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Twenty-Fifth Meeting of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer Bangkok, 21–25 October 2013

Report of the Twenty-Fifth Meeting of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer

Introduction

1. The Twenty-Fifth Meeting of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer was held at the United Nations Conference Centre in Bangkok from 21 to 25 October 2013. The meeting consisted of a preparatory segment, held from 21 to 23 October, and a high-level segment, held on 24 and 25 October.

Part One: preparatory segment (21–23 October 2013)

I. Opening of the preparatory segment

- 2. The preparatory segment was opened by its co-chairs, Patrick McInerney (Australia) and Javier Camargo (Colombia), on Monday, 21 October 2013, at 10.20 a.m.
- 3. Opening statements were delivered by the Deputy Director General of the Department of Industrial Works of the Ministry of Industry of Thailand, Chumpon Cheewaprapanunt, and the Executive Secretary of the Ozone Secretariat, Marco González.
- 4. In his statement, Mr. Cheewaprapanunt noted the contribution made by the Montreal Protocol to tackling global environmental problems. He cautioned, however, that it was important not to lose sight of the development needs of parties operating under paragraph 1 of Article 5 of the Protocol and that a balance needed to be struck between the special needs of the developing world and the need to protect the global environment. He expressed concern that multilateral funding was increasingly being used to compel developing countries to take actions which went beyond their treaty obligations. Noting that agreement on the Protocol had been reached under the principle of common but differentiated responsibilities, he called for continued adherence to that principle, which had proved successful. While acknowledging that some countries wished to do more than was required of them, he observed that the Multilateral Fund for the Implementation of the Montreal Protocol had a mechanism to accommodate bilateral support, and therefore suggested that such distinct interests should be pursued bilaterally, enabling donors and recipients with similar goals and interests to enter into partnership. Individual country interests should not take precedence over multilateralism, which was fundamental to the Protocol and lay at the root of its success.
- 5. He acknowledged the action of the parties in recognizing the intertwined nature of the twin environmental issues of climate and ozone protection, but noted that while moves to low-global-warming or lower-global-warming alternatives were to be welcomed, other potential gains for the climate, such as improved energy efficiency, had not yet been addressed and it was uncertain whether associated costs would be eligible under the current criteria of the Multilateral Fund. In that

regard, with the terms of reference for the study on the 2015–2017 replenishment of the Fund soon to be discussed, he called for parties to consider funding energy efficiency in order to maximize the benefit to the climate and for further efforts to tackle energy performance and phase-out of hydrochloroflurocarbons (HCFCs) concomitantly, with a view to fully implementing decision XIX/6.

- 6. He expressed concern regarding the final set of HCFC production facilities not yet funded under the Multilateral Fund, noting that it constituted a significant unknown factor in the effectiveness of the phase-out and the risk of illegal trade in ozone-depleting substances. Countries were limited in the extent to which they could control the import and export of HCFCs at their borders and illegal trade could unknowingly put countries in a position of non-compliance with the Protocol. He concluded by paying tribute to both Mr. González and the co-chair of the Technology and Economic Assessment Panel, Stephen Andersen, for their sterling work over many years in the protection of the ozone layer and their significant role in the development and evolution of the Protocol.
- 7. The Executive Secretary, in his statement, noted that the current meeting was being held at a time when the international community had fully recognized the potential of the Protocol, as demonstrated by the high rate of compliance therewith. Data had been reported by 183 parties to date, all of which were in full compliance with their obligations under the Protocol. He warned, however, against complacency, highlighting the challenges that remained for parties operating under paragraph 1 of Article 5, including a freeze in HCFC baselines in 2013 and a reduction of 10 per cent in baselines in 2015; essential-use and critical-use exemptions of methyl bromide; quarantine and pre-shipment issues; and feedstock uses. That such matters constituted major items for discussion was an indication of a mature and successful international regime.
- 8. A number of new issues had arisen, including the terms of reference for the study on the replenishment of the Multilateral Fund for the triennium 2015–2017; mobilizing financing from sources other than the Fund to maximize the climate benefits of the accelerated phase-out of HCFCs; and proposals for amending the Protocol to extend its provisions to phase down the production and consumption of hydrofluorocarbons (HFCs). Participants at the United Nations Conference on Sustainable Development, held in Rio de Janeiro, Brazil, in 2012, had called for a gradual phase-down and that call had since been reiterated in a number of other forums and bilateral agreements and by the Group of 20.
- 9. He noted that only five parties had failed to ratify all the amendments to the Protocol and called for those parties to accelerate the ratification process in order to avoid trade sanctions. To that end, the Secretariat would continue to work closely with the parties concerned. He concluded by paying tribute to a number of colleagues and experts who were retiring, expressing his gratitude for their long and valued contribution to the protection of the ozone layer.

II. Organizational matters

A. Attendance

The Twenty-Fifth Meeting of the Parties to the Montreal Protocol was attended by representatives of the following parties to the Protocol: Albania, Angola, Argentina, Armenia, Australia, Austria, Bahamas, Bahrain, Bangladesh, Belarus, Belgium, Benin, Bosnia and Herzegovina, Brazil, Brunei Darussalam, Burkina Faso, Cambodia, Cameroon, Canada, China, Colombia, Comoros, Congo, Cook Islands, Costa Rica, Côte d'Ivoire, Cuba, Czech Republic, Democratic People's Republic of Korea, Democratic Republic of the Congo, Denmark, Djibouti, Dominica, Dominican Republic, Ecuador, Egypt, El Salvador, Estonia, Ethiopia, European Union, Fiji, Finland, France, Gabon, Gambia, Georgia, Germany, Ghana, Grenada, Guinea, Guinea-Bissau, Haiti, Holy See, Hungary, India, Indonesia, Iran (Islamic Republic of), Iraq, Ireland, Italy, Japan, Jordan, Kazakhstan, Kenya, Kiribati, Kuwait, Kyrgyzstan, Lao People's Democratic Republic, Latvia, Lebanon, Lesotho, Libya, Lithuania, Madagascar, Malawi, Malaysia, Maldives, Mali, Mauritius, Mexico, Micronesia (Federated States of), Mongolia, Morocco, Mozambique, Myanmar, Namibia, Nauru, Nepal, Netherlands, New Zealand, Nicaragua, Niger, Nigeria, Norway, Oman, Pakistan, Panama, Paraguay, Philippines, Poland, Portugal, Qatar, Republic of Korea, Republic of Moldova, Russian Federation, Saint Kitts and Nevis, Saint Lucia, Samoa, Sao Tome and Principe, Saudi Arabia, Senegal, Serbia, Seychelles, Sierra Leone, Singapore, Solomon Islands, South Africa, South Sudan, Sri Lanka, Sudan, Swaziland, Sweden, Switzerland, Tajikistan, Thailand, the former Yugoslav Republic of Macedonia, Timor-Leste, Togo, Tonga, Trinidad and Tobago, Tunisia, Uganda, Ukraine, United Arab Emirates, United Kingdom of Great Britain and Northern Ireland, United Republic of Tanzania, United States of America, Uruguay, Uzbekistan, Vanuatu, Venezuela (Bolivarian Republic of), Viet Nam, Yemen, Zambia and Zimbabwe.

- 11. Representatives of the following United Nations bodies and specialized agencies also attended: the Global Environment Facility, the secretariat of the Multilateral Fund for the Implementation of the Montreal Protocol, the secretariat of the United Nations Framework Convention on Climate Change, the United Nations Development Programme, the United Nations Environment Programme (UNEP), the United Nations Industrial Development Organization and the World Bank.
- The following intergovernmental, non-governmental, industry, academic and other bodies were also represented: AHT Cooling Systems Asia Ltd., Ai Plus Company Ltd., Alliance for Responsible Atmospheric Policy, Assumption University, Basler Zeitung, California Energy Commission, California Strawberry Commission, Centre for Human Rights and Environment, Centre for Science and Environment, University Children's Hospital, Skopje, Charoen Pokphand Foods, Daikin Air-conditioning (Singapore) Pte. Ltd., Daikin Industries Ltd., Emergent Ventures International, Environmental Consultancies and Options, Environmental Investigation Agency, European Partnership for Energy and the Environment, GIZ Proklima, Green Cooling Association, Gujarat Fluorochemicals Ltd., HARMED, Honeywell International Pvt. Ltd., ICF International, Industrial Technology Research Institute, Ingersoll Rand, Insects Ltd., Institute for Governance and Sustainable Development, International Institute of Refrigeration, International Pharmaceutical Aerosol Consortium on Regulation and Science, Japan Fluorocarbon Manufacturers Association, Japan Industrial Conference for Ozone Layer and Climate Protection, Japan Refrigeration and Air Conditioning Industry Association, Johnson Controls Inc., K-Global Corporation, Korea Specialty Chemical Industry Association, Lahore College for Women University, League of Arab States, Longkou City Chemical Plant, Manitoba Ozone Protection Industry Association, Mayekawa, Mayekawa (Thailand) Co. Ltd., MEBROM Pty. Ltd., National Institute for Environmental Studies, Natural Resources Defense Council, Princeton University, Productos Halogenados de Venezuela, Refrigerant Reclaim Australia, Refrigerants Australia, Research Institute of Agribusiness Development, Shecco, SRF Limited, Trans-Mond Environment Ltd. and Trical, Inc.

B. Officers

13. The preparatory segment of the meeting was co-chaired by Mr. McInerney and Mr. Camargo.

C. Adoption of the agenda of the preparatory segment

- 14. The following agenda for the preparatory segment was adopted on the basis of the provisional agenda contained in document UNEP/OzL.Pro.25/1:
 - 1. Opening of the preparatory segment:
 - (a) Statements by representative(s) of the Government of Thailand;
 - (b) Statements by representative(s) of the United Nations Environment Programme.
 - 2. Organizational matters:
 - (a) Adoption of the agenda of the preparatory segment;
 - (b) Organization of work.
 - 3. Administrative matters:
 - (a) Consideration of membership of Montreal Protocol bodies for 2014;
 - (b) Financial reports of the trust funds and budgets for the Montreal Protocol.
 - 4. Issues related to exemptions from Articles 2A–2I of the Montreal Protocol:
 - (a) Nominations for essential-use exemptions for 2014 and 2015;
 - (b) Nominations for critical-use exemptions for 2014 and 2015;
 - (c) Handbook on critical-use nominations for methyl bromide;
 - (d) Uses of controlled substances as process agents.
 - 5. Final report by the Technology and Economic Assessment Panel on additional information on alternatives to ozone-depleting substances.
 - 6. Organizational issues related to the Technology and Economic Assessment Panel:
 - (a) Operation and organization of the Panel;
 - (b) Status of membership of the Panel and its technical options committees.

- 7. Issues related to funding:
 - (a) Additional funding for the Multilateral Fund for the Implementation of the Montreal Protocol to maximize the climate benefit of the accelerated phase-out of hydrochlorofluorocarbons;
 - (b) Funding of production facilities for hydrochlorofluorocarbons;
 - (c) Terms of reference for the study on the 2015–2017 replenishment of the Multilateral Fund.
- 8. Implementation of the Montreal Protocol with regard to small island developing States.
- 9. Harmonization and validation of the Multilateral Fund climate impact indicator.
- 10. Proposed amendments to the Montreal Protocol.
- Compliance and data reporting issues: presentation on and consideration of the work and recommended decisions of the Implementation Committee under the Non-Compliance Procedure for the Montreal Protocol.
- 12. Other matters.
- 15. During the discussion of the agenda for the preparatory segment, the parties agreed to include under agenda item 12, "Other matters", a discussion on staffing issues at the Ozone Secretariat.
- 16. Also during the discussion of the agenda, one representative questioned the inclusion on the agenda of item 10, "Proposed amendments to the Montreal Protocol". The representative, supported by several others, said that, for various reasons, including in particular the fact that HFCs were climate-warming gases and not ozone-depleting substances and therefore lay outside the scope of the Protocol, the item should not be discussed. Noting that the proposed amendments to the Protocol had been discussed many times over the years, he contended that the proposed amendment was a political issue and as such did not belong on the agenda of the current meeting and should not be discussed further until political agreement had been reached thereon. Another representative said that it was important to study the core issues first and recalled that there had been an agreement at the thirty-third meeting of the Open-ended Working Group that the amendments should not be discussed.
- 17. Several representatives disagreed, considering that the current forum was indeed the most appropriate for discussion of HFCs. One said that he was deeply discouraged by the proposal that the item should not be included on the agenda, expressing surprise that the proposal was supported by some other representatives. He noted with regret that the lack of a contact group on the matter had engendered frustration over the past five years, saying that any renewed proposal for a contact group to discuss the issue should not be refused. Another representative said that the proponents of the amendments had submitted those amendments in accordance with the requirements of the Protocol and that one of the reasons for the tradition of success seen to date was that all proposals submitted by parties were duly considered. He therefore called in the strongest possible terms for a robust discussion that would continue the recent political momentum with regard to the matter. Several representatives concurred that a formal contact group should be formed to discuss the amendments.
- 18. The Co-Chair confirmed that the proposals had been submitted in accordance with the requirements of the Protocol, noting that there was significant support for retaining the item on the agenda. The representative who had first objected reiterated his objections.
- 19. The Co-Chair said that given that item 10 had been placed on the agenda in accordance with the relevant treaty provisions and the rules of procedure and there was no consensus to remove it, it would remain on the agenda. The strong reservations expressed would be noted in the report of the meeting.

D. Organization of work

20. The parties agreed to follow their customary procedure and to establish contact groups as necessary.

III. Administrative matters

A. Consideration of membership of Montreal Protocol bodies for 2014

21. The Co-Chair requested the regional groups to submit nominations to the Secretariat for several positions in Montreal Protocol bodies for 2014.

22. The parties approved a draft decision that contained a compilation of all nominations for further consideration and adoption during the high-level segment.

B. Financial reports of the trust funds and budgets for the Montreal Protocol

- 23. The Co-Chair noted that it had been the practice of the parties at past meetings to establish a budget committee to review budget-related documents and prepare one or more draft decisions on budgetary matters for consideration by the Meeting of the Parties. In accordance with that practice, the parties agreed to establish such a committee, co-chaired by Fiona Walters (United Kingdom of Great Britain and Northern Ireland) and Tumau Fassaoina (Samoa).
- 24. Subsequently, the co-chair of the budget committee presented a conference room paper setting out a draft decision on the financial reports and budget of the trust fund for the Montreal Protocol, which the parties approved for consideration and adoption during the high-level segment.

IV. Issues related to exemptions from Articles 2A–2I of the Montreal Protocol

A. Nominations for essential-use exemptions for 2014 and 2015

1. Nomination for an essential-use exemption for CFC-113 from the Russian Federation for aerospace uses

- 25. The Co-Chair recalled that, during the thirty-third meeting of the Open-ended Working Group, the Technology and Economic Assessment Panel had reported that it had received a nomination of 85 metric tonnes for an essential-use exemption for CFC-113 from the Russian Federation for aerospace uses. Following the Panel's presentation of its recommendation on the nomination, the Russian Federation had submitted a draft decision that called for approval of the nominated amount that had been recommended by the Panel. The Working Group had forwarded that draft decision to the Twenty-Fifth Meeting of the Parties for its consideration (UNEP/OzL.Pro.25/3, sect. II, draft decision XXV/[A]).
- 26. The parties approved the draft decision on the matter for consideration and adoption during the high-level segment.

2. Recommendations for essential-use exemptions for the manufacture of metered-dose inhalers in 2014

- 27. The Co-Chair recalled that the Technology and Economic Assessment Panel had presented its recommendations on the nominations for 2014 exemptions for essential uses of CFCs for the manufacture of metered-dose inhalers at the thirty-third meeting of the Open-ended Working Group. Based on its discussion of those recommendations, the Working Group had forwarded to the Twenty-Fifth Meeting of the Parties for its consideration a draft decision on the matter (UNEP/OzL.Pro.25/3, sect. II, draft decision XXV/[B]). Since the meeting of the Open-ended Working Group, the Medical Technical Options Committee had reassessed the nomination by the Russian Federation on the basis of additional information submitted by the party. The results of the reassessment by the Committee were set out in the addendum to volume 1 of the May 2013 progress report of the Technology and Economic Assessment Panel.
- The co-chair of the Medical Technical Options Committee, Helen Tope, gave a presentation in which she reviewed additional information on the essential-use nomination by the Russian Federation of 212 metric tonnes of chlorofluorocarbons (CFCs) for 2014 for manufacture of metered-dose inhalers. Following the Committee's recommendation of 106 metric tonnes in the Technology and Economic Assessment Panel's progress report of May 2013, informal discussions had been held with the Russian Federation, and both the party and the United Nations Industrial Development Organization (UNIDO) had presented additional information supporting the nomination for the Committee's review. The information from the Russian Federation drew attention to supply problems that would occur if the Committee's recommendation of 106 metric tonnes were to be applied, placing patients at risk. UNIDO had provided a revised schedule indicating completion of a conversion project by the end of 2014, and an accelerated schedule for equipment installation early in 2014. In the light of the additional information, the Committee had concluded that Russian patients could be at increased risk if the quantity of CFCs authorized for 2014 were limited to six months' supply, given that additional imported HFC metered-dose inhalers would not be added to a list of free medicines upon which many low-income patients relied. It had therefore recommended acceptance of the nomination by the Russian Federation of 212 metric tonnes of CFCs for 2014, using existing available global pharmaceutical-grade CFC stockpiles in preference to new CFC production, although it remained

concerned that the challenging schedule, and any unexpected problems, might result in further delays in project completion.

- 29. In the ensuing discussion, one representative, speaking on behalf of a group of countries, congratulated those parties that had made progress in phasing out CFC-based metered-dose inhalers and welcomed the commitment of the Russian Federation to expediting the conversion process. The representative of the Russian Federation said that his country attached great importance to the timely completion of the conversion project.
- 30. Following informal discussions, the parties approved the draft decision on the matter, as amended, for consideration and adoption during the high-level segment.

B. Nominations for critical-use exemptions for 2014 and 2015

- 31. The Co-Chair recalled that the Methyl Bromide Technical Options Committee had presented the results of its initial review of the 2014 and 2015 critical-use nominations at the thirty-third meeting of the Open-ended Working Group. Since then, several nominating parties had provided further information, which the Panel had considered in further assessing the nominations.
- 32. The co-chairs of the Methyl Bromide Technical Options Committee, Mohamed Besri, Ian Porter, Michelle Marcotte and Marta Pizano, gave a detailed presentation on critical-use nominations and other methyl bromide-related issues, including trends in consumption, reporting and nominations; pre-plant soil use of methyl bromide, including for strawberry cultivation; structures and commodities; and quarantine and pre-shipment issues. The report contained final recommendations on the 2014 and 2015 nominations. A summary of the presentation prepared by the presenters is set out in annex IV to the present report.
- 33. In the ensuing discussion, one representative asked what would be the implications for decision XV/12, on the use of methyl bromide for the treatment of high-moisture dates, of the 1 January 2015 phase-out of methyl bromide for developing countries and what technologically and economically feasible alternatives were available. Another representative expressed frustration that, while many developing countries had made strenuous efforts to eliminate the use of methyl bromide in soil treatments by the phase-out date, some parties not operating under paragraph 1 of Article 5 of the Protocol, with considerable financial and technical means, had indicated that they would continue to submit requests for critical-use nominations up to 2016. He also expressed concern at the high volumes of methyl bromide that continued to be used for quarantine and pre-shipment purposes and at the danger that the substance could be diverted to other uses, such as soil treatment.
- The representative of Canada said that her country was committed to phasing out methyl bromide and was pleased with its efforts to phase out the use of the substance in pasta manufacturing facilities in 2011. In continuing the use of methyl bromide for emergency situations, Canada ensured that the criteria of decision IX/6 were fulfilled, in line with the country's rigorous regulatory regime. Regarding the statement in the report of the Methyl Bromide Technical Options Committee that neither of the 2012 fumigations had reached the critically needed concentrations of phosphine for the required length of time, those fumigations had in fact used a combination methodology employing heat, carbon dioxide and phosphine, and the fumigations had been carried out in accordance with the stipulated procedures for the patented method. In addition, every effort had been made before fumigation to ensure that the facility was adequately sealed to prevent gas loss and maximize the effects of the methyl bromide fumigation. Ambient air monitoring results indicated that the sealing had been effective. Lastly, in issuing the permit for an emergency use of methyl bromide, the Government had requested the company to submit an action plan outlining additional measures that the company would take to avoid future infestations, together with plans for efficacious fumigations using phosphine products to ensure that a similar situation would not occur in the future. The company would submit the action plan in January 2014.
- 35. Members of the Methyl Bromide Technical Options Committee responded to the issues raised. Ms. Marcotte said that the issue of alternatives to methyl bromide for date fumigation had been discussed in previous reports of the Panel, including the report of May 2013. Selection of appropriate alternatives depended on a number of factors relating to local circumstances, including the type of date, the moisture content and the condition at the time of harvest. The Committee had taken note of the comments of Canada on its methyl bromide use for emergency situations. On the matter of critical-use nominations for methyl bromide, Mr. Porter said that two of the three countries requesting nominations had indicated that they would not require critical-use nominations for pre-plant soil use beyond 2016; he expressed the hope that the third country would make further efforts to implement alternatives and follow suit. Regarding the possible reassignment of methyl bromide intended for

quarantine and pre-shipment to controlled uses in other areas, it was important that local regulations were enforced to ensure that that did not happen.

- The representative of Australia expressed thanks to the Committee for reassessing his country's methyl bromide critical-use nomination for strawberry runners for 2015, based on the additional information provided intersessionally. The Committee's recommendation of an amount of 28.765 metric tonnes fell about 1 metric tonne short of the requested 29.76 metric tonnes, however. The Committee had recommended reduction by 0.5 metric tonnes, given that that amount was considered a contingency use; in fact, that portion was used for research into alternatives and was critical to the continuation of the research programme. The Committee had also recommended a further reduction of 0.5 metric tonnes because it considered that soilless substrates were a feasible alternative to methyl bromide in the strawberry runner industry; however, soilless substrates had not been proven to be technically and economically feasible beyond foundation stock in Australia. Because of the withdrawal of methyl iodide from the registration process in Australia and the inconclusiveness of soilless substrate research, the strawberry runner industry was considering the possibility of treating soil with existing, less-effective chemical alternatives in combination with herbicides for later-generation strawberry runners. While Australia was committed to phasing out its critical use of methyl bromide, it was, for the reasons stated, seeking approval of the full nominated amount of 29.76 metric tonnes, and was working with some other parties to prepare a draft decision on critical-use nominations for methyl bromide.
- The representative of Canada expressed thanks to the Committee for reviewing its critical-use nominations and reasserted the party's commitment to phasing out critical uses of methyl bromide when viable alternatives were registered and commercially available. Its only remaining critical-use nomination was for strawberry runners in Prince Edward Island, for which the adoption of alternatives faced significant regulatory and economic barriers. The small reduction in the quantity of methyl bromide requested for that purpose recommended by the Committee failed to take account of the fact that the soilless culture technology suggested by the Committee had not been proven in Canada, and several of the alternatives proposed were applicable to the production of strawberry fruit rather than strawberry runners. Work was under way to find suitable alternatives to methyl bromide, pursuant to decision XXIV/5, but major regulatory barriers remained to be overcome with regard to the three possible alternative fumigants: iodomethane was not registered in Canada; 1,3-dichloropropene had been de-registered and was no longer available; and the use of chloropicrin was not permitted by the provincial government of Prince Edward Island owing to concerns over potential groundwater contamination. In response, the Government planned to conduct a study on the possible environmental effects of chloropicrin and was seeking technical advice on technically and economically feasible, in addition to sustainable, alternatives in the particular context of Prince Edward Island. Given those continuing efforts, the Committee's recommendation that the Canadian nomination be reduced by 4 per cent on the basis that soilless culture was an immediate and suitable alternative did not accord with the reality of the situation. Adoption of soilless culture techniques would require significant capital investment with only a small reduction in the amount of methyl bromide used by the grower. Canada therefore requested that the parties should agree to the full amount of the critical-use nomination as the best route to achieving complete phase-out of methyl bromide use for strawberry runners.
- 38. The representative of the United States of America said that his country remained committed to phasing out its critical uses of methyl bromide, as demonstrated by the significant reductions that it had achieved through painstaking research and testing of alternatives. The vast strawberry production sector in California had made great strides in reducing methyl bromide use and would complete the phase-out by 2017, but growers nevertheless needed sufficient methyl bromide in 2015 and 2016 to complete the transition to alternatives and to allow time to develop new practices and procedures. Given that progress and background, it was discouraging that the Committee had recommended a reduced amount for the critical-use nomination, even though the United States had submitted a transition plan that made it clear that the party would seek no further exemption after 2016. In addition, the Committee had failed to follow agreed procedures by recommending an amount for the sector for 2016, when the party had made no request and provided no specific information on amounts other than for 2015. The United States accordingly requested that its critical-use nomination for the California strawberry sector should be approved, in order to enable a smooth transition to phase-out in that sector's final few years of methyl bromide use.
- 39. One representative expressed surprise that parties with advanced technologies still needed to request critical-use nominations, calling upon all parties to ensure that such requests were not made and to counteract illegal trade in methyl bromide. Another representative outlined the problems being faced in his country owing to the increased resistance of some insect pests to phosphine. Another representative, speaking on behalf of a group of countries, expressed concern at the slow rate of

decline of critical-use nominations among certain parties, urging other parties to consider the example of his group of countries, wherein use of methyl bromide for strawberry culture had been phased out completely through use of available alternatives. He requested the Committee to continue to provide information on consumption and stocks of methyl bromide for 2014. Another representative urged the Committee to make further use of trend analysis in assessing the use of methyl bromide for quarantine and pre-shipment.

