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Tenth meeting of the Conference of the Parties to the Vienna Convention for the Protection of the Ozone Layer

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

Paris, 17–21 November 2014

Report of the tenth meeting of the Conference of the Parties to the Vienna Convention for the Protection of the Ozone Layer and the Twenty-Sixth Meeting of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer

Introduction

1. The combined tenth meeting of the Conference of the Parties to the Vienna Convention and Twenty-Sixth Meeting of the Parties to the Montreal Protocol were held at the headquarters of the United Nations Educational, Scientific and Cultural Organization, Paris, from 17 to 21 November 2014.

2. The present report reflects the deliberations under the items included on the single agenda used for the combined meetings; any references to the current meeting should be understood to denote the combined meetings of the two bodies.

Part One: preparatory segment (17–19 November 2014)

I. Opening of the preparatory segment

3. The preparatory segment was opened by its co-chairs, Mr. Patrick McInerney (Australia) and Mr. Richard Mwendandu (Kenya), on Monday, 17 November 2014, at 10.20 a.m.

4. The parties viewed a brief video on human impact on planet Earth and the need for sustainability, following which remarks were delivered by Ms. Ségolène Royal, Minister of Ecology, Sustainable Development and Energy of France, and Mr. Achim Steiner, Executive Director of the United Nations Environment Programme (UNEP), who formally opened the meeting.

A. Statement by the representative(s) of the Government of France

5. In her remarks, Ms. Royal welcomed the parties to France and expressed appreciation to the organizers of the current meeting and the host organization, the United Nations Educational, Scientific and Cultural Organization (UNESCO), for gathering experts and ministers to engage in a constructive and pragmatic dialogue on collective action to further protect the ozone layer without harming the climate. Such a dialogue required a new integrated development-environment model involving the broad participation of Governments, non-governmental organizations and civil society, including industry. Recognizing the interconnected nature of environmental protection, she said that progress

under the Montreal Protocol had been possible because the parties had chosen to see constraints as opportunities to innovate, to develop new activities and create new jobs, and to shift to a clean energy model.

6. The Protocol had shown what the international community could achieve by acting jointly on the basis of discussion and scientific evidence, such as that provided by the Protocol's assessment panels. The solidarity shown in providing over $3 billion through the Multilateral Fund for the Implementation of the Montreal Protocol to assist Article 5 parties in complying with their obligations to phase out hydrochlorofluorocarbons (HCFCs) had furthered progress toward full implementation. France had contributed some $230 million to that end and was committed to a successful outcome to discussions on the replenishment of the Fund for the triennium 2015–2017 at the current meeting; as for other key issues on the agenda, France attached importance to that of amending the Protocol to include hydrofluorocarbons (HFCs), as it was crucial to avoid solutions to ozone depletion that caused new problems in relation to climate change, and keeping track of and accelerating the elimination of HCFCs through synergies with other multilateral environmental agreements.

7. In closing, she said that France was ready to share its experience in mobilizing industry to make available and accessible to all countries the technological advances and alternatives needed to achieve the reduction of HCFC consumption. She hailed the significant recent agreement between China and the United States of America to tackle climate change, as well as the commitment of G-20 countries to do likewise and to promote green development, together with the exemplary projects initiated in many other countries, as indications that the world was moving toward a strong global agreement on climate that would reduce inequalities among countries and present an opportunity for developing countries to pursue sustainable development without repeating the past mistakes of developed countries that had led to the depletion of resources and the destruction of biodiversity. She wished the participants fruitful discussions over the coming week, quoting the poet Edouard Glissant to suggest that what was necessary was not improbable, but rather a possibility arising from a shared responsibility.

B. Statement by the representative(s) of the United Nations Environment Programme

8. In his statement Mr. Steiner observed that 2015, a year of important negotiations on climate change and sustainable development, would mark 30 years since the adoption of the Vienna Convention, which he characterized as one of the great success stories of international environmental cooperation. The Montreal Protocol's journey was also one of challenge because of the recognized imperative to maintain the world's commitment to phasing-out ozone-depleting substances, and hope because it could lead to further breakthroughs in protecting the environment and human health and well-being.

9. Over the life of the Protocol, the parties had succeeded in phasing out more than 98 per cent of all ozone-depleting substances, leading to important benefits that the public could readily see such as the dramatic reduction in the number of skin cancer cases. The Protocol's Scientific Assessment Panel had found encouraging signs that the ozone layer would recover by the middle of the current century. In his opinion, the success of the Convention sent the global community three powerful messages: that strong global partnership and united action was needed to achieve results; that patience and persistence were needed because the benefits of action often became apparent only after the passage of much time; and that the need for such patience and persistence must be factored into international discussions and negotiations.

10. Noting that parties had been mindful of not causing adverse environmental impacts and that protection of the ozone layer had contributed significantly to climate change mitigation, he cautioned that, if not addressed, the climate impact of HFCs could offset some of the Protocol's climate mitigation achievements. Current science provided clear evidence that ozone-related action inevitably affected climate change, both in terms of the man-made emissions that caused climate change and the policy actions for dealing with them. While that did not facilitate the parties' work, it did make it more meaningful.

11. In terms of the agenda for the meeting, he stressed the importance of the replenishment of the Multilateral Fund for the Implementation of the Montreal Protocol. As countries continued to develop they would use more energy and more chemicals, and developing economies in particular would produce more refrigeration and air-conditioning systems. Many developing economies had already made energy efficiency a key concern, however, and addressing energy efficiency in the HCFC phase-out process, especially in the refrigeration and air-conditioning sector, could help lead to technology choices that would benefit the ozone layer and reduce the climate impact of alternatives to ozone-depleting substances. He acknowledged the challenge of the Fund replenishment negotiations,

coming as they did at a critical stage when developing countries were in the midst of planning and implementing HCFC phase-out activities and many developed countries were facing financially challenging times, but urged parties to strive for a successful outcome that would both respond to the requirements of the Protocol and enable climate-friendly choices.

12. For many countries money was not the only concern. Issues such as the availability of low-global-warming-potential (GWP) alternatives to HCFCs, and their costs, and real technology transfer needed to be addressed. The challenge was to ensure access to technology and the development of technologies appropriate for all regions while also addressing issues like intellectual property. Those challenges notwithstanding, industries around the world were hearing the messages of the Montreal Protocol and were working to meet future needs.

13. He said that there was a need to build on the principles of common but different responsibilities and fairness in order for the global partnership between developed and developing countries to work. The discussion on HCFC alternatives was taking place at a time when low-GWP alternatives were gaining market share globally due to national and regional policy measures, and if such factors were not recognized in the discussions taking place, waste banks could become a significant source of future emissions. He called upon everyone to see the wider picture, as the year ahead would be one of difficult negotiations with an impact on climate, the planet and peoples' lives, and he urged parties to recognize each others' differences while striving to forge the agreements that took advantage of the opportunities before them.

14. In closing, he announced that Professor Mario Molina, whose research on ozone layer depletion had been seminal to the adoption of the Vienna Convention and the Montreal Protocol, was being honoured by UNEP later in the week with a lifetime achievement award. That award, he said, was also a reflection of the parties' successful stewardship of the Protocol over the years.

II. Organizational matters

A. Attendance

15. The tenth meeting of the Conference of the Parties to the Vienna Convention and the Twenty-Sixth Meeting of the Parties to the Montreal Protocol were attended by representatives of the following parties: Albania, Algeria, Andorra, Angola, Antigua and Barbuda, Argentina, Armenia, Australia, Austria, Bahrain, Bangladesh, Belarus, Belgium, Belize, Benin, Bhutan, Bolivia (Plurinational State of), Bosnia and Herzegovina, Botswana, Brazil, Brunei Darussalam, Burkina Faso, Cabo Verde, Cambodia, Cameroon, Canada, Central African Republic, Chile, China, Colombia, Comoros, Congo, Cook Islands, Costa Rica, Côte d'Ivoire, Croatia, Cuba, Czech Republic, Democratic People's Republic of Korea, Democratic Republic of the Congo, Denmark, Djibouti, Dominican Republic, Ecuador, Egypt, El Salvador, Eritrea, Estonia, Ethiopia, European Union, Fiji, Finland, France, Georgia, Germany, Ghana, Grenada, Guatemala, Haiti, Holy See, Honduras, India, Indonesia, Iran (Islamic Republic of), Iraq, Ireland, Italy, Japan, Jordan, Kazakhstan, Kenya, Kuwait, Kyrgyzstan, Lao People's Democratic Republic, Latvia, Lebanon, Lesotho, Libya, Liechtenstein, Lithuania, Madagascar, Malawi, Malaysia, Maldives, Mali, Mauritius, Mexico, Micronesia (Federated States of), Mongolia, Montenegro, Morocco, Mozambique, Myanmar, Netherlands, New Zealand, Nicaragua, Nigeria, Norway, Oman, Pakistan, Panama, Philippines, Poland, Portugal, Republic of Korea, Republic of Moldova, Romania, Russian Federation, Rwanda, Saint Kitts and Nevis, Saint Lucia, Sao Tome and Principe, Saudi Arabia, Senegal, Singapore, Slovakia, South Africa, South Sudan, Spain, Sri Lanka, Sudan, Sweden, Switzerland, Thailand, the former Yugoslav Republic of Macedonia, Timor-Leste, Togo, Trinidad and Tobago, Tunisia, Turkey, 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.

16. Representatives of the following United Nations bodies and specialized agencies also attended: Global Environment Facility, the secretariat of the Multilateral Fund for the Implementation of the Montreal Protocol, United Nations Development Programme, United Nations Environment Programme (UNEP), United Nations Industrial Development Organization, World Bank and World Meteorological Organization.

17. The following intergovernmental, non-governmental, industry, academic and other bodies and individuals were also represented: Ademe, A-Gas International, Air Liquide, Alliance for Responsible Atmospheric Policy, Asahi Glass Co., Ltd., ARKEMA, Avery Dennison, California Strawberry Commission, Cannon SpA, Carrefour, Centre for Science and Environment, Centro Mario Molina, Centro Studi Galileo Srl, Children's Investment Fund Foundation, Climate and Clean Air Coalition,

Coldway, Cooltech, CYDSA Corporativo, S.A. de C.V., Daikin Industries, Ltd., Daikin U.S., Dupont Company, Dupont International, S.A., Earth Institute, Emergent Ventures India, Environmental Investigation Agency, Eurammon, European Partnership for Energy and the Environment, GIZ Proklima, Groupe-Conseil Baastel, Green Cooling Association, Green Energy and Environment Research Laboratories, Hindu Business Line, Honeywell, Honeywell Belgium, N.V., ICF International, Industrial Technology Research Institute, Ingersoll Rand, Institute for Governance and Sustainable Development, INTECH, International Institute of Refrigeration, International Pharmaceutical Aerosol Consortium, Japan Fluorocarbon Manufacturers Association, Kompozit, Lambiotte & Co., League of Arab States, Mr. Alfi Malek, Manitoba Ozone Protection Industry Association, M. De Hondt B.V.B.A, Mexichem UK Limited, Natural Resources Defense Council, Nolan-Sherry Associates Ltd., Navin Fluorine International Limited, Norris Group, Nybra Consulting, Pest Kare (I) Pvt Ltd, Pisces Foundation, Press Trust of India, Quimobásicos S.A. de C.V., Refrigerant Reclaim Australia, Shecco, Terre Policy Centre, University of Cambridge and World Avoided Project, Universities Space Research Association, CNRS, Marcotte Consulting, Ozone Monitoring Centre, Education Nationale, National Oceanic and Atmospheric Administration.

