 assessment report of the Technology and Economic Assessment Panel

15. Mr. Lambert Kuijpers, Co-Chair of the Technology and Economic Assessment Panel (TEAP), introduced the Panel's 2006 assessment report and the co-chairs of the Panel's six technical options committees presented their findings to the Open-ended Working Group. He said that the assessment report contained executive summaries of all 2006 technical options committee assessment reports, (which brought more than 1000 pages of information to the Parties) and some chapters on relevant issues such as banks and emissions which had been the subject of task force reports during the period 2003–2006. He then elaborated on the possibilities for subcommittees in each technical options committee and mentioned that the two groups which had existed for years under the aegis of the Methyl Bromide Technical Options Committee had been officially named sub-committees, each with co-chairs (being the co-chairs of the Methyl Bromide Technical Options Committee) and that the quarantine and pre-shipment task force had been merged with the Quarantine, Structures and Commodities subcommittee. In closing, he noted that TEAP had published a second report in 2007, the TEAP Legacy Task Force report, which would be updated as necessary and contained a large quantity of data on membership, geographic representation and other matters for the period 1989–2007.

1. Medical Technical Options Committee

16. Ms. Helen Tope, co-Chair of the Medical Technical Options Committee, summarized the 2006 assessment findings of the Medical Technical Options Committee. She reported that with the widespread availability of technically and economically feasible alternatives, global phase-out of CFCs in metered-dose inhalers was achievable by 2010, although there remained considerable challenges for Article 5 Parties. After 2009, she said, the economics of CFC production might make pharmaceutical-grade CFC production for metered-dose inhalers impractical. If Article 5 Parties faced difficulties in achieving transition by 2010, stockpiling might be needed to supply CFCs for metered-dose inhalers to meet patient requirements beyond 2009. For pharmaceutical aerosol products other than metered-dose inhalers, there were technically and economically feasible alternatives. She reported that global use of CFCs in sterilization had been minimal in 2006, with easily substituted alternatives available, and HFC-containing alternatives were expected to replace the small use of HCFCs in sterilization over time.

2. Chemicals Technical Options Committee

17. Mr. Masaaki Yamabe, co-chair of the Chemicals Technical Options Committee, presented the Committee's 2006 assessment by highlighting the achievements in seven sub-sectors during 2003–2006 and by pointing out the importance of tighter collaboration between the Executive Committee of the Multilateral Fund and TEAP and its technical options committees regarding process agent uses, as well as of further studies on emissions of feedstocks and carbon tetrachloride, as the way forward.

18. In answer to a question from the floor, Committee co-chair Ian Rae reminded Parties that the Committee's 2006 report had indicated that process agent applications from Turkey and Brazil met the criteria established under decision X/14.

3. Foams Technical Options Committee

19. Mr. Paul Ashford, co-chair, Foams Technical Options Committee, reported the highlights of the 2006 foams assessment report. He noted that consumption of CFCs in 2005 had dropped below 1 per cent of total blowing agent usage for the first time. A slide was presented showing the changes in

blowing agent consumption that had taken place in the period 2001–2005. He noted that there had been a switch from HCFCs to hydrocarbons in non-Article 5 Parties and that there was evidence that HFCs were being introduced – although to a lesser extent than had been previously anticipated owing to the adoption of more efficient formulations and some use of alternatives, driven in part by uncertainties over the future regulatory approach to those chemicals.

20. He noted that in some developing countries there was a rapid increase in the manufacture of building insulation foam, particularly XPS in China – based on either HCFC-22 or HCFC-142b. Industry concerns remained over the long-term availability of HCFC-141b in some countries once use in non-Article 5 Parties had been eliminated. Moves to non-ozone-depleting substance solutions continued to be hindered by product and process safety concerns related to hydrocarbons.

21. Ozone-depleting substances in foams remained the largest component of global banks but were among the slowest emitting. Recovery of blowing agents from appliances at end-of-life was mandated in several regions but was practised with varying success. Although there was little foam reaching the waste stream from buildings thus far, Japan had conducted a detailed study on the technical and economic potential for recovery, which had led to the introduction of voluntary actions in that country. He noted that there was a potential role for voluntary carbon projects in ozone-depleting substance bank management at end-of-life. In answer to a question from a representative, he explained how voluntary carbon projects were differentiated from the regulated projects existing under the flexible mechanisms of the Kyoto Protocol. Finally, interest continued in foam bank management projects in Article 5 countries, although there were specific logistical challenges in some cases.

4. Halons Technical Options Committee

22. Mr. Dan Verdonik, co-chair of the Halons Technical Options Committee, provided the overview of the Committee's 2006 assessment. As of the end of 2005 China, the Republic of Korea and France were continuing to produce halons; France produced them only for use as a feedstock. Only 26 Parties continued to import newly produced halons, mainly for servicing existing equipment. For halon 2402, the Russian Federation had substantially reduced its inventory by using it as a process agent in its chemical industry. It was the Committee's understanding that the practice had been discontinued as the price of halon 2402 increased due to the reduction of supplies. Nevertheless, the Committee was of the opinion that adequate supplies of halon 2402 still existed within the Russian Federation and Ukraine. The Committee estimated that there were 50,000 tonnes of Halon 1301 globally but noted that approximately 35 per cent was thought to be in Japan. There were 90,000 tonnes of halon 1211 globally, with the majority in China. The Committee was concerned about such regional imbalances and noted the need for them to be addressed. Article 5 Parties had had both successes and failures with halon banking. Stocks of contaminated or otherwise unwanted halons continued to build up, particularly in Africa and China, an issue that needed immediate attention. The civil aviation sector continued to rely on halons, had made little progress in adopting halon alternatives in new airframe designs and lacked a strategy for implementing alternatives. Airframe manufacturers needed to produce technical designs for halon alternatives that would enable civil aviation authorities to certify halon alternative systems for implementation.

5. Methyl Bromide Technical Options Committee

23. Mr. Jonathan Banks, chair of the quarantine and pre-shipment taskforce, presented information on global consumption of methyl bromide. In 2005, global production for the methyl bromide uses controlled under the Protocol was about 18,140 metric tonnes. Methyl bromide production in Article 5 Parties for controlled uses had fallen to 39 per cent of the baseline, or 538 metric tonnes, in 2005. Consumption for quarantine and pre-shipment uses was estimated at 14,000 tonnes in 2005. Article 5 Party consumption for controlled uses was estimated at 9,285 tonnes in 2005. The reported consumption in non-Article 5 Parties for 2005 was 11,468 tonnes.

24. With respect to quarantine and pre-shipment uses an increase of methyl bromide usage in 2005 seemed to be due to the International Standard for Phyto-Sanitary Measures (ISPM 15). The Methyl Bromide Technical Options Committee estimated that technically effective and approved alternatives were available for over 50 per cent of current quarantine and pre-shipment treatments by volume.

25. Deployment of recapture technology for reduction of emissions was increasing but still low. Quarantine and pre-shipment uses existed for a large variety of commodities and also for pre-plant (soil) fumigation. Many approved alternatives were available for major uses but there was little incentive for their adoption. Many low volume treatments did not have approved alternatives and alternative fumigants for wooden packaging were under consideration by the International Plant Protection Convention.

26. Methyl bromide emissions had been significantly reduced during the past decade, declining 27,600 tonnes in 2005. Currently, an estimated 11,771-13,589 tonnes of emissions arose from quarantine and pre-shipment, commodities and structures and 9,935–19,907 tonnes from soil fumigation. Full implementation of barrier films for soil uses would reduce methyl bromide emissions by ~4,000 tonnes.
27. Ms. Marta Pizano, co-chair of the Methyl Bromide Technical Options Committee, continued the presentation. She stated that the decline in total global consumption of methyl bromide was largely attributable to reductions in soil fumigation, although in Europe non-quarantine and pre-shipment postharvest uses had also been greatly reduced. Currently, 65 per cent of controlled methyl bromide had been phased out globally. The Methyl Bromide Technical Options Committee estimated that alternatives were available for all but ~1200 tonnes of controlled uses.
28. Most alternatives in non-Article 5 Parties were chemical fumigants, which, like methyl bromide, had uncertain long-term suitability of use. Non-chemical alternatives required increased attention. For structures, sulfuryl fluoride, heat, enhanced integrated pest management, phosphine and combination treatments were the leading options. For durable commodities, phosphine was a key alternative.
29. In reference to methyl bromide phase-out in Article 5 countries, she reported that by 2007, 5,207 tonnes of methyl bromide had been phased-out through Multilateral Fund projects, which represented 33 per cent of the baseline for Article 5 Parties. Alternatives had been adopted at an average rate of ~25 per cent per year, which was similar to most non- Article 5 Parties.
30. Methyl bromide could not generally be replaced by a single in-kind alternative. Users might thus need to change their approaches to production, process management or application methods and adapt to specific local conditions. Regulatory barriers and costs of key alternatives were limiting their implementation and forcing methyl bromide use. Areas where technical alternatives were proving more difficult included some specific nursery situations, some replant problems and elimination of broomrape in some situations. In post-harvest applications, the Methyl Bromide Technical Options Committee had not identified available and technically effective alternatives for high-moisture fresh dates, fresh market chestnuts, cheese and cured pork in storage and immovable museum components (when attacked by fungi and when continued use was required).

6. Refrigeration, Air Conditioning and Heat Pumps Technical Options Committee

31. Mr. Radhey S. Agarwal, Co-Chair of the Refrigeration, Air Conditioning and Heat Pumps Technical Options Committee, started the refrigeration presentation by mentioning that HFC blends, primarily R-410A, but also R-407C, were the most common near-term substitutes for HCFC-22 in air cooled systems, that hydrocarbons were an option for low charge systems and that the use of carbon dioxide charged water heater heat pumps was rapidly growing. Vehicle air-conditioning had changed to R-134a globally. Regulatory and environmental pressures (as from the recently adopted EU-MAC directive¹) were driving the future replacement of R-134a in vehicle air-conditioning by low-GWP alternatives. Under the topic “what is left to be achieved” he reported that the size of the CFC bank was approximately 450,000 tonnes, 70 per cent of which could be found in Article 5 Parties. HCFCs formed the dominant refrigerant bank, estimated at more than 1,500,000 tonnes and representing 60 per cent of the total amount of refrigerant currently in use, a figure that was expected to grow further for a number of years. Two-thirds of that bank could be found in non-Article 5 Parties. The current service needs were estimated to be 200,000 tonnes per year. Under the topic “the way forward” he mentioned that changing regulations were likely to drive further innovations in air-conditioning and refrigeration equipment, including those related to the application of low-GWP refrigerants in all subsectors. Technical solutions were being developed to lower refrigerant charges in equipment and the use of indirect systems was likely to increase, which would reduce the refrigerant charge and facilitate application of flammable refrigerants.

7. Discussion

32. Following the presentation of the panel, panel members responded to a number of questions raised by individual Parties.
33. Responding to the concern expressed by some representatives that no alternative had been found for the use of methyl bromide for the fumigation and treatment of high-moisture dates, particularly in

¹ Directive 2006/40/EC of the European Parliament and the Council of the European Union (17 May 2006), relating to emissions from air-conditioning systems in motor vehicles.

North Africa and the Gulf region, a co-chair said that that was indeed the case and that further research was required on the matter.

34. In response to questions about halons, including issues related to dealing with contaminated stocks of halon banks, one of the co-chairs said that halon production could cease by 2010; while some applications in aviation still relied on halons, they could use recycled halon material. The issue of treatment of contaminated halon stock was complex and was a function of the availability and proximity of processing equipment and the type of contamination.

35. Responding to a question on the status of a specific Brazilian process agent use that had not yet been listed in table A of decision XVII/7, one of the co-chairs said that the Chemical Technical Options Committee had previously advised Parties that the case in question met the criteria for inclusion on the list as a process agent and that it was therefore up to the Parties to take a decision on the matter.

36. Responding to a question on voluntary carbon projects, one of the co-chairs noted that a large number of projects were currently operating in the voluntary carbon market aimed at mitigating carbon emissions and that such projects could be implemented just as stringently as in the regulatory sector.

B. Synthesis report of the 2006 assessments of the Scientific Assessment Panel, the Environmental Effects Assessment Panel and the Technology and Economic Assessment Panel

37. Mr. A. R. Ravishankara and Mr. Stephen Andersen reported on the 2006 synthesis report of the Scientific Assessment Panel, the Environmental Effects Assessment Panel and the Technology and Economic Assessment Panel. Mr. Ravishankara, member of the Scientific Assessment Panel Steering Committee for the 2006 Assessment, speaking also on behalf of Professor Janet Bornman, Co-Chair of the Environmental Effects Assessment Panel, spoke on behalf of the Scientific Assessment Panel and the Environmental Effects Assessment Panel. Mr. Andersen, TEAP Co-Chair, spoke on behalf of TEAP, emphasizing policy-relevant conclusions with regard to technology.

38. Speaking on behalf of the Scientific Assessment Panel, Mr. Ravishankara said that the Montreal Protocol was working as intended. Its success was shown by the decrease in the sum of ozone-depleting substances, as measured by effective equivalent stratospheric chlorine, in the lower atmosphere and the stratosphere, as well as early indications of global ozone recovery. The major contributors to the observed trends in ozone-depleting substances were the decreases in methyl chloroform and methyl bromide, the near constancy of halons and increases in HCFCs. The date for the recovery of the Antarctic ozone hole was predicted to be between 2060 and 2075, and those for Antarctic ozone and global losses to be around 2050. Both climate change and ozone-depleting substance decreases had contributed to changes in the ozone layer; however, the dominant factor for the recovery of the ozone layer to pre-1980 values was the decrease in ozone-depleting substances brought about by the Montreal Protocol. Various options for further decreasing ozone-depleting substances had been evaluated.

39. Speaking on behalf of the Environmental Effects Assessment Panel, he said that the key findings identified for the environmental effects of increased UV-B radiation included, with respect to human health, damage to the eyes, skin cancers and suppression of the immune system, the last of which was linked to the increasing incidence of skin cancers. It was noted that for fair skinned populations, skin cancer had been projected to double during the period 2000–2015 and that the incidence of melanoma was still rising in children, likely due to early UV-B exposure. UV-B radiation also had many effects on plant and aquatic ecosystems and could increase biological availability and toxicity of metals and alter carbon and nutrient cycling. Some of those effects were compounded by the interaction of climate change factors. This interaction of UV-B radiation and climate change factors, such as high temperature, were also evident for some skin cancers and eye damage, which were further exacerbated, and also caused faster degradation of wood and plastics.

40. Mr. Andersen said that it was technically and economically feasible to accelerate the HCFC phase-out, to tighten methyl bromide controls and to collect and destroy ozone-depleting substances. Other policy-relevant findings were that some carbon tetrachloride and CFC feedstock and process agent uses could be replaced by HCFCs or by not-in-kind manufacturing processes; that HCFC use was increasing rapidly; that the civil aviation sector had not made progress in adopting alternative technologies in new airframe designs; that global phase-out of CFCs in metered-dose inhalers was achievable by 2010; that alternatives existed for almost all controlled uses of methyl bromide but that it would be necessary to undertake registration of several key chemical alternatives and provide incentives for the use of non-chemical alternatives and integrated pest management; that full implementation of

barrier films in methyl bromide soil fumigation could significantly reduce dosage rates and emissions; that several low-GWP refrigerants provided comparable energy efficiency to HFC-134a in vehicle air conditioning and likely would do so in other sectors and applications; and that a considerable portion of the 3.5 million ODP-tonnes of ozone-depleting substances contained in banks was available for collection and destruction at costs justified by benefits in reducing ozone-depleting substance and greenhouse gas emissions.

41. Following the presentations on the assessment report, a number of representatives asked for clarification on matters such as the need for Article 5 Parties to make proposals for nominations for essential uses for CFCs in 2007; the discrepancy between current carbon tetrachloride emissions and the findings of past atmospheric evaluations.

IV. Consideration of issues arising out of the 2007 progress report of the Technology and Economic Assessment Panel

A. Presentation of the reports of the Panel and of its technical options committees

42. Mr. Kuijpers introduced the Technology and Economic Assessment Panel's 2007 progress report and invited the co-chairs of five of the Panel's six technical options committees to present their findings to the Open-ended Working Group. He noted that the report of the Methyl Bromide Technical Options Committee would be made under agenda item 5, on methyl bromide issues. Following the presentations by the technical options committees, Mr. Kuijpers gave a brief presentation on general issues concerning the Technology and Economic Assessment Panel.