- 40. Following informal discussions among interested parties, the representatives of Australia, Canada and the United States introduced a conference room paper setting out a draft decision on the matter.
- 41. Subsequently, following further discussions with interested parties, a revised draft decision was presented.
- 42. The parties approved the draft decision for consideration and adoption during the high-level segment.

C. Handbook on critical-use nominations for methyl bromide

- 43. The Co-Chair recalled that the Technology and Economic Assessment Panel had presented an updated version (draft version 7.1) of the handbook on critical-use nominations for methyl bromide to the Open-ended Working Group at its thirty-third meeting, saying that it incorporated the comments and concerns expressed by a number of parties at the Twenty-Fourth Meeting of the Parties on the decision-making process of the Methyl Bromide Technical Options Committee and the economic guidelines.
- 44. In the ensuing discussion, one representative, speaking on behalf of a group of countries, thanked the Methyl Bromide Technical Options Committee for its continued work to finalize the handbook, while suggesting that further informal discussions at the current meeting would help to ensure that the changes made were consistent with those agreed upon at the thirty-third meeting of the Open-ended Working Group. Another representative expressed concern that a few issues raised at recent meetings, such as those with regard to economic feasibility, had not been considered in the most recent draft. Changes were also needed to ensure transparency in making recommendations and conducting deliberations.
- 45. The Co-Chair invited interested parties to discuss issues of concern with the members of the Methyl Bromide Technical Options Committee in order to make progress in finalizing the text of the handbook.
- 46. Subsequently, some representatives reported that discussions were continuing among interested parties and the Technology and Economic Assessment Panel to ensure that all concerns had been dealt with in the final draft of the handbook. Those who spoke favoured concluding the matter informally, without the adoption of a formal decision.
- 47. Following informal discussions between interested parties, the parties agreed that no further changes to the handbook needed to be made at this time and that the previous version of the handbook, version 6, should be used for nominating critical use exemptions.

D. Uses of controlled substances as process agents

- 48. The Co-Chair recalled that, during the thirty-third meeting of the Open-ended Working Group, the Technology and Economic Assessment Panel had presented a progress report on process-agent uses. The representative of India had requested the Panel to clarify aspects of the process used to manufacture vinyl chloride monomer in the United States. The Panel had prepared a report on the matter (UNEP/OzL.Pro.25/2/Add.1, annex).
- 49. The co-chair of the Chemical Technical Options Committee, Ian Rae, presented the report, stating that carbon tetrachloride was not used in the manufacture of vinyl chloride monomer in the United States, either as a feedstock or as a process agent. It was, in fact, present as an impurity at an early stage, removed and used as a feedstock in a completely separate process to produce hydrogen chloride. The hydrogen chloride was obtained by means of a process known as "thermal cracking". The chlorinated organic substances found in the impurity were heated in an oxygen-free environment and a catalyst employed to create a free-radical process producing a number of substances, including the lowest-energy compound, hydrogen chloride.
- 50. The parties took note of the information provided.

V. Final report by the Technology and Economic Assessment Panel on additional information on alternatives to ozone-depleting substances

- 51. The Co-Chair recalled that, by decision XXIV/7, the parties had requested the Technology and Economic Assessment Panel, in consultation with external experts, to update information on alternatives and technologies in various sectors, and to prepare a draft report for consideration at the thirty-third meeting of the Open-ended Working Group and a final report to be submitted to the Twenty-Fifth Meeting of the Parties. The parties had also invited the Panel to take into account any information relevant to its report provided by parties to the Secretariat. Following the presentation of the draft report to the Open-ended Working Group, an informal group had provided guidance to the Panel for the preparation of the final report.
- 52. He also recalled that a draft decision had been put forward by Canada, Mexico, Morocco, Switzerland and United States for consideration by the Twenty-Fifth Meeting of the Parties, which would request the Panel to undertake an assessment of the technical and economic considerations involved in implementing a global phase-down of HFCs and an assessment of HFC-23 by-product control measures, including associated environmental impact and costs. The decision would also invite parties to provide information on reporting systems, policies and initiatives promoting alternatives to ozone-depleting substances that minimized impact on the environment. It had been forwarded to the Twenty-Fifth Meeting of the Parties for further consideration (UNEP/OzL.Pro.25/3, sect. II, decision XXV/[C]).
- 53. Members of the Panel then gave a presentation outlining the report. A summary of the presentation is set out in section V of annex IV to the present report.
- 54. Following the presentation, several representatives expressed thanks to the Panel for the substantial progress made in finalizing the report and in responding to many of the comments made by parties at the thirty-third meeting of the Open-ended Working Group.
- 55. In response to a request for clarification of the terms "low-global-warming potential", "medium-global-warming potential" and "high-global-warming potential", the co-chair of the Panel, Lambert Kuijpers, said that there were no absolute numerical values. Over time, given technological developments, notions had changed and the concept of "low" global-warming potential was currently much lower than in the past. Given that sliding scale, the Panel preferred not to attribute actual values but instead to retain the terms in question.
- 56. He then explained that the Panel had, exceptionally, discussed refrigerants without an International Standardization/ASHRAE R-number and designation. A small number of blends existed that did not have an assigned R-number. Given that they were close to receiving such R-numbers and it was expected that they would soon be commercialized, it had been thought useful to provide further information on the properties of those blends.
- 57. With regard to retrofitting, he said that, given the volume of refrigerants involved, it was not usual to consider that option. The use of blends, however, was a type of retrofitting activity because the properties of the blends were similar to the substances that they were replacing. He agreed that, while the Panel had suggested options in table 4.1 of its report, not enough work had been conducted on the costs involved or the impact of costs on market penetration. He also said that it was difficult to respond to the question that had been posed about standards because they were quite complicated and took time to develop. The commercialization of several blends was foreseen, but the Panel was reluctant to make projections on that or any other matter in relation to the period after 2020, especially given the speed at which developments were occurring.
- 58. One representative noted that the Panel had proposed low-global-warming-potential alternatives for most sectors when looked at in terms of projected market penetration by 2020. He offered his own calculations of the carbon-dioxide equivalent that could be avoided by 2020 through the use of those alternatives as opposed to a business-as-usual scenario. Mr. Kuijpers said that, while he could not confirm the exact figures, given a number of assumptions, a reduction of 40 per cent appeared to be a reasonable estimate of the order of magnitude of the carbon-dioxide equivalent that could be avoided by 2020 by use of alternatives in comparison with a business-as-usual scenario using HFCs. He also said that more detailed figures and projections could be provided by the Panel if the parties so required, such as market penetration on a regional basis, by sector or in parties operating under paragraph 1 of Article 5 versus those not so operating. He explained that the calculations of how much carbon-dioxide equivalent could be avoided had considered only the potential alternatives that could be used safely.

- 59. One representative noted that natural refrigerants and the potential energy-efficiency gains relating to their use did not feature heavily in the final report. Highlighting the fact that ammonia, carbon dioxide and hydrocarbons all featured in the report, Mr. Kuijpers explained that in section 4 of the report the Panel had compared the energy efficiency of those natural refrigerants to that of HCFC-22 because it was the standard refrigerant. Nevertheless, it was more appropriate to compare the efficiency of an alternative with the efficiency of the substance that it was replacing. Furthermore, there were additional considerations, such as the specific ambient temperatures and the design of equipment used, which also had to be taken into account in determining overall energy efficiency. Water had its limitations as an alternative owing to its evaporation temperature. Non-vapour compression systems might not have had sufficient coverage in the report, although the Panel had never intended the report to be exhaustive.
- 60. He explained that carbon dioxide was a green alternative that was being applied in both transcritical and cascade systems in supermarkets. The efficiency of carbon-dioxide systems was low at higher ambient temperatures. Further work was needed to make those systems work more efficiently, but work was continuing with larger systems in commercial refrigeration, especially in Europe.
- 61. He acknowledged that high pressure was required in carbon-dioxide systems. Over the previous 20 years, however, more interest had been expressed in such use than in the use of ammonia. Further work was needed to evaluate the market potential of carbon dioxide. The issues to be balanced were safety, energy efficiency and thermodynamics, and the balance was different for each alternative. In nearly all cases, however, the performance of the alternatives could be enhanced with design improvements.
- 62. Regarding the market penetration of HC-600a (isobutene), he said that it had been in commercial use in Europe since 1992 and had been taken up in a number of other countries. Owing to regulatory concerns, however, it did not have a large market share in either North or South America. Consequently, to achieve an overall market penetration rate of 50 per cent, its market penetration in some regions had necessarily been higher in percentage terms than in other regions.
- 63. He said that the Panel was aware of use of HFO-1234yf in motor vehicles in the United States. In relation to one representative's assertion that there were no alternatives appropriate for use in high-ambient-temperature conditions, he said that, although more work was required, alternatives were indeed available. They worked well, although perhaps not as well as HCFC-22. The overall effectiveness of an alternative, however, was based on a number of factors, including the design of the equipment.
- 64. With regard to fire prevention, the co-chair of the Halons Technical Options Committee, David Catchpole, said that while there were two low-global-warming-potential alternatives, it was too early to predict how they would be commercialized. Fires on aircraft were complex events and the alternatives being proposed had to be carefully tested. The same held true for fires outside aircraft. If the proposed alternatives could not be developed, higher-global-warming-potential substances might need to be used.
- 65. While expressing their appreciation for the work carried out by the Panel to date, several representatives were of the opinion that more information was required in order to give parties a solid basis on which to make informed decisions about their choice of alternatives to HFCs. The representative of the European Union said that the party would propose a draft decision requesting more information from the Panel on issues such as the cost, economic benefit and overall environmental impact of each alternative. Several representatives suggested that the existing draft decision XXV/[C] and the ideas of the European Union should be integrated into a single draft decision. One cautioned against the inclusion of too many elements, requesting a simpler text.
- 66. The representative of the United States, as one of the original proponents of draft decision XXV/[C], reiterated the ideas contained therein, stressing that there was no intention to prejudge the outcome of discussions on the potential amendment of the Protocol. Another representative expressed concern that a request for action by the Executive Committee, as proposed in the draft decision, might create obstacles to the approval of projects within stage II of countries' HCFC phase-out management plans, to the detriment of the parties concerned.
- 67. The parties agreed to establish a contact group, chaired by Annie Gabriel (Australia) and Donnalyn Charles (Saint Lucia), to work further on a consolidated draft decision.
- 68. Subsequently, the Co-Chair said that the quality and depth of the report of the Technology and Economic Assessment Panel had inevitably led to further requests for clarification and additional information on alternatives to ozone-depleting substances. He said that, in addition to the draft

decision forwarded by the Open-ended Working Group (UNEP/OzL.Pro.25/3, sect. II, decision XXV/[C]), a further draft decision, on additional information in view of addressing hydrofluorocarbons, had been put forward by the European Union, as set out in a conference room paper.

- 69. In the ensuing discussion, several representatives said that they opposed consideration of the draft decision put forward by the European Union, given that its content lay outside the mandate of the Protocol to phase out the production and consumption of ozone-depleting substances. In addition, the activities proposed in the draft decision would greatly increase the workload of the Technology and Economic Assessment Panel, which would be better occupied with work of direct relevance to the Protocol. Some representatives said that the draft decisions proposed under the agenda item were simply an extension of efforts to amend the Protocol in line with agenda item 10. One representative said that developed countries should, in accordance with their responsibilities under the Protocol, take the initiative to phase out substances with high global-warming potential before engaging in discussion of low-global-warming-potential substances under the auspices of the Protocol. Currently, there were few, if any, low-global-warming-potential alternatives that were environmentally friendly, safe, economically viable and technologically proven.
- A number of representatives favoured consideration of the draft decision, given that the phase-out of ozone-depleting substances could result in a rapid increase in the use and release of high-global-warming-potential HFCs into the environment and that there was significant momentum in several international forums, notably the Group of 20, supporting complementary initiatives and multilateral approaches, including through use of the expertise and institutions of the Protocol, to phase down the production and consumption of HFCs, based on the examination of economically viable and technically feasible alternatives. Several representatives said that additional information of the type requested in the draft decision would help to inform their national action plans and strategies to control ozone-depleting substances through the adoption of alternatives that were not harmful to the environment. Some representatives stressed that while the draft decisions under the current agenda item were related to the proposed amendments to the Protocol being considered under agenda item 10, their content was distinct, given that it was specifically limited to the provision of additional information in response to the stated needs of many parties. One representative, speaking on behalf of a group of countries, said that the volume of work requested in the draft decisions was well within the capacity of the Panel. Several representatives said that there was a tradition within the Protocol of discussing issues of contention and seeking a way forward, no matter how divergent the views of parties.
- 71. The representative of Brazil said that an approach to the issue of alternatives broader than that taken in the proposed draft decisions under the current item was needed. His country would submit a draft decision requesting the Technology and Economic Assessment Panel to update information on alternatives to ozone-depleting substances and to prepare a draft report on the matter for consideration by the Open-ended Working Group at its thirty-fourth meeting.
- 72. The parties agreed to the Co-Chair's proposal that the contact group set up to consider matters under agenda item 5 would begin its discussions. The starting point of those discussions would be the draft decision forwarded to the current meeting by the Open-ended Working Group; the contact group could consider other issues or proposed draft decisions as it saw fit.
- 73. Subsequently, the co-chair of the contact group introduced a revised draft decision that had been prepared by the contact group.
- 74. The parties agreed to forward the draft decision for further consideration and adoption during the high-level segment.

VI. Organizational issues related to the Technology and Economic Assessment Panel

A. Operation and organization of the Panel

75. The Co-Chair recalled that, by decision XXIV/8, the parties had requested the Technology and Economic Assessment Panel to make recommendations to the Open-ended Working Group at its thirty-third meeting on the future configuration of its technical options committees, bearing in mind anticipated workloads. The parties had also requested the Panel and its technical options committees to make available to the parties their standard operating procedures. The Panel had set up a task force to carry out the work. A summary of the key issues contained in the report had been presented to the Open-ended Working Group at its thirty-third meeting. Following consideration of the information,

the representatives of Australia and the United States had proposed a draft decision that would, among other things, encourage the Panel to continue its implementation of the revised terms of reference as approved by the parties in decision XXIV/8 and provide information on its proposed configuration and processes for the nomination of members to its technical options committees. The Working Group had agreed to forward draft decision XXV/[D] set forth in section II of document UNEP/OzL.Pro.25/3, revised to incorporate the comments of interested parties, to the Twenty-Fifth Meeting of the Parties for further consideration.

76. The parties approved the draft decision for further consideration and adoption during the high-level segment.

B. Status of membership of the Panel and its technical options committees

- 77. The Co-Chair recalled that, at its thirty-third meeting, the Open-ended Working Group had considered the membership and renomination status of the members of the Technology and Economic Assessment Panel, with a number of parties putting forward proposals for the reappointment of those members to serve on the Panel. The Working Group had requested the Secretariat to merge two draft decisions that had been put forward, along with other renominations received from the parties, into a single draft decision and to submit it, together with an updated list of nominations, to the Twenty-Fifth Meeting of the Parties for further consideration. While the Secretariat had consolidated all the nominations as draft decision XXV/[E] in section II of document UNEP/OzL.Pro.25/3, an additional renomination and a new nomination had been received from China. The revised draft decision was contained in a conference room paper.
- 78. The parties agreed to conduct informal consultations among interested parties to ensure that the nominations were complete.
- 79. Following those consultations, the parties approved a revised draft decision for further consideration and adoption during the high-level segment.

VII. Issues related to funding

A. Additional funding for the Multilateral Fund for the Implementation of the Montreal Protocol to maximize the climate benefit of the accelerated phase-out of hydrochlorofluorocarbons

- 80. The Co-Chair recalled that, at its thirty-third meeting, the Open-ended Working Group had considered a draft decision on additional funding for the Multilateral Fund to maximize the climate benefit of the accelerated phase-out of HCFCs. Among other things, the decision would request the Executive Committee of the Fund to assess options for a funding window to maximize climate co-benefits of the phase-out of HCFCs and to agree upon a set of appropriate procedures and terms of reference. The Working Group had agreed to forward draft decision XXV/[F] set forth in section II of document UNEP/OzL.Pro.25/3, with elements enclosed in square brackets, to the Twenty-Fifth Meeting of the Parties for further consideration.
- 81. In the ensuing discussion, several representatives voiced support for the proposal, saying that it offered the opportunity to generate climate co-benefits. The new voluntary contributions would enable the Protocol to meet needs that went beyond those dealt with by the compliance targets. It was also pointed out that the voluntary funds being proposed would be in addition to the existing funding available under the Protocol and would not detract from the work of the Fund or compromise its funding mechanism.
- 82. Other representatives were of the view, however, that it was important to ensure that any additional funding was used to meet the compliance needs of the parties and that it was premature to consider the issue until the parties had met their compliance targets. More had to be done to meet the compliance needs of parties, especially those of small island developing States. It was also observed that having the Fund administer such voluntary funding could lead to difficulties with the management of the Fund. One party also recalled that the previous successes of the Protocol had not required the creation of any voluntary funding mechanism.
- 83. The parties agreed that the interested parties would consult informally with a view to resolving the matter.
- 84. Subsequently, the representative of Canada said that during the informal discussions the participants had come close to a resolution of the matter, but had not succeeded in dealing with all the outstanding issues. Such resolution was unlikely before the conclusion of the current meeting.

85. One representative expressed the hope that the progress that had been made in the informal group would not be lost in the future.

B. Funding of production facilities for hydrochlorofluorocarbons

- 86. The Co-Chair recalled that, at its thirty-third meeting, the Open-ended Working Group had discussed a draft decision submitted by Argentina and India on the funding of production facilities for HCFCs. Given that it had made only limited progress on the issue during the time available, the Working Group had agreed to forward the draft decision to the Twenty-Fifth Meeting of the Parties for further consideration (UNEP/OzL.Pro.25/3, sect. II, draft decision XXV/[G]).
- 87. The representative of India explained that when the Nineteenth Meeting of the Parties had agreed to accelerate the phase-out of HCFCs, under decision XIX/6, it had also agreed that the funding made available through the Multilateral Fund would be sufficient to meet all the agreed incremental costs of phase-out, for both production and consumption. That agreement notwithstanding, the Executive Committee of the Fund had still not fully implemented that commitment, especially with regard to the production sector. Indeed, in 2012, some Committee members had argued that swing plants would not be eligible for funding, even though in 1999 the Eleventh Meeting of the Parties had made it clear that they would be with regard to the cost of phasing out CFCs. In fact, India had successfully phased out CFCs from August 2008, in advance of its commitments under the Protocol.
- 88. The accelerated phase-out of HCFCs under decision XIX/6 would require the early closure of HCFC production facilities, with a significant negative impact on businesses. If funding were not to be made available therefor, parties operating under paragraph 1 of Article 5 would risk non-compliance with their 2015 target of a reduction of 10 per cent in HCFC consumption and production. India had already put in place regulations to control HCFCs, but parties needed to recognize the economic impact of the accelerated phase-out. The draft decision put forward by India and Argentina accordingly reaffirmed the intent of decision XIX/6 to provide stable and sufficient funding to meet all the agreed incremental costs for accelerated HCFC production phase-out for all parties operating under paragraph 1 of Article 5; urged the Executive Committee to approve funding for phase-out of production facilities, including swing plants; and requested the Committee to take into consideration any proactive regulatory action taken by parties to restrict HCFC production ahead of their phase-out schedules.
- 89. The representative of Argentina, noting that her country had been a proponent of the adjustment to the HCFC control measures and had accepted the wording of decision XIX/6 on the understanding that the funding necessary to accelerate closure of HCFC-22 production would be made available, highlighted the lack of progress in the Executive Committee's production sector subgroup, which had necessitated the draft decision, especially because her country could, she suggested, be at risk of non-compliance. She expressed surprise that a proposal had been submitted to finance the elimination of the by-product HFC-23, which would eliminate the effect and not the cause, which from an environmental perspective was unacceptable. Suggesting that HCFC-22 production closure should be financed rather than the release of the by-product itself, she requested the Twenty-Fifth Meeting of the Parties to ask the Committee to rule on the inclusion in the production sector guidelines of compensation for swing plants for the early closure of HCFC-22 production. Another representative of a party operating under paragraph 1 of Article 5 agreed that there was a need for further guidance from the parties to the Committee to enable progress to be made.
- 90. Other representatives, however, while expressing appreciation for the leading role played by India and Argentina in phasing out CFCs and HCFCs, pointed out that decision XIX/6, in setting the new framework under which the Executive Committee was to work in providing funding for HCFC phase-out, had not modified any existing guidance relating to swing plants. Funding for the costs of conversion was provided for the conversion of plants from CFCs to other substances, but swing plants always had the ability to produce other substances as well as CFCs and therefore were not eligible for conversion funding, merely compensation for the costs of closure. That was not a new issue; the parties had discussed it in the past and had agreed that the funds made available for the complete closure of CFC and HCFC production represented a fixed total; no additional funding would be made available for the closure of plants that converted from CFC to HCFC production. Accordingly, the agreement of April 2013 between the Executive Committee and China on production sector phase-out had excluded a swing plant for which compensation had already been paid.
- 91. With regard to the separate issue of funding for proactive regulatory action, while expressing appreciation for and applauding the fact that India and other countries had taken early action to phase out HCFCs, representatives said that it was not reasonable to expect the Multilateral Fund to provide retrospective financial support for activities that went beyond the terms of the agreements that parties had made with the Executive Committee. That would imply that parties could expect funding for any

action that they wished to take, which was not how the Fund operated. The level of financial support from the Fund was agreed upon and set out before activities were undertaken, not afterwards. Nevertheless, representatives expressed willingness to engage in further discussions on all relevant issues.