B. Officers

18. The preparatory segment of the meeting was co-chaired by Mr. McInerney and Mr. Mwendandu.

C. Adoption of the agenda of the preparatory segment

19. The following agenda for the preparatory segment was adopted on the basis of the provisional agenda contained in document UNEP/OzL.Conv.10/1/Rev.1-UNEP/OzL.Pro.26/1/Rev.1:

1. Opening of the preparatory segment:
   - (a) Statement by representative(s) of the Government of France;
   - (b) Statement 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. Combined Vienna Convention and Montreal Protocol issues:
   - (a) Financial reports and budgets of the trust funds for the Vienna Convention and the Montreal Protocol;
   - (b) Extension of the trust funds for the Vienna Convention and the Montreal Protocol;
   - (c) Status of ratification of the Beijing Amendment to the Montreal Protocol.
4. Montreal Protocol issues:
   - (a) Replenishment of the Multilateral Fund for the Implementation of the Montreal Protocol:
     - (i) Supplemental report of the Technology and Economic Assessment Panel replenishment task force;
     - (ii) Extension of the fixed-exchange-rate mechanism for 2015–2017;
   - (b) Issues related to exemptions from Article 2 of the Montreal Protocol:
     - (i) Nominations for essential-use exemptions for 2015 and 2016;
     - (ii) Nominations for critical-use exemptions for 2015 and 2016;
     - (iii) Global exemption of controlled substances for laboratory and analytical uses;
   - (c) Availability of recovered, recycled or reclaimed halons;
   - (d) Measures to facilitate the monitoring of trade in hydrochlorofluorocarbons and substituting substances;
   - (e) Releases, breakdown products and opportunities for reduction of releases of ozone-depleting substances;

(f) Issues related to alternatives to ozone-depleting substances:

(i) Final report by the Technology and Economic Assessment Panel on alternatives to ozone-depleting substances (decision XXV/5, subparagraphs 1(a)–(c));

(ii) Information submitted by parties on their implementation of paragraph 9 of decision XIX/6 to promote a transition from ozone-depleting substances that minimizes environmental impact (decision XXV/5, paragraph 3);

(g) Proposed amendments to the Montreal Protocol;

(h) Renomination and reappointment of co-chairs and members of the Technology and Economic Assessment Panel and its technical options committees;

(i) Consideration of the membership of Montreal Protocol bodies for 2015:

(i) Members of the Implementation Committee;

(ii) Members of the Executive Committee of the Multilateral Fund;

(iii) Co-chairs of the Open-ended Working Group;

(j) Compliance and reporting issues considered by the Implementation Committee.

5. Vienna Convention issues:

(a) Report of the ninth meeting of the Ozone Research Managers of the Parties to the Vienna Convention;

(b) Status of the General Trust Fund for Financing Activities on Research and Systematic Observations Relevant to the Vienna Convention.

6. Other matters.

20. During the discussion on the adoption of the agenda, a number of representatives said that item 4 (g) of the provisional agenda, “Proposed amendments to the Montreal Protocol”, should be removed, arguing that the proposed amendments had been extensively discussed at a number of previous meetings over the course of several years, that there was nothing new to discuss and no prospect of agreement to amend the Protocol, and that further discussion would only impede work on the already heavy agenda for the current meeting. One member said that, while he did not support them, the proposed amendments had been properly submitted for discussion at the current meeting in accordance with the Protocol amendment procedures and should therefore remain on the agenda. Several other members strongly supported the inclusion of the item on the agenda on the same basis, with one, speaking on behalf of a group of countries, adding that further discussion of the matter during the current meeting was also justified by additional technical information that had become available since the matter had last been discussed.

21. Following the discussion the Co-Chair ruled that, consistent with the practice at previous meetings of the parties and the Open-ended Working Group, the proposed amendments would remain on the agenda because they had been duly submitted for discussion at the current meeting in accordance with the rules of procedure. The views of those opposing their presence on the agenda would be reflected in the present report.

D. Organization of work

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

III. Combined Vienna Convention and Montreal Protocol issues

A. Financial reports and budgets of the trust funds for the Vienna Convention and the Montreal Protocol

23. Introducing the item, the Co-Chair drew attention to the approved and proposed budgets set out in documents UNEP/OzL.Conv.10/4 and UNEP/OzL.Pro.26/4 and the financial reports set out in documents UNEP/OzL.Conv.10/4/Add.1 and UNEP/OzL.Pro.26/4/Add.1. He 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. In accordance with that

practice, the parties agreed to establish a budget committee, coordinated by Mr. Kazeem Bayero (Nigeria) and Ms. Fiona Walters (United Kingdom), to agree on budgets for the Vienna Convention and the Montreal Protocol trust funds and to prepare draft decisions on financial matters for the Convention and the Protocol.

24. Subsequently, the co-chair of the budget committee presented conference room papers setting out draft decisions on the financial report and budget of the trust fund for the Montreal Protocol and on the financial report and budget of the trust fund for the Vienna Convention, which the parties approved for consideration and adoption during the high-level segment.

B. Extension of the trust funds for the Vienna Convention and the Montreal Protocol

25. Introducing the sub-item, the Co-Chair recalled that at the combined eighth meeting of the Conference of the Parties to the Vienna Convention and Twentieth Meeting of the Parties to the Montreal Protocol, in 2008, the parties had requested the Executive Director of UNEP to extend both the Montreal Protocol and Vienna Convention trust funds to 31 December 2015. Subsequently, the United Nations Environment Assembly at its first session, in June 2014, had approved the further extension of the two funds to the end of 2017, subject to the Executive Director receiving requests to that effect from the parties to the Convention and the Protocol.

26. The parties agreed that the budget committee would consider the matter further.

27. As noted in section A above, the co-chair of the budget committee subsequently presented conference room papers setting out draft decisions on the financial report and budget of the trust fund for the Montreal Protocol and on the financial report and budget of the trust fund for the Vienna Convention, which the parties approved for consideration and adoption during the high-level segment. Those draft decisions included provisions requesting the Executive Director of UNEP to extend the trust funds for the Vienna Convention and the Montreal Protocol to 31 December 2025.

C. Status of ratification of the Beijing Amendment to the Montreal Protocol

28. The Co-Chair introduced the item, recalling that at each meeting the parties reviewed the status of ratification of the Vienna Convention, the Montreal Protocol and the amendments to the Protocol, and noting that with the ratification of the Beijing Amendment by just one more country the Convention, the Protocol and all amendments to the Protocol would have achieved universal ratification.

29. One representative congratulated parties that had ratified the Beijing Amendment for doing so and urged those that had not yet ratified to do so quickly.

30. The parties approved the draft decisions prepared by the Secretariat on the matter (UNEP/OzL.Conv.10/3-UNEP/OzL.Pro.26/3, sect. IV A, draft decisions X/[AAA] and XXVI[AAA]) for consideration and adoption during the high-level segment.

IV. Montreal Protocol issues

A. Replenishment of the Multilateral Fund for the Implementation of the Montreal Protocol

1. Supplemental report of the Technology and Economic Assessment Panel replenishment task force

31. Ms. Shiqiu Zhang, co-chair of the Technology and Economic Assessment Panel's replenishment task force**,** and Mr. Lambert Kuijpers, co-chair of the Technology and Economic Assessment Panel, made a presentation on the task force's supplemental report assessing the funding requirement for the replenishment of the Multilateral Fund for the period 2015–2017. A summary of the presentation prepared by the presenters is set out in annex VI to the present report.

32. Following the presentation, Mr. Kuijpers responded to several requests for clarification. He said that the assessment did not include any increase in the funding requirement to meet the needs of small and medium-sized enterprises specifically because the historical data had not yielded an increased cost-effectiveness factor; the report did acknowledge, however, that those enterprises might face higher costs owing, among other things, to the rising cost of low-GWP technologies and the cost of addressing health and safety issues. As for the question of HCFC consumption growth in manufacturing and servicing in the refrigeration and air-conditioning sector, he said that countries could choose to allow increased consumption in that sector if they offset it in other sectors, but that

was an issue to be addressed by parties through their HCFC phase-out management plans in coordination with the Executive Committee of the Multilateral Fund. Responding to a request for indicative figures on the costs of conversion for small and medium-sized enterprises at risk of non-compliance and delays due to lack of funding, he said that it would be possible to produce such figures on the basis of assumed cost-effectiveness figures to assist the parties at the current meeting if requested to do so.

33. There then followed a general discussion, in which many representatives expressed general appreciation to the Assessment Panel and its replenishment task force for the comprehensive reports and proposed scenarios. Several representatives, including one speaking on behalf of a group of countries, said that the assessment report provided a useful basis for the week's negotiations on the replenishment of the Multilateral Fund for the triennium 2015–2017 and beyond.

34. Several representatives, including one speaking on behalf of a group of parties, expressed a commitment to maintaining stable and sufficient funding at a level that would enable parties operating under paragraph 1 of Article 5 (Article 5 parties) to comply with their HCFC phase-out obligations under the Protocol in accordance with decision XIX/6. One representative said that projects should be carefully selected to ensure compliance, and another that the assumptions of the task force should be carefully reviewed to ensure that funding was both stable and sufficient.

35. Another representative, speaking on behalf of group of countries, said that those countries were prepared to make a strong contribution to the replenishment to ensure stable and sufficient funding to meet the agreed incremental costs of Article 5 parties and to avoid a phase-in of HFCs. Noting that the Fund was at its lowest level ever, she urged parties to increase the trust fund level to signal a strong commitment to the Protocol and Fund as the key credible instruments for achieving the global phasedown of harmful substances.

36. Many representatives said that the Panel’s assessment did not take sufficient account of the challenges and difficulties faced by Article 5 parties, particularly with regard to small and medium-sized enterprises, including increasingly prohibitive costs of conversion to low-GWP alternatives, the rising price of energy-efficient equipment, a lack of adequate training for technicians and end-users and a lack of expertise in health and safety. One representative said that the replenishment should take into account experience that had shown that front-loaded funding was necessary for successful project implementation. Another representative, supported by another, said that funding should be provided for pilot projects to test and raise awareness of new technologies, including in the context of swing production plants. Two representatives drew attention to the particular needs of servicing sector companies in rationalizing consumption and the use of alternatives, with one calling for a review of current cost-effectiveness guidelines in the light of those needs. Another representative said that assistance for small and medium-sized enterprises should continue for at least a year after conversion to assist them in coping with a market dominated by large corporations better able to absorb the cost of conversion; another suggested that small and medium-sized enterprises could benefit during the transition period from the use of systems houses and other similar approaches. One representative, supported by another, said that the assessment did not adequately take account of inflation and used prices for technologies and substances that were between 10 and 30 per cent too low.

37. Many representatives highlighted what they said was a need for greater funding for institutional strengthening, which according to one had not increased in a decade while Article 5 parties struggled to cope with increasingly complex demands.

38. Lastly, one representative questioned the scope of the Assessment Panel's report in going beyond the next triennium, saying that there was no need to discuss stage III funding at the current time and that the top priority should be conversion project implementation in the 2015–2017 triennium; another, speaking on behalf of a group of countries, recalled the provisions of decision XIX/6 calling for alternatives to HCFCs that minimized climate impact.

39. The parties agreed to establish a contact group, co-chaired by Mr. Agustin Sanchez (Mexico) and Mr. Josef Buys (Belgium) to discuss the proposed replenishment further, taking into account the discussion in plenary.