1. Medical Technical Options Committee

43. Professor Ashley Woodcock, co-chair of the Medical Technical Options Committee, presented the recommendations associated with that committee's assessment of essential use nominations for 2008 and 2009. He reminded Parties regarding CFC metered-dose inhalers that the 2010 CFC production phase-out date was fast approaching. In recommending the nominations from the European Community, the Russian Federation and the United States, Professor Woodcock drew attention to issues that Parties might wish to consider, including: that some nominations included CFC quantities for drugs that would not be reformulated by 2010; that some nominations included CFC quantities for combination products not considered essential; and that plans for use or disposal of stockpiles might be required in future nominations. He further suggested that the Parties might therefore wish to take decisions to reduce the quantities of essential use CFCs approved or to not allocate CFCs.

44. Ms. Tope then summarized the Committee's response to a request by Parties under decision XVIII/16 on difficulties facing some Article 5 Parties manufacturing CFC metered-dose inhalers. She conveyed the Committee's recommendation that as a matter of urgency Article 5 Parties producing or importing CFC metered-dose inhalers develop and implement transition strategies to assure patient access to inhaled therapies as the 2010 CFC production phase-out approached. After summarizing the main technology transfer challenges for Article 5 Parties manufacturing CFC metered-dose inhalers, such as finance, capacity, and the timely supply of new equipment for manufacturing alternatives, she mentioned factors that did not need not to present barriers, namely regulatory approvals, price and patient acceptance of alternative products. She explained that continued production of CFC metered-dose inhalers beyond 2009 might be needed to supply the needs of patients in Article 5 Parties for a limited period, either from local or imported metered-dose inhaler products, requiring a supply of pharmaceutical-grade CFCs. She summarized the advantages and disadvantages of two possible options that Parties might consider to meet those needs, namely, continued annual production of pharmaceutical-grade CFCs or a final campaign production of pharmaceutical-grade CFCs in 2009. She highlighted the limited feasibility of continued annual production and serious concerns about the reliability of supply of diminishing quantities of pharmaceutical-grade CFCs with that approach and pointed out that on the other hand a final campaign in 2009 was feasible without harm to patient health and was preferred by CFC manufacturers. The Committee estimated that about 4,000 tonnes might be needed for a final campaign in 2009, assuming China, India and multinational enterprises operating in Article 5 Parties phased out by 2010. To ensure patient health, she recommended that a more precise definition of quantities was needed for a final campaign. She also said there was a need for adequate, high quality storage and careful consideration of location, management and distribution. She suggested that a decision by Parties to undertake a final campaign might be needed this year to establish a process for assessing CFC quantities required for a final campaign, on the basis of information provided by

Parties in early 2008. That information would in turn provide the basis for a decision by the Twentieth Meeting of the Parties to authorize production, which would allow CFC production orders to be taken in early 2009.

2. Chemical Technical Options Committee

45. The Chemicals Technical Options Committee section of the TEAP 2007 progress report was introduced by Committee co-chair Ian Rae. The Committee had examined the process agent nominations listed in table A of decision XVII/7 and categorized them as continuing, no longer in active use, possibly replaceable by non-ozone depleting substances, and unable to assess. The Committee had similarly categorized the nominations in table A-bis of decision XVII/8 and a new list of potential process agents submitted by China.

46. On other matters, the Committee advised that there was a case for an essential use exemption for the use of CFC-113 in the domestic aerospace programme of the Russian Federation. It was noted that consumption of n-propyl bromide, which was marketed as a replacement for solvents with greater ozone-depleting potential, was growing rapidly. Finally, the Committee reported that emissions of carbon tetrachloride from landfills were unlikely to be large enough to account for the gap between bottom-up and top-down estimates of carbon tetrachloride emissions.

3. Foams Technical Options Committee

47. In introducing the progress report for the Foams Technical Options Committee, Mr. Ashford commented that it had not been the Committee's original intention to submit such a report in 2007. However, some specific matters on the application of life cycle assessment techniques to foams had prompted a short series of statements. He noted that citing results for foams based on Life Cycle Climate Performance (LCCP) needed to be done in context, since outputs were application-specific. Selection of representative scenarios was also important.

48. He reported that work was continuing, with support from members of the Scientific Assessment Panel, to provide verification of the global warming potential of various hydrocarbon substitutes currently in use. In response to a question from a representative of the United States of America, he clarified that that work was carried out in continued support of the information package provided on alternatives within the 2006 foams assessment report and only involved an extended search of existing literature at the current stage.

49. On bank management issues, it was noted that interest in voluntary carbon projects had grown rapidly during the early part of 2007 and that the major concern was to ensure that appropriate project protocols were available to avoid misappropriation of savings. Such an approach might assist with the bank management challenges in the buildings sector, where the interplay between technical and economic aspects might make future regulation difficult.

4. Halons Technical Options Committee

50. Mr. Verdonik provided a summary of the Committee's 2007 progress report. The efforts under decision XV/11 were back on track due to the assistance from the Ozone Secretariat. The Ozone Executive Secretary had met with the International Civil Aviation Organization (ICAO) Secretary-General in March 2007 and gained assurances that the joint Committee – ICAO working paper (equivalent to a background paper and a Montreal Protocol conference room paper) would be brought to the floor at the 36th ICAO General Assembly meeting, which coincidentally would take place in Montreal at the same time as the celebration of the twentieth anniversary of the Montreal Protocol. In response to a request from the European Community, Mr. Verdonik also provided up-to-date progress on decision XV/11 since the publication of the 2007 assessment report. As a result of the Ozone Secretariat's efforts, the Committee's co-chairs had developed and submitted a draft working paper to ICAO and presented the issues at a meeting of the ICAO Airworthiness Panel. It had been learned that the United States Federal Aviation Administration (FAA) was also preparing a working paper on halon replacements on behalf of the International Aircraft Systems Fire Protection Working Group (IASFPWG). The Committee co-chairs were working with FAA to develop a joint paper for submission to the ICAO Assembly. The current draft of the working paper would require ICAO to establish a date(s) when it would be mandatory to use halon replacements for engines, hand-held extinguishers and lavatories. The extent to which that would apply to new designs, in-production aircraft, and existing aircraft would be determined by ICAO in coordination with the Ozone Secretariat and TEAP and the Committee by March 2009. Further, it would encourage ICAO to continue to work with the Ozone Secretariat and TEAP and the Committee on halon replacement in civil aviation.

51. With regard to halon banking, the South African halon bank was working with GTZ Proklima to move the Eastern and Southern African countries' regional recycling machine to a mutually agreed site and begin recycling previously accumulated halons. That was expected to improve significantly the region's halon banking capabilities. On the issue of regional imbalances of halons, India continued to report difficulties in obtaining halon 2402, required to support existing critical equipment. Lastly, on the issue of build-up of unwanted halons, Committee members continued to report that large quantities of halon 1211 that could no longer be used in China were accumulating in that country.

5. Refrigeration, Air Conditioning and Heat Pumps Technical Options Committee

52. Mr. Agarwal reported that in response to the recent European Union MAC F-Gas Directive, there was a rapid development of low GWP refrigerants especially for MAC systems, and several new low-GWP blends had been announced in January 2007. Such blends could possibly also be used for stationary refrigeration and air-conditioning applications. At the end of March 2007 two major chemical manufacturers had announced a global joint development agreement to accelerate the development of the new generation low-GWP refrigerants. Those initiatives were likely to have a very significant impact not only in the MAC sub-sector but in the entire refrigeration and air-conditioning sector.

6. General issues concerning the Technology and Economic Assessment Panel

53. Mr. Kuijpers concluded the presentation with TEAP administrative issues. TEAP and its technical options committees had undertaken a large number of actions to save costs related to TEAP and committee meetings and would undertake further action in the future, if possible. A historic lack of sponsoring, he said, was the reason that TEAP had requested funding for 26 travels for experts from non-Article 5 Parties. He also noted that the TEAP 2007 progress report contained disclosure of interest statements in accordance with the relevant decision of the Parties and he proposed that they be published solely on the UNEP website in future.

7. Discussion

54. In response to a request for further information on the use of halon-2402 as a process agent in the Russian Federation, one of the co-chairs noted that it was the Russian members of the Halons Technical Options Committee who had alerted the Committee to the problem. Another added that, according to the scientific literature, halon-2402 had been used as a highly specialized solvent, but research was continuing to ascertain whether it had any other uses.

55. Responding to the presentations on the phasing out of CFC metered-dose inhalers in the European Community, the representative of the European Community said that it should be acknowledged that considerable progress had been made in that regard, noting that its 2008 nomination was down by 41 per cent from the previous year. She stressed that the issue of the high percentage destined for export to Article 5 Parties was being addressed, both with manufacturers and by encouraging those countries to reduce the demand for such imports.

56. With regard to the Russian Federation's essential-use exemption for CFC-113 for aerospace applications, one representative noted that the information presented by the Chemical Technical Options Committee was insufficient, and suggested that additional details should be presented at the next Meeting of the Parties.

57. In response to a question about the rationale for ongoing efforts by the Foams Technical Options Committee to validate global warming potentials for hydrocarbon blowing agents, one of the co-chairs said that in preparing its assessment reports the committee routinely evaluated alternatives to ozone-depleting substances, including hydrocarbon blowing agents. In doing so, it evaluated the environmental impact of such alternatives, and global warming potential was merely one aspect of that. Work in that area, he added, was limited to reviewing existing literature and did not involve the commissioning of new studies or other activities requiring significant expenditures.

58. During the discussion, the representative of Argentina said that the time period of 2003–2005 selected for analysis in the Medical Technical Options Committee's report did not reflect the actual consumption of CFCs for metered-dose inhalers in her country due to a significant deviation in 2003 resulting from the economic crisis. Furthermore, HFC-containing metered-dose inhalers were not produced locally.

B. Review of nominations for essential-use exemptions for 2008 and 2009

59. The representative of the Russian Federation, suggesting that the table contained in the note by the secretariat on issues for discussion by and information for the attention of the Open-ended Working

Group at its twenty-seventh meeting (UNEP/OzL.Pro.WG.1/29/2) was unclear, stressed that his country had conveyed two new requests on essential-use exemptions: one for 212 tonnes of CFCs for metered-dose inhaler production and one for CFC-113 for aerospace applications in 2008 and 2009. He thanked the Panel for its objective consideration of the nominations. In response, the co-chair of the Working Group noted that TEAP had recommended both nominations, including 140 tonnes for aerospace applications for 2008 and 130 tonnes for 2009.

60. The representative of the United States, stressing what he called enormous progress in reducing the overall amount of requested exemptions, briefly introduced a draft decision on essential-use exemptions for chlorofluorocarbons for the manufacture of metered-dose inhalers.

61. The Co-Chair proposed and the Working Group agreed that the Parties that had nominated essential-use exemptions and had those nominations approved by TEAP, namely the United States, the European Union and the Russian Federation, should meet informally with a view to presenting a revised draft decision for the consideration of the Working Group.

62. The representative of the Russian Federation subsequently reported to the Working Group that fruitful and cordial consultations had been held between his Party, the European Union and the United States, leading to the preparation of a draft decision. The Working Group agreed to forward the revised draft decision, as set out in annex I to the present report (section J), to the Nineteenth Meeting of the Parties for its consideration.

63. The Co-Chair informed the Working Group that the Russian Federation had prepared a draft decision for the Nineteenth Meeting of the Parties that would carry forward the Panel's recommendation for a 2008 and 2009 exemption for CFC-113 for essential uses in the Party's aerospace sector. The Working Group agreed to forward the draft decision, as set out in annex I to the present report (section H), to the Nineteenth Meeting of the Parties for its consideration.

C. Technology and Economic Assessment Panel and Executive Committee review of progress made in reducing the emissions from and the use of ozone-depleting substances as process agents and the implementation of emissions reduction techniques and alternative processes and products (decision XVII/6)

64. Ms. Maria Nolan, Chief officer of the Multilateral Fund secretariat, provided an overview of the report of the Executive Committee on the progress made in reducing emissions of controlled substances from process-agent uses (UNEP/OzL.Pro.WG.1/27/4, annex), which had been prepared pursuant to decision XVII/6.

65. The representative of the United States thanked the Multilateral Fund secretariat for its hard work in analysing process agent projects and making recommendations to the Executive Committee and to the members of the Chemicals Technical Options Committee, who had reviewed the lists of process agent uses contained in table A of decision X/14, table A-bis set out in decision XVII/8 and in a separate table presented by China.

66. He noted that when the Parties had agreed to decision X/14, they had recognized that process agent uses were well managed and caused only very insignificant emissions in non-Article 5 Parties and so had agreed to cap the emissions from such uses in non-Article 5 Parties and to set up a framework to address them in Article 5 Parties. The framework, contained in decision X/14, had facilitated remarkable progress in addressing emissions from Article 5 Parties and it was worthy of note that emissions from those Parties were currently significantly below the cap that had been set. His delegation had prepared a draft decision containing a revised table A for use in conjunction with decision X/14 on the basis of the information presented by the Chemicals Technical Options Committee. Noting that China had also prepared a draft decision on the removal of 17 applications from table A-bis in decision XVII/8, he expressed his willingness to work with other Parties on the elaboration of a revised table A.

67. The representative of the European Community noted that his delegation had also prepared a draft decision for the purpose of updating table A and expressed his willingness to work with other Parties on the issue. He stressed that any update of table A should be made in compliance with the criteria set out in decision X/14 and other relevant decisions. His delegation's draft decision was based on the TEAP recommendations contained in the April 2007 progress report, meaning that those applications that TEAP had identified as not qualifying as process agents would not be contained in the list. He also noted that his organization was in favour of the consideration of the additional list submitted by China.

68. Another delegation welcomed the reports of the Chemicals Technical Options Committee and the Multilateral Fund on process agents and requested the Ozone Secretariat to follow up with concerned Parties on the issue of the lack of reporting by some countries, which had impeded the work of the Chemicals Technical Options Committee.

69. The Working Group agreed that the concerned Parties interested in discussing this very technical issue would meet informally in order to prepare a draft decision for the consideration of the Working Group.

70. The representative of one of those Parties subsequently reported to the Working Group that they had agreed to recommend to the Working Group the deletion of many of the uses in tables A and A bis, as revised by decisions XVII/6 and XVII/7, including those that TEAP had reported to be no longer in operation, those that TEAP had said it had been unable to assess and those that TEAP had recommended be deleted, as well as those that had been put into operation after 1 July 1999. The Parties had accordingly prepared a draft decision incorporating their agreement for the consideration of the Working Group.

71. Following that report, the Working Group agreed to forward the draft decision on the issue, as set out in annex I to the present report (section I), to the Nineteenth Meeting of the Parties for its consideration.

D. Technology and Economic Assessment Panel final report on carbon tetrachloride emissions and opportunities for reductions (decision XVIII/10)

72. Introducing the item, the Co-Chair recalled that in response to decision XVI/4, TEAP had presented a report during the preceding year in which it had reviewed the emissions of carbon tetrachloride from certain uses and potential methods for reducing those emissions. She added that after reviewing that report, the Parties had requested TEAP to draft a more detailed study but the Panel had not yet completed that work due to time constraints and difficulties in obtaining relevant data. She noted, however, that the Panel's latest information on the matter, which was contained in its 2007 progress report, indicated that there was only limited evidence of carbon tetrachloride emissions.

73. The Working Group agreed to await the final report from TEAP and agreed that the issue should be discussed further when the report became available.

E. Technology and Economic Assessment Panel report on n-propyl bromide emissions, alternatives available and opportunities for reductions (decision XVIII/11)

74. In introducing the sub-item, the Co-Chair recalled that decision XVIII/11 had requested the Scientific Assessment Panel to update existing information on the ozone-depletion potential of n-propyl bromide and had requested TEAP to continue its assessment of global emissions, with particular attention to obtaining more complete data on production, uses and emissions, toxicity and availability and regulation of alternatives for different use categories of n-propyl bromide. He gave a brief overview of TEAP findings in that regard.

75. In the ensuing discussion, the representative of Germany, on behalf of the member States of the European Union, said that, as the ozone-depletion potential of n-propyl bromide was similar to that of other substances already covered under the Protocol, the Parties had to decide whether to add it to the controlled substances covered by the Protocol. Since such a step would require an amendment to the Protocol, he suggested that, in keeping with previous practice, the matter should be deferred until another amendment to the Protocol was under consideration. Until such a time, the Meeting of the Parties should recommend restricting the use of n-propyl bromide to those applications for which alternatives were unavailable.