- 92. The representative of India, as one of the proponents of the draft decision, said that the representatives who had spoken were calling into question the integrity of decision XIX/6, which did not state that swing plants would not be eligible for funding. The issue had been discussed by the Executive Committee on many occasions since the adoption of the decision, which suggested that in fact the matter was not as straightforward as had been suggested. He further pointed out that the agreement with China on production sector phase-out had been a bilateral agreement, not discussed by the Executive Committee, and thus was not relevant to the discussion. It was clear that decision XIX/6 had to be revisited, lest some parties operating under paragraph 1 of Article 5 were to find themselves at risk of non-compliance.
- 93. The parties agreed to establish a contact group, co-chaired by Alice Gaustad (Norway) and Rajendra Kumar (Mauritius), to work further on the draft decision.
- 94. Subsequently, the co-chair of the contact group reported that, notwithstanding the efforts of the members of the contact group in discussing the operative paragraphs of the draft decision, it had not proved possible to reach consensus on a way forward on the issue of HCFC production facilities.
- 95. The representative of India expressed his disappointment at the outcome of the discussions of the contact group. He said that decision XIX/6 provided that funding should be stable and sufficient to enable parties operating under paragraph 1 of Article 5 of the Montreal Protocol to meet all agreed incremental costs of complying with the accelerated HCFC phase-out schedule in both the production and consumption sectors. More than five years after the adoption of that decision, the Executive Committee had still not finalized guidelines for the production sector. At the sixty-ninth meeting of the Committee, a contact group had been formed and had concluded that decision XIX/6 was unclear. The issue had been forwarded to the Meeting of the Parties to provide further clarity. At the current meeting, however, the contact group established to discuss the matter could not provide the clarity required. He said that he found that difficult to understand, stressing that India was not asking for all costs to be covered, only for compensation for the profits that had been lost as a result of the accelerated phase-out schedule. While India had made significant efforts, if there was to be no clarity with regard to decision XIX/6, India had no option but to address its request to the Secretariat under Article 8 of the Protocol in order to avoid non-compliance in the production sector.

C. Terms of reference for the study on the 2015–2017 replenishment of the Multilateral Fund

- 96. The Co-Chair recalled that, at its thirty-third meeting, the Open-ended Working Group had discussed a draft decision on the terms of reference for the study on the 2015–2017 replenishment of the Multilateral Fund put forward by Australia, Canada and Norway. Agreement had been reached on some, but not all, parts of the text. The draft decision had therefore been forwarded to the Twenty-Fifth Meeting of the Parties (UNEP/OzL.Pro.25/3, sect. II, draft decision [H]).
- 97. The parties agreed to establish a contact group, co-chaired by Alain Wilmart (Belgium) and Marissa Gaurie (Trinidad and Tobago), to work further on the draft decision.
- 98. Subsequently, the co-chair of the contact group introduced a draft decision that had been prepared by the contact group.
- 99. The parties agreed to forward the draft decision to the high-level segment for further consideration and adoption.

VIII. Implementation of the Montreal Protocol with regard to small island developing States

100. The Co-Chair recalled that Saint Lucia had, at the thirty-third meeting of the Open-ended Working Group, introduced a draft decision setting out the implications of the outcome document of the United Nations Conference on Sustainable Development, held in Rio de Janeiro, Brazil, in 2012, for the implementation of the Protocol by small island developing States. The Working Group had set up a contact group to discuss the proposal. The contact group had amended the operative paragraphs and title of the draft decision and the Working Group had agreed that the draft decision should be forwarded to the Twenty-Fifth Meeting of the Parties for further consideration (UNEP/OzL.Pro.25/3, sect. II, draft decision XXV/[I]).

- 101. In the ensuing discussion, one representative expressed serious concerns regarding the text. It was inappropriate, he said, for small island developing States to ask the parties to the Protocol to request their own Governments to tackle issues relevant to the Protocol at the Third International Conference on Small Island Developing States. Acceding to a request for a United Nations convention to extrapolate its mandate in requesting a group of countries to add an item to the agenda of one of its meetings would set a dangerous precedent. Another representative said that the outcomes of the United Nations Conference on Sustainable Development were of no relevance to the Protocol; nor was it clear to which outcomes of the Conference the draft decision was referring. The mandate of the Protocol was specifically to phase out the production and consumption of ozone-depleting substances, meaning that consideration of the recommendations of the Conference clearly lay outside that mandate.
- 102. A number of representatives of small island developing States expressed support for the draft decision. One said that considerable work had been carried out by the proponents of the draft decision, including through the contact group convened at the thirty-third meeting of the Open-ended Working Group, to accommodate the views of various parties and adjust the text accordingly. Several representatives drew attention to the vulnerabilities of small island developing States and the difficulties that they faced in implementing the provisions of the Protocol, which had particular relevance to some sectors of importance to those States, such as tourism. One representative noted the excellent track record of small island developing States in meeting their obligations under the Protocol, requesting the assistance of other parties in helping those States to remain in compliance.
- 103. Several other representatives expressed support for the draft decision. One, while acknowledging that it was unusual for a body such as the Meeting of the Parties to request its secretariat to liaise with another secretariat on matters relating to the Protocol, said that such a request was not unprecedented. In addition, benefits could be realized from such action, including promoting the implementation of the Protocol and increasing synergies in areas of relevance to the wider agenda of the Protocol, including climate change and energy efficiency. Regarding the reference to the outcome document of the United Nations Conference on Sustainable Development, he said that that occurred only in the preambular section of the draft decision and was not a component of the operative paragraphs. Another representative, speaking on behalf of a group of countries, agreed that the draft decision had synergistic value, adding that it would be simple to implement and imposed few obligations on parties. Another representative said that in further developing the text of the draft decision, care should be taken to ensure that it was consistent with the provisions of Article 5 of the Protocol.
- 104. The parties agreed to establish a contact group, co-chaired by Azra Rogović-Grubić (Bosnia and Herzegovina) and Vaitoti Tupa (Cook Islands), to discuss the matter further.
- 105. Subsequently, during consideration of the draft decision following the work of the contact group thereon, the representative of India expressed concern about its content, saying that, because it was unclear as to what would be involved in the process of liaising with the organizers of the Third International Conference on Small Island Developing States, he was unable to agree to forward the draft decision to the high-level segment.
- 106. Several representatives expressed disappointment at that stance, emphasizing that all customary procedures of Montreal Protocol meetings had been followed, namely that the time and venue of the contact group had been well publicized and that interested parties had come together to discuss their differing views. Through compromise, they had succeeded in reaching consensus. They said that no representative of India had attended the meetings of the contact group and that it set a dangerous precedent to permit a party that had not attended a meeting of a contact group to reopen discussions on, or block, a decision in plenary session.
- 107. In response to the assertion by the representative of India that his country had been unable to attend the meetings of the contact group owing to the small size of its delegation, several representatives stressed that, had the co-chairs of the contact group been informed of such a difficulty, every effort would have been made to reschedule the meetings of the contact group to enable all interested parties to participate.
- 108. Following the discussion, the Co-Chair decided that the draft decision would be forwarded to the high-level segment for consideration, urging the representative of India to seek the clarification that he required before the matter was taken up in that segment.

IX. Harmonization and validation of the Multilateral Fund climate impact indicator

- 109. The Co-Chair recalled that, at the thirty-third meeting of the Open-ended Working Group, the representative of Uruguay had introduced a draft decision on the modalities for moving forward with the discussions on the Multilateral Fund climate impact indicator. Following informal consultations, the Working Group had agreed to forward the draft decision to the Twenty-Fifth Meeting of the Parties for further consideration (UNEP/OzL.Pro.25/3, sect. II, draft decision XXV/[K]).
- 110. The representative of Uruguay said that informal discussions on the matter were continuing.
- 111. Subsequently, the representative of Uruguay said that there had been insufficient time to conduct informal discussions on the matter. Uruguay would raise the matter again in the future.

X. Proposed amendments to the Montreal Protocol

- 112. The Co-Chair recalled that, at its thirty-third meeting, the Open-ended Working Group had discussed two proposals for amendments to the Protocol to phase down the production and consumption of HFCs. The Working Group had established a discussion group to tackle issues relating to the management of HFCs, including the financial, technical and legal aspects, and the appropriate processes to deal with them, including options for establishing a mechanism to deal with the linkage between the Protocol and the United Nations Framework Convention on Climate Change.
- 113. The representative of the United States, also speaking on behalf of Canada and Mexico, introduced their proposal to amend the Protocol to phase down the production and consumption of HFCs by all parties, control by-product emissions of HFC-23, address trade in HFCs, and require licensing systems and reporting on HFCs. The environmental benefits would be considerable, amounting to more than 90 gigatonnes of carbon-dioxide equivalent up to 2050, equivalent to some two years of current human-generated emissions of greenhouse gases.
- 114. The Montreal Protocol was the appropriate instrument to phase down HFC consumption and production because it was the efforts that parties had made thereunder to phase out CFCs and HCFCs that had led to the rise in HFC use. Article 2.2 (b) of the Vienna Convention, under which parties were called upon to harmonize appropriate policies in the phase-out of ozone-depleting substances, gave parties the authority and responsibility under the Protocol to tackle HFCs. The Protocol also possessed the expertise, the institutions and the track record of success necessary to undertake that effort. The proposed amendment accepted that HFCs would continue to be included within the scope of the United Nations Framework Convention on Climate Change and the Kyoto Protocol thereto for the accounting and reporting of emissions.
- 115. It was clear that global awareness of the threat posed to the climate system by HFCs was growing. The outcome document of the United Nations Conference on Sustainable Development had included a commitment to support a gradual phase-down in the consumption and production of HFCs, language that clearly referred to the Protocol. In September 2013, the Group of 20 had agreed to support complementary initiatives through multilateral approaches that included using the expertise and the institutions of the Protocol to phase down the production and consumption of HFCs, based on the examination of economically viable and technically feasible alternatives. Similar support for action using the institutions and expertise of the Protocol had been expressed in bilateral meetings, including that between the President of the United States, Barack Obama, and the President of China, Xi Jinping, in September 2013, which had called for the establishment of an open-ended contact group to consider all relevant issues, including financial and technological support to developing countries, cost-effectiveness, safety of substitutes, environmental benefits and an amendment to the Protocol. Against that backdrop, it was becoming increasingly difficult to explain why the parties to the Protocol were not moving forward. He concluded by calling for the establishment of an open-ended contact group to allow for further discussions in detail.
- 116. The representative of the Federated States of Micronesia introduced his country's proposal for an amendment to the Protocol. In addition to the international support for the control of HFCs through the Protocol expressed by the participants in the United Nations Conference on Sustainable Development, the Group of 20 and the Presidents of China and the United States, he highlighted the Kiruna Declaration, adopted by the Arctic Council in May 2013, support from the Climate and Clean Air Coalition in September 2013 and the agreement between the President of the United States and the Prime Minister of India, Manmohan Singh, in September 2013 to convene an India-United States task force on HFCs to discuss, among other things, multilateral approaches that included using the

expertise and institutions of the Protocol to phase down the consumption and production of HFCs. The leaders of the world's largest countries had given parties the mandate to tackle the control of HFCs.

- 117. The need for action was urgent. The latest projections of the impact of climate change showed a minimum rise in sea levels of 1 metre by 2100. People who lived on islands or on the coast, such as the inhabitants of his country, could already see the effects. By taking action to control HFCs under the Protocol, parties could assist the parties to the United Nations Framework Convention on Climate Change in their efforts to negotiate a new climate agreement in 2015. It was vital that the parties should take action for the survival of the human species and human civilization.
- 118. All the representatives who took the floor expressed thanks to the proponents of the two amendments for their persistence in raising the issue in recent years. Many representatives voiced support for the proposals. It was clear that many details, in particular on the legal, technical, economic and financial aspects of the proposals and the availability, technical viability, cost-effectiveness and safety of alternatives to HFCs, needed to be carefully studied and discussed in detail. The deliberations of the discussion group established by the Open-ended Working Group at its thirty-third meeting had generated useful additional information and the establishment of a formal contact group, preferably open-ended, would enable all those issues, and others, to be fully analysed and discussed further.
- 119. Representatives of many small island developing States and countries with extensive coastlines highlighted their extreme vulnerability to the effects of climate change, notwithstanding the fact that they were not responsible for the vast majority of greenhouse-gas emissions, and the accompanying need for action to phase down HFCs.
- 120. The representative of Japan said that his country was introducing new legislation to control the use of fluorocarbons. The representative of the European Union also noted that the party was revising its control framework with a view to phasing down the production and consumption of HFCs.
- 121. One representative, speaking on behalf of a group of countries, expressed the support of the group for the establishment of a contact group. While HFCs were not ozone-depleting substances, it was clear that the implementation of the Protocol was leading to an increase in their production and consumption, and that a phase-down of HFCs would have environmental benefits. There was, however, a need to resolve legal questions relating to the interrelationship of the Protocol and the United Nations Framework Convention on Climate Change; the limited availability of alternatives; the need for effective mechanisms for technology transfer to developing countries, especially those in Africa; and the need for adequate funding for the Multilateral Fund.
- 122. One representative, speaking on behalf of a regional ozone network and associated countries with economies in transition, also expressed those parties' support for a phase-down of HFCs under the Protocol. He called for the establishment of a contact group to discuss all relevant issues, including the question of funding for countries with economies in transition that were not eligible for support from the Multilateral Fund.
- 123. Other representatives, however, expressed opposition to the proposed amendments. In particular, several representatives were concerned at the lack of availability of alternatives to HFCs, saying that until technically viable, cost-effective and safe alternatives became more widely available it was premature to discuss proposals to amend the Protocol. The report of the Technology and Economic Assessment Panel had shown the limited availability and high cost of alternatives, in addition to the concerns over the toxicity and flammability of some of them. The phase-out of HCFCs that parties operating under paragraph 1 of Article 5 were currently carrying out was proving to be challenging, and it was unclear how it could be achieved if HFCs were not to be available as substitutes. HFCs continued to be used by parties not operating under paragraph 1 of Article 5, while their industries continued to sell HFCs to parties so operating. No transfer of alternative technology was occurring, and there was no clarity over the availability of financial support for phasing down HFC use in parties operating under paragraph 1 of Article 5. Some representatives added that, while they would encourage the adoption of low-global-warming-potential alternatives where possible, the conditions were not yet ripe for the discussion of amendments to the Protocol.
- 124. Several representatives suggested that because HFCs were not ozone-depleting substances, the Montreal Protocol was not the appropriate forum in which to discuss the control thereof. A much more appropriate forum was that of the United Nations Framework Convention on Climate Change and the Kyoto Protocol thereto, where an active discussion was under way. Questions of the control of production and consumption of HFCs, and of the relevance of the Clean Development Mechanism and any replacement therefor, would be better undertaken in that forum, with its clear commitment to the principle of common but differentiated responsibilities.

- 125. One representative said that it was necessary to make progress in the current forum before action elsewhere could be considered. Another asked whether, given that the United Nations Framework Convention on Climate Change and the Kyoto Protocol thereto explicitly excluded greenhouse gases controlled by the Montreal Protocol, the inclusion of HFCs in the Montreal Protocol would mean that they would be removed from the United Nations Framework Convention on Climate Change and the Kyoto Protocol thereto. He suggested that the relationship between the two international regimes should be clarified.
- 126. Another representative pointed to recent figures showing that HFCs represented only 0.7 per cent of total emissions of greenhouse gases, suggesting that, while climate change was clearly a matter of concern, the current focus on HFCs was misplaced.
- 127. Some representatives added that the United Nations Framework Convention on Climate Change and the Kyoto Protocol thereto enabled parties to choose on which of the basket of greenhouse gases that they controlled to concentrate their efforts to reduce emissions. Some countries, in particular those with high ambient temperatures, could not function without the use of HFCs and it would be wrong to compel them to phase them out. While the Montreal Protocol was indeed a highly successful environmental agreement, it would be undesirable to introduce issues relating to climate change into it, and any attempt to do so would be likely to result in chaos.
- 128. One representative gave the example of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, saying that although the Convention could have dealt with issues relating to mercury, the parties had considered the topic to be too significant and that it warranted its own separate convention, which had just been adopted. Similarly, it would be better to devise a new mechanism to deal specifically with HFCs.
- 129. Other representatives, however, argued that the parties to the Montreal Protocol had a clear responsibility to tackle HFCs because the growth in their use was entirely as a result of actions taken under that instrument. There was no reason why the Montreal Protocol could not work together with the United Nations Framework Convention on Climate Change and the Kyoto Protocol thereto in tackling the control of HFCs.
- 130. Another representative called upon the proponents of the amendments to conduct and publish a study on the mandate of the Montreal Protocol and its relationship to the United Nations Framework Convention on Climate Change and the Kyoto Protocol thereto, so as to assist in the development of a broader consensus.
- 131. One representative pointed to the scientific finding that the unusually high level of depletion of the ozone layer over the Arctic in the spring of 2011 was due to the increasing concentration of greenhouse gases in the atmosphere. Under article 2.1 of the Vienna Convention, the parties were obliged to take appropriate measures to protect human health and the environment against adverse effects resulting or likely to result from human activities that modified or were likely to modify the ozone layer. Given that rising concentrations of greenhouse gases clearly affected the recovery of the ozone layer, the parties to the Montreal Protocol were obliged to take action to limit them. They had a responsibility not only to address ozone-depleting substances, but also to take action to protect the ozone layer.
- 132. The representative of India observed that while the outcome document of the United Nations Conference on Sustainable Development had indeed made mention of HFCs, it had not specified the Montreal Protocol as the appropriate forum in which they should be addressed. The statement by the Group of 20 was a general declaration in which support had been expressed for complementary action through the Montreal Protocol, but it did not detract from the fact that HFCs were already covered by the United Nations Framework Convention on Climate Change and the Kyoto Protocol thereto. Furthermore, while the United States and India had agreed to establish a task force on HFCs, it would be premature to discuss any action until the task force had been formed and completed its work. The time that had been spent discussing HFCs at successive meetings had detracted from discussions on issues directly pertaining to the protection of the ozone layer and had delayed, for example, the implementation of guidelines for the accelerated phase-out of HCFCs.
- 133. One representative expressed the belief that a solution to the issue needed to be reached through consensus, that it should resolve the legal transfer issues between the United Nations Framework Convention on Climate Change and the Kyoto Protocol thereto and the Montreal Protocol in accordance with the principles of the Convention, in particular the principle of common but differentiated responsibilities, and that it should fully assuage the concerns of developing countries on HFC issues, including with regard to the availability of safe and economically viable alternatives and to the provision of new, adequate and additional financial support above current levels of funding for

phasing out ozone-depleting substances. Until those concerns could be resolved, it was not appropriate to establish a contact group to discuss the amendments exclusively.

- 134. Several representatives stated that, while they opposed the establishment of a formal contact group, they did not object to an informal discussion group, which was the reasonable compromise that had been reached at the thirty-third meeting of the Open-ended Working Group and was fully in line with the commitments made at the United Nations Conference on Sustainable Development and elsewhere. Such a group would allow for the discussion of key issues, such as the availability of alternatives to HFCs.
- 135. Other representatives, while fully recognizing those concerns, said that the environmental benefits of the phase-down of HFCs were too substantial to be ignored. Only the Montreal Protocol possessed the framework to enable the control of production and consumption. If those questions were addressed, mechanisms could be developed that would enable developing countries to leapfrog HFCs and adopt more climate-friendly alternatives. A formal contact group would be a better forum than an informal discussion group in which to make progress, building on the positive discussions that had been held by the Open-ended Working Group. That would enable the full exploration of issues such as the availability of alternatives, cost implications and interaction with the United Nations Framework Convention on Climate Change. The proposals contained in the amendments could not be considered fully without establishing a formal contact group.
- 136. In response to the discussion, the representative of the Federated States of Micronesia said that the concerns voiced demonstrated why he wished to establish a contact group to continue the debate in greater detail. The latest scientific evidence of the impact of climate change should be sufficient to convince anyone of the urgency of the issue.
- 137. The representative of Canada also expressed thanks to the parties for their contributions to the debate, while stating that he found some of the comments confusing. Given that many of the recent statements by leaders and groups such as the Group of 20 had been explicit in their support for using the institutions of the Montreal Protocol to phase down HFCs, he found it difficult to understand how representatives of the same countries could oppose the establishment of a contact group to discuss those issues. He accepted that amending the Montreal Protocol was only one potential way forward, but said that the contact group would also allow for discussion of other options. He too found it difficult to understand the argument that the parties could not discuss HFCs until the India-United States task force had concluded its work; progress in bilateral task forces should clearly be encouraged, but that could not reasonably be expected to block progress in all other forums.
- 138. Several parties had argued that it was too soon to discuss the phase-down of HFCs, given their current focus on HCFCs. HCFCs had, however, been included in the Montreal Protocol since 1992, even though the first phase-out target that parties operating under paragraph 1 of Article 5 had had to meet had been set for 2013. Similarly, discussing HFCs at the current juncture did not mean that the parties would have to begin phasing them down immediately. It would, however, be valuable to begin to construct the long-term framework for the control of HFCs, which would give industry and Governments a degree of certainty about the future and help to stimulate industrial innovation in developing alternatives. Consideration of a potential phase-down did not preclude continuing use of HFCs in the short or medium term.
- 139. The argument that no alternatives existed to HFCs was not supported by the report of the Technology and Economic Assessment Panel; on the contrary, the report clearly showed that alternatives currently in use or under development would allow significant reductions in HFC use by 2020. The Vienna Convention provided the scope for the Montreal Protocol to tackle HFCs, even though they were not ozone-depleting substances, and, as the Group of 20 had concluded, the Protocol possessed the appropriate expertise and institutions to take on the issue. He agreed with the argument that the United Nations Framework Convention on Climate Change should not be in rivalry with the Montreal Protocol, but argued that the two agreements could work together to deal with HFCs. He accepted that the Multilateral Fund had sufficient funding only to support phase-out activities for substances currently controlled by the Protocol; if HFCs were added to the Protocol, the Multilateral Fund would clearly require significant additional resources. Lastly, while he recognized that many parties were unhappy with the proposal to establish a contact group, he was of the opinion that a contact group would be more likely than other forums to produce options for making progress.
- 140. The representatives of the United States and Mexico also expressed thanks to the parties for their contributions. They agreed with the representative of Canada that the establishment of a contact group did not necessarily imply the beginning of negotiations on the amendments, but said that it would be the most suitable forum for issues relating to the amendments to be raised, discussed and clarified.

- 141. The representative of India said that although several international and bilateral forums had raised the issue of HFCs in relation to the Montreal Protocol, none of them had proposed specifically that the phase-down of HFCs should be conducted under the Protocol. Furthermore, the high-level discussions between India and the United States had not been the idea of India; in effect, India had been forced to agree to the establishment of the joint task force on HFCs. He understood that HFCs were an important issue to parties not operating under paragraph 1 of Article 5, but said that there was no reason why they could not adopt national regulations to control them. There was no need to consider them under the Montreal Protocol. In addition, given that HFCs were already controlled under the United Nations Framework Convention on Climate Change and the Kyoto Protocol thereto, he could not understand why none of the proponents of the amendments had raised the issue in that forum; indeed, two of them were not even parties to the Kyoto Protocol.
- 142. The representatives of the United States and India disagreed over the creation of the task force. While the representative of the former said that India had suggested, first, bilateral discussions and, subsequently, the creation of the task force, the representative of the latter reiterated his belief that it had been a United States initiative.
- 143. Other representatives disagreed that alternatives were available for all uses of HFCs. They also disagreed with the proposal that an amendment should be adopted in order to encourage industry to develop alternatives in the future; that argument, which had been used in the past, was dangerous. Economically and socially acceptable technology had to be available before any additional commitments could be entered into. Other representatives, however, strongly disagreed with that conclusion, observing that more information was currently available on alternatives to HFCs than had been available on alternatives to CFCs or to HCFCs when the phase-out of those substances had been agreed upon. The parties had faced similar situations previously and the outcomes had always been positive.
- 144. The representative of an environmental non-governmental organization recalled that the past year had seen atmospheric carbon dioxide concentrations rise above 400 parts per million for the first time and the scientific community issue its starkest warning yet that human activities would result in far-reaching disruption of the climate system. HFCs were the fastest-growing category of greenhouse gases and their use was increasing precisely because of the activities of the Montreal Protocol. He called for the Protocol to live up to its potential, phase down HFC consumption and production, and avoid emissions of at least 100 gigatonnes of carbon-dioxide equivalent in the period up to 2050. With an ever-widening gap between the emissions reductions required to limit global temperature rise to 2°C by 2020 and current national pledges, the international community could ill afford to ignore such significant potential for climate mitigation. He called upon the parties to agree to establish an open-ended contact group to tackle all relevant financial, technical and legal issues in accordance with the principle of common but differentiated responsibilities that was the foundation of the Montreal Protocol and to take action before it was too late for the climate.
- 145. After informal discussions with a number of parties on the appropriate forum for further discussion, the Co-Chairs proposed that the parties should agree to re-establish the discussion group that had been set up at the thirty-third meeting of the Open-ended Working Group, with a mandate to report back on issues pertaining to the management of HFCs through the mechanisms of the Montreal Protocol, including financial, technical and legal aspects, and on the appropriate processes to deal with them, including options for establishing a mechanism to deal with the linkage between the Montreal Protocol and the United Nations Framework Convention on Climate Change. The parties had found that group to be a valuable and constructive forum in which to discuss all relevant issues without any preconceptions as to the outcomes. The discussion group would aim to develop the discussion further, including taking account of the outcomes of recent international discussions, and would report back. It would also outline options for advancing the discussions in 2014. Its outcome would be reflected in the report of the meeting. The co-convenors of the group would continue to be Gudi Alkemade (Netherlands) and Leslie Smith (Grenada).
- 146. The parties agreed to establish the said discussion group.
- 147. Subsequently, the co-convenor of the group presented the issues discussed by the group, stressing that it had not reached agreement on any issue, while highlighting the suggestion that more time be made available for discussions on the issues in 2014. The report of the discussion group is set out in annex III to the present report.
- 148. One representative expressed thanks to the co-chairs of the discussion group for their hard work and patience, stressing that there was a need for time for further discussions to be made available in 2014, including, potentially, an extra meeting of the Open-ended Working Group.