40. Following the work of the contact group the parties approved for consideration and adoption during the high-level segment a draft decision agreed by the contact group on the replenishment of the Multilateral Fund for the period 2015–2017.

2. Extension of the fixed-exchange-rate mechanism for 2015–2017

41. The Co-Chair recalled that for the last several replenishments the Parties had provided for the use of a fixed exchange rate mechanism to help facilitate payment, noting that use of the mechanism had led to a net increase in funds available to the Multilateral Fund. The Secretariat had prepared a draft decision on the matter (UNEP/OzL.Conv.10/3-UNEP/OzL.Pro.26/3, sect. III D, draft decision XXVI/[CC]).

42. The parties agreed that the contact group established to discuss the replenishment would also consider the draft decision on the fixed-exchange rate mechanism.

43. Following the work of the contact group the parties approved for consideration and adoption during the high-level segment a draft decision agreed by the contact group on the extension of the fixed-exchange-rate mechanism to 2015–2017.

B. Issues related to exemptions from Article 2 of the Montreal Protocol

1. Nominations for essential-use exemptions for 2015 and 2016

44. The Co-Chair recalled that the Open-ended Working Group, at its thirty-fourth meeting, had heard a presentation from the Technology and Economic Assessment Panel on their preliminary recommendations on nominations for essential uses. Consequently, the Open-ended Working Group had forwarded three draft decisions on nominations for essential-use exemptions for 2015 and 2016 for consideration by the Twenty-Sixth Meeting of the Parties on the use of chlorofluorocarbon (CFC) 113 for aerospace applications in the Russian Federation (UNEP/OzL.Conv.10/3-UNEP/OzL.Pro.26/3, sect. II, draft decision XXVI/[A]), on laboratory and analytical uses of carbon tetrachloride in 2015 for China (UNEP/OzL.Conv.10/3-UNEP/OzL.Pro.26/3, sect. II, draft decision XXVI/[B]), and on the use of chlorofluorocarbons (CFCs) for metered-dose inhalers in China (UNEP/OzL.Conv.10/3-UNEP/OzL.Pro.26/3, sect. II, draft decision XXVI/[C]).

45. Mr. Keiichi Ohnishi, (Chemicals Technical Options Committee), gave a presentation on the reassessment of the essential-use exemption for laboratory and analytical use of carbon tetrachloride for China. The Committee had been unable to recommend approval of the initial nomination for 90 tonnes owing to concerns over the relationship of the nomination to the carbon tetrachloride phase-out plan signed between China and the Multilateral Fund; delays in drafting, submitting and implementing the revised standards described in the nomination; and the justification for the amount requested for analysing water. China had since submitted additional information on the requirements and conditions for testing and the method for calculating the total volume of carbon tetrachloride usage and had indicated that the agreement with the Multilateral Fund did not include the phase-out of carbon tetrachloride in laboratory and analytical uses. The party had also agreed to reduce the nominated quantity by 10 tonnes for 2015 by accelerating the transition to new technologies.

46. The representative of China confirmed that his party had submitted the requested information to the Committee, addressing the concerns raised, and had agreed to a revised nomination of 80 tonnes. Some parties, including one speaking on behalf of a group of countries, said that there was a need for further discussion of the nomination. One representative expressed disagreement with a note in the report of the Chemicals Technical Options Committee indicating that the Committee had been unable to recommend the nomination for China for 2016 as it believed that any essential-use nomination should be presented no more than one year in advance and for one year only; nominations for more than one year had been submitted and considered in the past.

47. The representative of the Russian Federation thanked the Committee for approving his country's nomination for 75 tonnes of chlorofluorocarbon-113 for aerospace applications for 2015 and announced that the nomination would be the last for that sector that the Russian Federation would submit.

48. The parties approved the draft decisions on the nominations for the use of chlorofluorocarbon-113 in the aerospace industry of the Russian Federation and the use of chlorofluorocarbons in metered-dose inhalers in China for consideration and adoption during the high-level segment.

49. The parties also agreed that interested parties should meet informally with the representative of China to further discuss the nomination for laboratory and analytical uses of carbon tetrachloride.

50. Following the informal consultations between China and interested parties, the parties approved the draft decision on the essential-use exemption for laboratory and analytical use of carbon tetrachloride for China for consideration and adoption during the high-level segment.

2. Nominations for critical-use exemptions for 2015 and 2016

51. The Co-Chair recalled that the Open-ended Working Group, at its thirty-fourth meeting, had heard a presentation from the Methyl Bromide Technical Options Committee on its initial review of the ten critical-use nominations submitted by six parties. Since that time, some of the nominating parties had submitted additional information to the Technology and Economic Assessment Panel, and the Panel had met to conduct a final evaluation of the nominations.

52. Mr. Mohamed Besri and Mr. Ian Porter, co-chairs of the Methyl Bromide Technical Options Committee, gave a presentation on the final recommendations for critical-use nominations for methyl bromide. A summary of the presentation prepared by the presenters is set out in annex VI to the present report.

53. Following the presentation, the representative of Argentina expressed surprise that her country's nomination for the critical use of methyl bromide for the strawberry fruit, green pepper and tomato sectors had not been recommended by the Methyl Bromide Technical Options Committee, particularly as that nomination was the first submitted by an Article 5 party. The Committee's report on the matter, she said, was technically inconsistent and lacking in impartiality and did not allow for the fact that growers had to produce two crops a year for production to be economically viable. In addition, the Committee had not acknowledged important social, economic and cultural factors behind the nomination, including the role of immigrant producers in raising the crops. Also, the call of the Committee for producers to consider hydroponic techniques was not appropriate given the economic dependence of producers on soil-based agricultural methods. The studies used by the Committee as a basis for rejecting the nomination were preliminary and had not been finalized for general acceptance by the scientific community; nor had there been time for Argentina to respond to the issues arising from those studies. In summary, she said that the party needed more time to resolve the technical, economic and social problems faced in identifying and applying alternatives to use of methyl bromide and requested the parties to reconsider the nomination.

54. The representative of Canada said that her country was committed to the phase-out of methyl bromide, once suitable alternatives had been identified, and would work with other parties to finalize a draft decision on the matter. The representative of Australia said that the research programme in that country to identify alternatives to use of methyl bromide in the strawberry runners sector was continuing, although problems were still being faced with regard to the prevention of pathogens and phytotoxicity. The party was preparing a draft decision on the matter in consultation with interested parties. The representative of the United States of America drew attention to the great efforts that had been made, particularly by farmers and growers, to reduce the nominations for his party; only two currently remained, for the cured pork and strawberry fruit sectors, and the latter, accounting for 99 per cent of the nominated amount, would be the last for that sector. The representative of China highlighted the great importance attached to the ginger crop in his region and said that efforts were continuing to find a suitable alternative to methyl bromide for that application.

55. A number of representatives expressed support for the nomination of Argentina, saying that it should be considered further at the current meeting. Several representatives observed that non-Article 5 parties were still requesting critical-use exemptions for methyl bromide; that, they suggested, was evidence of the difficulty of identifying alternatives to the substance, and a nomination by a party operating under paragraph 1 of Article 5, with less technical capacity and with pressing social and economic issues, should be viewed with sympathy. One representative said that it was in the broader interest of the parties to provide the necessary flexibility for parties to remain in compliance with the provisions of the Protocol. One representative, speaking on behalf of a group of countries, said that the parties in his regional grouping had phased out the use of methyl bromide for all purposes and that alternatives were being employed successfully. Saying that there was a need to share information to help other parties in their efforts to phase out the substance, he said that the nomination from Argentina had been rejected principally due to a lack of supporting data, and he urged that rapid action be taken to make those data available to the parties for consideration at the current meeting.

56. The parties agreed to establish a contact group, co-chaired by Ms. Donalyn Charles (Saint Lucia) and Mr. Mikkel Sorensen (Denmark), to consider the matter further, in particular the issue of the critical-use nomination of Argentina, and the wider issues of process raised by Argentina.

57. Subsequently, the co-chair of the contact group reported that the group had finalized its discussions and presented a draft decision on nominations for critical use exemptions. The parties approved the draft decision for consideration and adoption during the high-level segment.

3. Global exemption of controlled substances for laboratory and analytical uses

58. The Co-Chair recalled that the Open-ended Working Group, at its thirty-fourth meeting, had agreed to forward to the current meeting a draft decision submitted by the United States of America that would extend the expiry date of the exemption for laboratory and analytical uses of controlled substances to 31 December 2021 (UNEP/OzL.Conv.10/3-UNEP/OzL.Pro.26/3, sect. II, draft decision XXVI/[D]).

59. The representative of the United States said that the draft decision acknowledged the fact that small amounts of ozone-depleting substances were still used for analytical purposes in many countries. One representative, speaking on behalf of a group of countries, suggested an additional operative paragraph encouraging parties to investigate alternatives for that use and to share the resulting information.

60. The parties approved the draft decision, as amended to incorporate the suggestion above, for consideration and adoption during the high-level segment.

C. Availability of recovered, recycled or reclaimed halons

61. Introducing the sub-item, the Co-Chair recalled that at the thirty-fourth meeting of the Open-ended Working Group the United States had submitted a draft decision on the availability of recovered, recycled or reclaimed halons, which Australia and Norway had joined as co-sponsors.

62. At the request of the Co-Chair the representative of Norway introduced the draft decision (UNEP/OzL.Conv.10/3-UNEP/OzL.Pro.26/3, sect. II, draft decision XXVI/[E]), recalling that it had been amended to take into account the discussions at the thirty-fourth meeting of the Open-ended Working Group and that the Group had agreed to forward it for consideration at the current meeting.

63. All representatives who took the floor welcomed the proposal and thanked its proponents. One representative observed that his country had recovered halons for possible reuse but possessed neither recycling nor destruction facilities, so its ability to export recovered halons was important. Other representatives said requests users of halons for information about their disposal were increasing. Since the aviation industry still needed to use halons, the draft decision was timely.

64. One representative asked for greater clarity on the type of information to be reported under the draft decision. Other representatives expressed concern about the impact of additional reporting requirements on countries with limited capacity and suggested an amendment to clarify that the activities contemplated were voluntary.

65. The parties approved the draft decision, as orally amended, for consideration and adoption during the high-level segment.

D. Measures to facilitate the monitoring of trade in hydrochlorofluorocarbons and substituting substances

66. Introducing the sub-item the Co-Chair recalled that at the thirty-fourth meeting of the Open-ended Working Group the European Union had submitted a draft decision on measures to facilitate the monitoring of trade in HCFCs and substituting substances. At the Co-Chair's request the representative of the European Union then introduced the draft decision (UNEP/OzL.Conv.10/3-UNEP/OzL.Pro.26/3, sect. II, draft decision XXVI/[G]), saying that it would start the slow process of amending the World Customs Organisation's Harmonized Commodity Description and Coding System to facilitate the identification of alternatives to HCFCs and the tracking of trade in HCFCs and their alternatives, as HCFCs were gradually phased out, while encouraging parties, on a voluntary basis, to do the same thing at the national level. At the meeting of the Open-Ended Working Group in July, parties had discussed the draft decision in a contact group but had not reached complete agreement, and he therefore hoped that it could be further discussed in a contact group at the current meeting.