76. The representative of Germany, on behalf of the member States of the European Union, introduced a proposed draft decision, co-sponsored by the European Community, Iceland and Norway, on the possible future amendment of the Protocol regarding n-propyl bromide, which had been circulated as a conference room paper.

77. A number of representatives expressed support for the proposal, although some noted the need for some editorial changes. One representative said that his Party supported the proposal to restrict or prohibit the use of n-propyl bromide in future, provided that prevailing conditions in Article 5 countries were taken into consideration, but would not be in favour of the concept of interim use. One

representative noted that the proposed decision would need to be amended to take note of the fact that a study on that matter was currently under way, which was expected to be published before the next meeting of the Parties.

78. A number of representatives requested that consideration of the proposed draft decision be deferred to allow time to discuss possible implications of it with their Governments and national industries. In order to understand the issue better, one speaker requested that TEAP provide an update on the technological and economic availability of alternatives for different categories of n-propyl bromide, as had been requested in the original decision, preferably before the Nineteenth Meeting of the Parties.

79. The Working Group agreed that the issue should be discussed further at the Nineteenth Meeting of the Parties, on the understanding that informal discussions among the Parties should continue prior to that meeting. The Working Group also agreed to forward the draft decision on the issue, as set out in annex I to the present report (section K), to the Nineteenth Meeting of the Parties for its consideration.

F. Technology and Economic Assessment Panel report on assessment of measures for addressing ozone depletion, with a focus on hydrochlorofluorocarbons (decision XVIII/12)

80. Introducing the item, the Co-Chair recalled that by decision XVIII/12, the Conference of the Parties had requested TEAP to do further work to assess the measures listed in the report of the Ozone Secretariat-sponsored experts workshop on the special report prepared by the Intergovernmental Panel on Climate Change and TEAP on ozone depletion and climate change.² By the same decision it had also requested the Scientific Assessment Panel to consider the implications of their findings for the recovery of the ozone layer, with a focus on HCFCs. TEAP had subsequently established a task force to address the matter, which was preparing a report for the consideration of the Nineteenth Meeting of the Parties. At the request of the Co-Chair, Mr. Agarwal, Mr. Ashford and Mr. Kuijpers made a presentation on the work and findings of the task force to date.

81. Mr. Agarwal introduced the presentation by highlighting that what was being presented was a progress report and that, in the context of such a complex decision, the Panel's work to date should be treated as work in progress. He then outlined the membership of the Task Force and described the liaison which had been conducted through the Ozone Secretariat with other relevant bodies as identified in paragraph 3 of the decision. He also outlined the report headings as currently envisaged. It was noted that most of the work to date had been focused on establishing annual baseline consumption and emissions to 2050 and on researching and analysing the impact of the Clean Development Mechanism. The practical measures identified by the Open-ended Working Group workshop had been consolidated into five themes and the main focus of the presentation would be on the earlier phase-out of ozone-depleting substances.

82. Mr. Ashford continued the presentation by stating that the primary source of consumption data had been the special report on the ozone layer and climate prepared jointly by TEAP and the Intergovernmental Panel on Climate Change, which contained consumption, bank and emission data for 2002 together with projections for 2015. Assumptions for consumption in the period beyond 2015, together with approaches to emission estimation, were also presented. A series of graphs showing the trends in banks for the period 2002–2050 and forecast emissions for the same period were shown in terms of both ozone-related and climate-related parameters, including an analysis of sectoral sources.

83. Mr. Ashford then discussed the components of an earlier phase-out schedule considered by the Task Force to date. That included a freeze at 2012 as well as phase-out accelerations of 10 years and 15 years, respectively. It was emphasized that those components were not mutually exclusive and in no way represented a specific proposal. Comparative emission reductions were then presented and discussed for the refrigeration sector. It was particularly noted that the climate benefits arising from an early phase-out of HCFC-22 would depend on the climate performance of alternative systems.

84. Throughout the analysis, the impact on baseline HFC-23 emissions had been considered. That formed the basis of a discussion of the impact of the Clean Development Mechanism on HCFC-22 demand. Mr. Lambert Kuijpers first presented some background slides on the Clean Development Mechanism and confirmed that an approved methodology for HFC-23 abatement projects already

² For more information on the special report, see chapter VII of part one of the report of the Eighteenth Meeting of the Parties (UNEP/OzL.Pro.18/10).

existed. The current treatment of existing plants was explained, but it was noted that for new plants a methodology was still being negotiated.

85. The importance of HFC-23 abatement was stressed. Comments were made about the possible implications of the Clean Development Mechanism for the relative competitiveness of existing alternatives and the development of new ones.

86. In conclusion, Dr. Kuijpers outlined the further work planned by the task force, which included further work on other practical measures, and noted that the report would be finalized and made available by mid-July.

87. During the ensuing discussion there was general praise for the work TEAP was undertaking on the matter. A number of questions and issues were raised in response to the presentation, to which Mr. Ashford responded.

88. Some representatives raised questions about the work remaining to be done, including the need for consultations, and the ability of the Task Force to complete the work in a timely manner. In that regard, some suggested that it might be advantageous for TEAP to limit the scope of its work more closely to its mandate to look particularly at ozone depletion; one questioned the applicability of the life cycle climate performance approach and whether it had been endorsed in other forums. .

89. In response to the queries about necessary consultation and the timeframe for completing the work, Mr. Ashford said that any consultations that remained to be done were informal in nature and that because much groundwork had been laid already by what was a large task force, he believed that the resources were sufficient to complete the work in a timely manner. As regards the life cycle climate performance approach, he noted that one example where the approach had been used extensively was in the TEAP/IPCC special report, but he acknowledged its limitations and said that the current work being undertaken would not be totally reliant on it.

90. He said too that the Panel would address in its work the concern that inclusion of destruction of HFC-23 at new plants in the Clean Development Mechanism might offer perverse incentives for Article 5 Parties to increase their production of HCFC-22 and might also have an impact on the implementation of an eventually agreed earlier phase-out of HCFCs.

91. One representative noted a discrepancy between the data presented by TEAP and the actual situation in her country, for example regarding the number of HCFC enterprises having projects under the Clean Development Mechanism. She also suggested that Parties' policies on the use of Clean Development Mechanism funds should be taken into account in the task force report. Mr. Ashford replied that the situation regarding approved Clean Development Mechanism projects was complex and that he would consult bilaterally with the Party concerned.

92. In conclusion, the Working Group agreed that copies of the information presented at the current meeting would be made available to Parties to help further discussion and urged TEAP to finalize its report as soon as possible, taking into account the comments made during the current meeting, in time to respond to the request for guidance from the United Nations Framework Convention on Climate Change's Subsidiary Body for Scientific and Technological Advice.

G. Technology and Economic Assessment Panel report on campaign production of chlorofluorocarbons for production of metered-dose inhalers (decision XVIII/16)

93. Introducing the item, the Co-Chair recalled that decision XVIII/16 had requested TEAP to assess and report on the need for, feasibility of, timing of, and recommended quantities for a limited campaign production of CFCs for the manufacture of metered-dose inhalers. That report, contained in the TEAP 2007 progress report, had concluded that a campaign production for 2009 was technically feasible without harm to patient health but would require an accurate definition, in 2008, of CFC quantities, based on information submitted by Parties.

94. Several representatives expressed support for the conclusions in the TEAP report, with one warning that a cycle of non-compliance might result if production of CFCs was extended beyond 2009. Another representative said that certain countries would need financial and technical assistance in the preparation of their transition strategies in order to make an accurate assessment of the quantity of CFCs that might be needed after 2009. One representative said that, owing to a number of domestic and technical considerations, there were significant obstacles to his country's ability to agree by the end of 2008 to phase out production of pharmaceutical-grade CFCs by 2009 and that it had therefore already

requested an essential use exemption for 2009. While thanking TEAP for its work and suggesting that its idea on campaign production was an interesting one, he noted that his country could not work under such a framework.

95. One representative noted that her country would not be in a position to provide the information required by TEAP to estimate the quantities required for campaign production in 2009, particularly on its transition strategy, prior to the Nineteenth Meeting of the Parties.

96. Some representatives urged great caution in considering campaign production, as, in particular, establishing the optimum quantity required for a 2009 production campaign would be very difficult and complicated international arrangements would have to be put in place to facilitate such production.

97. The representative of India noted that his country would be the largest single user of CFCs for the manufacture of metered-dose inhalers in 2008 and recalled that notwithstanding the Party's efforts to phase out CFC use, the Medical Technical Options Committee and TEAP had recognized its need for an essential use exemption for 300 tonnes of CFCs for the year 2010. He noted, however, that India would require financial assistance from the Multilateral Fund and that lacking such assistance would find it necessary to seek an exemption for more than 600 tonnes of CFCs. He also noted that pursuant to decision 51/34 of the Executive Committee, India had requested plant conversion project preparation funding and that a plan of action with respect to plant conversion would be prepared in consultation with the Ministry of Health and industry groups.

98. The Working Group agreed that, as there was currently no consensus on the issue, interested parties would hold intersessional consultations with a view to tabling a draft decision on the matter, if desired, at the Nineteenth Meeting of the Parties.

H. Very short-lived ozone-depleting substances

99. The representative of Germany presented a draft decision on the assessment of new very short-lived halogenated substances which had been submitted by Germany (on behalf of the member States of the European Union), the European Community, Iceland and Norway, saying that it had been submitted in response to findings that very short-lived halogenated substances were more significant in terms of ozone depletion than previously thought and were expected to gain further importance. It was necessary, therefore, for Parties to keep a watchful eye on such substances.

100. All of the representatives who spoke expressed their support for the broad thrust of the draft decision but concerns were expressed about certain wording and the generality of the proposal, particularly as it related to chemicals of concern. One representative, while agreeing on the importance of monitoring new substances that had a short-term atmospheric lifetime and might damage the ozone layer, expressed his Party's concern that the timing set out in the draft decision for reports from the Scientific Assessment Panel was too short to enable that body to develop a scientifically objective and well-conducted assessment of the substances. It was also noted that certain paragraphs asked the Panel to undertake work that was already part of its standard operating procedures or requested action that Parties had already requested.

101. The Working Group agreed that the proponents of the draft decision would meet with other interested Parties and report back to the Parties as and when ready. The Working Group also agreed to forward the draft decision, as set out in annex I to the present report (section N) to the Nineteenth Meeting of the Parties for its consideration.

I. Any other issues arising out of the Technology and Economic Assessment Panel reports

102. Introducing the item, the Co-Chair drew attention to chapter 11 of the TEAP 2007 progress report, in which the Panel requested funding for travel of experts from non-Article 5 Parties in the coming year and discussed changes in the operation of the Methyl Bromide Technical Options Committee.

103. Some Parties expressed concern that the Methyl Bromide Technical Options Committee had reorganized the operation of its work in what they considered to be a less than transparent fashion very soon after the Parties had approved a workplan for the Committee that did not suggest such a change. Others suggested that the changes made by the Committee were within its mandate and consistent with other changes that the Panel had made from time to time.

104. Some representatives supported the request for funding the travel of members of the Panel and its committees, given the volume of work and the importance of ensuring the scientific expertise of the Protocol and the efficient functioning of TEAP, while others were opposed based on historic reasons or expressed a belief that funding for the Panels would have to be offset by cuts elsewhere to ensure zero growth in the budget.

105. Several representatives said that there was a need for more Article 5 Parties to propose experts in order to achieve broader representation on the technical options committees and one observed that there was a relative lack of representation from sub-Saharan African Parties.

106. Responding to the issues raised, the TEAP co-chair explained that the minor operational adjustment to the Committee's procedures had been undertaken in response to budgetary constraints and the compressed time schedule resulting from the fact that the 2007 meeting of the Parties would be held earlier in the year than usual. To enable the Committee to produce its report in time, the activities of its two subcommittees had been more tightly structured and defined; their meetings, however, had taken place simultaneously in the same facility, presenting opportunities for discussion and shared conclusions while preserving the right of any expert not in agreement to present a minority report. In conclusion, he said that TEAP would welcome approval of funding for the work plan of the Methyl Bromide Technical Options Committee and the travel of its members to enable it comply with the wishes of the Parties.

V. Consideration of methyl-bromide-related issues

107. The Working Group commenced its consideration of the item with presentations by three of the four co-chairs of the Methyl Bromide Technical Options Committee – Mr. Mohamed Besri, Mr. Ian Porter and Ms. Michelle Marcotte.

108. Mr Besri, Co-Chair of the Subcommittee on Soils, introduced the 2008–2009 critical-use nominations for methyl bromide. Noting that the Committee had 42 members with specific expertise relevant to one of the Committee's two subcommittees (the Soils Subcommittee and the Quarantine, Structures and Commodities Subcommittee), he showed that the total critical-use nomination amounts were declining, from 16,050 metric tonnes requested in 2005 to 6,377 metric tonnes for 2009. New Zealand and Switzerland were no longer submitting nominations and dramatic reductions had occurred in amounts applied for by member States of the European Community and several other Parties, with amounts required for critical uses below 250 tonnes. The United States of America had nominated approximately 5,000 tonnes and Israel and Japan less than 1,000 tonnes.

109. Mr. Porter, Co-Chair of the Subcommittee on Soils, presented an overview of the 43 critical use nominations for preplant soil use, down from 70 in the last round. Fourteen nominations had been submitted by two Parties for 2008 and 29 from five Parties for 2009. Israel was the only Party applying for both years but there were no parties that had not previously submitted nominations. Parties which in previous years had submitted nominations for preplant soil use but were no longer applying were Belgium, France, Greece, Italy, Malta, New Zealand, Portugal and the United Kingdom of Great Britain and Northern Ireland.

110. He indicated that amounts nominated for soil use had dropped from 8,066 metric tonnes in 2007 to 6,494 metric tonnes in 2008 and 5,843 metric tonnes in 2009. Phase-out progress was slowing or had stalled for tomatoes, strawberry fruit, peppers, eggplants and cucurbits, but other applications for other sectors continued to show a downward trend.

111. As in past rounds, the Committee had relied on a range of information for assessment of the nominations, including data from research trials and commercial scale-up studies within the nominating countries and in sectors in other countries with similar pests, climate and other factors; information in nominations from previous years; international validation studies (e.g., the TEAP May 2006 special report, entitled, "Validating the Yield Performance of Alternatives to Methyl Bromide for Pre-Plant Fumigation"); adoption schedules for alternatives in similar sectors and situations in other countries; and economic information on use of alternatives.

112. Standard criteria for dosage rates, use of low-permeability barrier films and consideration of methyl bromide/chlorpicrin formulations remained unchanged from the 2006 round of nominations. Recommendations were based on the use of low-permeability barrier films unless a Party had documented regulatory barriers preventing use, e.g., all preplant uses in California and strawberry nurseries in Australia and Canada. In the current round of nominations, higher dose rates of methyl

bromide were accepted in four nominations with respect to which they were said to be a mandatory requirement to meet certification regulations.

113. For the additional quantity nominated for use in 2008, the Panel agreed to recommend 997 metric tonnes but not to recommend 197 metric tonnes. For 2009, the Panel agreed to recommend 678 metric tonnes and was unable to assess nominations for 2,978 tonnes. Key reasons that nominations in the “unable to assess” category had been so classified included insufficient technical justification, registration issues, inappropriate application rates and formulations and, in some nominations, the need to disaggregate crops to enable assessment. In several nominations, yield losses reported for alternatives were unsubstantiated or inconsistent with international studies and further analysis by the nominating Parties was required.

114. A number of issues had arisen during the critical-use nomination assessment process. In 2007, permits had been granted in the United States and Australia for preplant soil use of a key alternative, methyl iodide, which was considered a “one-to-one” replacement for methyl bromide and suitable for most remaining critical uses. Low-permeability barrier films to reduce emissions from the remaining uses of methyl bromide proved very effective, with substantial adoption occurring in major methyl bromide user regions. Lack of buffer zones for methyl bromide compared to the large buffer zones for alternatives (e.g., 250 metres in Israel) forced methyl bromide use. Full economic justification (i.e., partial budgets) was still lacking for many nominations.

115. Adoption of non-chemical alternatives was increasing. Major chemical alternatives adopted for preplant soil use were 1,3-D, chloropicrin, metham sodium and their combinations. Current registration reviews (in the European Community and the United States), however, were leading to more stringent regulations on the use of those fumigants and Parties were urged to consider practices which avoided the need for fumigation such as grafting and the use of substrates and resistant plants.