XI. Compliance and data-reporting issues: presentation on and consideration of the work and recommended decisions of the Implementation Committee under the Non-Compliance Procedure for the Montreal Protocol

- 149. The President of the Implementation Committee reported on the outcomes of the fiftieth and fifty-first meetings of the Committee. He outlined the draft decisions emanating from those meetings, which were before the parties in the form of a conference room paper.
- 150. The first draft decision dealt with the compliance status of Azerbaijan in relation to the phase-out of HCFCs in 2011. The Committee had considered the circumstances that had led to the state of non-compliance, the submission of data for 2012 showing that the party had returned to compliance and the implementation of the regulatory, administrative and technical measures required to ensure the party's continued compliance. The Committee had therefore recommended no further action, but proposed that Azerbaijan should be urged to work with the relevant implementing agencies in carrying out its related plan of action and that the party's progress should continue to be monitored.
- 151. The second draft decision concerned France, which had fallen into non-compliance after exceeding the allowed production of HCFCs for 2011. The party had subsequently submitted a plan of action that confirmed its return to compliance with the Protocol's HCFC production control measures for 2012. It was expected that compliance would continue in subsequent years. The Committee had agreed that no further action was necessary in view of the party's implementation of regulatory and administrative measures to ensure its compliance.
- 152. The third draft decision pertained to non-compliance by Kazakhstan, which had exceeded its permitted consumption of HCFCs and methyl bromide for 2011. The party had been requested to submit a plan of action to the Committee, including an explanation of the excess consumption and details of the management systems that had failed to prevent it. Unfortunately, no response had been received. The draft decision therefore requested the party to submit the requested information by 31 March 2014 to enable the Committee and the parties to consider the non-compliance situation of Kazakhstan in 2014. Noting that Kazakhstan remained the only party not operating under paragraph 1 of Article 5 that was not party to the Beijing Amendment, he looked forward in due course to welcoming Kazakhstan to the group of States that had ratified all the amendments to the Protocol.
- 153. The fourth draft decision concerned requests for revision of the HCFC baseline data of a number of parties. At its fiftieth and fifty-first meetings, the Committee had examined requests submitted by five parties operating under paragraph 1 of Article 5. The Committee was proposing to approve the requests by four of the parties; the lack of provision of sufficient data by the fifth party had prevented approval of that request.
- 154. The Committee was pleased with the excellent progress that the parties were making in meeting their data-reporting and phase-out obligations. Nevertheless, the fifth draft decision dealt with parties that had yet to report data. The name of any party to report data before the end of the current meeting would, however, be removed from any final decision. At the time of the President's report, nine parties had yet to report data: the Central African Republic, Eritrea, Gabon, Jordan, Kazakhstan, Kuwait, South Sudan, Uzbekistan and Yemen. The Committee was urging those parties to report their outstanding data as soon as possible and thereby return to a state of compliance with their data-reporting obligations. All the parties that had reported their data had been in compliance with their phase-out obligations. Early submission of data was exceptionally helpful to the Committee, he said, encouraging all parties to follow that practice in future.
- 155. The sixth and final draft decision pertained to the status of licensing systems regulating the import and export of ozone-depleting substances. At its fiftieth and fifty-first meetings, the Committee had examined the status of two of the parties to the Montreal Amendment in terms of the establishment of such systems. In the light of the information available, the Committee had agreed to request Botswana and South Sudan to establish such systems consistent with Article 4B of the Protocol and subsequently report to the Secretariat on their progress.
- 156. In conclusion, he expressed thanks to the representatives of the secretariat of the Multilateral Fund and the implementing agencies, the Chair of the Executive Committee and the Ozone Secretariat for their support to the work of the Implementation Committee.
- 157. Following the report, the representative of Jordan said that his country's data were ready for submission. The representative of Kazakhstan said that the ratification of the Beijing Amendment by her country's parliament was under way and would be completed by the end of 2013. She assured the

parties that Kazakhstan would provide the information requested in the draft decision by 31 March 2014. The representative of Kuwait promised that his country would report its data by the end of the current meeting.

158. The representative of Yemen reiterated his country's commitment to the Protocol, including with regard to data submission. Nevertheless, the security situation in Yemen had affected its ability to gather and verify data and, therefore, to report on time. The required data would be sent to the Ozone Secretariat as soon as possible upon his return to Yemen after the current meeting.

XII. Other matters

A. Request by Croatia to be removed from the list of countries operating under paragraph 1 of Article 5 of the Montreal Protocol

- 159. The representative of the European Union, on behalf of Croatia, stated that Croatia had become a full member of the European Union on 1 July 2013 and was therefore requesting to be removed from the list of countries operating under paragraph 1 of Article 5 of the Protocol. Introducing a draft decision on the issue, she stated that, accordingly, Croatia undertook to assume all related obligations for the year 2014 and thereafter.
- 160. The parties approved the draft decision for consideration and adoption during the high-level segment.

B. Secretariat staffing

- 161. The representative of Grenada said that the issue of the staffing of the Ozone Secretariat required urgent examination by the parties, given that the Executive Secretary would be retiring at the end of October 2013 and that the position of Deputy Executive Secretary remained vacant, in addition to other staffing changes in the Secretariat. The work of the Secretariat would be heavy in 2014, with the joint meeting of the Conference of the Parties to the Vienna Convention and the Twenty-Sixth Meeting of the Parties to the Montreal Protocol, in addition to the associated preparatory meetings therefor. There would be some 30 meetings of the assessment panels, together with the negotiations for the replenishment of the Multilateral Fund. Given that it would be a challenging year for the Secretariat, it was his country's intention to assist in ensuring a smooth transition process with minimal disruption to the operations of the Secretariat.
- 162. In the ensuing discussion, there was general agreement that the success of the Protocol was largely due to the strength of the Secretariat. It was suggested that some of the concerns expressed might be alleviated if the date on which the new Executive Secretary would take office could be provided. It was, however, noted that in the past the Deputy Executive Secretary had ensured continuity at such times of transition, with some representatives expressing concern that the position remained vacant.
- 163. The parties agreed to establish an informal group, co-chaired by Mikkel Sørensen (Denmark) and Margaret Aanyu (Uganda), to discuss possible action that could be taken in support of the Secretariat.
- 164. Subsequently, the Executive Secretary reported that Tina Birbili (Greece) had been confirmed as the incoming Executive Secretary. She would take up her post in early November 2013. In addition, the process of appointing a new Deputy Executive Secretary was at an advanced stage and that appointment would be announced shortly. Lastly, the process of appointing a new Information and Communications Officer would be completed by the end of 2013.
- 165. Subsequently, the co-chair of the informal group said that the Senior Administrative Officer of the Ozone Secretariat, Kathleen Creavalle, had been present, as had the Senior Administrative Officer of the UNEP Regional Office for Asia and the Pacific, Henk Verbeek. Information had been provided on the staffing situation of the Secretariat in line with the information that had been supplied by the Executive Secretary. The group had been of the opinion that, in the light of the capable and experienced staff members in Secretariat and the new information provided, there appeared to be no need for additional support. Nevertheless, the representative of Grenada wished to ensure that there would be minimum disruption and a seamless transition, and proposed that the Secretariat should have some flexibility to seek additional support, if required, and that that possibility should be accommodated in the budget.
- 166. The parties took note of the report.

Part Two: High-level segment

I. Opening of the high-level segment

- 167. The high-level segment of the Twenty-Fifth Meeting of the Parties was opened at 10.15 a.m. on Thursday, 24 October 2013.
- 168. Opening statements were delivered by the Minister for Industry of Thailand, Prasert Boonchaisuk; the Executive Secretary of the Ozone Secretariat, Marco González; and the Additional Secretary, Climate Change Division (Cabinet Secretariat) for Pakistan and President of the Twenty-Fourth Meeting of the Parties to the Montreal Protocol, Raja Hasan Abbas.
- 169. In his statement, Mr. Abbas, expressing appreciation to the parties for having entrusted him with the presidency of the Twenty-Fourth Meeting of the Parties, said that the Bureau had met on 19 October 2013 to review the implementation of the decisions of the Twenty-Fourth Meeting of the Parties. He was pleased to see that those decisions had been implemented, with follow-up action being taken by the parties, the assessment panels, the Implementation Committee and the Secretariat. The successful implementation of the Protocol had demonstrated the cooperative spirit of all parties in dealing with the problems associated with the ozone layer.
- 170. Challenges, however, remained to be tackled, such as those identified in the additional information prepared by the Technology and Economic Assessment Panel on alternatives to ozone-depleting substances and the additional funding needed for the Multilateral Fund to maximize the climate benefits of the accelerated phase-out of HCFCs. There was also continuing negotiation of terms of reference for the replenishment of the Multilateral Fund for the triennium 2015–2017. A decision needed to be taken thereon to ensure that the protection of the ozone layer was not derailed by a lack of renewed commitment to providing adequate technical and financial resources to enable developing countries to phase out HCFCs and any other remaining controlled substances. He urged the parties to negotiate in the spirit of compromise and to continue to agree on issues by consensus.
- 171. The Executive Secretary, in his statement, said that the Protocol was making history, not only by protecting the ozone layer, but also by contributing to mitigating climate change. In addition to working to phase out HCFCs while avoiding the use of substitutes with high global-warming potential and promoting energy-efficient technologies, parties were considering other options to protect the atmosphere. Ambitious proposals to deal with the production and use of HFCs, which were one of the main substitutes for HCFCs, had been considered by the parties since 2009. Since the Twenty-Fourth Meeting of the Parties, a number of agreements had been reached at the highest political levels, giving impetus to the policy, legal, technical and financial issues being discussed at the current meeting. The market was reacting to such developments and responding with increased efforts to develop and commercialize suitable alternatives. He stressed the importance of the discussions on the terms of reference for the replenishment of the Multilateral Fund to set the stage for years to come.
- 172. Speaking of his imminent retirement, he expressed thanks to all those who had accompanied him on his journey in the ozone arena and admiration for their sterling work and support. He recalled the universal ratification of the Vienna Convention and the Montreal Protocol, the only United Nations treaties to have achieved such a status, with the highest ever number of parties and an outstanding rate of compliance (98 per cent since the adoption of the Protocol). He also noted that the Protocol had been the first multilateral environmental agreement to conduct paperless meetings, another initiative to assist in environmental protection efforts. He urged parties to redouble their efforts to meet the challenges ahead, while paying tribute to the Protocol as an example of what nations could achieve together.
- 173. In his statement, Mr. Boonchaisuk said that Thailand, having been a party to the Protocol since 1989, had implemented various activities to meet its obligations under the Protocol. With its national CFC phase-out plan, and the support of the Multilateral Fund through the World Bank and other implementing agencies, Thailand had successfully phased out more than 10,000 metric tonnes of CFCs and other ozone-depleting substances. In 2013, Thailand had also imposed a quota on the import of HCFCs in order to meet its obligations under the freeze control measure. Thailand would also phase out methyl bromide consumption completely in 2013, two years earlier than the date set under the Protocol.
- 174. In 2007, the parties had reached a historic agreement to accelerate the phase-out schedule for HCFCs in both developed and developing countries. Parties operating under paragraph 1 of Article 5 were obliged to freeze their HCFC production and consumption by 2013 and comply with the stepwise reduction until complete phase-out was achieved in 2030. The accelerated HCFC phase-out milestones had, however, become a new challenge to the parties. With regard to substitute technologies, they were

facing barriers pertaining to safety issues and economic feasibility. There was also a rising trend of HCFC consumption in developing countries. Those barriers notwithstanding, he was confident that the goal of phasing out HCFCs could be attained. At the current meeting, the parties had been considering how to advance the implementation of the Protocol in line with decision XIX/6. The issues included proposed amendments on HFC phase-down, additional funding to maximize climate benefits, terms of reference for the study of the replenishment of the Multilateral Fund and funding of HCFC production facilities. Keeping in mind that the past successes of the Protocol had greatly depended on the principle of common but differentiated responsibilities and the development needs of developing countries, he expressed the hope that an agreement could be reached of dual benefit to the ozone layer and the climate.

175. The opening statements were followed by a performance of traditional Thai music and dance.

II. Organizational matters

A. Election of officers for the Twenty-Fifth Meeting of the Parties to the Montreal Protocol

176. At the opening session of the high-level segment, in accordance with paragraph 1 of rule 21 of the rules of procedure, the following officers were elected, by acclamation, to the Bureau of the Twenty-Fifth Meeting of the Parties to the Montreal Protocol:

President: Oleksandr Sushko Ukraine (Eastern European States)

Vice-Presidents: Harry Kalaba Zambia (African States)

Italo Córdoba El Salvador

(Latin American and Caribbean States)

Malcolm McKee New Zealand

(Western European and other States)

Rapporteur: Juan Miguel Cuna Philippines (Asia-Pacific States)

B. Adoption of the agenda of the Twenty-Fifth Meeting of the Parties to the Montreal Protocol

177. The following agenda for the high-level segment was adopted on the basis of the provisional agenda contained in document UNEP/OzL.Pro.25/1:

- 1. Opening of the high-level segment:
 - (a) Statements by representative(s) of the Government of Thailand;
 - (b) Statements by representative(s) of the United Nations Environment Programme;
 - (c) Statement by the President of the Twenty-Fourth Meeting of the Parties to the Montreal Protocol.
- 2. Organizational matters:
 - (a) Election of officers for the Twenty-Fifth Meeting of the Parties to the Montreal Protocol:
 - (b) Adoption of the agenda of the Twenty-Fifth Meeting of the Parties to the Montreal Protocol;
 - (c) Organization of work;
 - (d) Credentials of representatives.
- 3. Status of ratification of the Vienna Convention for the Protection of the Ozone Layer, the Montreal Protocol and the amendments to the Montreal Protocol.
- 4. Presentations by the assessment panels on the status of their work, including the latest developments.
- 5. Presentation by the Chair of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol on the work of the Executive Committee, the Multilateral Fund secretariat and the Fund's implementing agencies.

- 6. Statements by heads of delegation.
- 7. Report by the co-chairs of the preparatory segment and consideration of the decisions recommended for adoption by the Twenty-Fifth Meeting of the Parties.
- 8. Dates and venue for the Twenty-Sixth Meeting of the Parties to the Montreal Protocol.
- 9. Other matters.
- 10. Adoption of decisions by the Twenty-Fifth Meeting of the Parties to the Montreal Protocol.
- 11. Adoption of the report of the Twenty-Fifth Meeting of the Parties to the Montreal Protocol.
- 12. Closure of the meeting.

178. During the discussion of the agenda for the high-level segment, the parties agreed to include under agenda item 9, "Other matters", a statement by the representative of Burkina Faso, who requested that the statement should be recorded in its entirety in the report of the meeting. Subsequently, however, the representative of Burkina Faso noted that he would be unable to deliver the statement, given that, as a result of the travel arrangements that had been made for the current meeting, he and numerous other representatives would need to leave before the conclusion of the meeting in order to make the travel connections that had been organized for them by the Secretariat. He requested that in the future such arrangements should be avoided.

C. Organization of work

179. The parties agreed to follow their customary procedures.

D. Credentials of representatives

180. The Twenty-Fifth Meeting of the Parties approved the credentials of the representatives of 102 of the 150 parties represented. The Bureau provisionally approved the participation of the remaining parties on the understanding that they would forward their credentials to the Secretariat as soon as possible. The Bureau urged all parties attending future meetings of the parties to make their best efforts to submit credentials to the Secretariat as required under rule 18 of the rules of procedure. The Bureau also recalled that, under the rules of procedure, credentials had to be issued either by a head of State or Government or by a minister for foreign affairs or, in the case of a regional economic integration organization, by the competent authority of that organization. The Bureau further recalled that representatives of parties not presenting credentials in the correct form could be precluded from full participation in the meetings of the parties, including the right to vote.

III. Status of ratification of the Vienna Convention for the Protection of the Ozone Layer, the Montreal Protocol and the amendments to the Montreal Protocol

181. The President congratulated the large number of countries that had ratified the Vienna Convention, the Montreal Protocol and the amendments to the Montreal Protocol. Only five countries – Kazakhstan, Libya, Mauritania, Papua New Guinea and Saudi Arabia – had yet to ratify some of the amendments. He urged them to do so as soon as possible.

IV. Presentations by the assessment panels on the status of their work, including the latest developments

- 182. Presentations were made by the co-chairs of the Scientific Assessment Panel, the Environmental Effects Assessment Panel and the Technology and Economic Assessment Panel.
- 183. Ayité-Lô Ajavon outlined the status of the 2014 assessment of the Scientific Assessment Panel and summarized the topics that would be addressed therein.
- 184. Nigel Paul presented an update on the status of the 2014 assessment of the Environmental Effects Assessment Panel and outlined the topics that it would cover.
- 185. Bella Maranian gave an overview of the status of the 2014 assessment of the Technology and Economic Assessment Panel and outlined the main items therein relating to the work of the Chemical Technical Options Committee, the Flexible and Rigid Foams Technical Options Committee, the Halons Technical Options Committee, the Medical Technical Options Committee, the Methyl

Bromide Technical Options Committee and the Refrigeration, Air-Conditioning and Heat Pumps Technical Options Committee.

- 186. Summaries of the presentations prepared by the presenters are set out in annex IV to the present report.
- 187. The parties took note of the information presented.

V. Presentation by the Chair of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol on the work of the Executive Committee, the Multilateral Fund secretariat and the Fund's implementing agencies

- 188. The Chair of the Executive Committee of the Multilateral Fund, Fiona Walters (United Kingdom), delivered a presentation on the Committee's activities since the Twenty-Fourth Meeting of the Parties, encompassing the Committee's sixty-eighth, sixty-ninth and seventieth meetings. She summarized the report of the Committee (UNEP/OzL.Pro/25/8) and said that, since its previous report, the Committee had approved a total of 178 projects and activities with a planned phase-out of 931 ODP-tonnes of production and consumption of controlled substances. The funds approved for those projects and activities had totalled \$122.5 million. During the reporting period, the Committee had also approved tranches of management plans to tackle HCFC consumption in 50 countries. A total of 138 parties operating under paragraph 1 of Article 5 had HCFC phase-out activities in place to meet at least the 2015 control measures. Only six countries had phase-out management plans outstanding. The first tranche of the HCFC production phase-out management plan for China, the world's largest producer of HCFCs, had also been approved.
- 189. The Executive Committee had agreed to provide China with up to \$385 million to completely eliminate its production of HCFCs by 2030. Of that amount, \$95 million had been approved for stage I of the HCFC phase-out management plan for the production sector to meet the freeze and the 10 per cent reduction in the party's HCFC production baseline. China had agreed not only to retire its current HCFC production capacity, but also to retire surplus production capacity that was currently not used. There had, however, been no agreement on the HCFC production sector guidelines, and discussions on that issue would resume at the seventy-first meeting of the Committee.
- 190. A revised proposal on maximizing climate benefits from the HCFC phase-out in the refrigeration servicing sector had led to the preparation of a discussion paper on minimizing the adverse climate impact of HCFC phase-out in that sector. The Committee would continue its deliberation of that issue at its seventy-first meeting. Considerable progress had also been made in the development of guidelines for funding the preparation of stage II of the HCFC phase-out management plans, and that work would also continue at the Committee's seventy-first meeting. A review of the criteria for funding HCFC phase-out in the consumption sector, adopted under decision 60/44, had been initiated at the seventieth meeting. Additional information on the incremental costs incurred under stage I would be submitted to the Committee at its seventy-first meeting, with the criteria for funding being discussed at the first meeting of the Committee in 2014.
- 191. Pursuant to decision XXIV/11, a report summarizing the actions taken by the Committee on each of the recommendations contained in the 2012 evaluation of the financial mechanism had been included as annex I to the report of the Committee. The report also included a section on progress with the Multilateral Fund Climate Impact Indicator. A further report thereon would be considered at the Committee's seventy-first meeting. During consideration of that report, the Committee had suggested that it should be reviewed by independent experts, perhaps from the climate-related bodies of the United Nations. The Committee had also considered an evaluation of methyl bromide projects in Africa that showed that the risk of African countries returning to the use of methyl bromide was low and that the alternative technologies being chosen were generally appropriate.
- 192. There had been progress regarding the contributions of the Russian Federation, which had paid its pledge of \$2.7 million for 2013. The Committee had considered a voluntary contribution of €3 million from the European Commission that was intended to maximize the climate benefits from HCFC phase-out, but had decided to defer discussion of that contribution until a later meeting.
- 193. Pursuant to decisions XVII/6 and XXI/3, an updated report on the progress made in reducing emissions of controlled substances from process-agent uses during the biennium 2011–2012 had been submitted to the Open-ended Working Group at its thirty-third meeting. In accordance with decision XXII/8, that would be the final such report, given that all process-agent projects had been completed. The Committee had also decided to hold, on a trial basis, two meetings in 2014, an arrangement that

would be reviewed at the final meeting of the year. Should any urgent matters need to be considered, an intersessional meeting could be organized.

- 194. She then spoke on behalf of the implementing agencies. UNEP was assisting 148 parties operating under paragraph 1 of Article 5 to comply with their obligations under the Protocol through its Compliance Assistance Programme. UNEP was implementing projects, including HCFC phase-out management plans and institutional strengthening projects, in 106 countries. It was also providing country-specific compliance services, operating regional networks of ozone officers, facilitating South-South cooperation, assisting with regional technology capacity-building and awareness-raising activities, and providing a global information clearing house to build the capacity of national ozone units. While assisting all parties operating under paragraph 1 of Article 5, UNEP was particularly attentive to the needs of low-volume-consuming countries, which included least-developed countries and small island developing States. Through partnerships with other agencies and organizations, UNEP was also encouraging the adoption of low-global-warming-potential, energy-efficient alternatives to HCFCs to achieve climate co-benefits in line with decision XIX/6.
- 195. The United Nations Development Programme (UNDP) was implementing HCFC phase-out management plans in 44 countries. Significant progress had been achieved in the implementation of demonstration projects to assess the viability of HCFC replacement technologies with low global-warming potential in several sectors. UNDP had continued to engage with partner countries, technology providers and the Climate and Clean Air Coalition to provide information on climate-friendly emerging technologies to parties operating under paragraph 1 of Article 5.
- 196. UNIDO was implementing HCFC phase-out management plans in 68 countries. It also had several projects for the elimination of methyl bromide and demonstration projects for the waste management and disposal of ozone-depleting substances. Pilot projects had been developed for the Gambia and Viet Nam to mobilize co-financing for HCFC activities to improve energy efficiency and reduce emissions of ozone-depleting substances. The ATMOsphere Technology Summit had been held in June 2013 to discuss technology solutions for businesses in the refrigeration, air-conditioning and foam sectors in developing countries.
- 197. Given the funding commitments made by the Executive Committee for stage I of the HCFC phase-out management plans, and the regulatory measures instituted in parallel to investment activities, the partner countries of the World Bank were on track to meet their 2013 freeze targets. The Bank would also assist in the HCFC production phase-out in China. The first stage of the plan would reduce HCFC supply by more than 47,000 metric tonnes by 2015, facilitating not only the country's ability to meet its first HCFC reduction targets under the Protocol, but also those of other developing countries. The production sector plan also played a significant role in global efforts to reduce greenhouse gases, with an equivalent of 63 billion tonnes of carbon dioxide emissions avoided during the first stage.
- 198. The recruitment process for the post of Chief Officer had been set in motion at the sixty-eighth meeting of the Committee and, on 6 September 2013, the Secretary-General of the United Nations had announced that Eduardo Ganem had been selected as the new Chief Officer of the Multilateral Fund. In conclusion, she paid tribute to the former Chief Officer, Maria Nolan, as well as to the Treasurer of the Multilateral Fund, Moses Ajibade, and the Executive Secretary, who would be retiring after the current meeting.
- 199. The parties took note of the information presented.