67. Several representatives welcomed the draft decision, saying that it would assist with the control of illegal trade. One representative described how her country required licenses for imports not only for HCFCs but for all refrigerants and was also helping to initiate a regional illegal trade enforcement network for ozone-depleting substances and related technologies; introducing Harmonised System codes for alternatives to HCFCs would be helpful in both cases. Another representative described how the authorities in his country were beginning to detect instances of illegal trade in HCFCs. Another representative, however, raised a concern about a potential lack of capacity in developing countries to comply with any additional reporting requirements.

68. The parties agreed to establish a contact group, co-chaired by Mr. Leslie Smith (Grenada) and Ms. Nancy Seymour (Canada) to consider the draft decision further.

69. Subsequently, the co-chair of the contact group reported that the group had finalized its discussions and had agreed on a draft decision. The parties approved the draft decision for consideration and adoption during the high-level segment.

E. Releases, breakdown products and opportunities for reduction of releases of ozone-depleting substances

70. Introducing the item, the Co-Chair recalled that at the thirty-fourth meeting of the Open-Ended Working Group the European Union had introduced a draft decision on releases of ozone-depleting substances, breakdown products and opportunities to reduce releases. Since then, in the light of the new scientific findings provided by the Scientific Assessment Panel in its *Assessment for Decision Makers: Scientific Assessment of Ozone Depletion: 2014*, published in September 2014, the European Union had decided to split the original draft decision into two separate draft decisions, one on releases of halogenated substances and co-products and by-products of their production and use (UNEP/OzL.Conv.10/3/Add.1-UNEP/OzL.Pro.26/3/Add.1, sect. II, draft decision XXVI/[H]), and the other on breakdown products of ozone-depleting substances and their alternatives (UNEP/OzL.Conv.10/3/Add.1-UNEP/OzL.Pro.26/3/Add.1, sect. II, draft decision XXVI/[I]).

71. Introducing the two draft decisions, the representative of the European Union observed that the Scientific Assessment Panel's assessment for decision makers had highlighted the fact that the concentration of carbon tetrachloride observed in the atmosphere was much higher than could be accounted for by reported production and use, a matter that was of significant concern; that, along with other similar issues, was the subject of the first draft decision. The Panel had also reported that breakdown products from hydrofluoroolefins could have potentially negative impacts in the long term, although the short-term effects appeared to be negligible; that, along with related issues, was the subject of the second decision.

72. In the ensuing discussion one representative suggested that, while the first draft decision raised important issues, it was overbroad, covering all ozone-depleting substances and uses even though discrepancies in emissions were relevant primarily to carbon tetrachloride. In addition, although four CFCs and HCFCs had been newly discovered, it was not yet clear whether this was a serious concern or the result of improved measurement techniques; in any case, the atmospheric incidence of two of them was falling. The second draft decision was also possibly unnecessarily broad, and he was concerned about the extra reporting burden it could mean for countries with no production of any of the relevant substances. He also hoped that the Scientific Assessment Panel and Environmental Effects Assessment Panel could be involved in any discussions on both draft decisions.

73. Other representatives also expressed concern that the draft decisions, while dealing with important issues, might be overbroad. It was also suggested that discussion of the draft decisions be deferred until the Scientific Assessment Panel and Environmental Effects Assessment Panel produced their full assessment reports in 2015. Other representatives expressed concern about possible additional burdens on countries with limited capacities.

74. One representative argued that the draft decisions should not be discussed at all, saying that they fell outside the remit of the Montreal Protocol, which regulated only the production and consumption of ozone-depleting substances, not their co-production, by-production or use as feedstock. He also said that the discrepancy in emissions of carbon tetrachloride had been discussed at length at the Twenty-Third Meeting of the Parties in 2011 and that the European Union's draft decisions appeared to add nothing new. Countries concerned about the issues could address them at the national and regional levels, and it would not be fair to industry in developing countries for the parties to create uncertainty about the future of processes that they used. He also suggested that draft decisions that were in substance the same as previous decisions should not be discussed.

75. Another representative expressed disagreement, arguing that the ultimate objective of the Montreal Protocol, as expressed in its preamble, was to control emissions of chemicals that depleted the ozone layer and that if emissions were still occurring despite the phase-out of production and consumption it was clearly a matter for discussion by the parties. Although he did not agree with everything in the draft decisions, he wanted to discuss them further with other interested parties. The representative of the European Union concurred, pointing out that discrepancies in emissions had been discussed at several meetings of the parties and clearly fell within the scope of the Montreal Protocol.

76. A representative of an environmental non-governmental organization said that the concentration of carbon tetrachloride in the atmosphere had been observed to be between four and

forty times what it should be based on reported feedstock uses. Given the increasing use of HCFCs as feedstock, the whole question of the Montreal Protocol's ability to regulate feedstock use effectively was at stake and should be addressed as a matter of urgency.

77. Following discussion of the first draft decision the Co-Chair proposed that a contact group be established to discuss it further. There being no objection to the proposal, he said that details regarding co-chairs and other matters would be announced.

78. Following discussion of the second draft decision the Co-Chair proposed that the representative of the European Union and the representative expressing opposition to the draft decision discuss with the Co-Chairs how best to make progress on it. The latter representative then objected to the establishment of a contact group to discuss either of the two draft decisions, saying that there was a lack of consensus to do so. The Co-Chair suggested that consensus in the context did not require unanimity, noting that a clear majority of representatives taking the floor had supported discussion of the first draft decision in more detail. He accepted that there had not been the same level of interest expressed in discussing the second draft decision and suggested that the European Union should consider revising and resubmitting it at some point in the future.

79. In response to a request for clarification, the Senior Legal Officer of the Ozone Secretariat stated that the decision to establish a contact group was one of process rather than substance and as such could be made by a majority. The outcome of any contact group would of course be considered in plenary, where a final decision would be made.

80. Several other representatives then argued against establishing a contact group, saying that to do so in the absence of consensus was contrary to the previous practice of the Montreal Protocol and might set an unfortunate precedent. Other representatives, however, disagreed, saying that the idea that a contact group required the agreement of all parties had only recently been aired and was not in line with previous practice under the Protocol. The establishment of a contact group was not a threat to any party, but rather an opportunity to discuss differences in more detail than was possible in the time available in plenary and to explore whether consensus could be achieved.

81. One representative said that while the latter position was correct, it would be desirable if consensus could be reached on the establishment of a contact group in order to preserve the cooperative spirit in which discussions under the Protocol had always been conducted in the past.

82. The representative of the European Union, asking that his comment be reflected in the present report, expressed concern that an initial ruling by the Co-Chair at the conclusion of the discussion of the first decision, to establish a contact group to discuss that decision, had provoked no objection at the time it was made but had subsequently been revoked in response to the objections described above, voiced at the conclusion of the discussion of the second draft decision.

83. The Co-Chair requested the representative of the European Union and any interested parties to consult informally in an effort to reach consensus.

84. Following those consultations the representative of the European Union announced that the European Union would await the publication of the final assessment reports of the Scientific Assessment Panel and the Environmental Effects Assessment Panel in 2015 before coming back to the issues described above. Supported by another representative, he also reiterated the concern described above regarding the reversal of the decision to establish a contact group, expressing the hope that nothing like it would happen again.

F. Issues related to alternatives to ozone-depleting substances

1. Final report by the Technology and Economic Assessment Panel on alternatives to ozone-depleting substances (decision XXV/5, subparagraphs 1(a)–(c))

85. Introducing the sub-item, the co-chair recalled that following the presentation of the initial report of the Technology and Economic Assessment Panel on alternatives to ozone-depleting substances at the thirty-fourth meeting of the Open-ended Working Group, the parties had provided further guidance to the Panel on the finalization of the report for consideration by the Twenty-Sixth Meeting of the Parties. The executive summary of the final report was set out in annex II to document UNEP/OzL.Conv.10/2/Add.1-UNEP/OzL.Pro.26/2/Add.1.

86. Mr. Paul Ashford, co-chair of the Foams Technical Options Committee, Mr. Kuijpers and Mr. Roberto de Aguiar Peixoto, co-chairs of the Refrigeration, Air-Conditioning and Heat Pumps Technical Options Committee, and Mr. Daniel P. Verdonik, co-chair of the Halons Technical Options Committee, made a presentation on the Panel's final report on alternatives to ozone-depleting

substances. A summary of the presentation prepared by the presenters is set out in annex VI to the present report.

87. Following the presentation, the Panel members responded to questions from representatives. Mr. Ashford began by responding to questions on available alternatives in the foam sector. He explained that a number of non-HFC alternatives had been considered for micro, small and medium-sized enterprises, including CO_2 water blowing for some applications and oxygenated hydrocarbons in methylformate and methanol, but that micro operations were not expected to have access to low-GWP alternatives such as hydrofluoroolefins (HFOs) immediately and that there were cost implications. He noted that such small businesses were highly dependent on systems houses, and the discussion therefore revolved more around systems houses and measures that could be adopted at that level. Regarding the pricing of HFO1234ze, he said that the chemistry of that substance made its manufacture difficult and therefore more expensive than that for HCFCs and HFCs. Industry, however, was working on blends that delivered the benefits of HFOs at a lower cost.

88. Regarding the Panel's assumption about when late phase-down of high-GWP alternatives in the extruded polystyrene subsector, he said that while transitions to low-GWP solutions financed by the Multilateral Fund were under way in the subsector, influential multinational enterprises had not yet decided which technology to choose. The Panel was still collecting data and trying to stay up to date on the issue, and he said that in future assessments the Panel could include more optimistic assumptions about the pace of phasedown in the subsector.

89. Responding to a question on assumptions made about transition patterns and whether the Panel had considered applying a marginal abatement cost curve, he explained that the Panel had assumed a linear phase-down across all sectors; while more often used for emissions than for consumption, a marginal abatement cost curve could be considered in future assessments. He noted that while most in the foam industry in non-Article 5 parties were already using low-GWP alternatives, the main areas still dependent on HFCs, such as polyurethane spray foam and extruded polystyrene, faced particular process and product issues that had to be taken into account. The Panel had therefore not expected to see major steps in the early stages and according assumed a five-year linear phase-down. The appliance industry in North America might make the transition faster, which could justify changing the phase-down assumptions. The issue would need to be revisited periodically, he said, because of rapid technological change and greater acceptance of HFOs as they became more viable, and he offered to discuss it in the margins of the meeting with interested parties.

90. Regarding uncertainty about the price of HFOs, he said that while the Panel expected HFOs to continue to command a premium, prices could fall depending on supply and demand agenda and the availability of competing alternatives. Currently there were many alternatives, and it was not yet clear how they would fare. It was therefore difficult to predict what the final price of HFOs might be.

91. Finally, addressing a question regarding alignment between the mitigation scenarios envisioned in the report on alternatives to ozone-depleting substances and the report of the replenishment task force, Mr. Ashford affirmed that the two bodies had deliberately chosen not to coordinate their work, as the Panel had wished to take a broader approach to the study of alternatives.

92. Ms. Tope then took the floor to respond to a question on alternatives to metered-dose inhalers in the medical sector. She said that India was the leading manufacturer of dry-powder inhalers, a key alternative that avoided the use of high-GWP HFC metered-dose inhalers. India was also the leader in the use of cheap, affordable and effective single-dose dry-powder inhalers, which already made up about fifty per cent of the inhaler market for the treatment of asthma and chronic obstructive pulmonary disease in India. In countries like India and Bangladesh, single-dose salbutamol dry-powder inhalers were already the drug of choice of physicians for their poorer patients. She noted, however, that there remained a small proportion of patients who could not use dry-powder inhalers.