116. The criteria for critical-use nominations would be reviewed and the handbook would be revised before the Nineteenth Meeting of the Parties.

117. In his presentation, Mr Porter noted that 95 per cent of the reduction for controlled uses of methyl bromide in non-Article 5 Parties was due to the phase-out of preplant soil uses, which had seen a reduction from approximately 52,600 tonnes in 1995 to approximately 8,000 tonnes under the critical-use exemption process in 2008. He stated, however, that in addition at least 1,300 tonnes had been categorized for quarantine and pre-shipment soil use in the United States and that some Parties held significant stocks.

118. He then illustrated the progress in phase-out for the two major sectors for preplant soil use. For strawberry fruit crops, Australia, France, Spain, Italy, the United Kingdom and New Zealand had phased out methyl bromide while in the United States and Israel the transitions were not yet complete. For tomato crops, Belgium, Greece, Italy, Australia and Spain had phased out methyl bromide, but the United States’ transition was not yet complete.

119. He concluded with an overview of stocks held at the end of 2006, as required under decision IX/6 (paragraph 1 (b) (ii)). Total stocks of methyl bromide held by Parties equalled 8,298 metric tonnes. Australia and Israel held no stocks, Canada had 1.57 metric tonnes, New Zealand 4 metric tonnes, Japan 19.34 metric tonnes, the European Community 68.55 metric tonnes and the United States, 7,671 metric tonnes of pre-2005 stocks and 579 metric tonnes of post-2005 stocks. The Committee had not considered stocks and inventories when evaluating critical-use nominations.

120. Ms. Marcotte, Co-Chair of the Subcommittee for Quarantine, Structures and Commodities (QSC), presented a report on the membership of the QSC subcommittee, the interim critical-use nomination results for post-harvest applications, with highlights on progress in methyl bromide alternatives, and new regulatory and technical developments. The QSC subcommittee, she noted, had welcomed members of the former Quarantine Task Force from Argentina, Belize, Netherlands, New Zealand and the Philippines.

121. In the 2007 round of critical use nominations, Parties had submitted 16 nominations for the use of methyl bromide in structures and commodities. Of the nominations submitted in 2007, seven were for 2008 for a total of 11.535 tonnes. Of nominations for 2008, the QSC subcommittee recommended five, with two recommended at less than the full amount nominated, for a total of 3.952 tonnes. The Methyl Bromide Technical Options Committee had been unable to assess one nomination for 2008 and had not recommended approval of one nomination. Of the 2007 nominations nine were for 2009, for a total of 529.721 tonnes. Of the nominations for 2009 the subcommittee had recommended eight, with four recommended at less than the full amount nominated, for a total of 476.017 tonnes. The subcommittee

had been unable to assess one nomination. She reported that the nominations submitted in 2007 reflected considerable success in adoption of alternatives in the sector. In the 2006 round, for example, there had been 28 structural nominations for the sector and in commodities there had been 16.

122. In discussing the interim critical-use nomination results, the subcommittee had reported that it had been unable to assess nominations that had not reported on research or demonstrated the adoption of alternatives. The Committee had adjusted quantities to standard dosage rates, based on European Plant Protection Organization standards. It had recommended less than nominated amounts when low adoption rates were shown despite availability and commercial adoption of alternatives in the nominating Party's region and similar industries elsewhere.

123. The subcommittee had reported steady progress in adoption of alternatives for virtually all QSC methyl bromide uses. The impact on pest control of the recent deregistration of some alternatives in the cereal and milling sector, however, was unknown. Some sectors were indicating zero or very slow phase-out with resulting potential methyl bromide use for a further five—eight years. Lack of regulatory approval of technically effective alternatives in some regions continued to delay adoption of alternatives.

124. In the ensuing discussion, all Parties thanked the Committee for its hard work. Two representatives offered clarifications regarding what they considered to be erroneous information contained in the slides used during the presentation in respect of their countries.

125. Responding to concerns raised by one representative with regard to the apparent stagnation in the reduction of critical use exemptions, another of the co-chairs said that there was still cause for optimism and that the Committee was generally satisfied with the considerable success achieved to date. Although very few applications remained for which there were no feasible alternatives, the adoption of alternatives had been hindered in many instances by lack of registration, logistical issues and investment problems. It was hoped that such obstacles would increasingly be resolved and that the positive trend would continue.

A. Review of nominations for critical-use exemptions for methyl bromide for 2008 and 2009

126. Introducing the sub-item, the Co-Chair noted that the 2008 and 2009 nominations for critical use exemptions had been covered in the presentation of the Methyl Bromide Technical Options Committee and that the Committee's views could also be found in the TEAP 2007 progress report and in a summarized form in the Secretariat's note on issues for discussion by the Working Group (UNEP/OzL.Pro.WG.1/27/2). The Working Group agreed that Parties would follow the practice adopted at previous meetings and merely raise questions on the TEAP report rather than debate individual nominations, which Parties would take up with the Committee through bilateral discussions.

127. During the ensuing discussion, many representatives expressed their gratitude to TEAP for its work. Some speakers drew attention to the progress that they and other Parties had made in eliminating the use of methyl bromide and reducing stockpiles of the substance. They observed that their success demonstrated that alternatives were available for a wide range of uses and that there was therefore ever less reason to grant critical use exemptions to Parties. They also expressed concern that some Parties had been relatively slow in phasing in alternatives and phasing out and eliminating in particular pre-2005 stockpiles of methyl bromide. Other representatives noted the importance of transparency in the use of stocks, the need to restrict stocks to critical uses and the need to take all stocks into account in approving critical use nominations. The desire for more information from the Panel on the basis for their meta analysis was also expressed.

128. Several representatives noted the need for robust national strategies to be updated and the representative of the European Community expressed the hope that other countries would do as the member States of her organization were doing and update their strategies regularly to make them living documents. One representative suggested that the countries that were making relatively little progress should submit reports on the measures that they were adopting to address the situation as an element to be taken into account by the Nineteenth Meeting of the Parties. Another stressed that the consideration of nominations should be based on the best possible scientific information. In that regard, he stressed that given the total phase-out of methyl bromide in many countries, TEAP should provide much more robust justifications for the continued granting of exemptions in the future and suggested that the Panel should look at the facts each year and make independent judgments without considering the political decisions taken by the Parties in granting exemptions in previous years. In contrast, other representatives said that they were unsure why they had not received recommendations for exemptions

in sectors where they had been awarded previously, despite no apparent changes in their circumstances. Several delegations called for more time to consider the findings of the Methyl Bromide Technical Options Committee. Another representative called for non-Article 5 countries to invest more in research and development to identify alternatives. The representative of Australia clarified that the amount of rice to be treated with methyl bromide in 2008 in his country was 261,300 tonnes, meaning that the full supplementary amount of 1.8 tonnes of methyl bromide approved by the Eighteenth Meeting of the Parties would be required. The co-chair of the Methyl Bromide Technical Options Committee confirmed that Australia had provided that clarification to the Committee.

129. In response to a question regarding surplus stocks, one of the co-chairs explained that practices for dealing with stocks differed among Parties, but some did take surplus stocks from previous years into account when calculating the quantities to be included in their nominations for a given year.

130. The Co-Chair noted that bilateral discussions would take place between the Parties and the Panel on outstanding issues.

B. Report on quarantine and pre-shipment definitions and contacts with the International Plant Protection Convention relative to quarantine and pre-shipment matters (decision XVIII/14)

131. In introducing the sub-item, the Co-Chair recalled that decision XVIII/14 had requested TEAP to cooperate with the technical bodies of the International Plant Protection Convention and to report to the Open-Ended Working Group at its twenty-seventh meeting on contacts it had made with those bodies, with a view to coordinating work in several areas. The decision had also requested the Secretariat to provide factual information on the definitions of quarantine and pre-shipment under the Protocol and the International Plant Protection Convention. The TEAP 2007 progress report contained an update on the contacts the Panel had made pursuant to the decision. The Secretariat had also prepared a paper on the definitions of quarantine and pre-shipment in cooperation with members of the TEAP Quarantine and Pre-Shipment Task Force, which was contained in document UNEP/OzL.Pro.WG.1/27/5.

132. In the ensuing discussion, one representative said that to curb the increased use of methyl bromide in quarantine applications, there was an urgent need for more detailed definitions of quarantine activities. He also stressed the need for technical assistance to be provided to Article 5 countries wishing voluntarily to reduce or entirely phase out the use of methyl bromide in quarantine applications.

133. Another representative noted that the Secretariat's paper would form a useful basis for future discussions. The importance of Parties reporting fully on the situations in their countries was stressed. One representative said that the use of methyl bromide in quarantine and pre-shipment applications urgently needed to be reduced by allowing a greater number of alternatives under ISPM 15 and encouraging Parties to remove registration obstacles to their use.

134. The representative of a non-governmental organization urged Parties to introduce a cap on methyl bromide use in quarantine and pre-shipment activities and said that continued cooperation between the bodies of the Montreal Protocol and the International Plant Protection Convention should be encouraged, as there were very considerable potential mutual benefits.

135. The co-chair thanked the Committee and the Secretariat for their work on the issue and said that the meeting report would take note of it.

C. Report on the development of alternative procedures for laboratory and analytical applications currently using methyl bromide (decision XVII/10)

136. In introducing the sub-item, the Co-Chair recalled that decision XVII/10 had requested TEAP to report in 2007 and every other year thereafter on the development and availability of laboratory and analytical procedures that could be performed without using the controlled substance in Annex E of the Protocol. The Working Group took note of the TEAP report on the matter and agreed that the issue would be considered in the future in accordance with the timetable included in decision XVII/10.

D. Multi-year exemptions for methyl bromide use (Report of the Eighteenth Meeting of the Parties to the Montreal Protocol (UNEP/OzL.Pro.18/10), para. 94)

137. Introducing the sub-item, the Co-Chair recalled that the issue of agreeing criteria for the approval of multi-year critical use exemptions had been considered by the Fifteenth and Sixteenth

Meetings of the Parties and that with decision XVI/3 the Parties had agreed that the Seventeenth Meeting of the Parties would elaborate a framework for extending exemptions over more than one year. He further recalled that one Party had requested that consideration of the issue be postponed until the current meeting. The representative of that Party said that while his Party recognized the value of multi-year exemptions, it was currently engaged in a considerable amount of domestic regulatory activity to address methyl bromide use and would therefore prefer that consideration of the issue be further deferred until the following year. The Working Group accordingly agreed to defer consideration of the matter until the 2008 meeting of the Open-ended Working Group.

E. Options for preventing harmful trade in methyl bromide stocks to Article 5 Parties (Report of the Eighteenth Meeting of the Parties to the Montreal Protocol (UNEP/OzL.Pro.18/10), para. 97)

138. Introducing the sub-item, the Co-Chair recalled that pursuant to decision Ex.I/4, the Working Group had considered, at its twenty-sixth meeting, a report by TEAP on options that the Parties might wish to consider for preventing trade in methyl bromide stocks that was harmful to Article 5 Parties as consumption was reduced in non-Article 5 Parties. He noted that the Eighteenth Meeting of the Parties had agreed that the matter should be discussed at the current meeting.

139. One representative presented a draft decision on the issue that had been prepared by his delegation and ten others and had been circulated as a conference room paper. There was consensus that the issue was one of great importance, and several representatives expressed interest in the proposed text and said that they would like to collaborate to produce a revised draft that would be acceptable to the entire Working Group. The Working Group agreed that interested Parties should discuss the matter in the margins of the meeting and seek to develop a mutually satisfactory text.

140. The representative of Kenya subsequently reported to the Working Group that some of the interested parties had contacted the proponents of the draft decision and confirmed their support for the proposal. No other comment had been received. The Working Group then agreed to forward the draft decision, as set out in annex I to the present report (section B), to the Nineteenth Meeting of the Parties for its consideration. One representative noted, however, that the draft decision should not be considered approved, as her delegation had many important issues regarding the proposal that still needed to be discussed.

VI. Review of the deferral of consideration by the Implementation Committee and the Meeting of the Parties of the carbon-tetrachloride compliance status of Parties operating under Article 5 which provide evidence that their deviations are due to the use of that chemical for analytical and laboratory processes (decision XVII/13).

141. The Co-Chair recalled that by its decision XVII/13, the Meeting of the Parties had deferred consideration of non-compliance by Article 5 Parties using carbon tetrachloride in instances where such Parties had provided evidence that the substance had been used for laboratory and analytical uses. She added that since the adoption of that decision, three Parties had made use of the provision and that the deferral was due for review in 2007.

142. In the ensuing discussion, one representative observed that two of the three Parties that had reported use of carbon tetrachloride for laboratory and analytical use had consumed sufficiently small quantities that, even in the absence of the deferral, they would not have breached the Protocol's compliance rules. He urged the Parties to avoid devoting time to consideration of such cases. Another representative said that his country used carbon tetrachloride for specific laboratory and analytical purposes for which it was currently very hard to find an alternative. She therefore suggested that she would request an extension of the deferral.

143. The Working Group agreed that Parties that desired an extension of the deferral should present a draft decision to that effect to the Nineteenth Meeting of the Parties.

VII. Future of the laboratory and analytical use exemption (decision XV/8)

144. Introducing the item, the Co-Chair recalled that in decision XV/8, the Parties had agreed to extend the laboratory and analytical essential use exemption until 31 December 2007. He noted that two draft decisions had been prepared on the issue.

145. The representative of the European Community introduced his organization's draft decision, which had been circulated in a conference room paper and which proposed extending the exemption until 31 December 2009 in view of the difficulties faced by some users in implementing alternatives.

146. The representative of the United States of America introduced a draft decision prepared jointly by his delegation, Japan, Canada, Australia and New Zealand, which had also been circulated in a conference room paper. The proposed decision called for a longer extension and also called on TEAP to report on the matter in its quadrennial assessment report rather than on an annual basis.

147. The Working Group agreed that the co-sponsors of both draft decisions would address the matter further in informal consultations, with a view to it being considered further by the Nineteenth Meeting of the Parties. The Working Group also agreed to forward the draft decisions submitted by the European Community and by the United States, Japan, Canada, Australia and New Zealand, as set out in annex I to the present report (sections L and M, respectively), to the Nineteenth Meeting of the Parties for its consideration.

VIII. Need for a study on the 2009–2011 replenishment of the Multilateral Fund for the Implementation of the Montreal Protocol

148. Introducing the item, the Co-Chair recalled that since 1990 the Multilateral Fund for the Implementation of the Montreal Protocol had worked on the basis of three-year funding cycles, with the last replenishment decision in 2005 covering the period 2006–2008. It had been the custom of the Parties, in the year prior to each replenishment decision, to develop terms of reference for a study on the upcoming replenishment. Accordingly, the matter was due for consideration in the current year in preparation for the 2008 replenishment decision, which would cover the period 2009–2011.

149. During the ensuing discussion, there was unanimous support for a study on the replenishment of the Fund. Several representatives noted that the Fund had been a key factor in the success of the implementation of the Montreal Protocol and had been of particular assistance to Article 5 Parties in the implementation of country programmes. Appropriate replenishment of the Fund was crucial given the significant challenges that remained in the period up to and following 2010. Some representatives said it would be useful for the study to provide Parties with indicative requirements for potential replenishment periods beyond 2011, where possible. Other suggestions for matters to be considered by the study included coordination with other financial mechanisms, and destruction and bank management, though one representative said that it might be advisable to wait for the results of a study by the Fund Secretariat on the latter issue.

150. One representative noted the special needs of Pacific island States, which had made significant progress in developing legislation and licensing systems and in the training of customs officers but needed further assistance with disposal of end-of-life equipment and other solid waste and contaminated materials, further officer training and reformation of the Pacific Islands Network for Action on Climate Change 2006–2015.

151. It was agreed that a contact group, co-chaired by Mr. David Omotosho (Nigeria) and Mr. Josef Buys (Belgium), would be set up to consider the matter further.

152. Following the contact group's deliberations, the group's co-chairs reported to the Working Group that the members of the group had agreed on all issues except those relating to the scenarios for the costs of the implementation by Article 5 Parties of the proposed adjustments in the Protocol's HCFC phase-out schedule and the results of the study being undertaken by the Executive Committee pursuant to decision XVIII/9, as well as the future rules and guidelines for determining eligibility for the funding of projects.