VI. Statements by heads of delegation

- 200. During the high-level segment, statements were made by the heads of delegation of the following parties, listed in the order in which they spoke: Zambia, Zimbabwe, China, Japan, United States, Sri Lanka, Panama, Malawi, Angola, Nauru, Mozambique, Saint Lucia, Solomon Islands, Bahrain, Iraq, Philippines, Indonesia, Burkina Faso, South Africa, Comoros, Kenya, Nicaragua, Saudi Arabia, Bangladesh, Cook Islands, European Union, Congo, Democratic People's Republic of Korea, Costa Rica, Timor-Leste, Vanuatu, Tajikistan, Brazil, Cambodia, Sierra Leone, Dominican Republic, Fiji, Maldives, Trinidad and Tobago, Kiribati, Pakistan, Ecuador, Singapore, Cameroon, Cuba, Mexico, Uganda, Malaysia, South Sudan, Tunisia, Micronesia (Federated States of), Namibia and Georgia.
- 201. A statement was also made by the representative of the International Institute of Refrigeration.
- 202. Representatives of all parties who spoke expressed thanks to the Government and people of Thailand for their hospitality in hosting the current meeting. Many thanked UNEP and the Ozone

Secretariat, the Multilateral Fund secretariat and implementing agencies, donor partners, the assessment panels, international organizations and other stakeholders for their role in ensuring the success of the meeting and the successful development and implementation of the Protocol. Many representatives expressed their heartfelt appreciation for the valuable work performed by the outgoing Executive Secretary in spearheading international efforts to save the ozone layer and mobilizing a diverse global community in pursuit of that goal.

- 203. Many representatives expressed pride at having ratified the Protocol and all the amendments thereto, reiterating their commitment to the objectives of the instrument. A number said that they would continue to strive, along with other parties, to ensure the protection of the ozone layer.
- Many described efforts at the national level to meet their obligations under the Protocol, outlining the policy, legislative, institutional and programmatic measures that they had put in place in order to support those efforts, together with the improved governance structures that they had developed. A number of representatives spoke of their commitment to phasing out HCFCs, describing the phase-out management plans, strategies, data collection and monitoring activities and development of guidelines for best practice being undertaken to achieve that end. One representative said that the accelerated phase-out of HCFCs was yet another important phase in the history of the Protocol, requiring high levels of collaboration, cooperation, innovation and research. Several representatives described their countries' achievements in phasing out ozone-depleting substances, including CFCs, halons, carbon tetrachloride and methyl bromide, ahead of the designated schedule. Among the wide range of initiatives described were establishing licensing and quota systems; introducing strict labelling requirements; conducting in-country training for technicians in the air-conditioning and refrigeration sectors; implementing conversion measures in the technically challenging foam sector; developing curricula in educational institutions for courses in air-conditioning and refrigeration servicing; training customs officers to improve oversight of trade in ozone-depleting substances and prevent illegal trade; and conducting awareness-raising programmes. Several representatives indicated that their efforts to control ozone-depleting substances under the Protocol were part of a wider commitment to sustainable development and the protection of the environment and human health, and several described multisectoral programmes with a range of components in addition to protection of the ozone layer. Some spoke of the need for a holistic approach, drawing upon the respect of human beings for one another and for the planet. Lastly, several parties expressed gratitude to the international partners and donors that had assisted them in their endeavours.
- 205. A number of representatives reflected on the success of the Protocol over the years and the factors behind the success of the only truly global agreement. Several expressed pride at being associated with the remarkable accomplishment of the Protocol in redressing previous errors and making the world a safer place in which to live. One representative said that the Protocol was marked by a spirit of strengthened confidence, consensus-building and cooperation among parties. Another representative remarked that a notable feature of the Protocol was its ability to produce multiple environmental benefits, in particular climate-related benefits. Another said that the Protocol was considered a model for multilateral environmental agreements, owing to its delivery of targets and exemplary financial and technical support structure. Among the range of factors identified as contributing to that achievement were the dedication and commitment of all those involved, including the Secretariat and the parties; the honesty and transparency of the discussions and negotiations; a wide range of programmes and initiatives, including the UNEP OzonAction Programme, and the strong regional dimension to activities; and the role played by robust science and research, as reflected in the work of the assessment panels.
- 206. Several representatives urged all parties to continue to strive for the total elimination of all ozone-depleting substances. A number called for synergistic approaches involving all environment-related instruments, including the Basel Convention, the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade, the Stockholm Convention on Persistent Organic Pollutants, the United Nations Framework Convention on Climate Change and the Kyoto Protocol thereto, the recently adopted Minamata Convention on Mercury and the Montreal Protocol itself. Such cooperation and coordination was needed to confront and overcome the increasingly complex web of environmental and other challenges facing the planet and to make efficient use of increasingly stretched resources. One representative spoke of the need for coherent, cohesive and integrated action, with various instruments complementing one another within the framework of global environmental governance.
- 207. Many representatives highlighted the role of the Multilateral Fund as a mechanism by which developing-country parties or parties with economies in transition could avail themselves of financing and other forms of assistance for phase-out projects. A number of representatives alluded to the vital work undertaken by the implementing agencies of the Fund at the country level. Several praised the

work of the former Chief Officer of the Multilateral Fund, Maria Nolan, and congratulated Eduardo Ganem on his appointment as her replacement. One representative said that, given recent developments in the international community, with some developing countries achieving remarkable economic growth, parties operating under paragraph 1 of Article 5 should play a responsible and appropriate role in tackling global challenges, and future replenishments of the Fund should take account of the changing economic conditions of individual countries. Another representative said that emerging challenges pertaining to potential actions under the ozone protection regime, for example on HFCs, could be tackled through additional financing channelled via the Fund. Another representative said that, with the next Fund replenishment covering the transition from stage I to stage II of the HCFC phase-out management plans, stable and sustainable funding was essential.

- 208. The representative of the Democratic People's Republic of Korea, drawing attention to her country's recent notification under the non-compliance procedure of the Protocol, expressed regret that its HCFC phase-out management plan had still not been approved by the Executive Committee of the Multilateral Fund. She urged the Committee to consider the project positively, and to arrange for early disbursement of the funds approved for the institutional strengthening project, so that her country could participate fully in the international activities to protect the environment.
- The phase-out of HCFCs, and the challenges surrounding it, was an issue of major concern to a number of parties. One representative expressed a general theme when she said that technology transfer to developing countries remained a major challenge, given the various geographical locations and the cost of the available ozone-friendly and climate-friendly alternatives on the market, in addition to the fact that many new technologies had yet to be tested in all regions of the world to determine their effectiveness, affordability and usability. She added that, for most countries operating under paragraph 1 of Article 5, non-investment projects, including those on awareness-raising, training and institutional strengthening, continued to make a crucial contribution to the phase-out of controlled substances. Another representative said that it was important for the Technology and Economic Assessment Panel to keep pace with new developments and their commercialization, highlighting the value of demonstration projects financed by the Multilateral Fund. Several representatives noted the difficulty of identifying suitable alternatives for some ozone-depleting substances in specific uses, for example methyl bromide for quarantine and pre-shipment and fumigation purposes. Several representatives expressed concern at the continued use of methyl bromide, for example through critical-use nominations in the strawberry runner sector, by parties that might be expected to have the resources necessary to achieve timely phase-out. Lastly, one representative summed up the mood of many when he expressed the hope that, in the not-too-distant future, environmentally friendly alternatives that were affordable, technically feasible, cost-effective and safe would be commercially available.
- 210. Many representatives stressed that, in the light of the foregoing challenges, there was a need for adequate, predictable and stable funding for developing countries and countries with economies in transition. Financial, scientific and technological support was needed to help countries to shift to non-HCFC technology and to assist them with capacity-building and institutional strengthening. A number of representatives called upon developed countries to fulfil their responsibilities to provide support to developing countries, including through technology transfer. Some representatives said that the principle of common but differentiated responsibilities should underlie that process. One representative said that provision of technical and financial assistance should not be subject to unfair conditionalities.
- 211. Representatives expressed a range of views on the extent to which the issue of HFCs should be dealt with under the Protocol, and the related matter of whether the Protocol should be amended accordingly. Some representatives urged the parties to accept their responsibilities and to take relevant measures under the Protocol, in cooperation with other instruments, to tackle the matter of HFCs, while others stated that substances with high global-warming potential came under the purview of the United Nations Framework Convention on Climate Change and the Kyoto Protocol thereto and should therefore be dealt with in that forum. Several stressed that there was a need for urgent action under the Montreal Protocol, including through the establishment of a formal contact group to take forward the issue of HFCs, to complement international efforts to counteract the threat of global warming, with several alluding to the growing impact of climate change on their countries, while others said that more time was needed to build scientific knowledge on, and assess the cost, safety and suitability of, alternatives to ozone-depleting substances so that previous mistakes were not repeated.
- 212. A number of representatives drew attention to the particular challenges facing their countries or groups of countries. Those from small island developing States stressed the growing threat of rising sea levels, exacerbating such problems as the dependence of their economies on vulnerable sectors such as tourism and fishing, the difficulty of disposing of hazardous waste, the daunting challenge of

controlling illegal trade and the negative effect of the isolated market on the choice of technology. Several sought greater representation on the bodies of the Protocol, including the Executive Committee of the Multilateral Fund. Representatives of countries in very hot geographical locations also highlighted the compliance challenges that they faced owing to environmental factors, especially in the refrigeration and air-conditioning sectors. One representative highlighted the vulnerability of people in high mountain areas, for example to the effects of ultraviolet radiation.

- 213. A number of representatives reflected on the challenges facing the Protocol in the future. Finding a way forward on the issue of HFCs was seen by most as the main challenge facing the Protocol in the coming years. Among the specific issues raised were the urgent need to find alternatives for certain uses of methyl bromide, the continuing existence of large banks and stockpiles of ozone-depleting substances, the need to improve systems for recovery and recycling, the growing problem of illegal trade and dumping, the need for further institutional strengthening and the uncertainty surrounding the cost and viability of alternatives.
- 214. On a broader level, several representatives considered what might be the future role of the Protocol in a rapidly changing environmental, economic and social context. There was recognition of the importance of increased partnership, greater cooperation between international instruments and more effective regional cooperation. The extent to which the Protocol should engage in the climate change agenda remained a crucial issue. Another subject of discussion was the relationship between the Protocol and other matters of crucial global importance, such as the post-2015 development agenda and, if adopted, the sustainable development goals. One representative said that a holistic and flexible approach was needed to adapt the achievements of the Protocol to the broader goal of sustainable development.
- 215. The representative of the International Institute of Refrigeration said that, while refrigeration was indispensable to life, it contributed to two major threats to the environment: ozone depletion and climate change. He outlined a number of recommendations in the sector, including on coordination between the Montreal and Kyoto protocols to phase down consumption of HFCs; improved refrigeration containment by optimization of design and maintenance and training of technicians; use of refrigerants of low-global-warming potential, especially natural refrigerants such as ammonia, carbon dioxide, hydrocarbons and water; and provision of sufficient and objective information on those issues to assist policymaking.

VII. Report by the co-chairs of the preparatory segment and consideration of the decisions recommended for adoption by the Twenty-Fifth Meeting of the Parties

216. Thanking the parties for their efforts, the contact group chairs for their leadership, the Secretariat for its excellent work and professionalism, and the interpreters and other behind-the-scenes staff for facilitating the work of the parties, the co-chairs of the preparatory segment commended the draft decisions approved during the segment for adoption by the Meeting of the Parties.

VIII. Dates and venue for the Twenty-Sixth Meeting of the Parties to the Montreal Protocol

217. The representative of the Secretariat stated that the Secretariat had received no offer from any party to host the Twenty-Sixth Meeting of the Parties. Consequently, the parties agreed to hold the Twenty-Sixth Meeting of the Parties in November 2014 at the seat of the Secretariat, in Nairobi, or at any other United Nations venue.

IX. Other matters

Tribute to the Executive Secretary

218. At the final session of the ministerial segment, on Friday, 25 October 2013, representatives of parties, implementing agencies, national ozone officers, the Multilateral Fund and the Ozone Secretariat paid tribute to the Executive Secretary of the Ozone Secretariat, Marco González, who was attending his last meeting of the parties in that capacity, for his remarkable contribution to the work of the Vienna Convention and the Montreal Protocol. Recalling his many achievements over 11 years at the helm of the Secretariat, many eulogized his pursuit of compliance for all under the two ozone instruments. Several representatives drew attention to his vision and invaluable role in charting the course of the instruments, helping the Montreal Protocol to become a model for international

cooperation and an effective instrument for protecting the ozone layer and life on Earth. The attainment of universal ratification of the Vienna Convention and the Montreal Protocol, achieved in 2009, the first of the multilateral environmental agreements to achieve that status, had in turn led to meaningful achievements, such as the significant reduction of production and consumption of ozone-depleting substances, during his tenure.

219. Many representatives praised his commitment to and aptitude for building consensus and his good-humoured and unfailing support to parties, implementing agencies and colleagues alike. Recounting personal anecdotes that highlighted the many close personal relationships forged with members of the "ozone family", representatives commended his warmth, leadership and unerring respect for all. A number of representatives expressed the hope that he would continue to share his extensive knowledge with the ozone community in the ongoing quest for atmospheric protection. At the culmination of a distinguished career in the Ozone Secretariat, they unanimously expressed their gratitude for his exemplary service and wished him success in his future endeavours.

X. Adoption of decisions by the Twenty-Fifth Meeting of the Parties to the Montreal Protocol

220. The Twenty-Fifth Meeting of the Parties decides:

Decision XXV/1: Status of ratification of the Montreal and Beijing amendments to the Montreal Protocol

- 1. To note with satisfaction the large number of countries that have ratified the Vienna Convention for the Protection of the Ozone Layer and the Montreal Protocol on Substances that Deplete the Ozone Layer;
- 2. To note that, as at 25 October 2013, 194 parties had ratified the Montreal Amendment to the Montreal Protocol and 192 parties had ratified the Beijing Amendment to the Montreal Protocol;
- 3. To urge all States that have not yet done so to ratify, approve or accede to the amendments, taking into account the fact that universal participation is necessary to ensure the protection of the ozone layer;

Decision XXV/2: Essential-use nominations for controlled substances for 2014

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, the use of chlorofluorocarbons for metered-dose inhalers does not qualify as an essential use if technically and economically feasible alternatives or substitutes are available that are acceptable from the standpoint of environment and health,

Noting the Panel's conclusion that technically satisfactory alternatives to chlorofluorocarbon-based metered-dose inhalers are available for some therapeutic formulations for treating asthma and chronic obstructive pulmonary disease,

Taking into account the Panel's analysis and recommendations for essential-use exemptions for controlled substances for the manufacture of metered-dose inhalers used for asthma and chronic obstructive pulmonary disease,

Noting with concern the delay in the implementation of the conversion project in the Russian Federation,

Welcoming the fact that the Russian Federation does not intend to submit nominations beyond 2014.

Welcoming also the continued progress of several parties operating under paragraph 1 of Article 5 in reducing their reliance on chlorofluorocarbon-based 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 2014 necessary to satisfy essential uses of chlorofluorocarbons for metered-dose inhalers for asthma and chronic obstructive pulmonary disease, as specified in the annex to the present decision;
- 2. To request nominating parties to provide the Medical Technical Options Committee with information to enable the assessment of essential-use nominations, in accordance with the criteria

contained in decision IV/25 and subsequent relevant decisions, as set out in the handbook on essential-use nominations:

- 3. To encourage parties with essential-use exemptions in 2014 to consider initially sourcing required pharmaceutical-grade chlorofluorocarbons from stockpiles where they are available and accessible, provided that such stockpiles are used subject to the conditions established by the Meeting of the Parties in paragraph 2 of its decision VII/28;
- 4. To encourage parties with stockpiles of pharmaceutical-grade chlorofluorocarbons potentially available for export to parties with essential-use exemptions in 2014 to notify the Ozone Secretariat of those quantities and to provide it with the details of a contact point by 31 December 2013;
- 5. To request the Secretariat to post on its website details of the potentially available stocks referred to in paragraph 4 of the present decision;
- 6. To urge the Russian Federation to expedite its conversion project with a view to phasing out chlorofluorocarbons;
- 7. That parties listed in the annex to the present decision shall have full flexibility in sourcing the quantity of pharmaceutical-grade chlorofluorocarbons to the extent required for manufacturing metered-dose inhalers, as authorized in paragraph 1 of the present decision, from imports, from domestic producers or from existing stockpiles;
- 8. To request that parties consider domestic regulations to ban the launch or sale of new chlorofluorocarbon-based metered-dose inhaler products, even if such products have been approved;
- 9. To encourage parties to fast-track their administration processes for the registration of metered-dose inhaler products in order to speed up the transition to chlorofluorocarbon-free alternatives:

Annex

Essential-use authorizations for 2014 of chlorofluorocarbons for metered-dose inhalers

(Metric tonnes)

Party	2014
China	235.05
Russian Federation	212

Decision XXV/3: Essential-use exemption for chlorofluorocarbon-113 for aerospace applications in the Russian Federation

Noting the evaluation and recommendation of the Technology and Economic Assessment Panel and its Chemicals Technical Options Committee on the essential-use nomination for chlorofluorocarbon-113 for aerospace applications,

Noting also that the Russian Federation continues to explore the possibility of importing chlorofluorocarbon-113 for its aerospace industry needs from available global stocks,

Noting further that the Russian Federation has been successful in reducing use and emissions in line with the technical adaptation timetable developed in collaboration with the Chemicals Technical Options Committee,

- 1. To authorize the levels of production and consumption of chlorofluorocarbon-113 in the Russian Federation for essential-use exemptions for chlorofluorocarbons in its aerospace industry in the amount of 85 metric tonnes in 2014;
- 2. To request the Russian Federation to explore further the possibility of importing chlorofluorocarbon-113 for its aerospace industry needs from available global stocks;
- 3. To encourage the Russian Federation to continue its efforts to introduce alternative solvents and adopt newly designed equipment, with a view to completing the phase-out of chlorofluorocarbon-113 by 2016;

Decision XXV/4: Critical-use exemptions for methyl bromide for 2015

Noting with appreciation the work of the Technology and Economic Assessment Panel and its Methyl Bromide Technical Options Committee,

Recognizing the significant reductions made in critical-use nominations for methyl bromide by many parties,

Recalling paragraph 10 of decision XVII/9,

Recalling also that all parties that have nominated critical-use exemptions are to report data on stocks using the accounting framework agreed to by the Sixteenth Meeting of the Parties,

Recognizing that the production and consumption of methyl bromide for critical uses should be permitted only if methyl bromide is not available in sufficient quantity and quality from existing stocks of banked or recycled methyl bromide,

Recognizing also that parties operating under critical-use exemptions should take into account the extent to which methyl bromide is available in sufficient quantity and quality from existing stocks of banked or recycled methyl bromide in licensing, permitting or authorizing the production and consumption of methyl bromide for critical uses,

Recognizing further that soilless systems for strawberry runners are economically and technically feasible and in use in many countries, but are not yet economically and technically feasible throughout Australia,

Recognizing that Australia has a research programme to identify technically and economically feasible alternatives to methyl bromide for strawberry runners,

Recognizing also that technically and economically feasible alternatives, including soilless culture systems, are currently not available for the production of strawberry runners in Prince Edward Island, Canada,

Recognizing further that Canada will proceed with its assessment of the impact of chloropicrin on groundwater in Prince Edward Island, Canada,

Acknowledging that the Technology and Economic Assessment Panel, and specifically its Methyl Bromide Technical Options Committee, produces reports that are science-based, independent and robust, and that all parties should strive to respect the results of that work,

- 1. To request that Australia submit, by the thirty-sixth meeting of the Open-ended Working Group, the available results of its research programme to the Technology and Economic Assessment Panel for its consideration;
- 2. To request that Canada submit, by the thirty-sixth meeting of the Open-ended Working Group, the available results of its assessment of the impact of chloropicrin on groundwater to the Technology and Economic Assessment Panel for its consideration;
- 3. To consider approving a critical-use nomination for the strawberry sector in California, United States of America, in 2014, and to approve sufficient methyl bromide for use in 2016 to enable that sector to complete its intended transition from critical uses for methyl bromide by the end of 2016;
- 4. To permit, for the agreed critical-use categories for 2015 set forth in table A of the annex to the present decision for each party, subject to the conditions set forth in the present decision and in decision Ex.I/4 to the extent that those conditions are applicable, the levels of production and consumption for 2015 set forth in table B of the annex to the present decision, which are necessary to satisfy critical uses, with the understanding that additional levels of production and consumption and categories of use may be approved by the Meeting of the Parties in accordance with decision IX/6;
- 5. That parties shall endeavour to license, permit, authorize or allocate quantities of methyl bromide for critical uses as listed in table A of the annex to the present decision;
- 6. That each party that has an agreed critical-use exemption shall renew its commitment to ensuring that the criteria in paragraph 1 of decision IX/6, in particular the criterion laid down in paragraph 1 (b) (ii) of decision IX/6, are applied in licensing, permitting or authorizing critical uses of methyl bromide, with each party requested to report on the implementation of the present provision to the Ozone Secretariat by 1 February for the years to which the present decision applies;
- 7. To request the Technology and Economic Assessment Panel to ensure that its consideration of nominations analyses the impact of national, subnational and local regulations and

law on the potential use of methyl bromide alternatives and to include a description of the analysis in the critical-use nomination report;

Annex

Table A

Agreed critical-use categories for 2015

(Metric tonnes)

Australia	Strawberry runners 29.760
Canada	Strawberry runners (Prince Edward Island) 5.261
United States of America	Strawberry field 373.66, cured pork 3.24

Table B

Permitted levels of production and consumption for 2015

(Metric tonnes)

Australia	29.760
Canada	5.261
United States of America	376.90 ^a

^a Minus available stocks.