93. In their questions, several representatives expressed concern regarding the effectiveness of alternatives under high ambient temperature conditions. Mr. Peixoto responded to this by acknowledging that high ambient temperatures posed a challenge, but he stressed that the situation was fluid due to the rapid pace of technological development. He clarified that the Panel had considered temperatures up to 52 degrees centigrade.

94. He said that hydrocarbons were feasible in terms of energy efficiency and provided good performance in high ambient temperatures. Regarding flammability, the issue of safety and regulations had to be addressed at the national level, although there were many international safety standards that could be used as reference. He said that domestic refrigeration was one application where the use of hydrocarbons was very appropriate and that there were no remaining challenges to be faced. He also said that propane was a feasible alternative for small self-contained air conditioners like split systems,

which were already being mass produced using that refrigerant, and that chillers could be used for larger capacities and installed remotely. Hydrocarbons could also be used in chillers, but such use depended on local regulations, and safety features were dependent on where the chiller was installed

95. In response to a question on the performance of HFC1234yf in mobile and other air-conditioning systems, Mr. Peixoto said that performance information on many alternatives was available and that performance figures were constantly improving based on new test, such as those conducted by the Alternative Refrigeration Evaluation Programme (AREP) and in the context of the UNEP "Promoting low-GWP refrigerants for the air conditioning sectors in high-ambient temperature countries" (PRAHA) project.

96. Finally, he clarified that when an alternative was described as commercially available and technically feasible it meant that component and system suppliers were in a position to deliver it. He also noted that commercial availability varied from refrigerant to refrigerant.

97. Several representatives asked about the report's assumption regarding estimates and projections to 2030 in the refrigeration and air-conditioning sector. Mr. Kuijpers responded that the panel had chosen the 2015–2030 period so as to look at changes over a 15-year period in a business-as-usual scenario; the scenario would have to be adjusted for 2030 and beyond, but had been a good place to start. The assumption that the stationary air-conditioning sector would convert to alternatives by 2020 had been made based on the assumption that certain low-GWP refrigerants would be available in the subsector and that manufacturers would have largely converted to them by then.

98. Responding to questions about marine refrigeration applications, Mr. Peixoto said that there were no available, feasible alternatives approved for such applications. Mr. Kuijpers added that while it would be some time before low-GWP alternatives were available for marine and transport refrigeration under high ambient temperature conditions, including for retrofits, research and demonstration projects were well under way.

99. Following the question and answers above there ensued a general discussion of the report as a whole.

100. The representative of the United States introduced a draft decision, saying that it was clear from the report and the questions on it that there was substantial interest in the issue and a need for further information and work. The draft decision would request the Technology and Economic Assessment Panel to undertake, for consideration at the thirty-sixth meeting of the Open-ended Working Group, an assessment of the technical and economic considerations involved in implementing a global phase-down of HFCs, including HFC-23 by-product control measures, an update on the deployment of climate-friendly alternatives to ozone-depleting substances, including information on their technical and economic feasibility, and the deployment of climate-friendly alternatives in areas with high ambient temperatures.

101. All representatives who took the floor thanked the Panel for its work in producing the report, which was a valuable and independent source of information and essential for the Parties' deliberations. Several representatives suggested, however, that the report and the discussion had revealed a need for more information, including in particular on the costs, technical viability, flammability and toxicity of new substances and blends, the development of not-in-kind alternatives to HFCs, the needs of the servicing sector and likely future costs as technologies continued to mature.

102. One representative said that while the scenarios presented by the Panel were very useful, there was a need for a more complete picture of the individual steps involved and their implications in terms of cost, regulation and the challenges that would need to be overcome.

103. Some representatives said that the Panel's report made it clear that alternatives were still not available for all uses, and in particular for countries with high ambient temperatures, and that information on issues such as cost-effectiveness and safety was largely lacking. One representative objected to further studies on the topic, saying that HFCs were not ozone-depleting substances and should not be addressed under the Montreal Protocol.

104. Other representatives, however, said that the report showed that in fact a wide range of alternatives were available for most uses of HFCs. One representative of an Article 5 party said that he hoped that non-Article 5 parties would be at the forefront of introducing alternatives to HFCs and that the Multilateral Fund would make adequate financial assistance available for the introduction of low-GWP alternatives in Article 5 parties, in particular for small and medium-sized enterprises and for the servicing sector.

105. The representative of the European Union drew attention to the European Union's fluorinated gas regulation, which he said would enter into force fully in January 2015 and would result in a

79 per cent reduction in HFC use by 2030. The European Union had made the information underlying the regulation, which showed how HFCs could be phased down, available in line with the requirements of decision XIX/6. It had also commissioned research on the availability of alternatives to HFCs for use in high ambient temperatures, and a summary of that research was available on the Ozone Secretariat website. He also said that the report of the Panel confirmed that alternatives to HFCs were available for many uses and enabled Parties to cap their growth and contemplate a phase-down in their use; the European Union had outlined such an approach, which he believed was realistic, effective and fair, in an information document (UNEP/OzL.Pro.26/INF/7).

106. Some representatives welcomed the draft decision introduced by the United States and expressed their willingness to work with other representatives to improve it. Others, however, dissented, arguing that neither the parties nor the Technology and Economic Assessment Panel should work on HFC-related issues; the priority for Article 5 parties was phasing out HCFCs, and it was too early to talk about phasing out HFCs.

107. Other representatives expressed disagreement, arguing that it was important to avoid the phase-out of HCFCs leading to an over-reliance on HFCs and the negative climate impacts that that would cause. Although there were uncertainties over the development of alternatives, it was important to the matter immediately. Furthermore, the Panel had proved itself entirely capable of producing reports on several different topics. While the draft decision would benefit from some redrafting, it was similar to a decision that had been adopted at the Meeting of the Parties in 2013, and it was necessary for the parties to give the Panel guidance for its future work on the issue. One representative stressed the importance of the performance of alternatives to HFCs in high ambient temperatures, as highlighted in the draft decision.

108. Summarizing the views expressed, the Co-Chair concluded that there was clearly a widespread desire for the Technology and Economic Assessment Panel to carry out more work on alternatives to ozone-depleting substances, in particular on the issues identified in the questions to the Panel. The parties agreed to establish a contact group, chaired by Ms. Alice Gaustad (Norway), to prepare a draft decision to provide guidance to the Panel for its future work.

109. Subsequently, the chair of the contact group reported that the group had finalized its discussions and had agreed on a draft decision. The parties approved the draft decision for consideration and adoption during the high-level segment.

2. Information submitted by parties on their implementation of paragraph 9 of decision XIX/6 to promote a transition from ozone-depleting substances that minimizes environmental impact (decision XXV/5, paragraph 3)

110. The Co-Chair recalled that at its thirty-fourth meeting the Open-Ended Working Group had considered information submitted by 14 parties on their implementation of paragraph 9 of decision XIX/6, by which parties were encouraged to promote the selection of alternatives to HCFCs that minimized environmental impacts, in particular impacts on climate, and met other health, safety and economic considerations. The Secretariat had prepared a summary of that information (UNEP/OzL.Pro.26/9), as well as a compilation of submissions from an additional six parties received after the Working Group's thirty-fourth meeting (UNEP/OzL.Pro.26/INF/4), for consideration by the Twenty-Sixth Meeting of the Parties.

111. One representative, speaking on behalf of a group of countries, said that the documents prepared by the Secretariat provided very useful information on Parties' actions in avoiding high-GWP alternatives when implementing the transition from ozone-depleting substances, which was clearly relevant to and should inform the discussions on the report of the Technology and Economic Assessment Panel.

112. The parties took note of the information presented.

G. Proposed amendments to the Montreal Protocol

113. The Co-Chair recalled that two proposals to amend the Montreal Protocol to provide for the phasedown of HFCs had been submitted to the Secretariat in accordance with the provisions of the Vienna Convention and the Montreal Protocol, one by Canada, Mexico and the United States (the "North American proposal"), and the other by the Federated States of Micronesia. They had been discussed at the thirty-fourth meeting of the Open-ended Working Group and similar proposals had been discussed at the last several meetings of the parties.

114. The representative of Canada introduced the North American proposal. Over the six years during which proposals like it had been discussed, more and more information had become available about alternatives to HFCs, including on their availability and cost, and it was clear that delay in

amending the Protocol to deal with HFCs would only serve to increase costs over the long term, that the Montreal Protocol was the most effective mechanism for addressing the HFCs, and that the adoption of clear global targets was the best way to spur industry to develop and commercialize alternatives to HFCs. Few other measures could achieve a similar reduction in greenhouse gas emissions so cost-effectively.

115. The bodies of the Protocol had both the technical and legal ability to phase down HFCs, and the parties had the responsibility to see that they did so given that it was the phase-out of ozone-depleting substances under the Protocol that had led to their rapid uptake. Many countries had adopted national regulations and commitments to control HFCs, and the leaders of China and India had made high-level statements recognizing the importance of the issue and the potential for using the Montreal Protocol, but a patchwork of national measures was insufficient to ensure the global availability of alternatives. Parties had genuine concerns about proposal, and she proposed, in the spirit of the Montreal Protocol and its tradition of consensus decision-making based on mutual respect and understanding, the establishment of a contact group to discuss the proposal in full.

116. The representative of India cited the terms of a statement released by the leaders of the United States and India in September 2014, as follows: ‘The leaders recalled previous bilateral and multilateral statements on the phase-down of HFCs. They recognized the need to use the institutions and expertise of the Montreal Protocol to reduce consumption and production of HFCs, while continuing to report and account for the quantities reduced under the United Nations Framework Convention on Climate Change. They pledged to urgently arrange a meeting of their bilateral task force on HFCs prior to the next meeting of the Montreal Protocol to discuss issues such as safety, cost, and commercial access to new or alternative technologies to replace HFCs. The two sides would thereafter cooperate on next steps to tackle the challenge posed by HFCs to global warming."

117. The representative of the United States said that the North American proposal would avoid an estimated 90 CO_2-equivalent gigatonnes of greenhouse gases by 2050 and was supported by over 100 parties. He also highlighted the actions taken by the United States to regulate its own HFC use, with two new rules adopted in recent months, and stressed that he wished to discussed in a contact group the concerns raised by developing countries regarding the availability, cost-effectiveness and safety of alternatives to HFCs, especially in countries with high ambient temperatures, baselines, the impact of HFC phase-down on HCFC phase-out, the relationship between the Montreal Protocol and the Framework Convention on Climate Change and the availability of adequate financial support. He also said that the parties should consider holding an additional meeting of the Open-ended Working Group in the spring of 2015, in conjunction with a workshop on HFC alternatives to consider all issues related to HFC management, including an amendment to the Montreal Protocol.

118. The representative of the Federated States of Micronesia introduced his country's proposal, saying that the projected growth in the use of HFCs threatened not only to wipe out the gains made under the Montreal Protocol but also to counteract the next thirty–forty years of progress under the Climate Change Convention; HFCs could add up to 0.5 degrees Celsius of warming by the end of the century. It would be unconscionable for the Montreal Protocol to create a bigger problem for the climate regime when it was within its capability to implement the solution. Furthermore, as Minister Royal had emphasized, the adoption of an amendment would provide considerable momentum for a successful outcome to the climate negotiations.