153. Reflecting the state of its deliberations, the contact group had prepared a draft decision for the consideration of the Working Group with square brackets around text on which it had not been able to reach agreement. The Working Group agreed to forward the draft decision, as set out in annex I to the present report (section C), to the Nineteenth Meeting of the Parties for its consideration.

IX. Consideration of the request of the Executive Committee to change its terms of reference to modify if necessary the number of times that it meets

154. Introducing the item, the Co-Chair noted that the Executive Committee had made a request to change its terms of reference to modify the times it met to ensure flexibility in its arrangements to enable it to respond to fluctuations in its workload.

155. Several representatives spoke in favour of allowing the Executive Committee to make its own meeting arrangements. One urged that any reduction in the number of the Committee's meetings should not be allowed to affect the smooth functioning of its work.

156. The Working Group agreed to discuss the matter in the contact group on replenishment of the Multilateral Fund.

157. Following the deliberations of the contact group, the co-chair of that group reported that it had reached consensus and agreed on a draft decision for the consideration of the Working Group. The Working Group agreed to forward the draft decision, as set out in annex I to the present report (section D), to the Nineteenth Meeting of the Parties for its consideration.

X. Compilation of Parties' comments on systems for monitoring transboundary movements of ozone-depleting substances (decision XVIII/18)

158. Introducing the item, the Co-Chair noted that in accordance with decision XVII/16 consultants had been hired to prepare a report on systems for monitoring ozone-depleting substances, which had been presented to the Eighteenth Meeting of the Parties. Decision XVIII/18 had invited Parties to submit their comments on the report to the secretariat by 31 March 2007. The Secretariat had received eight comments, which were set out in the annex to the note by the secretariat on the issue (UNEP/OzL/Pro.WG.1/27/6).

159. The representative of the European Community introduced a draft decision on preventing illegal trade in ozone-depleting substances through more effective systems for monitoring their transboundary movement between Parties. The draft decision, he said, had been inspired by a tracking study that had identified weaknesses in the monitoring of and data on illegal trade and had indicated cost-effective options for the short-, medium- and long-term to address them. He indicated a number of corrections that would be made to the draft decision and expressed his willingness to work with other Parties to finalize it.

160. Many representatives who spoke stressed the importance of establishing robust import and export licensing systems for ozone-depleting substances in those countries that had not yet done so and ensuring the effective implementation of such systems. Some expressed the belief that until those more basic requirements were met, the significant additional measures set out in the draft decision would pose an imposition and further burden for countries where resources were already lacking. One representative expressed the view that there was no need for further international measures but that national or regional measures could be considered when needed to address specific problems. In that regard, she noted, as did others, appreciation for activities being undertaken in the Asia Pacific Region, including Project Sky Hole Patching.

161. One representative highlighted the importance of strengthening the training of ozone officers and customs officers in the fight against illegal traffic. A number suggested that the draft decision should address such issues as funding and guidance for the appropriate disposition of seized ozone-depleting substances, trade in equipment containing CFCs and avoiding the illegal shipment of ozone-depleting substances disguised as alternatives to such substances. Some representatives raised concerns about the proposal's provisions related to containers and others suggested the need to consider its trade implications.

162. A representative of the Environmental Investigation Agency highlighted the work of that organization, which had been carrying out detailed research on the illegal trade in ozone-depleting substances since the mid-1990s. That research, he said, had revealed widespread smuggling operations and unscrupulous traders in CFCs. He noted that huge discrepancies had been found in data on declared trade between countries. Finally he noted new challenges facing the Parties, including illegal trade in

HCFCs and methyl bromide. Despite isolated successes, he suggested, there had been a general inertia in addressing illegal trade in a meaningful way and he therefore expressed his full support for the draft decision.

163. A number of other representatives also proposed amendments to the draft decision. The Working Group accordingly agreed to continue discussions on the matter in a contact group to be chaired by the representative of New Zealand.

164. The chair of the contact group gave an interim report on the group's progress. He noted that the group had already discussed operative paragraphs 1 to 4 and that a consensus was emerging on operative paragraphs 1 and 2, on implementation of Article 4B of the Protocol and the desirability of establishing a prior informed consent procedure for ozone-depleting substances, respectively. He indicated that group wished to continue working and that he expected that with another two hours of work it could complete at least a first run through all of the operative paragraphs of the draft decision. The Working Group accordingly asked the contact group to continue its efforts.

165. Upon completion of the contact group's work the group's chair reported that while the group had achieved a degree of consensus on the draft decision, it was the view of the group that the Parties would need to consider the draft decision further at the national level in view of the fact that some items might require the enactment of new or additional domestic administrative and industrial measures. Consultations between Parties, customs agencies and industrial interests might, therefore, be valuable. The Working Group agreed to forward the draft decision, as set out in annex I to the present report (section E), to the Nineteenth Meeting of the Parties for its consideration.

XI. Presentation of the summary of key issues arising from the dialogue on future challenges to be faced by the Montreal Protocol (decision XVIII/36)

166. Mr. Tom Land (United States of America), co-chair of the dialogue on future challenges to be faced by the Montreal Protocol, introduced a summary of the dialogue (UNEP/OzL.Pro/WG/27/7), highlighting areas of consensus and disagreement that had emerged during the two-day meeting, which had taken place over the weekend immediately preceding the current meeting. He noted that a full report of the dialogue would be available by the end of July so that the Parties could review the details of the dialogue at that time.

167. In the ensuing brief discussion on the presentation of the co-chairs, a representative of a Pacific small island developing State Party noted that his country had improved its compliance status in 2007 with the help of the Government of Germany and the Multilateral Fund. He requested the secretariat to review the particular national and regional requirements of Pacific countries and to provide technical assistance to those countries through the Multilateral Fund, in particular, for pilot projects on alternatives to HCFCs that were environmentally friendly.

168. A number of representatives pointed to the importance of cooperation and coordination between the Montreal Protocol and other multilateral environmental agreements. Most of the representatives who spoke congratulated the co-chairs of the dialogue for their excellent work and accurate summary. One representative suggested that adjustments to the Protocol should be focused on the compliance that still had to be carried out.

169. Extensive debate took place on a draft decision introduced by Australia, Canada, Japan and the United States of America on refining the institutional arrangements of the Protocol, and the Working Group agreed that the contact group considering the draft decision on the terms of reference for the next replenishment of the Multilateral Fund should take up that draft decision as well. There was further discussion of a draft decision introduced by Canada on the establishment of a multi-year agenda for the Meeting of the Parties. Both matters are discussed in chapter XIV, below, on other matters.

XII. Proposed areas of focus for the assessment panels' 2010 quadrennial reports (Article 6 and decision XV/53)

170. Introducing the item, the Co-Chair recalled that Article 6 of the Montreal Protocol called for a review, at least once every four years, of the control measures provided for in Article 2 and Articles 2 (A) to 2 (I) on the basis of available scientific, environmental, technical and economic information.

171. The Working Group agreed to request the Secretariat to coordinate with the assessment panels in preparing a draft proposal on the item for consideration by the Nineteenth Meeting of the Parties.

XIII. Discussion of any proposed adjustments to the Montreal Protocol

172. The Working Group had before it six proposals to adjust the Montreal Protocol with respect to the phase-out of HCFCs, which were set out in documents UNEP/OzL.Pro.WG.1/27/8/Rev.2 and Corr.1. Representatives of the Parties submitting those proposals – the Federated States of Micronesia; Mauritania; Mauritius; the United States of America; Argentina and Brazil, jointly; and Iceland, Norway and Switzerland, jointly – introduced the proposals, giving brief overviews of their salient points.

173. During the ensuing discussion, many representatives expressed their gratitude to the nine Parties that had produced the proposals before the Working Group, which they said had provided a very useful basis for the discussions. There was broad acceptance that there had been a very substantial increase in the production and consumption of HCFCs over recent years, particularly in Article 5 Parties, and that that represented a major problem. In the light of that concern and the widely recognized impact that ozone-depleting substances could have on climate change, many representatives affirmed that there was a clear need to accelerate the timetable for the phase-out of ozone-depleting substances, in particular HCFCs.

174. Opinions differed, however, on the precise timetable that should be agreed for freezing and phasing out HCFCs. Some representatives said that a past year, for which figures were already available, should be designated as the baseline and that allowing growth from that level was preferable, but others preferred designating a future date. Similarly, some representatives advocated accelerating the freeze and phase-out schedules but others recommended retaining the existing freeze and phase-out dates, albeit coupled with some interim reductions. Some countries voiced support for addressing those HCFCs with the greatest ozone-depleting potential first but others said that such a differentiated approach could create confusion and increase administration and compliance costs. Opinion also differed on whether exemptions to the phase-out of HCFCs should be allowed. One speaker supported introducing exemptions for HCFCs that were environmentally beneficial in that they helped conserve energy and thereby prevented climate change but others considered that allowing exemptions on the basis of what they termed such vague rationales was susceptible to abuse.

175. While acknowledging the desirability of an accelerated phase-out, several speakers counseled against imposing too heavy a burden on national industries, saying that it would be counter-productive. Efforts were needed, they said, to ensure that industry was a partner in the HCFC phase-out work. Many speakers underlined the need for the provision of financial and technical support to Article 5 Parties and others noted that further support was also needed in relation to identifying alternatives. One representative also suggested that UNEP could manage an HCFC database to facilitate the phase-out process.

176. There was also broad agreement that the Multilateral Fund would play a key role in assisting Article 5 Parties to achieve whatever targets were ultimately agreed and it was suggested that the issue should be considered in the context of forthcoming discussions on the replenishment of the Fund. Several representatives spoke of the need to amend the rules that prohibited the allocation of resources from the Multilateral Fund to facilities that had been established after July 1995 or had previously received Fund support for conversion to HCFCs, although one speaker said that those rules should not be altered.

177. In view of the breadth of views on the issue and its importance, the Working Group agreed to establish an open-ended contact group, co-chaired by Mr. Mikheil Tushishvili (Georgia) and Mr. Maas Goote (Netherlands), to consider the matter further. While acknowledging that the issues under discussion raised important legal concerns, including the potential that some of the proposals would necessitate amendments to the Protocol, it was agreed that the establishment of a legal working group would be deferred until a greater degree of consensus had been reached on the proposals.

178. In addition to the proposals discussed above, the representative of Kuwait introduced a draft decision calling for various measures concerning HCFCs in the light of the proposed adjustments to the HCFC phase-out schedule in the Montreal Protocol. Many representatives voiced their support for the proposal, although one expressed concern that it covered issues that were being dealt with by the contact groups addressing the acceleration of HCFC phase-out and financial matters. Other

representatives, however, disagreed, saying it addressed unique issues in a comprehensive manner and that it should therefore be considered. Another proposed various amendments to the draft text.

179. The Working Group agreed to forward the draft decision submitted by Kuwait, as contained in annex I to the present report (section A), to the Nineteenth Meeting of the Parties for its consideration, with the understanding that Parties could discuss possible changes to the draft decision during the intersessional period and would consider the matter more thoroughly in Montreal at the Nineteenth Meeting of the Parties.

180. Following the contact group's deliberations, Mr. Goote, speaking also on behalf of his fellow co-chair, reported that the members of the group had decided to base their discussions on a consolidated issues paper prepared by the group's co-chairs, which the co-chairs would revise to reflect the discussions in the contact group and which, the Working Group agreed, would be appended as an annex to the present report. He stressed that the issues paper was intended as an aid to deliberations on the issue and was not meant to prejudge any final conclusion. The group had further agreed that it would request the Working Group to include the present account of the group's deliberations in the body of the present report.

181. He emphasized that notwithstanding a general willingness to discuss the possible acceleration of the Protocol's HCFC phase-out schedule, several Parties had said during the group's discussions that they or their industries might face several difficulties with such a phase-out, including with respect to the availability and feasibility of alternatives and time constraints.

182. He then summarized the contents of the consolidated issues paper, which included four main options for establishing Parties' baselines and a set of options for the timing of the end of the phase-out of production and consumption and accompanying years and percentages. The group also included options for phasing out certain HCFCs faster than others, but it was acknowledged that this concept of "differentiation" would remain a point for discussion among the Parties. A related point of discussion reflected in the issues paper was that of exemptions. Members of the contact group exchanged views on essential use exemptions, including the need for them and their timing, on the concept of "superior environmental benefits", including its pros and cons, and the issue of co-benefits and the relationship between ozone layer and climate protection, which came up several times, including in the context of other issues.

183. The group looked forward to the results of the study being undertaken by TEAP pursuant to decision XVIII/12, which it felt would contain much information that would be important to the discussions on the issue. The group also agreed to recommend to the Working Group that it strongly encourage Parties and relevant organizations to share their analyses and calculations on the various scenarios for accelerated HCFC phase-out contained in the proposed adjustments of the Protocol and to provide that information to the Secretariat for posting on the Secretariat's website.

184. The group agreed too that it was important to bear in mind the distinction between adjustment and amendment of the Protocol and that currently the group's mandate and discussions related to the former only. The group discussed and refined options with respect to basic domestic needs before moving to issues of funding and finance. He noted that donor country representatives had made very encouraging remarks on those issues, with several underlining their countries' pragmatic and positive approach, and that those remarks had been welcomed by the representatives of Article 5 Parties. A final element in the consolidated issues paper related to the application of environmentally sound alternatives, as described in paragraph 7 of Article 2F of the Protocol. The group had discussed useful suggestions for extending the application and scope of that provision.

185. In closing, he expressed the group's view that the Parties had gained a better understanding of one another's views on the issue of HCFCs and said he was confident that the consolidated issues paper would constitute a sound basis for continued discussions on the proposed adjustments to the HCFC phase-out provisions of the Protocol.

186. The Working Group agreed to the recommendation made by the contact group that it strongly encourage and invite Parties and relevant organizations to share their analyses and calculations on the various scenarios for accelerated phase-out of HCFCs contained in the proposals to adjust the protocol and to send them to the Ozone Secretariat for posting on its website. It also agreed to forward the co-chairs' consolidated issues paper, as amended to reflect the discussions in the contact group, to the Nineteenth Meeting of the Parties as a starting point for its further consideration of the matter. It is set out in annex II to the present report.

XIV. Other matters

A. Change of status of Romania to that of a Party not operating under paragraph 1 of Article 5

187. The representative of the European Community introduced a draft decision submitted by his delegation on behalf of Romania. The draft decision requested that as Romania had become a new member State of the European Union it should be removed from the list of developing countries operating under paragraph 1 of Article 5 and should assume the obligations of a non-Article 5 Party. The Working Group agreed to forward the draft decision, as set out in annex I to the present report (section O), to the Nineteenth Meeting of the Parties for its consideration.

B. Arrangements for the Nineteenth Meeting of the Parties

188. The representative of Canada gave a presentation on arrangements for the Nineteenth Meeting of the Parties, which was to be held at the Palais des Congrès in Montreal from 17 to 21 September 2007, and the celebrations to mark the twentieth anniversary of the Montreal Protocol at that meeting. She reported that a seminar co-hosted by UNEP and Canada was to take place on 16 September and that more than 100 ministers were expected to participate. A science and technology showcase would also start on 16 September and a dinner would be held to celebrate International Ozone Day. She also reported that the high-level segment of the Nineteenth Meeting of the Parties was being scheduled for Monday, 17 September. She stressed that the meeting would be a green event with a minimal environmental footprint and she described logistical arrangements for the meeting and related side events and receptions. In closing, she expressed her Government's eagerness to welcome the Parties to her country.

C. World Environment Day

189. In honour of World Environment Day, Mr. Marco González launched the booklet "Ozzy goes polar", which was being simultaneously launched by Mr. Achim Steiner, Executive Director of the United Nations Environment Programme, in Norway and by others in Argentina, Costa Rica, Cuba and Mexico. He noted that in addition to being the International Year of the Ozone Layer under decision XVI/45, 2007 was also the International Polar Year and that in recognition of that fact, the booklet described how ozone depletion, climate change and persistent organic pollutants affected polar regions and how children and their families could contribute to alleviating the problems they caused. The booklet had been developed by UNEP/DTIE-OzonAction in conjunction with the International Polar Year programme office, the secretariats of the United Nations Framework Convention on Climate Change and the Stockholm Convention on Persistent Organic Pollutants, the Ozone Secretariat and UNEP GRID-Arendal. He then presented copies of the booklet to the Co-Chairs of the Working Group.