Decision XXV/5: Response to the report by the Technology and Economic Assessment Panel on information on alternatives to ozone-depleting substances (decision XXIV/7, paragraph 1)

Noting with appreciation volume 2 of the 2012 task force progress report, which responded to decision XXIII/9, and volume 2 of the 2013 progress report of the Technology and Economic Assessment Panel, which responded to decision XXIV/7,

Noting the release of the contribution of Working Group I to the fifth assessment report of the Intergovernmental Panel on Climate Change, entitled "Climate change 2013: the physical science basis",

- 1. To request the Technology and Economic Assessment Panel, in consultation with external experts if necessary, to prepare a report for consideration by the Open-ended Working Group at its thirty-fourth meeting and an updated report to be submitted to the Twenty-Sixth Meeting of the Parties that would:
- (a) Provide an update on information on alternatives to ozone-depleting substances in various sectors and subsectors, and differentiating between parties operating under paragraph 1 of Article 5 and parties not so operating, considering regional differences, and assessing whether such alternatives are:
 - (i) Commercially available;
 - (ii) Technically proven;
 - (iii) Environmentally sound;
 - (iv) Energy efficient;
 - (v) Economically viable and cost-effective;
 - (vi) Suitable for regions with high ambient temperatures, in particular considering the refrigeration and air-conditioning sector and their use in high-urban-density cities;
 - (vii) Suitable for safe uses, in particular considering their potential flammability or toxicity, and their suitability for use in densely populated urban areas, and describing potential limitations of their use;
 - (viii) Easily used;
- (b) Estimate current and future demand for alternatives to ozone-depleting substances, taking into account increased demand, in particular in the refrigeration and air-conditioning sectors and in parties operating under paragraph 1 of Article 5;

- (c) Assess, differentiating between parties operating under paragraph 1 of Article 5 and those not so operating, the economic costs and implications, and environmental benefits of various scenarios of avoiding high-global-warming-potential alternatives to ozone-depleting substances, where such avoidance is possible, considering the list in subparagraph (a) of the present decision;
- (d) Request the Scientific Assessment Panel, in liaison with the Intergovernmental Panel on Climate Change, to provide information from the contribution of Working Group 1 to the fifth assessment report on the main climate metrics, considering the updated information provided in paragraph 1 (a) of the present decision;
- 2. To convene a workshop, back to back with the thirty-fourth meeting of the Open-ended Working Group, to continue discussions on hydrofluorocarbon management, taking into account the information requested in the present decision and previous reports provided in response to decisions XXIII/9 and XXIV/7;
- 3. To encourage parties to provide to the Secretariat, on a voluntary basis, information on their implementation of paragraph 9 of decision XIX/6, including information on available data, policies and initiatives pertaining to the promotion of a transition from ozone-depleting substances that minimize environmental impact wherever the required technologies are available, and to request the Secretariat to compile any submissions received for consideration by the Open-ended Working Group at its thirty-fourth meeting;
- 4. To request the Executive Committee of the Multilateral Fund to consider the information provided in the report on additional information on alternatives to ozone-depleting substances prepared by the Technology and Economic Assessment Panel pursuant to decision XXIV/7 and other related reports, with a view to considering whether additional demonstration projects to validate whether low-global-warming-potential alternatives and technologies, together with additional activities to maximize the climate benefits in the hydrochlorofluorocarbon production sector, would be useful in assisting parties operating under paragraph 1 of Article 5 in further minimizing the environmental impact of the hydrochlorofluorocarbon phase-out;

Decision XXV/6: Operation and organization of the Technology and Economic Assessment Panel

Taking note of decision XXIV/8, which updated the terms of reference for the Technology and Economic Assessment Panel,

Taking note also of the information provided by the Technology and Economic Assessment Panel in volume 3 of its 2013 progress report,

Recognizing that the Technology and Economic Assessment Panel has commenced implementation of its revised terms of reference as approved by the parties in decision XXIV/8,

Recognizing also the need to consider adjustments to the technical options committees so as to reflect evolving workloads, the need for relevant expertise, and the requirements of the parties,

- 1. To encourage the Technology and Economic Assessment Panel to continue its implementation of the revised terms of reference as approved by the parties in decision XXIV/8;
- 2. To request the Technology and Economic Assessment Panel to provide the following information in its 2014 progress report:
- (a) An update on its processes for the nomination of members to its technical options committees, taking into account section 2.2.2 of its terms of reference;
- (b) Its proposed configuration of the technical options committees from 1 January 2015 (for example, the combination or division of the existing technical options committees, or maintaining the status quo thereof);
- (c) Options, if considered appropriate, to streamline the Panel's annual technology updates to the parties;

Decision XXV/7: Changes in the membership of the Technology and Economic Assessment Panel

- 1. To endorse the reappointment of:
- (a) Ms. Helen Tope (Australia) to the Technology and Economic Assessment Panel as co-chair of the Medical Technical Options Committee for a term of four years in accordance with section 2.3 of the terms of reference of the Panel;
- (b) Mr. Ian Porter (Australia) to the Technology and Economic Assessment Panel as co-chair of the Methyl Bromide Technical Options Committee for a term of four years in accordance with section 2.3 of the terms of reference of the Panel;
- (c) Mr. Roberto Peixoto (Brazil) to the Technology and Economic Assessment Panel as co-chair of the Refrigeration, Air Conditioning and Heat Pumps Technical Options Committee for a term of four years in accordance with section 2.3 of the terms of reference of the Panel;
- (d) Ms. Marta Pizano (Colombia) to the Technology and Economic Assessment Panel as co-chair of the Methyl Bromide Technical Options Committee for a term of four years in accordance with section 2.3 of the terms of reference of the Panel;
- (e) Mr. Miguel Wenceslao Quintero (Colombia) to the Technology and Economic Assessment Panel as co-chair of the Flexible and Rigid Foams Technical Options Committee for a term of four years in accordance with section 2.3 of the terms of reference of the Panel;
- (f) Mr. Mohamed Besri (Morocco) to the Technology and Economic Assessment Panel as co-chair of the Methyl Bromide Technical Options Committee for a term of four years in accordance with section 2.3 of the terms of reference of the Panel;
- (g) Mr. Sergey Kopylov (Russian Federation) to the Technology and Economic Assessment Panel as co-chair of the Halons Technical Options Committee for a term of four years in accordance with section 2.3 of the terms of reference of the Panel;
- (h) Mr. José Pons Pons (Bolivarian Republic of Venezuela) to the Technology and Economic Assessment Panel as co-chair of the Medical Technical Options Committee for a term of four years in accordance with section 2.3 of the terms of reference of the Panel;
- (i) Ms. Shiqiu Zhang (China) to the Technology and Economic Assessment Panel as a senior expert member for a term of four years in accordance with section 2.3 of the terms of reference of the Panel;
 - 2. To appoint:
- (a) Mr. Jianjun Zhang (China) to the Technology and Economic Assessment Panel as co-chair of the Chemicals Technical Options Committee for a term of four years in accordance with section 2.3 of the terms of reference of the Panel;
- (b) Mr. Marco González (Costa Rica) to the Technology and Economic Assessment Panel as a senior expert member for a term of two years in accordance with section 2.3 of the terms of reference of the Panel;

Decision XXV/8: Terms of reference for the study on the 2015–2017 replenishment of the Multilateral Fund for the Implementation of the Montreal Protocol

Recalling the parties' decisions on previous terms of reference for studies on the replenishment of the Multilateral Fund for the Implementation of the Montreal Protocol,

Recalling also the parties' decisions on previous replenishments of the Multilateral Fund,

- 1. To request the Technology and Economic Assessment Panel to prepare a report for submission to the Twenty-Sixth Meeting of the Parties, and to submit it through the Open-ended Working Group at its thirty-fourth meeting, to enable the Twenty-Sixth Meeting of the Parties to take a decision on the appropriate level of the 2015–2017 replenishment of the Multilateral Fund;
- 2. That, in preparing the report referred to in paragraph 1 of the present decision, the Panel should take into account, among other things:
- (a) All control measures and relevant decisions agreed upon by the parties to the Montreal Protocol and the Executive Committee, in particular those pertaining to the special needs of

low-volume- and very-low-volume-consuming countries, in addition to small and medium-sized enterprises, and the decisions of the Twenty-Fifth Meeting of the Parties and the Executive Committee at its seventieth and seventy-first meetings insofar as those decisions will necessitate expenditure by the Multilateral Fund during the period 2015–2017;

- (b) The need to allocate resources to enable all parties operating under paragraph 1 of Article 5 to maintain compliance with Articles 2A–2E, 2G and 2I of the Protocol;
- (c) The need to allocate resources to enable all parties operating under paragraph 1 of Article 5 to maintain or meet 2013, 2015 and 2020 compliance obligations in respect of Articles 2F and 2H of the Protocol, taking into account the extended commitment provided by parties operating under paragraph 1 of Article 5 under approved hydrochlorofluorocarbon phase-out management plans;
- (d) Dividing the funding relating to the 2020 target applicable to hydrochlorofluorocarbon consumption and production in an appropriate manner, including, but not limited to, one scenario that divides the funding relating to the 2020 target applicable to hydrochlorofluorocarbon consumption equally between the 2015–2017 and 2018–2020 replenishments;
- (e) Rules and guidelines agreed upon by the Executive Committee at all its meetings, up to and including its seventy-first meeting, for determining eligibility for the funding of investment projects and non-investment projects, including, but not limited to, institutional strengthening;
- (f) The need to allocate sufficient resources to the activities in the servicing sector in stage II of hydrochlorofluorocarbon phase-out management plans through technical assistance such as recovery, training and other necessary activities;
- 3. That, as a separate element to the funding requirement estimated in paragraph 2 of the present decision, the Panel should provide indicative figures for additional resources that would be needed to enable parties operating under paragraph 1 of Article 5 to gradually avoid high-global-warming-potential alternatives to ozone-depleting substances, taking into account the availability of safe, environmentally friendly, technically proven and economically viable technologies;
- 4. That, in preparing the said report, the Panel should consult widely all relevant persons and institutions and other relevant sources of information deemed useful;
- 5. That the Panel should strive to complete the report referred to above in good time to enable it to be distributed to all parties two months before the thirty-fourth meeting of the Open-ended Working Group;
- 6. That the Panel should provide indicative figures for the periods 2018–2020 and 2021-2023 to support a stable and sufficient level of funding, on the understanding that those figures will be updated in subsequent replenishment studies;

Decision XXV/9: Implementation of the Montreal Protocol with regard to small island developing States

Recalling that, of the 197 parties to the Montreal Protocol, 39 are recognized by the United Nations as small island developing States,

Noting that the United Nations Conference on Sustainable Development, held in Rio de Janeiro, Brazil, from 20 to 22 June 2012, recognized in its outcome document, "The future we want", that the phase-out of ozone-depleting substances was resulting in a rapid increase in the use and release of high-global-warming-potential hydrofluorocarbons to the environment, ¹

Recognizing decision XIX/6, in which the parties agreed to accelerate the phase-out of hydrochlorofluorocarbons and encouraged parties to promote the selection of alternatives thereto that minimized environmental impact, in particular impact on climate, as well as meeting other health, safety and economic considerations,

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¹ General Assembly resolution 66/288, annex, para. 222.

Noting that the outcome document of the United Nations Conference on Sustainable Development reaffirmed that small island developing States remained a special case for sustainable development in view of their unique and particular vulnerabilities, including their small size, remoteness, narrow resource and export base, and exposure to global environmental challenges and external economic shocks,¹

To request the Ozone Secretariat to liaise with the organizers of the Third International Conference on Small Island Developing States, to be held in Apia from 1 to 4 September 2014, with a view to promoting discussions on the challenges associated with the implementation of the Montreal Protocol, and to report to the parties on the outcome of that liaison at the thirty-fourth meeting of the Open-ended Working Group;

Decision XXV/10: Non-compliance with the Montreal Protocol by Azerbaijan

Noting that Azerbaijan ratified the Montreal Protocol on Substances that Deplete the Ozone Layer, the London Amendment and the Copenhagen Amendment on 12 June 1996, the Montreal Amendment on 28 September 2000 and the Beijing Amendment on 31 August 2012, and is classified as a party not operating under paragraph 1 of Article 5 of the Protocol,

Noting also that the Global Environment Facility approved \$9,706,515 to enable Azerbaijan to achieve compliance with the Protocol,

Noting further that Azerbaijan had reported annual consumption for the controlled substances in Annex C, group I (hydrochlorofluorocarbons), for 2011 of 7.63 ODP-tonnes, which exceeds the party's maximum allowable consumption of 3.7 ODP-tonnes for those controlled substances for that year, and was therefore in non-compliance with the consumption control measures under the Protocol for hydrochlorofluorocarbons,

Noting Azerbaijan's submission of a plan of action for returning to compliance with the Protocol's control measures for hydrochlorofluorocarbons,

Noting also that the party's submission of ozone-depleting-substance data for 2012 showed that Azerbaijan was in compliance with its hydrochlorofluorocarbon consumption obligations under the control measures of the Protocol,

- 1. That no further action is necessary in view of the party's return to compliance with the hydrochlorofluorocarbon phase-out in 2012 and its implementation of regulatory, administrative and technical measures to ensure compliance with the Protocol's control measures for hydrochlorofluorocarbons:
- 2. To urge Azerbaijan to work with the relevant implementing agencies to implement its plan of action for the consumption of hydrochlorofluorocarbons;
- 3. To monitor closely the party's progress with regard to the implementation of its obligations under the Protocol;

Decision XXV/11: Non-compliance with the Montreal Protocol by France

Noting that France ratified the Montreal Protocol on Substances that Deplete the Ozone Layer on 28 December 1988, the London Amendment on 12 February 1992, the Copenhagen Amendment on 3 January 1996 and the Montreal and Beijing amendments on 25 July 2003, and is classified as a party not operating under paragraph 1 of Article 5 of the Protocol,

Noting also that France has reported annual production for the controlled substances in Annex C, group I (hydrochlorofluorocarbons), for 2011 of 598.9 ODP-tonnes, which exceeds the party's maximum allowable production of 584.4 ODP-tonnes for those controlled substances for that year, and was therefore in non-compliance with the production control measures under the Protocol for hydrochlorofluorocarbons,

Noting further the submission by France of an action plan that confirms compliance with the Protocol's hydrochlorofluorocarbon production control measures for 2012 and subsequent years,

1. That no further action is necessary in view of the party's implementation of regulatory and administrative measures to ensure its compliance with the provisions of the Protocol governing production of hydrochlorofluorocarbons for subsequent years;

¹ Ibid., para. 178.

- 2. To monitor closely France's progress with regard to the phase-out of hydrochlorofluorocarbons. To the degree that the party is working towards and meeting the specific Protocol control measures, it should continue to be treated in the same manner as a party in good standing;
- 3. To caution France, in accordance with item B of the indicative list of measures, that, in the event that it fails to return to compliance in a timely manner, the Meeting of the Parties will consider measures consistent with item C of the indicative list of measures, which may include the possibility of actions available under Article 4;

Decision XXV/12: Non-compliance with the Montreal Protocol by Kazakhstan

Noting that Kazakhstan ratified the Montreal Protocol on Substances that Deplete the Ozone Layer on 26 August 1998, the London Amendment on 26 July 2001 and the Copenhagen and Montreal amendments on 28 June 2011, and is classified as a party not operating under paragraph 1 of Article 5 of the Protocol,

Noting also that the Global Environment Facility approved \$6, 024,696 to enable Kazakhstan to achieve compliance with the Protocol,

Noting further that Kazakhstan has reported annual consumption for the controlled substances in Annex C, group I (hydrochlorofluorocarbons), for 2011 of 90.75 ODP-tonnes, which exceeds the party's maximum allowable consumption of 9.9 ODP-tonnes for those controlled substances for that year, and was therefore in non-compliance with the consumption control measures under the Protocol for hydrochlorofluorocarbons,

Noting that Kazakhstan has reported annual consumption for the controlled substance in Annex E (methyl bromide), for 2011 of 6.0 ODP-tonnes, which exceeds the party's maximum allowable consumption of zero ODP-tonnes for that controlled substance for that year, and was therefore in non-compliance with the consumption control measures under the Protocol for methyl bromide.

- 1. To request Kazakhstan to submit to the Secretariat, as a matter of urgency and no later than 31 March 2014, for consideration by the Implementation Committee at its fifty-second meeting, an explanation for its excess consumption and details of the management systems in place that had failed to prevent that excess consumption, together with a plan of action with time-specific benchmarks to ensure the party's prompt return to compliance with its hydrochlorofluorocarbon and methyl bromide obligations under the Protocol;
- 2. To monitor closely Kazakhstan's progress with regard to the phase-out of hydrochlorofluorocarbons and methyl bromide. To the degree that the party is working towards and meeting the specific Protocol control measures, it should continue to be treated in the same manner as a party in good standing and, in that regard, should continue to receive international assistance to enable it to meet its commitments in accordance with item A of the indicative list of measures that may be taken by the Meeting of the Parties in respect of non-compliance;
- 3. To caution Kazakhstan, in accordance with item B of the indicative list of measures, that, in the event that it fails to return to compliance in a timely manner, the Meeting of the Parties will consider measures consistent with item C of the indicative list of measures, which may include the possibility of actions available under Article 4, such as ensuring that the supply of hydrochlorofluorocarbons and methyl bromide that are the subject of non-compliance is ceased so that exporting parties are not contributing to a continuing situation of non-compliance;

Decision XXV/13: Requests for the revision of baseline data by the Congo, the Democratic Republic of the Congo, Guinea-Bissau and Saint Lucia

Noting that, in accordance with decision XIII/15, by which the Thirteenth Meeting of the Parties decided that parties requesting the revision of reported baseline data should present such requests to the Implementation Committee, which in turn would work with the Secretariat and the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol to confirm the justification for the changes and present them to the Meeting of the Parties for approval,

Noting also that decision XV/19 sets out the methodology for the submission of such requests,

- 1. That the Congo, the Democratic Republic of the Congo, Guinea-Bissau and Saint Lucia have presented sufficient information, in accordance with decision XV/19, to justify their requests for the revision of their consumption data for hydrochlorofluorocarbons for 2009, 2010 or both, which are part of the baseline for parties operating under paragraph 1 of Article 5;
- 2. To approve the requests of the parties listed in the preceding paragraph and to revise their baseline hydrochlorofluorocarbon consumption data for the respective years as indicated in the following table:

Party	Previous hydrochlorofluo (ODP-tonnes)	rocarbon data	New hydrochlorofluorocarbon data (ODP-tonnes)		
	2009	2010	2009	2010	
1. Congo	7.1	-	9.68	-	
2. Democratic Republic of the Congo	85.7	-	55.82	-	
3. Guinea-Bissau	0	-	2.75	-	
4. Saint Lucia	0.4	0	1.37	0.81	

Decision XXV/14: Data and information provided by the parties in accordance with Article 7 of the Montreal Protocol

Noting with appreciation that 194 parties of the 197 that should have reported data for 2012 have done so and that 114 of those parties reported their data by 30 June 2013 in accordance with decision XV/15,

Noting that 164 of those parties reported their data by 30 September 2013 as required under Article 7 of the Montreal Protocol,

Noting with concern, however, that the following parties have not reported their data for 2012: Eritrea. South Sudan and Yemen.

Noting that failure to report their data for 2012 in accordance with Article 7 places those parties in non-compliance with their data-reporting obligations under the Montreal Protocol until such time as the Secretariat receives their outstanding data,

Noting also that a lack of timely data reporting by parties impedes effective monitoring and assessment of parties' compliance with their obligations under the Montreal Protocol,

Noting further that reporting by 30 June each year greatly facilitates the work of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol in assisting parties operating under paragraph 1 of Article 5 of the Protocol to comply with the Protocol's control measures,

- 1. To urge the parties listed in the present decision, where appropriate, to work closely with the implementing agencies to report the required data to the Secretariat as a matter of urgency;
- 2. To request the Implementation Committee to review the situation of those parties at its fifty-second meeting;
- 3. To encourage parties to continue to report consumption and production data as soon as figures are available, and preferably by 30 June each year, as agreed in decision XV/15;

Decision XXV/15: Status of the establishment of licensing systems under Article 4B of the Montreal Protocol

Noting that paragraph 3 of Article 4B of the Montreal Protocol requires each party, within three months of the date of introducing its system for licensing the import and export of new, used, recycled and reclaimed controlled substances in annexes A, B, C and E to the Protocol, to report to the Secretariat on the establishment and operation of that system,

Noting with appreciation that 192 of the 194 parties to the Montreal Amendment to the Protocol have established import and export licensing systems for ozone-depleting substances as required by the Amendment and that they have provided disaggregated information on their licensing systems detailing which annexes and groups of substances under the Montreal Protocol are subject to those systems,

Noting, however, that Botswana and South Sudan, which became parties to the Montreal Amendment in 2013, have not yet established such systems,

Recognizing that licensing systems provide for the monitoring of imports and exports of ozone-depleting substances, prevent illegal trade and enable data collection,

Recognizing also that the successful phase-out of most ozone-depleting substances by parties is largely attributable to the establishment and implementation of licensing systems to control the import and export of ozone-depleting substances,

- 1. To request Botswana and South Sudan to establish an import and export licensing system for ozone-depleting substances consistent with Article 4B of the Protocol and to report to the Secretariat by 31 March 2014 on the establishment of that system;
- 2. To review periodically the status of the establishment of import and export licensing systems for ozone-depleting substances by all parties to the Protocol as called for in Article 4B of the Protocol;

Decision XXV/16: Request by Croatia to be removed from the list of developing countries under the Montreal Protocol

- 1. To note the request by Croatia to be removed from the list of developing countries operating under paragraph 1 of Article 5 of the Montreal Protocol;
- 2. To approve the request by Croatia, and to note that Croatia shall assume the obligations of a party not operating under paragraph 1 of Article 5 of the Montreal Protocol for the year 2014 and thereafter;

Decision XXV/17: Membership of the Implementation Committee

- 1. To note with appreciation the work carried out by the Implementation Committee under the Non-Compliance Procedure for the Montreal Protocol in 2012;
- 2. To confirm the positions of Bangladesh, Bosnia and Herzegovina, Cuba, Italy and Morocco as members of the Committee for one further year and to select Canada, the Dominican Republic, Ghana, Lebanon and Poland as members of the Committee for a two-year period beginning on 1 January 2014;
- 3. To note the selection of Azra Rogović-Grubić (Bosnia and Herzegovina) to serve as President and Elisabetta Scialanca (Italy) to serve as Vice-President and Rapporteur of the Committee for one year beginning on 1 January 2014;

Decision XXV/18: Membership of the Executive Committee of the Multilateral Fund

- 1. To note with appreciation the work carried out by the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol, with the assistance of the Fund secretariat, in 2013;
- 2. To endorse the selection of Australia, Belgium, Italy, Japan, the Russian Federation, Sweden and the United States of America as members of the Executive Committee, representing parties not operating under paragraph 1 of Article 5 of the Protocol; and the selection of China, the Comoros, Grenada, Mauritius, Nicaragua, Saudi Arabia and Uruguay as members of the Executive Committee, representing parties operating thereunder, for one year beginning on 1 January 2014;
- 3. To note the selection of Premhans Jhugroo (Mauritius) to serve as Chair and John Thompson (United States of America) to serve as Vice-Chair of the Executive Committee for one year beginning on 1 January 2014;

Decision XXV/19: Co-Chairs of the Open-ended Working Group of the Parties to the Montreal Protocol

To endorse the selection of Richard Mwendandu (Kenya) and Patrick McInerney (Australia) as Co-Chairs of the Open-ended Working Group of the Parties to the Montreal Protocol in 2014;

Decision XXV/20: Financial reports of the trust funds and budgets for the Montreal Protocol

Recalling decision XXIV/24 on financial matters,

Taking note of the financial report on the Trust Fund for the Montreal Protocol on Substances that Deplete the Ozone Layer for the first year of the biennium 2012–2013, ended 31 December 2012,

Recognizing that voluntary contributions are an essential complement for the effective implementation of the Montreal Protocol,

Welcoming the continued efficient management by the Secretariat of the finances of the Montreal Protocol Trust Fund,

- 1. To approve the revision of the 2013 budget in the amount of 4,744,796 United States dollars and the budget of \$5,065,460 for 2014, as set out in annex I to the report of the Twenty-Fifth Meeting of the Parties to the Montreal Protocol;¹
- 2. To authorize the Secretariat to draw down \$467,863 in 2013 and \$788,527 in 2014, and to note the proposed drawdown of \$703,302 in 2015;
- 3. To approve, as a consequence of the drawdowns referred to in paragraph 2 of the present decision, total contributions to be paid by the parties of \$4,276,933 for 2013 and 2014, and to note the contributions of \$4,276,933 for 2015, as set out in annex II to the report of the Twenty-Fifth Meeting of the Parties to the Montreal Protocol;
- 4. That the contributions of individual parties for 2014 and indicative contributions for 2015 shall be listed in annex II to the report of the Twenty-Fifth Meeting of the Parties;
- 5. To reaffirm an operating cash reserve at a level of 15 per cent of the annual budget to be used to meet the final expenditures under the Trust Fund;
- 6. To request the Secretariat to indicate, in future financial reports of the trust funds for the Vienna Convention on the Protection of the Ozone Layer and the Montreal Protocol, the amounts of cash in hand in the "Total reserves and fund balances" section, in addition to contributions that have not yet been received;
- 7. To encourage parties, non-parties and other stakeholders to contribute financially and with other means to assist members of the three assessment panels and their subsidiary bodies with their continued participation in the assessment activities under the Protocol;
- 8. To note with concern that a number of parties have not paid their contribution for 2013 and prior years, and to urge those parties to pay both their outstanding contributions and their future contributions promptly and in full;
- 9. To authorize the Executive Secretary to enter into discussions with any party whose contributions are outstanding for two or more years with a view to finding a way forward, and to request that the Executive Secretary report to the Twenty-Sixth Meeting of the Parties on the outcome of the discussions;
- 10. To reaffirm the importance of the full participation of parties not operating under paragraph 1 of Article 5 and of parties so operating in the activities of the Meeting of the Parties;
- 11. To encourage parties that are continuing to receive hard copies of meeting documents to inform the Ozone Secretariat if they are accessing such documentation through its website;

Decision XXV/ 21: Dates and venue of the Twenty-Sixth Meeting of the Parties to the Montreal Protocol

To convene the Twenty-Sixth Meeting of the Parties to the Montreal Protocol at the seat of the Secretariat, in Nairobi, or at any other United Nations venue, in November 2014.