119. It was clear that there was a growing international consensus in favour of phasing down HFCs, reflected in national controls, fiscal incentives and the outcomes of the United Nations Conference on Sustainable Development in 2012 and the third International Conference on Small Island Developing States in 2014. The Montreal Protocol was clearly best suited to take the lead on implementing a global phase-down of HFCs, and he was therefore proposing a phase-down schedule beginning in 2017 for non-Article 5 parties and at a later date, to be negotiated, for Article 5 parties. Any Article 5 party phasing down HFCs earlier than required would still be eligible for financial assistance. He recognised that many other important issues had been raised, and he believed they would be best addressed in the context of a formal contact group.

120. The representative of the Maldives, a co-sponsor of the proposal, added that it would catalyse innovation and enhance synergies between climate and ozone protection. The proposal was not for a sudden phase-out of HFCs but for a gradual phase-down. The Montreal Protocol’s infrastructure of expert panels, regional networks and effective administrative, in addition to its wealth of experience in the scientific, economic and technical aspects of the problem, made it particularly well suited to take on the task of addressing HFCs. Parties did not have the luxury of deferring the issue in the hope that it would cease to exist.

121. The representative of the European Union announced that his party had discussed a slightly different approach with other parties, and had submitted a discussion paper (UNEP/OzL.Pro.26/INF/7) that proposed an ambitious phase-down schedule for non-Article 5 parties, many of whom were already regulating HFCs. For Article 5 parties, given the concerns over the availability of alternatives, the paper suggested a freeze on the production of HFCs, and on the consumption of HFCs plus HCFCs, from 2019, to be followed at a later date by discussion on a phase-down schedule.

122. Several representatives congratulated the proponents of the amendments for their persistence in pursuing the issue, saying that they had tried since 2009 to respond to all concerns, and stressed that HFCs, as highlighted in the report of the Technology and Economic Assessment Panel, were the fastest growing category of greenhouse gases, increasingly in demand particularly for refrigeration and air-conditioning.

123. Representatives of small island developing States stressed the extreme vulnerability of their countries to climate change and the need to take action as matter of urgency; the problem could not be avoided. Some outlined the steps they were already taking to promote climate-friendly technologies when phasing out HCFCs.

124. Several representatives stated their opposition to any further discussion of proposals to phase down HFCs and to the creation of a contact group. The discussion on the report of the Technology and Economic Assessment Panel had highlighted the fact that alternatives to HFCs were only available at high cost, were often flammable or toxic and for many uses were not available at all, particularly for small and medium-sized enterprises. If HFCs were to be phased down, industry in Article 5 parties would become dependent on highly expensive products produced by the small number of chemical manufacturers producing alternatives to HCFCs.

125. Several representatives said that suitable technologies did not yet exist for use in high-ambient-temperature countries. Furthermore, recently adopted international standards on the use of flammable refrigerants limited the use of hydrocarbons to air-conditioning systems too small to be of wide application in such countries.

126. The phase-out of HCFCs in Article 5 parties, only just beginning, was a major challenge, and a much more urgent one than addressing HFCs. Furthermore, the debate around HFCs was causing uncertainty for industry and inhibiting their adoption as alternatives to HCFCs, despite the need for them in the implementation of HCFC phase-out management plans. Another representative said that some Article 5 parties, through their HCFC phase-out management plans, were already being pushed into adopting low-GWP alternatives, many of which were costly and some of which had not even been tested in non-Article 5 parties.

127. Until parties were confident that they could meet their future needs they could not agree to the proposed amendments. Some said that HFC phase-down was being driven by political considerations and another that alternatives had been more readily available when the parties decided to phase out CFCs. Another representative, however, said that there had been few alternatives to when the Montreal Protocol had been negotiated, and the adoption of the control schedules under the Protocol had stimulated the development of more.

128. Other representatives pointed out that an increasing number of countries were adopting national regulations to control the use and growth of HFCs. Such a patchwork of approaches, however, could not stimulate industrial innovation in developing alternatives as effectively as would a global approach and would increase the costs of transition. Representatives of industry had made it clear that a strong global signal would enable them to increase investment in the development of alternatives. The experience of the European Union had shown that industry would respond to new regulation.

129. Furthermore, considerable work was under way on the development of alternatives, including for use in high ambient temperatures. The representative of the European Union recalled that his party had commissioned research on this topic, and its findings had been made available through the Ozone Secretariat website.

130. The Montreal Protocol possessed the requisite architecture to support a phase-down of HFCs, including special consideration for Article 5 parties, certainty and incentives for all parties to meet their commitments. It had a proven funding mechanism that operated flexibly and quickly and had 25 years of experience operating in the very sectors in which HFCs were used.

131. Several representatives said that adequate financial assistance through the Multilateral Fund would be necessary and that the proponents of the amendments should indicate what level of financial support they thought might be necessary.

132. Several representatives highlighted legal questions over the relationship between the Montreal Protocol and the Framework Convention on Climate Change which they felt had not yet been resolved, either at the workshop on HFC management in July or in the current meeting, saying that the Montreal Protocol should not take on matters that were properly within the ambit of other international agreements. Parties concerned about HFCs could address them through the Framework Convention on Climate Change, which had the same parties, and could contribute to the new Green Climate Fund. Furthermore, addressing HFCs under the Montreal Protocol would prevent them from being dealt with under the Framework Convention on Climate Change. The Montreal Protocol should retain its successful focus on ozone depletion and not seek to diversify its activities. One representative said that the key question was how best to ensure the mutual supportiveness of the two agreements. If HFCs were to be controlled by the Montreal Protocol, parties could also consider whether other greenhouse gases, such as nitrogen trifluoride or sulphur hexafluoride, might be as well.

133. Saying that 2015 was due to see agreement on a new international framework for addressing climate change, one representative said that it would be preferable to defer the discussion of HFCs until after the outcome of those negotiations was known. Another representative, however, recalled that opponents of the amendment had made the same argument several times before in relation to earlier meetings in the climate negotiations. In the meantime, the use of HFCs had increased sharply. The longer parties waited to begin phasing down HFCs, the more difficult and more expensive it would be.

134. One representative reiterated his suggestion, made originally at the HFC management workshop in July, that the ozone and climate change secretariats should hold a joint discussion on the matter. Another representative suggested the establishment of a joint contact group between the parties to the two agreements.

135. One representative said that since under the Framework Convention on Climate Change developing countries had only voluntary commitments, by transferring HFCs to the Montreal Protocol, in effect industrialised countries would be transferring obligations to developing countries. Another representative argued that while the Framework Convention on Climate Change was informed by the principle of common but differentiated responsibilities and respective capabilities, the same could not be said of the Montreal Protocol. Another representative disagreed, noting that many Article 5 parties recognised that the principle of common but differentiated responsibilities had been fully reflected in the design and implementation of the Montreal Protocol.

136. Other representatives said that adding HFCs to the Montreal Protocol would not cause any transfer of responsibilities away from the Framework Convention on Climate Change. The Montreal Protocol's experience lay in the control of production and consumption, whereas the Framework Convention on Climate Change controlled only emissions. In any case, no action had yet been taken under the Framework Convention on Climate Change to control HFCs. HFCs had been introduced because of the Montreal Protocol's efforts to phase out ozone-depleting substances, and the Protocol had a moral duty to control them. One representative added that the parties to the Framework Convention on Climate Change had invited the parties to the Montreal Protocol to consider the control of HFCs, suggesting that the Montreal Protocol could develop synergies with the Framework Convention on Climate Change and regard to their shared responsibility for HFCs.

137. Some representatives said that the workshop on HFC management during the thirty-fourth meeting of the Open-ended Working Group had shown that there was no legal barrier to addressing HFCs under the Montreal Protocol. Article 2 of the Vienna Convention established an obligation on all parties to the Montreal Protocol to avoid any adverse effects on the environment of the phase-out of ozone-depleting substances, including with regard to climate, which clearly provided authority to act on HFCs under the Montreal Protocol. This point had been made repeatedly over the preceding six years, and no opponent of the amendments had ever explained why they thought it was not valid. One representative added that countries could agree to address HFCs under any international agreement they chose; the terms of international agreements could be amended whenever the parties to them chose.

138. Another representative argued that decision XIX/6 of the meeting of the parties, on the accelerated phase-out of HCFCs, had already created a mandate to address HFCs in promoting the selection of alternatives to HCFCs that minimized environmental impacts, in particular impacts on climate. Another representative, however, said that the decisions of the parties were not always interpreted in the same way by the Executive Committee of the Multilateral Fund, as was true of decision XIX/6.

139. One representative said that the best way forward in the short term would be to strengthen the ability of parties to replace HCFCs with low-GWP alternatives under their HCFC phase-out management plans. That, however, would require additional funding through the Multilateral Fund, and a positive outcome to the current discussions on the replenishment of the Fund. Consideration could then be given to an amendment in the longer term, although many questions still needed to be addressed, including how to avoid double-counting the benefits of reducing HFCs under both legal frameworks. He said that the proponents of the amendments had not yet answered all the concerns raised by Article 5 parties, but that the proposal of the European Union was encouraging and preferable to the proposed amendments as a basis for further discussion.

140. In an effort to illustrate what was at stake in the HFC discussions, the representative of an environmental non-governmental organisation said that recent scientific assessments had confirmed that on current emission trajectories, global mean temperatures were likely to rise by between 3 and 4°C by the end of the century, well above the 2°C threshold necessary for avoiding dangerous tipping points for irreversible climate change. Man-made halocarbons were responsible for a sixth of the current level of radiative forcing, and a global deal to eliminate HFCs, which were among the most powerful global warming agents, could avoid half a degree of warming by the end of the century. Governments and major corporations were already eliminating their use and embracing new HFC-free technologies, but a global agreement on HFCs was needed to capitalize on those moves and create certainty for industry. The technology was ready to address a huge proportion of HFC uses; all that was needed was political will and financial commitment.

141. The representative of another environmental non-governmental organization said that many low-GWP solutions that were technically proven and economically viable were already being commercialized by companies in Article 5 parties, with both energy efficiency and climate benefits. He called for parties to work together under the Montreal Protocol to phase down HFCs.

142. Several representatives, including some who said that they had doubts about the proposed amendments, supported the establishment of a contact group, saying that it would provide an open space for the discussion of the amendments and the concerns raised by some parties. Several representatives, however, said that too many legal and technical questions remained unanswered to permit establishment of a contact group. They would be prepared, however, to continue informal discussions on matters relating to the management of HFCs.

143. One representative argued that contact groups should be restricted to matters of a technical nature, while matters with political implications, such as this one, should be conducted in plenary session, which allowed all delegations to contribute. Another said that contact groups existed to fine-tune issues where there was agreement in principle, while on HFCs there was no such agreement. Further exchanges of information would be valuable but would be better conducted through a seminar or workshop.

144. After further discussion, the parties agreed to conduct informal discussions on mechanisms for the sustainable phase-out of HCFCs in Article 5 parties, as well as all issues related to the management of HFCs in all parties, and how to address HFC management in 2015. Two facilitators would be appointed, who would report on the outcome of the discussions to the plenary. The facilitators were Mr. McInerny and Mr. Obed Baloyi (South Africa).

145. Following the informal discussions Mr. Baloyi reported on them in plenary, saying that representatives had held a wide-ranging discussion under both parts of the mandate for the discussions.