D. Presentation by the representative of Qatar on arrangements for the Twentieth Meeting of the Parties

190. The representative of Qatar gave a short presentation on progress made in preparations for the Twentieth Meeting of the Parties, which Qatar expected to host in 2008. Preparations included a recent coordination mission by the Executive Secretary of the Ozone Secretariat to Doha, where the meeting would take place. In closing, he expressed his Government's eagerness to welcome representatives of the Parties to his country and reaffirmed Qatar's offer to host the Meeting of the Parties in 2008.

E. Press kit

191. The representative of Argentina, referring to a comment that he had previously made on the press kit for the meeting, reported that he had discussed the issue with the secretariat and withdrew the issue from consideration.

F. Institutional matters

192. The representative of the United States of America introduced a draft decision on refining the institutional arrangements of the Montreal Protocol, submitted by Australia, Canada, Japan and the United States. He said that the different challenges facing Parties in the period following 2010 would

require a readjustment of the Montreal Protocol's institutional structures and that the draft decision was intended to help Parties make informed decisions in that regard.

193. During the subsequent discussion there was broad recognition of the need to refine the institutional arrangements of the Protocol at some point in time in response to changing circumstances. There were a variety of viewpoints, however, on how that might best be achieved and the time frame in which it should be carried out. Several representatives urged caution in considering proposals that might imply that the work of the Protocol was nearing completion, especially given the outcome of the dialogue, which had shown that much remained to be done regarding such issues as compliance, illegal trade and the phase-out of CFCs.

194. Several representatives expressed concern at a proposal to co-locate the administrative functions of the Ozone Secretariat, the Multilateral Fund secretariat and other ozone-related activities within UNEP, given the different mandates of the organizations involved. A number of representatives, noting the assistance received by Article 5 Parties under the UNEP Compliance Assistance Programme, were uneasy about institutional changes or cost-saving initiatives that might threaten the integrity of the programme. Rather than streamlining redundant functions, one representative suggested phasing them out when they had fulfilled their mandates. Several representatives said that while studies would be useful in guiding the future direction of the Protocol, it was currently premature to undertake such studies, as a number of outstanding issues needed to be resolved first.

195. The Working Group agreed that the contact group discussing the replenishment of the Multilateral Fund, when it had completed that work, would turn to consideration of the of the draft decision.

196. One of the co-chairs of the contact group gave an interim report on the group's deliberations on the draft decision. He said that although the group had agreed to a proposal to allow the Implementation Committee to meet for one additional day, it had been unable to reach agreement on anything else. It was felt by many in the group that the draft decision would have implications for many of the issues that had been raised during the dialogue on issues facing the Montreal Protocol that had been held over the weekend preceding the current meeting, that those issues would themselves need further discussion and that a draft decision of the sort being considered was therefore perhaps premature.

197. At the request of the Working Group the contact group continued its discussions on the draft decision, following which the co-chairs reported that although considerable progress had been made it would be necessary to have future discussions on the draft decision. The group, he said, had agreed that those discussions should include time for a general consideration of the background issues raised during the dialogue on issues facing the Protocol. One representative stressed that his Party was not in a position to support the draft decision. The Working Group then agreed to forward the draft decision, as set out in annex I to the present report (section F), to the Nineteenth Meeting of the Parties for its consideration.

G. Cooperation between the Ozone Secretariat and other multilateral environmental agreements

198. Mr. González, responding to an earlier question by a representative on the exchange of information between the Ozone Secretariat and the secretariats of other multilateral environmental agreements, referred the representative to a past report of the Secretariat (paragraph 53 of the note by the secretariat on issues for discussion by and information for the attention of the Meeting of the Parties (UNEP/OzL.Pro.18/2)), in which the Secretariat had sought guidance from the Parties on the request of the International Conference on Chemicals Management for information from the Parties to the ozone treaties. He also noted that two other instances in which the Parties to other multilateral agreements had apparently requested information from the Montreal Protocol regarding financial issues had never been brought to the attention of the Ozone Secretariat by those other agreements.

H. Montreal Declaration and the multi-year agenda for the Meeting of the Parties

199. The representative of Canada introduced a draft document entitled "Montreal Declaration". Noting that ozone-depleting substances had been pervasive in the world economy 20 years earlier, she stressed that two decades later, most of them had been eliminated and their complete phase-out was anticipated in the short term. The Montreal Protocol was generally hailed as a preeminent example of international cooperation, she said, and she expressed the view that a declaration in Montreal would

enable Parties to reaffirm their commitment to the Protocol and to highlight the many challenges that remained.

200. Another representative of Canada introduced a draft decision on the establishment of a multi-year agenda for the Meeting of the Parties to address key policy issues. The draft decision, he said, was intended to complement the draft Montreal Declaration and aimed to capture the key issues to be addressed by the Protocol that had emerged during the previous year and, in particular, during the recent dialogue on future challenges. He noted that Canada was open to other ideas for inclusion in the decision, and he noted the desirability of including an additional clause calling for consideration of ways to improve cooperation and collaboration with other multilateral environmental agreements.

201. The Working Group agreed to forward the draft decision, as set out in section G of annex I to the present report, and the Montreal Declaration, as set out in annex III to the present report, to the Nineteenth Meeting of the Parties for its consideration. It also agreed that intersessional work could continue on the two documents through an electronic dialogue.

I. Vacancies on the Scientific Assessment Panel

202. The Executive Secretary said that in May 2007 the Secretariat had received letters of resignation from two co-chairs of the Scientific Assessment Panel, Mr. Daniel Albritton and Mr. Robert Watson. He noted that as a result of their departure and the sad death of another co-chair, Mr. Gérard Mégie, there were three co-chair positions vacant on the Panel. He said that the Panel had recommended individuals for those positions and that their Governments had been contacted to discover whether they wished to make formal nominations.

203. The Working Group agreed that the appointment of new co-chairs for the Panel would be considered by the Nineteenth Meeting of the Parties.

J. Minute's silence in memory of Mr. Dunstan Sorhaindo

204. The Executive Secretary noted with regret the recent death of Mr. Dunstan Sorhaindo, the Ozone Officer of Antigua and Barbuda. He noted that Mr. Sorhaindo had been a founding member of the Network of English-speaking Caribbean Ozone Officers and had made a huge contribution to his regional network; his death was a great loss to the ozone family. The Working Group observed a minute's silence in his memory.

K. Distribution of handbooks on the Vienna Convention and Montreal Protocol on the occasion of the twentieth anniversary of the Protocol

205. The Executive Secretary informed the Working Group that the seventh edition of the handbooks for the Vienna Convention and the Montreal Protocol had been translated into all of the United Nations languages and that, on the occasion of the twentieth anniversary of the Montreal Protocol, copies in the relevant language versions would be sent to the main contact points of all Parties.

L. Remarks by the Executive Director of UNEP

206. Mr. Steiner congratulated the representatives present for their hard work in addressing issues pertinent to the successful implementation of the Montreal Protocol. He said that he was happy to learn that prior to the Working Group's current meeting the Parties had devoted two days to a dialogue on key futures challenges facing the Montreal Protocol, adding that he had no doubt that the Parties would agree on appropriate solutions to the challenges that had been identified. He said that he was encouraged by the technical analysis of the proposed accelerated HCFC phase-out plan, which indicated that alternatives were readily available for most uses and should be considered on the basis of their environmental soundness. He added that the accelerated phase-out of HCFCs, which were also greenhouse gases, would also bring climate benefits by reducing global warming potential.

207. Mr. Steiner paid tribute to the Government of Canada for offering to host the Nineteenth Meeting of the Parties and associated events to celebrate the twentieth anniversary of the Protocol in Montreal in September 2007. He said that the anniversary celebrations would afford Parties an opportunity to reflect on their accomplishments and future implementation of the Protocol. He also welcomed the offer by the Government of Qatar to host the Twentieth Meeting of the Parties in 2008.

XV. Adoption of the report

208. The present report was adopted on Thursday, 7 June 2007, on the basis of the draft report contained in documents UNEP/OzL.Pro/WG.1/27/L.1 and Add.1. The Ozone Secretariat was entrusted with the finalization of the report following the closure of the meeting.

XVI. Closure of the meeting

209. Following the customary exchange of courtesies, the twenty-seventh meeting of the Open-ended Working Group of the Parties to the Montreal Protocol was declared closed at 5.55 p.m. on Thursday, 7 June 2007.

Annex I

Draft decisions submitted by Parties at the twenty-seventh meeting of the Open-ended Working Group for consideration by the Nineteenth Meeting of the Parties

[...]

[The Meeting of the Parties decides:

A. Draft decision XIX/[]: Additional work on hydrochlorofluorocarbons

Acknowledging the six proposed adjustments by nine parties to the Montreal Protocol with regard to accelerating the phase-out of hydrochlorofluorocarbons (HCFCs) and the dual impact of such an adjustment on both saving the ozone layer and ameliorating the climate change problem,

Expressing appreciation for the work done by the Technology and Economic Assessment Panel and its technical options committees in analysing the global status of consumption, banks, emissions and technologies relative to HCFCs but noting that none of the latest reports of the Panel and its committees addresses in depth the level of alternate technology acceptance and promotion among Parties operating under paragraph 1 of Article 5 of the Protocol (Article 5 Parties),

Taking into consideration the difficulties faced by Article 5 Parties with regard to the production and consumption of HCFCs, particularly with respect to differences in sectoral uses, industries and related servicing sectors and the lack of time for the establishment of an effective HCFC management system,

1. To request the Technology and Economic Assessment Panel to conduct a detailed study addressing the prospects for the promotion and acceptance of alternatives to HCFC-using technologies in Article 5 Parties considering different uses and sectors and the associated costs under the accelerated phase-out scenarios, taking into consideration climatic, economic and social differences between Article 5 Parties;

2. To request the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol to consider at its forthcoming meetings during 2007 and 2008 funding additional projects for studying the situation of HCFC uses in Article 5 countries;

3. To request the Ozone Secretariat to organize an international workshop on the subject of available alternatives to HCFC-using technologies back to back with either the meeting of the Open-ended Working Group or the meeting of Parties taking place in 2008;

4. To request Parties to take into account all aspects of financial assistance, technical assistance and the transfer of technology and to address all HCFCs as one group with regard to any proposed adjustment.

B. Draft decision XIX/[]: Prevention of methyl bromide trade that is harmful to Parties operating under paragraph 1 of Article 5

Noting with appreciation the report prepared by the Technical and Economic Assessment Panel in accordance with paragraph 9 of decision Ex.I/4, which discusses options for preventing potential harmful trade of methyl bromide stocks with Parties operating under paragraph 1 of Article 5 as consumption is reduced in Parties not so operating,

Recognizing that the Technology and Economic Assessment Panel defines harmful trade as any trade that adversely impacts the implementation of control measures by any Party, allows backsliding from the implementation of alternatives to methyl bromide already achieved or is counter to the domestic policy of either an importing or exporting Party,

Acknowledging that methyl bromide in Parties operating under paragraph 1 of Article 5 originates from stockpiles in Parties not so operating, from production in the latter Parties to meet the

basic domestic needs of Parties operating under paragraph 1 of Article 5 or from production and stockpiles in Parties operating under paragraph 1 of Article 5;

Noting with appreciation the significant achievements of Parties operating under paragraph 1 of Article 5 reported in 2007 by the Methyl Bromide Technical Options Committee, which indicated that showed 80 per cent of such Parties consumed less than 50 per cent of their national baseline amounts in 2005 and that 47 out of 95 such Parties that consumed methyl bromide had achieved zero consumption by 2005;

Recognizing that the Methyl Bromide Technical Options Committee reported in 2007 that methyl bromide consumption was 9,285 metric tonnes in Parties operating under paragraph 1 of Article 5 in 2005, that such Parties reported production of 538 metric tonnes in 2005 and that imports for basic domestic needs equalled 8,735 metric tonnes, which is equivalent to 13 per cent of the basic domestic needs production rights of Parties not operating under paragraph 1 of Article 5;

Acknowledging that, in the light of the achievements and production and consumption figures described above, the amount of basic domestic needs production currently permitted in Parties not operating under paragraph 1 of Article 5 of 80 per cent of their 1995–1998 average production significantly exceeds the import requirements of Parties operating under paragraph 1 of Article 5;

Mindful that the progress in the reduction and phase-out of methyl bromide in Parties operating under paragraph 1 of Article 5 could be undermined by harmful trade, resulting in their increased methyl bromide consumption and further damage to the ozone layer,

1. To request Parties not operating under paragraph 1 of Article 5 to put in place procedures that may lead to the accurate quantification of stocks and reporting on them to the Ozone Secretariat so that any stocks exported are designated specifically for quarantine and preshipment uses or to meet the critical use needs of eligible Parties;

2. In order to satisfy the basic domestic needs of Parties operating under paragraph 1 of Article 5, to consider adopting at the Twentieth Meeting of the Parties an adjustment to Article 2H of the Protocol to provide that the quantity of methyl bromide that may be produced by Parties not operating under paragraph 1 of Article 5 shall be limited to 15 per cent of their annual average methyl bromide production for the period 1995–1998 inclusive;

3. To request Parties operating under paragraph 1 of Article 5 to inform the Ozone Secretariat in September of each year of their expected total methyl bromide imports in metric tonnes for the following year, indicating the amounts for quarantine and preshipment and non-quarantine and preshipment uses, using the format for reporting such information set out in the annex to the present decision, and to request the Secretariat to publish the information reported in accordance with the present decision on its website as a guide to potential exporters and importers;

4. To encourage Parties operating under paragraph 1 of Article 5 to put in place further practices to prevent the import of methyl bromide in an amount that exceeds expected demand.

Annex to decision XIX/[]

Format for reporting by Parties operating under paragraph 1 of Article 5 of expected total methyl bromide imports in metric tonnes in accordance with paragraph 3 of decision XIX/[]

[Name of Party] expects to import approximately [x] metric tonnes of methyl bromide for quarantine and preshipment uses and [y] metric tonnes for non-quarantine and preshipment uses in [year], which is below the quantity authorized by the Parties to the Montreal Protocol and consistent with its methyl bromide national phase-out plan.

C. Draft decision XIX/[]: Terms of reference for the study on the 2009–2011 replenishment of the Multilateral Fund for the Implementation of the Montreal Protocol

Recalling decisions VII/24, X/13, XIII/1 and XVI/35 on previous terms of reference for studies on the replenishment of the Multilateral Fund,

Recalling also decisions VIII/4, XI/7, XIV/39, and XVII/40 on previous replenishments of the Multilateral Fund,

1. To request the Technology and Economic Assessment Panel to prepare a report for submission to the Twentieth Meeting of the Parties, and to present it through the Open-ended Working Group at its twenty-eighth meeting, to enable the Twentieth Meeting of the Parties to take a decision on the appropriate level of the 2009–2011 replenishment of the Multilateral Fund. In preparing its report, the Panel should take into account, among other things:

(a) All control measures and relevant decisions agreed by the Parties to the Montreal Protocol and the Executive Committee, including decisions agreed by the Nineteenth Meeting of the Parties and the Executive Committee at its fifty-third and fifty-fourth meetings, insofar as those decisions will necessitate expenditure by the Multilateral Fund during the period 2009–2011, [in addition, the Panel's report should include scenarios which indicate [eligible incremental] costs [and cost-efficiencies] associated with implementation by Parties operating under paragraph 1 of Article 5 of the proposed adjustments and decisions relating to HCFCs] [and of possible measures resulting from the study conducted by the Executive Committee pursuant to decision XVIII/9, paragraph 2] [, should a compliance measure implementing one or more of these measures be adopted at the Nineteenth Meeting of the Parties,] and indicative funding requirements beyond 2011, to the extent possible;

(b) The need to allocate resources to enable all Parties operating under paragraph 1 of Article 5 to maintain compliance with Articles 2A–2I of the Montreal Protocol and possible new agreed compliance measures relevant to the period 2009–2011 under the Montreal Protocol;

(c) Agreed [and future] rules and guidelines for determining eligibility for funding of investment projects (including those in the production sector), non-investment projects and sectoral or national phase-out plans;

(d) Approved country programmes;

(e) Financial commitments in 2009–2011 relating to national or sectoral phase-out plans agreed by the Executive Committee;

(f) The provision of funds for accelerating phase-out and maintaining momentum, taking into account the time lag in project implementation;

(g) Experience to date, including limitations and successes of the phase-out of ozone-depleting substances achieved with the resources already allocated, as well as the performance of the Multilateral Fund and its implementing agencies;

(h) The impact that the international market, ozone-depleting substance control measures and country phase-out activities are likely to have on the supply and demand for ozone-depleting substances, the corresponding effects on the price of ozone-depleting substances and the resulting incremental costs of investment projects during the period under review;

(i) Administrative costs of the implementing agencies and the cost of financing the secretariat services of the Multilateral Fund, including the holding of meetings;

2. That, in undertaking this task, the Panel should consult widely with all relevant persons and institutions and other relevant sources of information deemed useful;

3. That the Panel shall strive to complete its work in time to enable its report to be distributed to all Parties two months before the twenty-eighth Meeting of the Open-ended Working Group;

D. Draft decision XIX/[]: Revision of the terms of reference of the Executive Committee

To amend paragraph 8 of the terms of reference of the Executive Committee, as modified by the Ninth Meeting of the Parties in Decision IX/16 and the Sixteenth Meeting of the Parties in Decision XVI/38, to read:

“8. The Executive Committee shall have the flexibility to hold two or three meetings annually, if it so decides, and shall report at each Meeting of the Parties on any decision taken there. The Executive Committee should consider meeting, when appropriate, in conjunction with other Montreal Protocol meetings.”