¹ UNEP/OzL.Pro.25/9.

XI. Adoption of the report of the Twenty-Fifth Meeting of the Parties to the Montreal Protocol

221. The parties adopted the present report on Friday, 25 October 2013, on the basis of the draft report set out in documents UNEP/OzL.Pro.25/L.1 and Add.1–2.

XII. Closure of the meeting

222. Following the customary exchange of courtesies, the meeting was declared closed at 10 p.m. on Friday, 25 October 2013.

Annex I

Trust Fund for the Montreal Protocol on Substances that Deplete the Ozone Layer Proposed revision of the approved 2013 and proposed 2014 and 2015 budgets of the Trust Fund for the Montreal Protocol

				w/m	2013 (US\$)	w/m	2014 (US\$)	Proposed 2015 (US\$)
10	PROJE	CT PERSONNEL	COMPONENT					
	1100	Project personne						
		1101	Executive Secretary (D-2) (shared with the Vienna Convention, [VC]	6	170 980	6	185 980	185 980
		1102	Deputy Executive Secretary (D-1)	12	150 000	12	311 614	311 614
		1103	Senior Legal Officer (P-5)	12	214 972	12	214 972	221 421
		1104	Senior Scientific Affairs Officer (P-5) (shared with VC)	6	113 300	6	116 699	116 699
		1105	Senior Administrative Officer (P-5) (paid by UNEP)		0		-	0
		1106	Programme Officer (Data and Information Systems, P-4)	12	159 257	12	164 035	168 956
		1107	Programme Officer (Communication and Information, P-3) (paid from VC)	12	0	12	-	0
		1108	Programme Officer (Monitoring and Compliance, P-4)	12	199 449	12	205 432	211 595
		1109	Webmaster (P-2)					
	1199	Subtotal			1 007 958		1 198 733	1 216 265
	1200	Consultants						
		1201	Assistance in data-reporting, analysis and promotion of the implementation of the Protocol		75 000		75 000	75 000
	1299	Sub-total			75 000		75 000	75 000
	1300	Administrative S	Support					
		1301	Administrative Assistant (G-7) (shared with VC)	6	22 545	6	23 672	24 998
		1302	Administrative Assistant (G-6)	12	29 768	12	36 435	38 475
		1303	Programme Assistant (G-6) (paid from VC)	12	0	12	-	0
		1304	Programme Assistant (Data)(G-6) (shared with VC)	6	19 375	6	19 375	20 460
		1305	Research Assistant (G-6) (shared with VC)	6	16 295	6	20 208	21 340
		1306	Information Management Assistant (G-6)	12	29 239	12	30 876	32 605
		1307	Data Assistant (Computer Information Systems Assistant) (G-7)	12	47 386	12	50 040	52 842
		1308	Administrative Assistant - Fund (G-7) - paid by UNEP (approved for upgrade to Associate Administrative Officer,	12	0	12	-	0

				w/m	2013 (US\$)	w/m	2014 (US\$)	Proposed 2015 (US\$)
			P-2)					
		1309	Team Assistant/Logistics Assistant (G-4) (paid by UNEP)	12	0	12	-	0
		1310	Meetings Services Assistant/Bilingual Senior Secretary (G-6) (paid from VC)	12	0	12	-	0
		1320	Temporary assistance		21 300		21 300	22 492.8
		1321	Open-ended Working Group meetings		490 000		490 000	502 740
		1322	Preparatory and Parties Meetings (shared with VC every three years, applies to the twenty-third and twenty-sixth Meetings of the Parties to the Montreal Protocol and the Ninth and Tenth meetings of the Conference of the Parties to the Vienna Convention in 2011 and 2014)		500 000		350 000	500 000
		1323	Assessment Panel meetings		75 000		85 000	85 000
		1324	Bureau meeting		20 000		20 000	20 000
		1325	Implementation Committee meetings		111 200		111 200	111 200
		1326	Montreal Protocol informal consultation meetings		10 000		10 000	10 000
		1327	Back-to-back workshop with Open-ended Working Group meeting				152 000	
	1399	Subtotal			1 392 107		1 420 105	1 442 153
	1600	Travel on official	business					
		1601	Staff travel on official business		210 000		210 000	210 000
		1602	Conference Services staff travel on official business		15 000		15 000	15 000
	1699	Sub-total			225 000		225 000	225 000
1999	COMPO	NENT TOTAL			2 700 065		2 918 838	2 958 418
20	CONTRA	CTS						
-0	2300	.015	Subcontracts					
	2000	2301						
	2399	Subtotal						
30	MEETIN	G/PARTICIPATIO	ON COMPONENT					
	3300	Support for partici	ipation					
		3301	Assessment Panel meetings ¹		450 000		450 000	420 000
		3302	Preparatory and Parties Meetings (Montreal Protocol bears the cost of the participation of MP and VC delegates from A5 countries at the joint 26th MOP and 10th COP in 2014)		350 000		350 000	350 000

				w/m	2013 (US\$)	w/m	2014 (US\$)	Proposed 2015 (US\$)
		3303	Open-ended Working Group meetings		300 000		300 000	300 000
		3304	Bureau meeting		20 000		20 000	20 000
		3305	Implementation Committee meetings		125 000		125 000	125 000
		3306	Consultations in an informal meeting		10 000		10 000	10 000
		3307	Back-to-back workshop with Open-ended Working Group meeting				85 000	
	3399	Subtotal			1 255 000		1 340 000	1 225 000
3999	COMPO	ONENT TOTAL			1 255 000		1 340 000	1 225 000
40	EQUIP	MENT AND PRE	MISES COMPONENT					
	4100	Expendable equ	sipment (items under \$1,500)					
		4101	Miscellaneous expendables (shared with VC)		20 000		20 000	20 000
	4199	Subtotal			20 000		20 000	20 000
	4200	Non-expendable	e equipment					
		4201	Personal computers and accessories		5 000		5 000	5 000
		4202	Portable computers		5 000		5 000	5 000
		4203	Other office equipment (server, fax, scanner, furniture etc.)		5 000		5 000	5 000
		4204	Photocopiers (for external use)		5 000		5 000	5 000
		4205	Equipment and peripherals for paperless conferences		5 000		5 000	5 000
	4299	Subtotal			25 000		25 000	25 000
	4300	Premises						
		4301	Rental of office premises (shared with VC)		51 870		51 870	51 870
	4399	Subtotal			51 870		51 870	51 870
4999		ONENT TOTAL			96 870		96 870	96 870
50	MISCE	LLANEOUS CON						
	5100	Operation and r	maintenance of equipment					
		5101	Maintenance of equipment and others (shared with VC)		20 000		20 000	20 000
	5199	Subtotal			20 000		20 000	20 000
	5200	Reporting Costs						
		5201	Reporting		25 000		20 000	20 000
		5202	Reporting (Assessment panels)		10 000		10 000	10 000
		5203	Reporting (Protocol awareness)		5 000		5 000	5 000
	5299	Subtotal			40 000		35 000	35 000
	5300	Sundry						
		5301	Communications		20 000		10 000	10 000

				w/m 2013 (US\$)	w/m 2014 (US\$)	Proposed 2015 (US\$)
		5202	P. W.	25.000	20,000	20,000
		5302	Freight charges	25 000	20 000	20 000
		5303	Training	12 000	12 000	12 000
		5304	Others (International Ozone Day)	10 000	10 000	10 000
	5399	Subtotal		67 000	52 000	52 000
	5400	Hospitality				
		5401	Hospitality	20 000	20 000	20 000
	5499	Subtotal		20 000	20 000	20 000
5999	COMPO	NENT TOTAL		147 000	127 000	127 000
99	TOTAL	DIRECT PROJ	ECT COST	4 198 935	4 482 708	4 407 288
	Program	me support costs	(13 per cent)	545 862	582 752	572 947
	GRAND	TOTAL (inclus	ive of programme support costs)	4 744 796	5 065 460	4 980 235
	Operatin	ig cash reserve e	xclusive of programme support costs	0	-	0
	TOTAL	BUDGET		4 744 796	5 065 460	4 980 235
	Drawdov	wn ²		467 863	788 527	703 302
	Contribu	ition from the Pa	arties	4 276 933	4 276 933	4 276 933

¹ The budget line covers participation of TEAP experts to enable the timely completion of the work requested by the Parties.

² Drawdown levels were set with a view to maintaining the level of contributions constant up to and including 2014, after which the Parties may wish to review the status of the Trust Fund to ascertain whether further drawdowns are warranted.

Annex II

Trust Fund for the Montreal Protocol on Substances that Deplete the Ozone Layer

Scale of contributions by the parties for 2014 based on the United Nations scale of assessments (General Assembly resolution 67/238, with a maximum assessment rate of 22 per cent)

(United States dollars)

	Party	United Nations scale of assessment for 2013–2015	Adjusted United Nations scale to exclude non-contributors	Adjusted United Nations scale with 22 per cent maximum assessment rate considered	2014 contributions by parties	Indicative 2015 contributions by parties
1	Afghanistan	0.005	0.000	0.000	_	_
2	Albania	0.010	0.000	0.000	_	
3	Algeria	0.137	0.137	0.137	5 840	5 840
4	Andorra	0.008	0.000	0.000	_	_
5	Angola	0.010	0.000	0.000	_	_
6	Antigua and Barbuda	0.002	0.000	0.000	_	_
7	Argentina	0.432	0.432	0.431	18 416	18 416
8	Armenia	0.007	0.000	0.000	0	0
9	Australia	2.074	2.074	2.067	88 412	88 412
10	Austria	0.798	0.798	0.795	34 018	34 018
11	Azerbaijan	0.040	0.000	0.000	_	_
12	Bahamas	0.017	0.000	0.000	_	_
13	Bahrain	0.039	0.000	0.000	_	_
14	Bangladesh	0.010	0.000	0.000	_	_
15	Barbados	0.008	0.000	0.000	_	
16	Belarus	0.056	0.000	0.000		
17	Belgium	0.998	0.998	0.995	42 543	42 543
18	Belize	0.001	0.000	0.000	_	_
19	Benin	0.003	0.000	0.000	_	_

	Party	United Nations scale of assessment for 2013–2015	Adjusted United Nations scale to exclude non-contributors	Adjusted United Nations scale with 22 per cent maximum assessment rate considered	2014 contributions by parties	Indicative 2015 contributions by parties
20	Bhutan	0.001	0.000	0.000	_	_
21	Bolivia (Plurinational State of)	0.009	0.000	0.000	_	_
22	Bosnia and Herzegovina	0.017	0.000	0.000	_	_
23	Botswana	0.017	0.000	0.000	_	_
24	Brazil	2.934	2.934	2.924	125 072	125 072
25	Brunei Darussalam	0.026	0.000	0.000	_	_
26	Bulgaria	0.047	0.000	0.000	_	_
27	Burkina Faso	0.003	0.000	0.000	_	_
28	Burundi	0.001	0.000	0.000	_	_
29	Cambodia	0.004	0.000	0.000	_	_
30	Cameroon	0.012	0.000	0.000	_	_
31	Canada	2.984	2.984	2.974	127 204	127 204
32	Verde	0.001	0.000	0.000	_	_
33	Central African Republic	0.001	0.000	0.000	_	_
34	Chad	0.002	0.000	0.000	_	_
35	Chile	0.334	0.334	0.333	14 238	14 238
36	China	5.148	5.148	5.131	219 452	219 452
37	Colombia	0.259	0.259	0.258	11 041	11 041
38	Comoros	0.001	0.000	0.000	_	_
39	Congo	0.005	0.000	0.000	_	_
40	Cook Islands	-	0.000	0.000	_	_
41	Costa Rica	0.038	0.000	0.000	_	_
42	Côte d'Ivoire	0.011	0.000	0.000	_	_
43	Croatia	0.126	0.126	0.126	5 371	5 371
44	Cuba	0.069	0.000	0.000	_	_
45	Cyprus	0.047	0.000	0.000	_	_

	Party	United Nations scale of assessment for 2013–2015	Adjusted United Nations scale to exclude non-contributors	Adjusted United Nations scale with 22 per cent maximum assessment rate considered	2014 contributions by parties	Indicative 2015 contributions by parties
46	Czech Republic	0.386	0.386	0.385	16 455	16 455
47	Democratic People's Republic of Korea	0.006	0.000	0.000	_	_
48	Democratic Republic of the Congo	0.003	0.000	0.000	_	_
49	Denmark	0.675	0.675	0.673	28 774	28 774
50	Djibouti	0.001	0.000	0.000	_	_
51	Dominica	0.001	0.000	0.000	_	_
52	Dominican Republic	0.045	0.000	0.000	_	_
53	Ecuador	0.044	0.000	0.000	_	_
54	Egypt	0.134	0.134	0.134	5 712	5 712
55	El Salvador	0.016	0.000	0.000	_	_
56	Equatorial Guinea	0.010	0.000	0.000	_	_
57	Eritrea	0.001	0.000	0.000	_	_
58	Estonia	0.040	0.000	0.000	_	_
59	Ethiopia	0.010	0.000	0.000	_	_
60	European Union	2.500	2.500	2.492	106 572	106 572
61	Fiji	0.003	0.000	0.000	_	_
62	Finland	0.519	0.519	0.517	22 124	22 124
63	France	5.593	5.593	5.575	238 422	238 422
64	Gabon	0.020	0.000	0.000	_	_
65	Gambia	0.001	0.000	0.000	_	_
66	Georgia	0.007	0.000	0.000	_	
67	Germany	7.141	7.141	7.118	304 411	304 411
68	Ghana	0.014	0.000	0.000	_	
69	Greece	0.638	0.638	0.636	27 197	27 197
70	Grenada	0.001	0.000	0.000	_	_
71	Guatemala	0.027	0.000	0.000	_	_
72	Guinea	0.001	0.000	0.000	_	_

	Party	United Nations scale of assessment for 2013–2015	Adjusted United Nations scale to exclude non-contributors	Adjusted United Nations scale with 22 per cent maximum assessment rate considered	2014 contributions by parties	Indicative 2015 contributions by parties
73	Guinea-Bissau	0.001	0.000	0.000	_	_
74	Guyana	0.001	0.000	0.000		_
75	Haiti	0.003	0.000	0.000		_
76	Holy See	0.001	0.000	0.000	_	_
77	Honduras	0.008	0.000	0.000		_
78	Hungary	0.266	0.266	0.265	11 339	11 339
79	Iceland	0.027	0.000	0.000	_	_
80	India	0.666	0.666	0.664	28 391	28 391
81	Indonesia	0.346	0.346	0.345	14 750	14 750
82	Iran (Islamic Republic of)	0.356	0.356	0.355	15 176	15 176
83	Iraq	0.068	0.000	0.000		_
84	Ireland	0.418	0.418	0.417	17 819	17 819
85	Israel	0.396	0.396	0.395	16 881	16 881
86	Italy	4.448	4.448	4.433	189 612	189 612
87	Jamaica	0.011	0.000	0.000	_	_
88	Japan	10.833	10.833	10.797	461 796	461 796
89	Jordan	0.022	0.000	0.000	_	_
90	Kazakhstan	0.121	0.121	0.121	5 158	5 158
91	Kenya	0.013	0.000	0.000	_	_
92	Kiribati	0.001	0.000	0.000	_	_
93	Kuwait	0.273	0.273	0.272	11 638	11 638
94	Kyrgyzstan	0.002	0.000	0.000	_	_
95	Lao People's Democratic Republic	0.002	0.000	0.000	_	_
96	Latvia	0.047	0.000	0.000	_	_
97	Lebanon	0.042	0.000	0.000	_	_
98	Lesotho	0.001	0.000	0.000	_	

	Party	United Nations scale of assessment for 2013–2015	Adjusted United Nations scale to exclude non-contributors	Adjusted United Nations scale with 22 per cent maximum assessment rate considered	2014 contributions by parties	Indicative 2015 contributions by parties
99	Liberia	0.001	0.000	0.000	_	_
100	Libya	0.142	0.142	0.142	6 053	6 053
101	Liechtenstein	0.009	0.000	0.000		_
102	Lithuania	0.073	0.000	0.000		_
103	Luxembourg	0.081	0.000	0.000	_	_
104	Madagascar	0.003	0.000	0.000	_	_
105	Malawi	0.002	0.000	0.000	_	_
106	Malaysia	0.281	0.281	0.280	11 979	11 979
107	Maldives	0.001	0.000	0.000	_	_
108	Mali	0.004	0.000	0.000	_	_
109	Malta	0.016	0.000	0.000	_	_
110	Marshall Islands	0.001	0.000	0.000	_	_
111	Mauritania	0.002	0.000	0.000	_	_
112	Mauritius	0.013	0.000	0.000	_	_
113	Mexico	1.842	1.842	1.836	78 522	78 522
114	Micronesia (Federated States of)	0.001	0.000	0.000	_	_
115	Monaco	0.012	0.000	0.000		_
116	Mongolia	0.003	0.000	0.000		_
117	Montenegro	0.005	0.000	0.000		_
118	Morocco	0.062	0.000	0.000	_	_
119	Mozambique	0.003	0.000	0.000		_
120	Myanmar	0.010	0.000	0.000	_	
121	Namibia	0.010	0.000	0.000	_	_
122	Nauru	0.001	0.000	0.000	_	
123	Nepal	0.006	0.000	0.000	_	_
124	Netherlands	1.654	1.654	1.649	70 508	70 508

	Party	United Nations scale of assessment for 2013–2015	Adjusted United Nations scale to exclude non-contributors	Adjusted United Nations scale with 22 per cent maximum assessment rate considered	2014 contributions by parties	Indicative 2015 contributions by parties
125	New Zealand	0.253	0.253	0.252	10 785	10 785
126	Nicaragua	0.003	0.000	0.000	_	_
127	Niger	0.002	0.000	0.000	_	_
128	Nigeria	0.090	0.000	0.000		_
129	Niue	-	0.000	0.000		_
130	Norway	0.851	0.851	0.848	36 277	36 277
131	Oman	0.102	0.102	0.102	4 348	4 348
132	Pakistan	0.085	0.000	0.000	_	_
133	Palau	0.001	0.000	0.000	_	_
134	Panama	0.026	0.000	0.000	_	_
135	Papua New Guinea	0.004	0.000	0.000		_
136	Paraguay	0.010	0.000	0.000	_	_
137	Peru	0.117	0.117	0.117	4 988	4 988
138	Philippines	0.154	0.154	0.153	6 565	6 565
139	Poland	0.921	0.921	0.918	39 261	39 261
140	Portugal	0.474	0.474	0.472	20 206	20 206
141	Qatar	0.209	0.209	0.208	8 909	8 909
142	Republic of Korea	1.994	1.994	1.987	85 002	85 002
143	Republic of Moldova	0.003	0.000	0.000	_	_
144	Romania	0.226	0.226	0.225	9 634	9 634
145	Russian Federation	2.438	2.438	2.430	103 929	103 929
146	Rwanda	0.002	0.000	0.000	_	_
147	Saint Kitts and Nevis	0.001	0.000	0.000	_	_
148	Saint Lucia	0.001	0.000	0.000	_	
149	Saint Vincent and the Grenadines	0.001	0.000	0.000	_	_
150	Samoa	0.001	0.000	0.000		_

	Party	United Nations scale of assessment for 2013–2015	Adjusted United Nations scale to exclude non-contributors	Adjusted United Nations scale with 22 per cent maximum assessment rate considered	2014 contributions by parties	Indicative 2015 contributions by parties
151	San Marino	0.003	0.000	0.000	_	_
152	Sao Tome and Principe	0.001	0.000	0.000		_
153	Saudi Arabia	0.864	0.864	0.861	36 831	36 831
154	Senegal	0.006	0.000	0.000	_	_
155	Serbia	0.040	0.000	0.000	_	_
156	Seychelles	0.001	0.000	0.000	_	_
157	Sierra Leone	0.001	0.000	0.000	_	_
158	Singapore	0.384	0.384	0.383	16 369	16 369
159	Slovakia	0.171	0.171	0.170	7 290	7 290
160	Slovenia	0.100	0.000	0.000		_
161	Solomon Islands	0.001	0.000	0.000		_
162	Somalia	0.001	0.000	0.000		_
163	South Africa	0.372	0.372	0.371	15 858	15 858
164	South Sudan	0.004	0.000	0.000	_	_
165	Spain	2.973	2.973	2.963	126 735	126 735
166	Sri Lanka	0.025	0.000	0.000	_	_
167	Sudan	0.010	0.000	0.000	_	_
168	Suriname	0.004	0.000	0.000	_	_
169	Swaziland	0.003	0.000	0.000	_	_
170	Sweden	0.960	0.960	0.957	40 924	40 924
171	Switzerland	1.047	1.047	1.044	44 632	44 632
172	Syrian Arab Republic	0.036	0.000	0.000		_
173	Tajikistan	0.003	0.000	0.000		_
174	Thailand	0.239	0.239	0.238	10 188	10 188
175	The former Yugoslav Republic of Macedonia	0.008	0.000	0.000		_
176	Timor-Leste	0.002	0.000	0.000		_

	Party	United Nations scale of assessment for 2013–2015	Adjusted United Nations scale to exclude non-contributors	Adjusted United Nations scale with 22 per cent maximum assessment rate considered	2014 contributions by parties	Indicative 2015 contributions by parties
177	Togo	0.001	0.000	0.000	_	_
178	Tonga	0.001	0.000	0.000	_	_
179	Trinidad and Tobago	0.044	0.000	0.000	_	_
180	Tunisia	0.036	0.000	0.000	_	_
181	Turkey	1.328	1.328	1.324	56 611	56 611
182	Turkmenistan	0.019	0.000	0.000	_	_
183	Tuvalu	0.001	0.000	0.000	_	_
184	Uganda	0.006	0.000	0.000	_	_
185	Ukraine	0.099	0.000	0.000	_	_
186	United Arab Emirates	0.595	0.595	0.593	25 364	25 364
187	United Kingdom of Great Britain and Northern Ireland	5.179	5.179	5.162	220 774	220 774
188	United Republic of Tanzania	0.009	0.000	0.000	_	_
189	United States of America	22.000	22.000	21.928	937 830	937 830
190	Uruguay	0.052	0.000	0.000	_	_
191	Uzbekistan	0.015	0.000	0.000	_	_
192	Vanuatu	0.001	0.000	0.000	_	_
193	Venezuela (Bolivarian Republic of)	0.627	0.627	0.625	26 728	26 728
194	Viet Nam	0.042	0.000	0.000	_	_
195	Yemen	0.010	0.000	0.000	_	_
196	Zambia	0.006	0.000	0.000	_	_
197	Zimbabwe	0.002	0.000	0.000	_	_
	Total	102.501	100.330	100.000	4 276 933	4 276 933

Annex III

Report of the co-chairs of the discussion group on issues on the management of hydrofluorocarbons using the Montreal Protocol and its mechanisms