146. Regarding the sustainable phase-out of HCFCs in Article 5 parties, he said, some representatives had reiterated the view that there was a lack of alternatives to HFCs that met all necessary criteria, including energy efficiency, safety and commercial availability, in particular for countries with high ambient temperatures as well as temperatures below –40°C. While R290 had been cited as an alternative for room air-conditioning in high ambient temperatures, it was only suitable for low-capacity applications, and its market penetration was low. Some representatives had expressed concern about the interaction between HCFC phase-out and the management of HFCs, saying that there were cost implications of moving away from HCFCs, as well as possible adverse effects on energy efficiency, and asking about the impact that imported equipment could have on phase-out or phase-down activities. Developing countries, they had said, needed to be confident that low-GWP alternatives were available and would provide a long-term solution. Furthermore, solutions needed to be multilateral and to address all sectors and regions. In the light of such concerns, some representatives had argued, action on HFCs under the Protocol should await the availability of adequate alternatives in all sectors and regions.

147. Some representatives had said that the report of the Technology and Economic Assessment Panel on alternatives did not respond to all of their concerns, including on the availability of adequate alternatives, and some had said that they did not agree with all the Panel's findings, particularly where it presented only one alternative rather than a range. There was therefore a need for further scientific and technical information and for more comprehensive but focused advice from the Panel in the future.

148. Other representatives had said that while alternatives did not yet exist for all applications they were available for many, including aerosols, solvents, mobile air-conditioning, fire suppression, foam and most refrigeration. In fact, more alternatives were currently available than had been available when the phase-out of CFCs began in the 1990s. Furthermore, a gradual phase-down would allow time for the development of alternatives, and action under the Montreal Protocol was the very thing needed to spur industry to develop them. In addition, gaps in the availability of alternatives could be dealt with through exemptions. Action under the Montreal Protocol could therefore begin without delay. Others had responded sceptically to the latter notion, saying that, even for the HCFC phase-out, technology transfer was lagging in some sectors.

149. Some representatives expressed concern about the relationship between the Montreal Protocol and the United Nations Framework Convention on Climate Change. Noting that HFCs were covered by the Framework Convention, they suggested that the Montreal Protocol would infringe on the responsibilities of the Convention and queried what impact that would have, including, for example, on the Convention's emission accounting rules. There was thus a need to work with the Convention. It was also suggested that the Framework Convention on Climate Change was the better instrument for addressing HFCs because it explicitly incorporated the principle of common but differentiated responsibilities, and the question was asked how that principle would be reflected in any action on HFCs under the Montreal Protocol. Other representatives, however, suggested that it was not unusual for treaties to overlap, citing the links between the Minamata Convention on Mercury, the Basel and Rotterdam conventions and the Protocol on Heavy Metals to the Convention on Long-range Transboundary Air Pollution, and argued that action under the Montreal Protocol would have no impact on the Framework Convention on Climate Change.

150. With regard to how to address HFC management in 2015, a bilateral approach had been suggested, in which individual donor countries would establish funds for HFC phase-down. Other representatives, however, said that such an approach would depend on diplomatic relations between the parties concerned and would result in an inefficient patchwork of solutions. Working through the Montreal Protocol and its Multilateral Fund, to which all countries were parties, would be more comprehensive and effective, allowing financial assistance and the deployment of alternatives to be coordinated, prioritized and rationalized.

151. Representatives also suggested mandating the Technology and Economic Assessment Panel to provide a detailed report containing information on all pending issues on the technological and economic feasibility of alternatives, including their cost and energy efficiency, focusing on finding solutions and on the feasibility of reducing reliance on HFCs over a reasonable time period,

152. Other suggestions had included the organization in 2015 of an extraordinary meeting of the Open-ended Working Group, on HFC management; a workshop on technical issues, including high-ambient-temperature issues, the technological readiness of industry, diversification in different countries, challenges with HCFC phase-out in Article 5 parties and the prioritization of sectors; intersessional work with written submissions highlighting questions, challenges and proposed solutions of relevance to specific countries and regions; and discussions on HFC management at regional network meetings, particularly in response to questions raised at the HFC management workshop in July 2014. It had also been suggested that the mandate of the Montreal Protocol and the legal aspects of its relationship with the Framework Convention on Climate Change be taken up.

153. Following the report by the co-facilitator the representative of the United States, on the evening of the last day of the meeting, introduced a draft decision proposing the establishment of a contact group to discuss, at the current and future meetings, the full range of issues related to HFC management, including the availability, cost, energy-efficiency, cost-effectiveness, safety and environmental benefits of alternatives; proposed amendments to the Montreal Protocol, including HFC phase-down schedules taking into account the circumstances of Article 5 parties and the provision of adequate financial and technical support to Article 5 parties through the Multilateral Fund; and the relationship between the Montreal Protocol and the Framework Convention on Climate Change. The draft decision also called for an additional meeting of the Open-Ended Working Group in April 2015 to continue discussion of those issues, back to back with a two-day workshop on alternatives focusing in particular on challenges in high ambient temperatures. The draft decision was accompanied by an

explanation stressing that contact groups did not bind parties to agree to an outcome and that parties were always free to withdraw from contact group discussions.

154. Several representatives thanked the representative of the United States for trying to address parties' concerns but maintained their opposition to the formation of a contact group. Several said that the draft decision failed to address all concerns that had been raised and others that it came too late in the current meeting to allow for its careful consideration. Some of them nevertheless indicated support for the organization of a workshop.

155. Other representatives suggested that the draft decision was very fair and balanced, saying that the United States had moved very far from its original position in response to concerns that had been expressed and that the draft decision merely proposed a framework for future discussions in which any party could raise any subject it wished. Over the previous six years parties had repeatedly called for more information, and an opportunity to discuss it, and the draft decision provided for exactly that, without prejudging any matter.

156. After further informal discussions with interested parties, the representative of the United States proposed a series of amendments to the draft decision. Several representatives, however, reiterated that they had had insufficient time to consider the proposal and expressed concern over what they saw as the open-ended nature of the proposed group and the inclusion of a number of items to be discussed, such as HFC baselines and phase-down schedules, which they said appeared to prejudge the outcome. Further informal discussions and further revisions of the draft decision followed, but agreement could not be reached. Given the late hour and the dim prospect that agreement could be reached in the time available, the Co-Chair ruled that discussion of the matter would not continue at the current meeting.

H. Renomination and reappointment of co-chairs and members of the Technology and Economic Assessment Panel and its technical options committees

157. Introducing the sub-item, the Co-Chair recalled that the matter of the appointment of co-chairs and members of the Technology and Economic Assessment Panel and its technical options committees had been considered by the Open-ended Working Group at its thirty-fourth meeting, at which the Panel had informed the parties that it would provide an update for consideration at the current meeting. Three technical options committees – the halons, methyl bromide and refrigeration committees – had completed their appointments of members to begin terms on 1 January 2015. The remaining three technical options committees – the chemicals, foams and medical committees – would conclude their appointment processes by the end of 2014. Additional appointments of new members could also take place during 2015 for all technical options committees. The membership size and geographical and gender balance in the period beginning 1 January 2015 was expected to be closely aligned with that reported to the parties in the Panel's decision XXIV/8 task force report of May 2013. Finally, he said that an additional matter for the parties to consider was the expiry of the current appointment of two of the Panel's co-chairs at the end of 2014.

158. During the ensuing discussion, one representative stressed the importance of achieving gender balance on the Technology and Economic Assessment Panel and on the technical options committees. Another representative said that the representation of countries with high ambient temperature conditions on the Panel and committees should be considered to ensure that issues of importance to those countries were reflected in the work of those bodies.

159. The parties agreed to conduct informal consultations on the matter.

160. Following those consultations the parties approved a draft decision on membership changes in the Technology and Economic Assessment Panel for consideration and adoption during the high-level segment.

I. Consideration of the membership of Montreal Protocol bodies for 2015

161. The Co-Chair requested the regional groups to submit nominations to the Secretariat for the co-chairs of the Open-ended Working Group and the members of Executive Committee of the Multilateral Fund and the Implementation Committee under the Non-Compliance Procedure of the Montreal Protocol for 2015.

162. The parties subsequently approved three draft decisions filling the vacancies on the three bodies for further consideration and adoption during the high-level segment.

J. Compliance and reporting issues considered by the Implementation Committee

163. The President of the Implementation Committee reported on the outcomes of the fifty-second and fifty-third meetings of the Committee. She outlined the five draft decisions emanating from those meetings, which were before the parties in a conference room paper.

164. One draft decision dealt with data and information provided by the parties in accordance with Article 7 of the Montreal Protocol. At the time of the fifty-third meeting of the Committee, two countries had yet to report data: the Central African Republic and Liechtenstein. Subsequent to the meeting Liechtenstein had reported its data for 2013 and would therefore be removed from the draft decision before its adoption. The rate of reporting was therefore very high, with 196 of 197 parties having reported their consumption and production data for 2013. Seventy-two parties had reported their data for 2013 by 30 June 2014, in accordance with decision XV/15. Early submission of data was very helpful to the work of the Committee, and all parties were encouraged to follow that practice.

165. Three draft decisions dealt with cases of non-compliance with the control schedules under the Protocol. The first concerned Kazakhstan, which had been in non-compliance with its HCFC and methyl bromide consumption obligations under the Protocol for 2011. A representative of Kazakhstan had attended the fifty-second meeting of the Committee to discuss the situation, and under the draft decision Kazakhstan committed to return to compliance with the Protocol's HCFC consumption control measures in 2016 and methyl bromide control measures in 2015. The second draft decision dealt with the Democratic People's Republic of Korea and related to the party's excess consumption and production of HCFCs in 2013. A representative of the Democratic People's Republic of Korea had attended the fifty-third meeting of the Committee to discuss the party's non-compliance, and the party committed, under the draft decision, to return to compliance with the Protocol's HCFC consumption control measures in 2015 and production control measures in 2016. The third draft decision dealt with the case of Guatemala, which had been in non-compliance due to its excess consumption of HCFCs in 2013. The party had committed, under the draft decision, to return to compliance in 2014; the Committee had noted with appreciation the party's decision to reduce its HCFC consumption in 2014 below the allowable consumption by an amount equivalent to its excess consumption in 2013.

166. The remaining draft decision dealt with requests for the revision of HCFC baseline data by Libya and Mozambique. The Committee had considered and approved those requests at its fifty-second meeting after review of the supporting information provided. A further request by an Article 5 party for revision of its baseline data had been considered by the Committee at its fifty-third meeting, but the Committee had been unable to approve it as it did not comply with the methodology set out in decision XV/19.

167. Although it was not the subject of a draft decision, the Committee also discussed an analysis of the responses by parties to decision XXIV/14, which had requested parties to affirmatively specify zero quantities, rather than leaving cells blank, in their Article 7 reporting forms. The analysis indicated that a number of parties were still leaving cells blank, and the Committee continued to urge all parties, when reporting data on production, imports, exports or destruction of ozone-depleting substances, to enter a number, including zero, in each cell.

168. In conclusion, the President of the Implementation Committee said that the work of the Committee had been assisted by the attendance at its meetings of representatives of the Multilateral Fund Secretariat and the implementing agencies, whose hard work with parties to ensure that they remained in or returned to compliance was greatly appreciated. The efforts and dedication of the Ozone Secretariat were also vital to the functioning of the Committee.

169. The parties approved the draft decisions forwarded by the Implementation Committee for consideration and adoption during the high-level segment.