E. Decision XIX/[]: Preventing illegal trade in ozone-depleting substances through more effective systems for monitoring their transboundary movement between Parties

Acknowledging the need for action to prevent and to minimize illegal trade in controlled ozone-depleting substances and the importance of this issue in continuing discussions on the future of the Protocol,

Mindful of decision XVIII/18, which requested the Parties to provide written comments on the report, entitled “ODS Tracking Feasibility Study”, on developing a system for monitoring the transboundary movement of controlled ozone-depleting substances between Parties and requested the Ozone Secretariat to provide a compilation of such comments to the Nineteenth Meeting of the Parties in 2007,

Noting with appreciation the comments of the Parties on the medium- and longer-term options put forward in the ODS Tracking Feasibility Study,

[Noting other initiatives that could be used in the monitoring of the transboundary movements of controlled ozone-depleting substances between Parties, [notably the Globally Harmonized System of Classification and Labelling of Substances and Mixtures (GHS)], [and Public-Private Partnerships in preventing illegal trade];]

Acknowledging that an important first step toward effective monitoring of transboundary movements of ozone-depleting substances between Parties would be better implementation and enforcement of existing mechanisms, notably improving the effectiveness of licensing systems for the control of imports, exports and re-exports, as called for in Article 4B of the Protocol[,] [and] improved cross checking of reported data[and public-private partnerships in preventing illegal trade],

1. To urge all Parties to implement fully Article 4B of the Protocol by establishing and implementing a system for licensing the import and export of controlled ozone depleting substances as well as recommendations contained in existing decisions of the Parties, notably decisions IX/8, XIV/7, XVII/12, XVII/16 and XVIII/18;

2. To encourage all Parties [, consequent to meeting the requirements in paragraph 1.] to [consider]put[ting] in place, if appropriate, a[n informal] prior informed consent system [on a voluntary basis] [to support the regulation] [towards the regulation] [of controlled substances] [especially for chlorofluorocarbons, halons, carbon tetrachloride and 1,1,1- trichloroethane (TCA) and mixtures containing those substances] [based on the experience of the one used in South and South-East Asia];

3. [To encourage all relevant Parties to strengthen the informal prior informed consent system as already introduced in South and South-East Asia and to put in place the same system in other regions,] [if appropriate] [on a voluntary basis];

[4. To [request] [encourage] Parties to [consider] includ[e][ing] in their ozone-depleting substances import/export licensing systems [import quotas] [, as appropriate,] for all controlled ozone-depleting substances, permits for each shipment of such substances and the obligation for importers and exporters to report on the use of such permits;]

[5. To [request] [encourage] Parties to [consider monitoring] [include] transit movements (trans-shipments) of ozone-depleting substances and shipments of ozone-depleting substances through duty free zones [in their ozone-depleting substances licensing systems or to apply to such movements some monitoring mechanism such as a unique consignment reference number];]

[6. To request the Ozone Secretariat to examine[, without further financial implications,] the possibility of putting in place mechanisms for cross checking import and export data and, where important discrepancies are established, establishing independent auditing;]

7. [To request the Ozone Secretariat to report in a timely basis the information received on trade and export under Decision XVII/16... and encourage Parties to use this information to track and cross-check imports and exports of ODS and take appropriate action ...]

[8. To encourage Parties to consider regulating the use of non-refillable containers that contain controlled ODS;]

[9. To request Parties to ban the use of non-refillable containers that contain controlled ozone-depleting substances]

10. To request [encourage] Parties to [consider] establish[ing] [the following minimum requirements] [labeling and documentation systems] for shipments of [controlled] ozone-depleting substance containers:

(a) That each container containing 10 kg or more of ozone-depleting substances or ozone-depleting substances-containing mixture may be shipped only if accompanied by:

- (i) Certificate of conformity issued by the final exporter;
- (ii) Technical specifications issued by the producer containing, inter alia: chemical name, American Society of Heating, Refrigeration and Air-conditioning Engineers (ASHRAE) designation and trade name of the ozone-depleting substances (or composition and ASHRAE designation of ozone-depleting substances-containing mixture) and the purity data of the ozone-depleting substances or ozone-depleting substances-containing mixture;

(b) [That the label of each such container contain, inter alia, the name, address and telephone/fax number of the producer and chemical name using the Globally Harmonized System, if appropriate, ASHRAE designation and trade name of the ozone-depleting substances (or composition and ASHRAE designation of the ozone-depleting substances-containing mixture)] [That the label of each such container shall contain, among other things, the chemical identification, the supplier's identity and the standardized label elements to be designated for the ozone-depleting substance contained therein under the Globally Harmonized System, if applicable, ASHRAE designation and trade name of the ozone-depleting substance (or composition and ASHRAE designation of the ozone-depleting substance containing mixtures)];

(c) [That Parties are free to consider consignments not corresponding to these minimum requirements to be illegal];

[11. That if an illegal amount of ozone-depleting substances is seized, it should be destroyed through means of the technology recommended by the Parties;]

[12. That Parties operating under paragraph 1 of Article 5 of the Montreal Protocol will be able to obtain financial support from the Multilateral Fund for adopting measures regarding final disposal in cases in which seized ozone-depleting substances have no determined origin (illegal trade);]

[13. That Parties are encouraged to introduce measures listed under paragraph 10 of the present decision with regard to consignments of ozone-depleting substance substitutes, in particular HFC-134a, in order to avoid shipping controlled ozone-depleting substances under the names of such substitutes.]

F. Draft decision XIX/[]: Refining the institutional arrangements of the Montreal Protocol

[*Noting* the Scientific Assessment Panel's conclusion that actions taken under the Montreal Protocol have led to the projected recovery of the ozone layer to pre-1980 levels in this century,]

[*Recalling* that the report of the 2006 assessment of the Scientific Assessment Panel indicates that there are already measurable reductions in tropospheric and stratospheric levels of many ozone-depleting substances,]

[*Recalling* the initial results of the Parties' discussions on the future of the Montreal Protocol and recognizing the need to address the issues identified by the Parties to ensure the continued success of the Montreal Protocol and secure the future health of the ozone layer,]

[*Welcoming* the report of the Ozone Secretariat that by the end of 2005 the Parties to the Montreal Protocol had achieved an aggregate reduction in their consumption of all ozone-depleting substances of 95 per cent from the baseline levels established by the Montreal Protocol,]

[*Further welcoming* the fact that if all projects approved or to be approved by the Multilateral Fund within the next two years are implemented as agreed Parties operating under Article 5 of the Montreal Protocol will have achieved a 97 per cent reduction in the ozone-depletion potential value of ozone-depleting substances for which they currently have baselines,]

[*Congratulating* the global community for its considerable accomplishments in effectively addressing the problem of ozone depletion,]

[*Noting* that future replenishments of the Montreal Protocol's Multilateral Fund will reflect the sizable accomplishments already achieved under the Protocol and comparatively few remaining compliance obligations,]

[1. To support the Implementation Committee meeting up to one extra day per meeting, as needed, on a case-by-case basis, subject to the provision of sufficient funds;]

[2. To request the Ozone Secretariat to collect information on the frequency,[and] scheduling [and relative workload], [and speed of decision process] of meetings held by [Parties and subsidiary] bodies under the Stockholm Convention on Persistent Organic Pollutants, the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade, the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal and the United Nations Framework Convention on Climate Change[, including the Kyoto Protocol,] and to report this information to the Open-Ended Working Group at its next meeting;]

[3. To request the Technology and Economic Assessment Panel through the Ozone Secretariat to consult with the scientific bodies of the conventions mentioned in paragraph 2 in order to identify and seek measures to avoid the redundancy of chemicals appearing in more than one control list, and to report any information resulting from such consultations to the Open-ended Working Group at its next meeting;]

[4. To request the Ozone Secretariat, in consultation with the Multilateral Fund Secretariat, to compile a list of reporting requirements under the Protocol and requests for reporting included in decisions of the Parties, including the elements and timing of such reporting, to include the list in a document identifying any reporting that may be [under-reported, duplicative or] obsolete, [duplicative or under-reported], to identify opportunities for [improving reporting quality and compliance level, and] optimizing data reporting and collection between the Ozone Secretariat and the Multilateral Fund secretariat [, to identify possible needs for additional reporting] and to submit the document to the Open-Ended Working Group at its next meeting[, in order to enhance/improve the quality of reporting and to reduce the burden of reporting on Parties....];

[5. To request each of the Ozone Secretariat and the Multilateral Fund Secretariat (through the Executive Committee of the Multilateral Fund) to [develop] [propose] a business plan [discussion paper that identifies strategic priorities] that identifies its core functions that will be required both before 2010 and between 2010 and 2015[, taking into consideration, the challenges identified during the dialogue on future challenges facing the Protocol and rules, guidelines and decisions of the Nineteenth Meeting of the Parties], including an estimate of the [staffing and] monetary resources required to fulfil those functions, and to provide such plan to the Twentieth Meeting of the Parties;]

[6. To request the Ozone Secretariat to hire a contractor to analyse the administrative functions of the Ozone Secretariat, the Multilateral Fund Secretariat [and other ozone-related activities within the United Nations Environment Programme] and to identify potential opportunities for cost savings, reductions in overhead expenses and streamlining of redundant functions that might be achieved, including through co-locating the [three] [two] entities after 2010, for presentation to the

[Twentieth] [Twenty-first] Meeting of the Parties;]

[7. To request the Technology and Economic Assessment Panel to revise its annual progress reporting pursuant to decisions IV/13 and VII/34 so that reporting after 2007 responds only to specific requests from the Parties and recommendations on annual exemption programs;]

[8. To request the Scientific Assessment Panel, the Environmental Effects Assessment Panel and the Technology and Economic Assessment Panel to provide the Open-ended Working Group at its next meeting a work plan for procedures to develop the 2010 assessment and information on costs associated with producing their last two assessments (2002 and 2006);]

[9. To request the Ozone Secretariat to analyse and report to the Open-Ended Working Group at its next meeting on how the [typical] activities and functions after 2009 at annual Open-Ended Working Group meetings and at annual meetings of the Parties would be re-organized and divided if meetings of the Parties were held every two years, three years, and four years and Open-Ended Working Groups were held in each of the intervening years, and to identify potential cost savings associated with such revised meeting schedules[, taking into account the way that the work of the subsidiary bodies would be affected;]]

[10. To request the Ozone Secretariat to provide to the Open-ended Working Group at its next meeting a report on possible near-term measures to simplify procedures and operations, including:

(a) Consolidating the preparatory and high-level segments of the Meeting of the Parties into a single body, called the Meeting of the Parties, with a single agenda and set of officers;

(b) Scope for completion of draft reports of the meetings of the Open-ended Working Group by the Secretariat and the establishment of a process for receiving final comments from Parties;

(c) Encouraging the assessment panels and other committees to make wherever practicable even greater use of electronic and other modern means of communication, including teleconferencing, to avoid or reduce the need for, frequency and length of in-person meetings].

G. Draft decision XIX/[]: Establishment of a multi-year agenda for the Meeting of the Parties to the Montreal Protocol to address key policy issues identified by the Parties

Recalling that the Eighteenth Meeting of the Parties to the Montreal Protocol, in its decision XVIII/36, recognized the need to address key issues related to the future of the Protocol and its institutions and that those key issues were subsequently more fully discussed by the Parties during a two-day dialogue held just prior to the twenty-seventh meeting of the Open-ended Working Group, in Nairobi, Kenya,

Recalling the initial results of the Parties' discussions on the future of the Montreal Protocol and recognizing the need to address the issues identified by the Parties to ensure the continued success of the Montreal Protocol and secure the future health of the ozone layer,

To establish the following work-plan:

(a) Consider remaining production and consumption of ozone-depleting substances;

(b) Consider banks and stockpiles of ozone-depleting substances;

(c) Consider the resources and long-term stability necessary for a global programme of scientific observation and reporting on the status of the ozone layer;

(d) Consider the evolution of the work of the Multilateral Fund of the Montreal Protocol and its Secretariat;

(e) Consider the future need for and scope of the work of the subsidiary bodies of the Montreal Protocol, namely, the Technology and Economic Assessment Panel, the Scientific Assessment Panel and the Environmental Effects Assessment Panel;

(f) Consider the future management and [monitoring or oversight] of the Montreal Protocol and its key institutions including the Ozone Secretariat and the Implementation Committee;

- (g) Consider ways to maintain compliance and combat illegal trade.

H. Draft decision XIX/[]: Essential-use exemption for chlorofluorocarbon-113 for aerospace applications in the Russian Federation

Noting with appreciation the work done by the Technology and Economic Assessment Panel and its Chemicals Technical Options Committee,

Taking into consideration that adequate identified alternatives for chlorofluorocarbon-113 (CFC-113) do not currently exist for use in the aerospace industry of the Russian Federation and that the search for its alternatives continues, as confirmed in the 2006 assessment report of the Technology and Economic Assessment Panel and its Chemicals Technical Options Committee,

Noting the readiness of the Russian Federation to explore the possibility of importing CFC-113 for its aerospace industry needs from available global stocks in accordance with the recommendations of the Technology and Economic Assessment Panel and its Chemicals Technical Options Committee,

Also noting that the Russian Federation is ready to receive prior to February 2008 a small group of experts in replacing ozone-depleting substance solvents in the aerospace industry nominated by the Technology and Economic Assessment Panel and its Chemicals Technical Options Committee with the aim of evaluating the applications and recommending proven alternatives where possible,

1. To authorize the levels of production and consumption of CFC-113 in the Russian Federation for essential-use exemptions for chlorofluorocarbons in its aerospace industry in the amount of 140 metric tonnes in 2008;
2. To authorize the volume of 130 metric tonnes of CFC-113 nominated for 2009 by the Russian Federation provided that no alternatives are identified by the Technology and Economic Assessment Panel that can be implemented by 2009;
3. To request the Russian Federation to explore further the possibility of importing CFC-113 for its aerospace industry needs from available global stocks in accordance with the recommendations of the Technology and Economic Assessment Panel and its Chemicals Technical Options Committee.

I. Draft decision XIX/[]: Replacement of table A and table A bis in Relevant Process Agent Decisions

1. To adopt the table in the appendix to the present decision as a list of process agent applications to replace table A of decision X/14 as it was amended in decision XVII/7 and to replace table A-bis in decision XVII/8.