- 1. Before starting the discussions, the co-chairs clarified that the mandate provided by the Meeting of the Parties was to continue the deliberations of the discussion group on issues pertaining to the management of HFCs using the Montreal Protocol and its mechanisms. During the thirty-third meeting of the Open-ended Working Group, that group had been tasked with discussing, without prejudging any decisions under the United Nations Framework Convention on Climate Change, the following matters:
- (a) Issues on management of hydrofluorocarbons (HFCs), using the Montreal Protocol and its mechanisms, including legal, technical and financial aspects;
 - (b) Possible processes to address legal, technical and financial aspects;
- (c) Identifying options to establish a relationship between the United Nations Framework Convention on Climate Change and the Montreal Protocol.
- 2. The group was also tasked with making progress on the discussion, including consideration of the outcomes of recent international forums, and with reporting the outcomes of the discussions to the plenary, including options for advancing the discussion in 2014, to be reflected in the report of the meeting.
- 3. To facilitate a structured discussion, the group agreed, first, to identify and discuss options for advancing discussions in 2014 relating to technical aspects of management of HFCs using the Montreal Protocol and its mechanisms and processes to address such technical aspects, based on the outcome of previous discussions.
- 4. With regard to the technical challenges relating to alternatives in high-population-density urban areas and high ambient temperatures, as well as the availability of alternatives in different sectors and subsectors, the following options were suggested:
- (a) To request the Technology and Economic Assessment Panel to further study and provide information to the parties, taking into account their specific circumstances, on, among others:
 - (i) Variations in availability of alternatives in sectors and subsectors;
 - (ii) Equipment design and its cost implications to address technical challenges in order to assist parties in the selection of alternatives;
 - (iii) Update on the availability of alternatives, including in regions with high ambient temperatures;
 - (v) Identification of safe, economically viable, environmentally friendly and technically proven alternatives to ozone-depleting substances and HFCs;
 - (vi) Energy efficiency of alternatives to ozone-depleting substances and HFCs;
 - (vii) In-depth study by the Technology and Economic Assessment Panel on alternatives available in the air-conditioning sector that meet requirements with regard to flammability, toxicity and costs of those alternatives;
- (b) To recognize different strategies for the management of HFCs, including measures for containment and conversion to alternatives, including not-in-kind technologies and equipment design;
- (c) To recognize the challenges of different parties with regard to the availability of climate-friendly alternatives, depending on their national circumstances and the importance of being able to select from a variety of technologies;
- (d) To share with parties information on availability of alternatives, domestic experience with management of HFCs and relevant international initiatives, such as bilateral cooperation, regional cooperation and the Climate and Clean Air Coalition to Reduce Short-Lived Climate Pollutants;
- (e) To recognize and further discuss or study the need to revise the international standards for the introduction of low-global-warming-potential technologies while at the same time ensuring

safety, in particular for hydrocarbon technology, and to discuss how issues relating to the evaluation and transparency of these standards can be addressed;

- (f) To consider the need for training in the servicing practice and safety of low-global-warming-potential alternatives in the servicing sector in stage II HCFC phase-out management plans;
- (g) To encourage the Executive Committee to approve further Multilateral Fund demonstration projects to test potential low-global-warming-potential technologies, in particular for high-ambient-temperature regions;
- (h) To consider actions to facilitate technology transfer in order to promote low-global-warming-potential technologies in parties operating under paragraph 1 of Article 5;
 - (i) To encourage reducing production of high-global-warming-potential HFCs;
- (j) To consider options to promote alternatives that have both low-global-warming potential and are energy efficient;
- (k) To provide parties with a compilation of information on existing alternatives and ongoing activities to develop alternatives;
- (1) To start a focused and more in-depth discussion on the information on alternatives provided by the Technology and Economic Assessment Panel in the context of an additional meeting of the Open-ended Working Group in 2014, addressing the technical, financial and legal aspects of management of HFCs using the Montreal Protocol and its mechanisms, and a workshop in the margins of the Working Group in 2014;
- (m) To ensure that scientific and technical experience from parties operating under paragraph 1 of Article 5 and their specific circumstances are taken into account in the information and discussion on availability of alternatives;
 - (n) To organize regional workshops on the availability of alternatives;
 - (o) To encourage domestic measures to manage HFCs;
- 5. The group also addressed broader technical aspects relating to the feasibility of an HFC phase-down approach to managing HFCs using the Montreal Protocol and its mechanisms, based on the analysis of the domestic situation of one party. It was recognized that the main technical challenges of conversion to alternatives appeared to be in the air-conditioning sector. The party illustrated how the challenges of the availability of alternatives could be addressed in a phase-down schedule that would take into account the alternatives available for different sectors and subsectors and showed that it would provide a signal to the market to develop alternatives for sectors where alternatives were not available in the short term. Furthermore, it was explained that a phase-down approach under the Protocol and its mechanisms would provide a delayed schedule for parties operating under paragraph 1 of Article 5, as well as financial support from the Multilateral Fund to assist parties in technology conversion.
- 6. Second, the group discussed the financial aspects of management of HFCs using the Protocol and its mechanisms and options for advancing discussions in 2014, based on the outcome of previous discussions.
- 7. With regard to the financial aspects, the group discussed the following matters:
- (a) How a phase-down approach under the Montreal Protocol to manage HFCs could provide technical and financial assistance to parties operating under paragraph 1 of Article 5, building on the institutions and experience of the Multilateral Fund, including national ozone units, in providing financial and technical assistance in phasing out ozone-depleting substances and at the same time achieving co-benefits;
- (b) How a phase-down approach under the Montreal Protocol to manage HFCs could address both the production and consumption of HFCs as alternatives to HCFCs, as well as production and consumption of HFCs not relating to the phasing out of HCFCs under the Protocol;
- (c) How using the Montreal Protocol and the Multilateral Fund to phase down HFCs would support the statement by the Group of 20 and the objective of the United Nations Framework Convention on Climate Change and the Kyoto Protocol thereto;
- (d) The extent to which the Multilateral Fund contributed to updating technologies, building capacity and improving the performance and efficiency of equipment and production processes;

- (e) The possibility of providing financial assistance through the provisions of the United Nations Framework Convention on Climate Change for HFC emissions;
- (f) The suitability of the Montreal Protocol and its financial mechanism to address intentionally produced substances, such as HFCs, through production and consumption controls, compared with climate-related financial mechanisms that address emissions, including the Global Environment Facility and the Clean Development Mechanism;
 - (g) The effective use of available financial resources;
- (h) Issues to address relating to the financial mechanism for a phase-down approach under the Montreal Protocol for the management of HFCs, including on the coordination between the Meeting of the Parties and the Executive Committee, technology transfer and patents, liability costs and the difference between the actual costs and the incremental costs of conversion to low-global-warming-potential alternatives in the light of the difference between a phase-down of HFCs and a phase-out of ozone-depleting substances;
 - (i) The adequacy of funds provided for institutional strengthening and HCFC phase-out;
- (j) The capability of parties not operating under paragraph 1 of Article 5 to provide additional funding to the Multilateral Fund for an HFC phase-down approach under the Montreal Protocol in order to assist parties so operating through the same financial mechanism;
- (k) The differing views of parties on sufficiency of financial resources to provide assistance to parties operating under paragraph 1 of Article 5;
- (l) The challenge of an HFC phase-down approach with regard to the availability of alternatives and the related economic and financial impact, including on industry;
- (m) The need for a clear commitment by parties not operating under paragraph 1 of Article 5 to providing additional financial resources to assist developing countries in the case of an HFC phase-down approach under the Montreal Protocol;
- (n) The extent to which policies of the Multilateral Fund should be revised in the light of providing sufficient funding for an HFC phase-down, including policies on baselines, cut-off dates, second conversions, eligibility, incremental operating costs and export to parties operating under paragraph 2 of the Protocol;
 - (o) The extent of the growth of HFCs.
- 8. The following options were suggested to advance discussions in 2014 relating to financial aspects of management of HFCs using the Montreal Protocol and its mechanisms:
- (a) To discuss a comprehensive financial mechanism, taking into account the experience of the Multilateral Fund, including on technology transfer;
- (b) To agree to request the Technology and Economic Assessment Panel to provide (in the replenishment study, for example) estimates on the additional costs and environmental benefits of a scenario for an HFC phase-down approach under the Montreal Protocol, taking into account the specific circumstances and challenges of parties operating under paragraph 1 of Article 5, as an information basis for further discussion, without pre-empting any decision;
- (c) To organize an extraordinary meeting between the thirty-fourth meeting of the Open-ended Working Group and the Twenty-Sixth Meeting of the Parties to address the issues raised by various parties.
- 9. Third, the group addressed legal aspects of management of HFCs using the Montreal Protocol and its mechanisms and the link between the United Nations Framework Convention on Climate Change and the Montreal Protocol, as well as options for advancing discussions.
- 10. With regard to the legal aspects, the group discussed the following:
- (a) The importance for some parties of Article 2 of the Vienna Convention, which provides that parties shall cooperate in harmonizing appropriate policies associated with controlling ozone-depleting substances and that that can include managing substitutes for chlorofluorocarbons and HCFCs, such as HFCs, and the views of other parties that HFCs cannot be addressed under Article 2 (b);
- (b) Some parties noted the effect of Article 3 of the North American amendment proposal, which states that the amendment would not exempt HFCs from the coverage of the United Nations Framework Convention on Climate Change and the Kyoto Protocol thereto;

- (c) Other parties noted articles 2, 5 and 7 of the Kyoto Protocol, which excludes substances that are controlled under the Montreal Protocol;
- (d) The importance of political will in addressing the issues relating to phasing down the production and consumption of HFCs under the Montreal Protocol;
- (e) The declarations of political leaders at the United Nations Conference on Sustainable Development and by the Group of 20;
- (f) The need of some parties for a clear signal from the United Nations Framework Convention on Climate Change before discussing a phase-down of HFCs under the Montreal Protocol and its mechanisms;
- (g) The extent to which a phase-down approach using the Montreal Protocol to manage HFCs is complementary to the objectives of the United Nations Framework Convention on Climate Change;
 - (h) The view of some parties that efforts should be made to harmonize legal texts.
- 11. The following options were suggested to advance discussions relating to legal aspects and the link between the United Nations Framework Convention on Climate Change and the Montreal Protocol, including options to advance the discussions in 2014:
- (a) To encourage cooperation between the Montreal Protocol and the United Nations Framework Convention on Climate Change and the Kyoto Protocol thereto;
- (b) To organize a joint workshop between the United Nations Framework Convention on Climate Change and the Montreal Protocol to address cross-cutting issues, which could, for example, be held before the thirty-fourth meeting of the Open-ended Working Group;
- (c) To cooperate to send a political signal under the United Nations Framework Convention on Climate Change to the Montreal Protocol;
- (d) To make available more time in the meetings of the Montreal Protocol for a focused discussion on issues relating to technical and financial aspects of a phase-down approach to managing HFCs using the Montreal Protocol and its mechanisms, including in workshops and an additional meeting of the Open-ended Working Group.

Annex IV

Summaries of presentations by members of the assessment panels and technical options committees

I. Medical Technical Options Committee

Helen Tope, co-chair of the Medical Technical Options Committee, presented the Committee's assessment of additional information provided in relation to the essential use nomination for chlorofluorocarbons (CFCs) for metered-dose inhalers (MDIs) from the Russian Federation for 2014. She recalled that the Russian Federation had nominated 212 tonnes of CFCs for MDI manufacture, for which the Medical Technical Options Committee had recommended 106 tonnes in the May 2013 TEAP progress report. During the thirty-third meeting of the Open-ended Working Group, additional information relating to the nomination had been provided by the Russian Federation and the United Nations Industrial Development Organization. The Russian Federation had subsequently also reported efforts to investigate global CFC stockpiles to supply the country's CFC requirements in 2014. The Committee's assessment of that information was provided in an addendum report, published in August. The co-chair also presented new information, indicating that owners of available stockpiles of pharmaceutical-grade CFCs in the United States had recently announced they would destroy such stockpiles in November without a firm commitment to purchase new stocks. The Committee concluded that Russian patients might be at increased risk if the quantity of CFCs authorized for 2014 were limited to six months' supply, given that additional imported hydrofluorocarbon (HFC) MDIs would not be added to a list of free medicines, upon which many low-income patients relied. Based on that information, the Committee recommended 212 tonnes of CFCs for 2014, utilizing existing available global CFC stockpiles in preference to new CFC production. The co-chair reiterated the Committee's concern that the challenging schedule for the conversion project, and any unexpected problems, might result in further delays.

II. Methyl Bromide Technical Options Committee

- 2. The co-chairs of the Methyl Bromide Technical Options Committee, Mohamed Besri and Ian Porter, the co-chair of the Structures and Commodities Subcommittee, Michelle Marcotte, and the co-chair of the Quarantine and Pre-shipment Subcommittee, Marta Pizano, presented the final recommendations for the critical-use nominations and other issues.
- 3. Mr. Besri introduced the presentation by summarizing methyl bromide consumption in parties operating under paragraph 1 of Article 5 of the Protocol and parties not so operating. He reported that the global consumption for methyl-bromide-controlled uses had fallen from 64.420 metric tonnes in 1991 to 5.187 metric tonnes in 2011.
- 4. Regarding the available stocks of methyl bromide (decision IX/6, paragraph 1), he said that Australia, Canada, Japan and the United States of America had reported 0.0 metric tonnes, 0.9 metric tonnes, 2.7 metric tonnes and 627.0 metric tonnes respectively. He noted that table 9.3 of the Technology and Economic Assessment Panel progress report issued in May 2013 showed the volume of stocks used and authorized by parties in 2012.
- 5. Only three parties not operating under paragraph 1 of Article 5 (United States, Canada and Australia) continued to submit nominations. The number of critical-use nominations from parties not operating under paragraph 1 of Article 5 had diminished significantly, from 116 in 2005 to 5 in 2013. No critical-use nominations had been received in 2013 from parties operating under paragraph 1 of Article 5.
- 6. Mr. Porter presented an overview of the nominations received for pre-plant soil use of methyl bromide in 2015. Three parties had requested volumes totalling 408.681 metric tonnes and the Committee had made a final recommendation of 310.526 metric tonnes. Consensus had been achieved on all nominations.
- 7. Australia had nominated 29.76 metric tonnes for strawberry runners and the Committee had recommended 28.765 metric tonnes. The party had provided an economic analysis for strawberry runner production in soilless culture and a new three-year research plan to identify appropriate alternatives to methyl bromide.
- 8. The Committee had observed that there had been no major reduction in the sector since the 2009 critical-use nominations and that the foundation stock stage in the strawberry runner production

chain had already made the transition to soilless production. It had noted that 0.47 metric tonnes were allocated each year by the party for foundation stock, which was a contingency use and, as such, was not recommended. The Committee had also considered that it was feasible to transition the mother plant stage (0.525 metric tonnes) to soilless production.

- 9. Canada had nominated 5.261 metric tonnes for strawberry runners and the Committee had recommended 5.050 metric tonnes, noting that no reduction had occurred in the sector since the 2011 nomination.
- 10. The party had stated that a groundwater study to reduce uncertainty over prior informed consent use would be undertaken and that the use of micropropagated plants had reduced the feasibility of expansion to soilless systems. A study on the technical and economic feasibility of soilless production would be conducted. The party had also confirmed that 2016 would be the final year for use of methyl bromide in that sector.
- 11. The Committee had considered that soilless systems and substrates were widely available as a replacement for methyl bromide in the production of strawberry nursery plants and had recommended that the nominated amount should be reduced by 4 per cent.
- 12. The United States had nominated 373.660 metric tonnes for strawberry fruit and the Committee had made a final recommendation of 276.711 metric tonnes. The party had requested that the full nomination should be recommended pending determination as to whether the higher use rates for chloropicrin registered federally in 2013 would be accepted by State and local authorities. The party had indicated that 2016 would be the final critical-use nomination for the sector.
- 13. The Committee had considered that alternatives (1,3-D/chloropicrin and chloropicrin alone under newly permitted rates of up to 392 kilograms per hectare), with or without barrier films, could replace methyl-bromide-specific critical-use nomination uses. Complete phase-out of methyl bromide was feasible. Given the current uncertainty regarding regulations on the use of chloropicrin at higher dosage rates, the Committee's final recommendation allowed for a three-year transition period. Given that the technologies for the application of chloropicrin were known, the Committee had considered that a greater reduction than the 10 per cent made by the party could be achieved in 2015 and therefore recommended a lower volume of methyl bromide.
- 14. Ms. Marcotte presented the final assessment of two post-harvest critical-use nominations and reviewed the emergency use by Canada of methyl bromide in two pasta warehouses.
- 15. The United States had nominated 0.310 metric tonnes for fresh dates requiring quick shipment. That nomination had not been recommended by the Committee in view of the fact that technically effective and commercially accessible alternatives were available; the need for a three-day market window for the estimated 25 per cent of the total harvest volume nominated had therefore not been substantiated by the party.
- 16. The United States had nominated 3.240 metric tonnes for dry cure pork in 2015 and the Committee had recommended that nomination. Extensive research had demonstrated a continued lack of success with possible alternatives, in particular in killing mites. The Committee had also made suggestions pertaining to new research and pest management.
- 17. Following its emergency use regulation, Canada had used 4.74 tonnes of methyl bromide to fumigate two pasta warehouses after finding phosphine-resistant pests in packaged pasta. That was the first time that such pests had been identified in Canada and it was therefore important to stop their spread. The Committee had provided suggestions on possible ways to avoid such events in the future.
- 18. The Committee had noted the following suggestions to avoid pest resistance: a stringent integrated pest management programme, managed by experienced and capable pest control operators, was a necessary prerequisite; before fumigation, the pests should be assessed and then proper fumigation should be carried out in accordance with the instructions on the fumigant label; only facilities or structures of "good" gas tightness should be fumigated; fumigants should not be used in facilities of "poor" gas tightness; if pest resistance was suspected, tests faster than the method recommended by the Food and Agriculture Organization of the United Nations should be used to allow for more effective follow-up fumigation.
- 19. Ms. Pizano summarized a number of other issues pertaining to the uses of methyl bromide. She set out the timeline for critical-use nominations in 2014 and said that 1 January 2015 was the phase-out date for the use of methyl bromide by parties operating under paragraph 1 of Article 5. Critical-use nominations for 2015 should be submitted in January 2014 and those for 2016 could be submitted in either January 2014 or January 2015.

- 20. In sharing the highlights of the progress report of the Quarantine and Pre-shipment Subcommittee, she noted that 43 parties had, pursuant to Article 7 of the Protocol, reported quarantine and pre-shipment consumption for 2012 totalling 8,665 metric tonnes and that the quarantine and pre-shipment report (prepared pursuant to decision XXIII/5) presented information from 34 parties, including States members of the European Union, on quarantine and pre-shipment use categories.
- 21. Since the 2013 progress report of the Technology and Economic Assessment Panel, additional information had been received from three other parties (United States, Canada and Japan). Most parties had provided a detailed breakdown of quarantine and pre-shipment uses by category, giving a good basis for further analysis by the Committee. As anticipated in decision XXIII/5 and in the light of that information, parties might wish to request the Committee to undertake a trend analysis of methyl bromide consumption for the quarantine and pre-shipment sector.

III. Scientific Assessment Panel

22. Ayité-Lô Ajavon, co-chair of the Scientific Assessment Panel, presented the Panel's plans for the development of the 2014 scientific assessment of ozone depletion. He described a new approach that would produce a concise document focused on decision-relevant information. He explained that, in accordance with decision XXIII/13, the assessment would look at key issues and respond to specific requests made by the Parties. It would review, among other topics, levels and trends of ozone, ozone-depleting substances and related chemicals, and the science related to stratospheric ozone and climate. The assessment process was developing well: author teams had been formed, the outline established and the first draft nearly completed. In the course of 2014, the draft would undergo further review and revision before being delivered as a pre-print volume to UNEP by 30 December 2014.

IV. Environmental Effects Assessment Panel

23. Nigel Paul, co-chair of the Environmental Effects Assessment Panel, presented the Panel's plans for the development of its 2014 assessment of the effects of ozone depletion on human health and the environment. He explained that, in accordance with decision XXIII/13, the assessment would look at key issues and respond to specific requests made by the Parties. In particular, it would review the relationship between changes in ozone levels and the consequent change in ultraviolet radiation as it affects humans and ecosystems, including contrasting effects within organisms (for example, the positive and negative effects of ultraviolet radiation on human health). It would also review ecosystems, assess the improved understanding of the fundamental mechanisms of responses and examine how the effects of ozone change interact with other elements of environmental change. The first draft of the 2014 report was being prepared and was due to be completed by the end of 2013. During the course of 2014, the draft would undergo further review and revision before being delivered to UNEP by 30 December 2014.

V. Technology and Economic Assessment Panel: report on the 2014 assessment

- 24. Bella Maranion, co-chair of the Technology and Economic Assessment Panel, gave a presentation reporting on the Panel's activities for the overview assessment in 2014. She introduced her fellow co-chairs, Lambert Kuijpers and Marta Pizano, and presented a list of the members of the Panel for 2013. She noted that the 2014 assessment report of the Panel would be based on the 2014 assessment reports of the six technical options committees, involving the work of some 150 experts who served on those committees. The committees had started to make organizational preparations for their 2014 assessments, including scheduling meetings and considering the balance of expertise needed within the committees, as membership re-appointments were being reviewed in 2014, as required by decision XXIII/10. She highlighted developments within each of the committees, including changes due to the retirement of co-chairs, and said that the impact of those changes on the assessment process would be both managed and minimized. The technical options committees would complete their assessment reports by the end of 2014 and the Panel would complete its report in early 2015.
- 25. She then highlighted the main items to be considered for the 2014 assessment by each of the six technical options committees. For the Chemicals Technical Options Committee, those included decreases in ODS process agent uses; increases in feedstock uses; new low-global-warming-potential solvents entering the market; and uncertainties with regard to carbon tetrachloride emissions.
- 26. The Flexible and Rigid Foams Technical Options Committee would provide an overview of transition progress in Parties operating under paragraph 1 of Article 5 and those not so operating,

setting out the challenges posed; a quantitative update of global blowing agent consumption; a review of emerging low-global-warming-potential alternatives; and an update on banks and management strategies in that sector.

- 27. The Halons Technical Options Committee would include in its assessment an evaluation of the development status of new chemical alternatives; consideration of the continued reliance on halons in the military and industrial sectors; an update on progress made by the International Civil Aviation Organization (ICAO), in association with the Committee, in respect of the phase-out of halons in civil aviation, as required by decision XXII/11 (in the light, in particular, of a resolution recently adopted by the ICAO Assembly on continuing progress towards development of halon replacements in civil aviation, which directed its Council to report on a timeframe for cargo compartment halon replacement at the next meeting of the Assembly in 2016); and a review of the status of halon destruction technologies.
- 28. The Medical Technical Options Committee assessment would include reporting on the progress in CFC MDI phase-out and any remaining challenges; progress in the phase-out of ozone-depleting substances used for sterilization and medical aerosols other than MDIs; and progress on alternative technologies, such as HFC MDIs, dry powder inhalers, aqueous sprays and other emerging technologies.
- 29. In its assessment, the Methyl Bromide Technical Options Committee would consider controlled uses of methyl bromide (pre-plant soil and commodities and structures uses), with particular focus on those applications that still required or might in future be nominated for critical uses, both by parties operating under paragraph 1 of Article 5 and by those not so operating. It would also analyse exempted uses of methyl bromide (quarantine and pre-shipment), which currently comprised some 80 per cent of total global methyl bromide use.
- 30. The assessment by the Refrigeration, Air Conditioning and Heat Pumps Technical Options Committee would include an analysis of the use of refrigerants in each refrigeration and air conditioning application chapter (Ammonia [R-717], Carbon dioxide [R-744] and hydrocarbons [HC-290 and others]; HCFCs; HFCs; and hydrofluoroolefins [unsaturated HFCs and HCFCs]); market availability, barriers and restrictions (including safety and efficiency), current trends and costs for those applications in each (sub-) sector; estimates on refrigerant banks and emissions; a new chapter entitled "Sustainable Refrigeration, Air Conditioning and Heat Pumps"; and a section on the mobile air conditioning sector with regard to the application of low-global-warming-potential alternatives.