Appendix to decision XIX/[]

Table A List of uses of controlled substances as process agents

	Process	ODS
1	Elimination of NCl_3 in chlor-alkali production	CTC
2	Chlorine recovery by tail gas absorption in chlor-alkali production	CTC
3	Production of chlorinated rubber	CTC
4	Production of endosulfan	CTC
5	Production of ibuprofen	CTC
6	Production of dicofol	CTC
7	Production of chlorosulfonated polyolefin (CSM)	CTC
8	Production of aramid polymer (PPTA)	CTC
9	Production of synthetic fibre sheet	CFC 11

10	Production of chlorinated paraffin	CTC
11	Photochemical synthesis of perfluoropolyetherpolyperoxide precursors of Z-perfluoropolyethers and difunctional derivatives	CFC 12
12	Reduction of perfluoropolyetherpolyperoxide intermediate for production of perfluoropolyether diesters	CFC 113
13	Preparation of perfluoropolyether diols with high functionality	CFC 113
14	Production of cyclodime	CTC
15	Production of chlorinated polypropene	CTC
16	Production of chlorinated EVA	CTC
17	Production of methyl isocyanate derivatives	CTC
18	Production of 3-phenoxybenzaldehyde	CTC
19	Production of 2-chloro-5-methylpyridine	CTC
20	Production of imidacloprid	CTC
21	Production of bupropfenin	CTC
22	Production of oxadiazon	CTC
23	Production of chloradized N-methylaniline	CTC
24	Production of 1,3-dichlorobenzothiazole	CTC
25	Bromination of a styrenic polymer	BCM
26	Synthesis of 2,4-D (2,4- dichlorophenoxyacetic acid)	CTC
27	Synthesis of DEHPC (di-(2-ethylhexyl) peroxydicarbonate)	CTC
28	Production of radio-labelled cyanocobalamin	CTC
29	Production of high modulus polyethylene fibre	CFC 113
30	Production of vinyl chloride monomer	CTC
31	Production of sultamicillin	BCM
32	Production of prallethrin (pesticide)	CTC
33	Production of o-nitrobenzaldehyde (for dyes)	CTC
34	Production of 3-methyl-2-thiophenecarboxaldehyde	CTC
35	Production of 2-thiophenecarboxaldehyde	CTC
36	Production of 2-thiophene ethanol	CTC
37	Production of 3,5-dinitrobenzoyl chloride (3,5-DNBC)	CTC
38	Production of 1,2-benzisothiazol-3-ketone	CTC
39	Production of <i>m</i> -nitrobenzaldehyde	CTC
40	Production of tichlopidine	CTC
41	Production of <i>p</i> -nitro benzyl alcohol	CTC
42	Production of tolclofos methyl	CTC

J. Draft decision XIX/[]: Essential-use exemptions for chlorofluorocarbons for metered-dose inhalers for Parties not operating under paragraph 1 of Article 5 for controlled substances for 2008 and 2009

Noting with appreciation the work done by the Technology and Economic Assessment Panel and its Medical Technical Options Committee,

Mindful that, according to decision IV/25, chlorofluorocarbon use for metered-dose inhalers does not qualify as essential if technically and economically feasible alternatives or substitutes are available that are acceptable from the standpoint of environment and health,

Welcoming the continued progress in several Parties not operating under paragraph 1 of Article 5 in reducing their reliance on chlorofluorocarbon-containing metered-dose inhalers as alternatives are developed, receive regulatory approval and are marketed for sale,

1. To authorize the levels of production and consumption for 2008 and 2009 necessary to satisfy essential uses of chlorofluorocarbons for the production of metered-dose inhalers for asthma or chronic obstructive pulmonary disease specified in the annex [] to the present report;

2. That Parties not operating under paragraph 1 of Article 5 of the Montreal Protocol, when licensing, authorizing, or allocating essential-use exemptions for chlorofluorocarbons for a manufacturer of metered-dose inhalers for asthma or chronic obstructive pulmonary disease, shall take into account pre- and post-1996 stocks of controlled substances as described in paragraph 1 (b) of decision IV/25, such that no more than a one-year operational supply is maintained by the manufacturer.

Annex to decision XIX/[]

Essential-use authorizations for 2008 and 2009 of chlorofluorocarbons for metered-dose inhalers approved by the Nineteenth Meeting of the Parties (in metric tonnes)

Party	2008		2009	
	Amount nominated	Amount approved	Amount nominated	Amount approved
European Community	316	316		
Russian Federation	212	212		
United States of America			282	282

K. Draft decision XIX/[]: Possible future amendment of the Protocol regarding n-Propyl Bromide (n-PB)

Noting with appreciation the work done by the Technology and Economic Assessment Panel and its Chemicals Technical Options Committee in its 2007 progress report (decision XVIII/11),

Recalling that each Party has agreed under the Montreal Protocol to control the emissions of ozone-depleting substances with the objective of their phase-out,

Recalling that all Parties are encouraged under decision X/8 to discourage the production and marketing of new ozone-depleting substances,

Recalling that under decision X/8 Parties must take appropriate steps under the Protocol to ensure the control and phase-out of new substances that pose a significant threat to the ozone layer,

Recalling that decision XIII/7 requested Parties to urge industry and users to consider limiting the use of n-propyl bromide (n-PB) to applications for which more economically feasible and environmentally friendly alternatives were unavailable,

Taking into account that there is no yearly reporting by the Parties with respect to n-PB since n-PB is not a controlled substance,

Noting that the Technology and Economic Assessment Panel estimated in its 2007 progress report that annual production and consumption of n-PB for solvent uses could reach 20,000 metric tonnes and related emissions 10,000 metric tonnes and that it expected consumption and emissions to increase significantly in the future,

Noting further that the Technology and Economic Assessment Panel reported in 2001 in its "Task Force Report on Geographical Market Potential and Estimated Emissions of n-Propyl Bromide" that n-PB was aggressively marketed for applications traditionally using ozone-depleting substances and non-ozone-depleting substances,

Mindful that the Scientific Assessment Panel believes from its recent findings that very short-lived brominated substances make a significant contribution to total stratospheric bromine and its effect on stratospheric ozone and that significant production of such substances could exacerbate ozone depletion,

Bearing in mind that the ozone-depletion potential of n-PB is within the range of other substances that are already controlled under the Montreal Protocol,

Mindful that including any new substance in the Protocol would require an amendment of the Protocol and that proposals to amend the Protocol must be communicated to the Parties by the Ozone Secretariat at least 6 months in advance of the meeting of the Parties at which any such proposal is to be considered,

Considering that past amendments of the Protocol have covered packages of subjects rather than single measures,

1. To consider the inclusion of n-PB as a controlled substance in connection with the next upcoming amendment of the Protocol, irrespective of its date and content, and in the meantime to take the steps outlined in the following paragraphs;
2. To request Parties, in line with decisions IX/24 and X/8, to discourage the production and marketing of n-PB and to restrict the use of n-PB to those applications where other more environmentally suitable alternative substances or technologies are unavailable;
3. To request Parties to urge enterprises subject to their jurisdiction to apply responsible use practices as described by the n-PB task force in its 2001 report in cases where n-PB must be used, as far as technically and economically feasible,
4. To urge parties to report on their production and consumption of n-PB to the secretariat, fully aware that n-PB is not now a controlled substance under the Protocol but might become one in the near future;
5. To ask the Scientific Assessment Panel the Technology and Economic Assessment Panel to update their findings regarding n-PB in case of any relevant new development.

L. Draft decision XIX/[]: Laboratory and analytical use exemption

Noting with appreciation the work done by the Technology and Economic Assessment Panel and its Chemical Technical Options Committee,

1. To extend the global laboratory and analytical use exemption under the conditions set out in annex II of the report of the Sixth Meeting of the Parties and decisions XV/8 and XVI/16 until 31 December 2009;
2. To request the Technology and Economic Assessment Panel and its Chemical Technical Options Committee to provide, by the Twentieth Meeting of the Parties, a list of laboratory and analytical uses in which ozone-depleting substances in annexes A, B, and C (group II and group III substances) of the Protocol are used, indicating those uses for which ozone-depleting substances are no longer required and describing the possible alternatives for those uses.

M. Draft decision XIX/[]: Future of the laboratory and analytical use exemption (decision XV/8)

1. To extend the global laboratory and analytical use exemption as restricted by paragraph 6 of decision VII/II and by decision XI/15 under the conditions set out in annex II of the report of the Sixth Meeting of the Parties for the controlled substances in all annexes and groups of the Montreal Protocol except Annex C, group I, until 31 December [2015];
2. To request the Technology and Economic Assessment Panel to report in its quadrennial assessment on the development and availability of laboratory and analytical procedures that can be performed without using the controlled substances in all annexes and groups of controlled substances of the Protocol.

N. Draft decision XIX/[]: Assessment of new very short-lived halogenated substances

Recalling that the 2006 Technology and Economic Assessment Panel assessment report reiterated the suggestion of the Scientific Assessment Panel and the Technology and Economic Assessment Panel that the Parties consider phasing out all ozone-depleting substances pending full assessment by the panels,

Noting the conclusion of the Scientific Assessment Panel in its 2006 report that very short-lived halogenated substances are of greater importance to stratospheric ozone depletion than previously estimated and that ozone depletion could be enhanced by significant anthropogenic production of those substances,

Mindful of the option of including new substances in the Montreal Protocol,

Understanding the urgency and benefit of disseminating information on new substances that enables individual Parties to limit or ban the use of those substances as soon as possible,

Mindful that the upper-limit for the ozone-depletion potential of trifluoroiodomethane (CF₃I) was calculated to be 0.011-0.018 in the recent Scientific Assessment Panel report, which is higher by far than the previously published upper limit for surface emissions of 0.008 and is within the range of other substances that are already controlled under the Montreal Protocol,

Taking into account that despite decision X/8, which requested Parties to discourage the production and marketing of new ozone-depleting substances, CF₃I has already been introduced as a fire extinguishing agent for some applications and might gain importance in this area as well as in other areas like the refrigeration and mobile air-conditioning sector,

Considering that it is less costly to prevent the introduction of a new substance for new applications than to replace such a substance once introduced if necessary due to new scientific findings,

1. To request the Technology and Economic Assessment Panel and the Scientific Assessment Panel:
 - (a) To summarize the recent findings on the potential ozone-depleting potential of trifluoroiodomethane (CF₃I), 1,2-dibromoethane (EDB), bromoethane, and other anthropogenic very short-lived substances;
 - (b) To collect and evaluate information on current and possible future production, consumption, and emissions of such substances as far as possible;
 - (c) To assess whether the current and future emissions of such substances may pose a threat to the ozone layer, taking into account their current and possible future uses;
 - (d) To identify the information that is necessary for an overall evaluation of such substances with regard to their potential to cause ozone depletion;
 - (e) To differentiate, if necessary, between surface and altitude emissions when evaluating the potential ozone-depletion potential, current and future emissions and the possible effect on the ozone layer of such substances;
 - (f) To collect and evaluate information on products resulting from the breakdown of such substances that may or may not have negative environmental and/or health effects;
 - (g) To summarize the available information on toxicology of trifluoroiodomethane and other anthropogenic very short-lived substances and to identify any further information necessary for a comprehensive assessment of such substances;
2. To report its findings to the Parties at the twenty-eighth meeting of the Open-ended Working Group;
3. To urge Parties, in accordance with decision X/8, to report on their production and consumption of trifluoroiodomethane, 1,2-dibromoethane, bromoethane and other anthropogenic very short-lived substances to the secretariat;
4. To request the Secretariat, in accordance with decision XIII/5, to update the list of new ozone-depleting substances reported by Parties to reflect the information reported by Parties pursuant to the preceding paragraph;
5. To call on Parties, following application of decisions IX/24 and X/8, to discourage the production, marketing and use of trifluoroiodomethane and other very short-lived ozone-depleting substances as long as there is the possibility that such substances will pose a substantial threat to the ozone layer.

O. Draft decision XIX/[]: Request by Romania to be removed from the list of developing countries under the Montreal Protocol

1. To note the request by Romania to be removed from the list of developing countries operating under paragraph 1 of Article 5;

2. To approve the request by Romania and note further that Romania shall assume the obligations of a Party not operating under paragraph 1 of Article 5 of the Montreal Protocol from 1 January 2008.

Annex II

Co-chairs' consolidated issues paper on proposals for accelerated phase-out of HCFCs

7 June 2007

This paper has been prepared by the co-chairs of the contact group on the HCFC adjustment proposals, with a view to further facilitating the discussions on this topic. The paper aims to consolidate and pull together, not replace, the proposals made by Parties, and has been discussed and further elaborated by the contact group. It was agreed that the paper would serve as a basis and starting point for continued deliberations in Montreal, later this year. It was fully understood that the paper would be without prejudice to any final conclusions on this issue. The general concern of, and difficulties anticipated by, some Parties to accelerate the phase out are also reflected in the report of the OEWG.

Baseline and freeze

- To choose as the baseline
[the 2010 level]
[[152]% of the 200[5][6] level or the 2014 level, whichever is less]
[the average of 2010, 2011, and 2012]
[the 2015 level],
- and to freeze, at the baseline level, consumption and production in [2011][2012][2016].
- Prudent to allow for one or two years between baseline year and freeze year.

End of phase out of production and consumption, and the stepdowns

- For A2 Parties, to have completed the phase out of production in [2020][2025] and of consumption in [2020], and, for A5 Parties, to have completed the phase out in [2030][2035][2040], on the basis of

- ... reductions of consumption and production,

for A5 Parties, by 2020, of [35%][50%][65%]
by 2025, of [65%][80%][90%]
by 2030, of [95.5%],

and for A2 Parties by 2010, of [65%]
by 2015, of [90%][99.5%]
by 2020, of [99.5%]

- [³... reductions of consumption and production, for A5 Parties,

by 2015,	of 20%	HCFC 22, 141b, 142b
	of 10%	HCFC 123, 124
by 2020,	of 40%	HCFC 22, 141b, 142b
	of 20%	HCFC 21, 123, 124, 225
by 2025,	of 65%	HCFC 22, 141b, 142b
	of 30%	HCFC 21, 123, 124, 225
by 2030,	of 100%	HCFC 22, 141b, 142b
	of 40%	HCFC 21, 123, 124, 225
by 2035,	of 95%	HCFC 21, 123, 124, 225
by 2040,	of 100%	HCFC 21, 123, 124, 225
by 2009,	of 100%	of all other HCFCs]

³

“Worst first” scenario 1.

- [⁴ ... reductions of consumption,
- | | | |
|--------------------------|--------|----------------------|
| for A5 Parties, by 2020, | of 75% | HCFC 22, 141b, 142b |
| by 2025, | of 95% | HCFC 22, 141b, 142b |
| for A2 Parties by 2010, | of 75% | HCFC 22, 141b, 142b |
| by 2015, | of 95% | HCFC 22, 141b, 142b] |

Exemptions

- [To allow for essential use exemptions after phase out [to be decided at a later stage]]
- [The concept of ‘superior environmental benefits’, for example for HCFC 123, coupled with destruction offset]
- [To solicit TEAP studies on essential uses, on HCFC 123]

BDN

- [To allow for BDN of [15% of production][10% until 2020 and 1% after 2020]]
- [To allow for minor amount of BDN, and to solicit further TEAP information on supply and demand]

Funding/finance

- [Need for adequate financing, technical assistance and access to alternatives; To change current MLF-guidance on funding second conversion and facilities established post-1995 for both production and consumption sectors.]
- [Addressing incremental costs related to new obligations]
- [Difficulties with viable alternatives and economic feasibility]

Other issues

- [Make notions contained in Article 2F, paragraph 7, also applicable to A5 Parties, and consider extending its scope]

4

“Worst first” scenario 2.

Annex III

Montreal Declaration

The Parties to the Montreal Protocol,

Acknowledging with pride the historic global cooperation achieved over the past twenty years under the Montreal Protocol on Substances that Deplete the Ozone Layer to restore and protect the Earth's ozone layer, and noting in particular:

That the Montreal Protocol has made substantial and verified progress toward the recovery of the ozone layer and is recognized as one of the most successful multilateral environmental agreements,

That the success of the Montreal Protocol reflects unprecedented cooperation between developed and developing countries,

That the Montreal Protocol is founded on the full participation of the Parties and a commitment by developed countries to provide the means for developing countries to fully participate,

That the Montreal Protocol is underpinned by institutions providing scientific, economic, environmental and technical support informing policy making by Parties, as well as a financial institution, namely, the Multilateral Fund for the Implementation of the Montreal Protocol, and an effective compliance mechanism,

Recognizing that the ozone layer will require many decades to recover to pre-1980 levels and that its long-term protection is dependent on continued vigilance, dedication and action by the Parties to the Montreal Protocol,

Recognizing the importance of all Parties meeting their phase-out obligations and taking appropriate steps to prevent new ozone-depleting substances from threatening the ozone layer,

Noting that actions taken to protect the ozone layer have resulted in significant beneficial impacts on global atmospheric issues, notably climate change,

1. *Reaffirm* their commitment to phase out the consumption and production of ozone-depleting substances consistent with their Protocol obligations;
 2. *Agree* to strive for the earliest possible ratification of all of amendments to the Protocol;
 3. *Recognize* the critical role played by the provisions of Articles 5 and 10 of the Protocol in assisting developing countries and the importance of sustaining such assistance to help ensure the further phase out of ozone-depleting substances;
 4. *Agree* that protection of the ozone layer will require a long-term global commitment and will require a sustained level of scientific research, monitoring and vigilance.
-