V. Vienna Convention issues

A. Report of the ninth meeting of the Ozone Research Managers of the Parties to the Vienna Convention

170. Introducing the item, the Co-Chair recalled that the ninth meeting of the Ozone Research Managers had been held in Geneva in May 2014. The Ozone Research Managers, he said, met every three years, six months before the Conference of the Parties to the Vienna Convention, to discuss issues related to ozone research and systematic observation and to develop recommendations for consideration by the Conference of the Parties. Those recommendations were included in document UNEP/OzL.Conv.10/6.

171. Mr. Mike Kurylo, Co-Chair of the ninth meeting of the Ozone Research Managers, gave a presentation on the outcomes of that meeting, which had been held in accordance with decisions I/6 and III/6 of the Conference of the Parties to the Vienna Convention. The reports of the Ozone Research Managers, he said, were required under the Convention and made recommendations on research and monitoring needs, complementing and using input from the scientific assessments of the World Meteorological Organization (WMO) and UNEP required under the Montreal Protocol. The recommendations of the ninth meeting of the Ozone Research Managers had been formulated within the framework of four overarching principles, namely, that climate change should be encompassed in ozone layer protection efforts, that observational and analysis capabilities for climate and ozone layer variables be maintained and enhanced, that the Vienna Convention Trust Fund for Research and Systematic Observations should be continued and enhanced; and that a continued dedication to build capacity for meeting those goals was essential.

172. On the recommendations, he said that sustained measurements and improved models were needed to better project the effects of a changing climate and the decrease of ozone-depleting substances on the ozone layer. Automated data submission with centralized processing must be implemented to ensure more cost-effective and efficient archiving. Stewardship of data records to preserve their use by the international science community was critical to understanding the evolution of the ozone layer in an atmosphere responding to other forcings. Training and capacity-building were of particular importance, particularly for instrument operators in developing countries and countries with economies in transition, for example through fellowships for students from those countries. The quality of the WMO and Global Atmosphere Watch global ozone observing system should be maintained through the continuation and expansion of calibrations and regular data intercomparisons between measuring devices. Finally, on the matter of the Vienna Convention Trust Fund, a strategic plan needed to be developed for more effective utilization of the fund, and a committee should be set up to assist in setting priorities and developing budgets in order to ensure cost-effective and timely implementation of the plan.

173. The representative of Georgia introduced a conference room paper containing a draft decision on the recommendations of the ninth meeting of the Ozone Research Managers, submitted by the Bureau of the ninth meeting of the Conference of the Parties to the Vienna Convention and the Bureau of the Twenty-Fifth Meeting of the Parties to the Montreal Protocol. The aim of the draft decision, she said, was to encourage parties to adopt and implement the recommendations of the Ozone Research Managers.

174. In the ensuing discussion, several representatives congratulated the Ozone Research Managers on their continued efforts to undertake research and monitoring on the ozone layer. One representative, speaking on behalf of a group of countries, said that the linkage identified by the Managers between research into the ozone layer and research into climate change was of significance for future actions under the Montreal Protocol. Another representative said that the overarching recommendations highlighted the importance of an integrated approach to research combining both ozone layer and climate change elements, and of supporting Article 5 countries to enhance their observational capabilities. Another representative said that the establishment of the Trust Fund had assisted countries to make progress on harmonizing efforts to monitor the ozone layer.

175. The parties agreed to forward the draft decision on the recommendations of the ninth meeting of the Ozone Research Managers, as orally amended, for consideration and possible adoption during the high-level segment.

B. Status of the General Trust Fund for Financing Activities on Research and Systematic Observations Relevant to the Vienna Convention

176. The representative of the Secretariat gave a presentation outlining the history and aims of the General Trust Fund for Financing Activities on Research and Systematic Observations Relevant to the Vienna Convention, established in accordance with decision VI/2, as well as the institutional arrangements agreed between the Secretariat and WMO in respect of its operation. On the status of contributions she said that the trust fund had, as of 31 December 2013, received $274,454 from Andorra, the Czech Republic, Estonia, Finland, France, Kazakhstan, South Africa, Spain, Switzerland and the United Kingdom of Great Britain and Northern Ireland, together with in-kind contributions in conjunction with activities undertaken under the Fund. Regarding those activities, she drew attention to the results of two workshops in Egypt and South Africa on the calibration and inter-comparison of Dobson instruments and a workshop in the Czech Republic on data archiving. Regarding the future of the fund, which was set to expire on 31 December 2015, the parties were invited to consider three options: first, maintaining and operating it on a business-as-usual basis; second, maintaining it with changes in regard to funding the participation of Article 5 party experts in relevant international

meetings, inviting contributions only for specific projects and activities, and inviting other organizations to act as co-partners for specific tasks; and third, terminating it. She ended by noting that the Ozone Research Managers at their ninth meeting and the Bureaux of the 10th meeting of the Conference of the Parties to the Vienna Convention and the Twenty-Sixth Meeting of the Parties to the Montreal Protocol had made recommendations regarding the future of the trust fund.

177. The representative of the WMO then gave a presentation in which he explained how inter-comparison and calibration exercises were carried out to ensure the homogeneity of the global network of Dobson spectrophotometers and the quality of the data produced. He then drew attention to the projects in the pipeline for the next two years, which would require total funding of $260,000, including projects on the repair and relocation of used Dobson spectrophotometers to cities in the Russian Federation and Sri Lanka, an inter-comparison of four regional Dobson calibration centres, in Argentina, Australia, South Africa and Japan, and a meeting and training course for spectrophotometer users in Thailand in 2015. Longer term plans, which included the inter-comparison and calibration of instruments produced by three different manufacturers, would take into account the recommendations of the Ozone Research Managers at their ninth meeting and the need to focus on cost-effectiveness.

178. The representative of Georgia then introduced a conference room paper, submitted by the Bureaux of the tenth meeting of the Conference of the Parties to the Vienna Convention and the Twenty-Sixth Meeting of the Parties to the Montreal Protocol, which contained a draft decision requesting the Executive Director of UNEP to extend the life of the trust fund and proposing the establishment, composition and mandate of a steering committee.

179. In the ensuing discussion, appreciation and support were expressed for the proposal to extend the life of the trust fund given its importance in ensuring accurate and comparable scientific observations for monitoring the state of the ozone layer, and several amendments to the draft decision were suggested. One representative said that it was important to have a long-term strategy and action plan, and another requested clarification on the role and financial implications of the proposed steering committee and suggested referring to it as an advisory committee rather than a steering committee.

180. The representative of the Secretariat, responding to the request for clarification, said that the committee would be expected to meet periodically to examine project proposals and prepare the documentation that would form the basis for securing funding for projects. The committee was not expected to have significant financial implications, as it was expected to work electronically and in the margins of other meetings, but further details would be provided upon request.

181. The parties approved the draft decision, as orally amended, for consideration and adoption during the high-level segment.

VI. Other matters

182. The parties took up no other matters during the preparatory segment.

Part Two: High-level segment (20 and 21 November 2014)

I. Opening of the high-level segment

183. The high-level segment of the tenth meeting of the Conference of the Parties to the Vienna Convention and the Twenty-Sixth Meeting of the Parties to the Montreal Protocol was opened at 10.10 a.m. on Thursday, 20 November 2014, by Ms. Nino Tkhilava (Georgia), President of the Bureau of the ninth meeting of the Conference of the Parties to the Vienna Convention.

184. The President introduced an audio-visual presentation about Mr. Mario Molina, renowned ozone scientist and Nobel Laureate, who had received a UNEP Champion of the Earth award for 2014 in recognition of his lifetime of service to planet Earth.

185. Following the presentation, opening statements were delivered by Ms. Tkhilava; Mr. Oleksandr Nastasenko (Ukraine), President of the Twenty-Fifth Meeting of the Parties to the Montreal Protocol; and Ms. Tina Birmpili, Executive Secretary of the Ozone Secretariat, on behalf of Mr. Achim Steiner, Executive Director of UNEP.

A. Statement by the President of the ninth meeting of the Conference of the Parties to the Vienna Convention

186. In her opening statement, Ms. Tkhilava expressed her gratitude to the parties for the role that each had played in the remarkable progress achieved under the Vienna Convention and the Montreal

Protocol over the previous three years. Highlighting the importance of increasing monitoring and research in ozone science, she expressed the hope that parties would look favourably on the recommendations of the Ozone Research Managers at their ninth meeting, arising from their review of the state of the ozone layer, the interaction between ozone layer depletion and climate change, international monitoring programmes and national and regional reports on ozone research and monitoring. A lack of adequate funding for research on ozone was hampering vital efforts to collect data from a wide geographical area needed to generate sound global statistics. She urged the parties at the current meeting to ensure the provision of adequate and predictable funding for research on ozone and replacement technologies for ozone-depleting substances. In closing, she highlighted the importance of starting to plan the celebration of the thirtieth anniversary of the Vienna Convention in 2015 by reflecting on the instrument's many achievements as well as remaining challenges to be addressed.

B. Statement by the President of the Twenty-Fifth Meeting of the Parties to the Montreal Protocol

187. Mr. Nastasenko expressed his gratitude to the Government of France for hosting the meeting and to UNEP, UNESCO and the Ozone Secretariat for its organization. Recalling the description of the Montreal Protocol by Mr. Kofi Annan, former Secretary-General of the United Nations, as perhaps the single most successful international agreement to date, he called on all parties to continue to make every effort to protect current and future generations of humankind from the deleterious effects of ultraviolet radiation. He drew attention to efforts by his Government to strengthen the monitoring and control of ozone depleting-substances and to harmonize its national legislation with the legal framework of the European Union for more effective implementation of the Montreal Protocol. He expressed his country's continuing commitment to the principles of the United Nations and international environmental law related to the ozone layer with the aim of ensuring a sustainable future for the planet.

C. Statement by representative(s) of the United Nations Environment Programme

188. Ms. Birmpili welcomed participants and expressed gratitude to the Government of France and UNESCO for their hospitality in hosting the current meeting. She recalled that the hypotheses of the research undertaken by Mr. Molina and Mr. Frank Sherwood Rowland had not been proven until the discovery of the hole in the ozone layer in 1995, ten years after Governments had reached agreement on the Vienna Convention on the basis of the precautionary principle and eight years after their agreement on the Montreal Protocol. Providing a snapshot of their key achievements, she said that the universal ratification of the two instruments – enabling a truly global participation in the protection of the global commons – had been fundamental to the achievement of the phase-out of some 98 per cent of the production and consumption of 96 ozone-depleting substances globally. While the Montreal Protocol had also achieved significant climate benefits, they might be offset by emissions of HFCs, which were growing fast every year.

189. Turning to the current meeting, she said that the achievements of the Montreal Protocol were founded on two main tools: the use of science as the basis for decision-making, and the Multilateral Fund, which had played a crucial role in enabling Article 5 parties to phase out ozone-depleting substances. In the light of the needs of those parties for HCFC phase-out and the financial difficulties faced by many non-Article 5 parties, the negotiations on the replenishment of the Fund were likely to require the spirit of cooperation and compromise well known under the Protocol. Parties were also facing the challenge of ensuring the continuity of the HCFC phase-out in a manner that would not have an adverse impact on the environment, especially the climate. In preparing for celebrations to mark the thirtieth anniversary of the Vienna Convention in 2015, it was important to focus on the human face of its achievements, and she invited parties to submit stories to the Ozone Secretariat in that regard. In closing, she urged representatives to showcase international cooperation at its very best at the current meeting, using the precautionary principle alongside the principle of common but differentiated responsibility, in the tradition of the Montreal Protocol, to arrive at the best solutions in response to a broad spectrum of challenges.

II. Organizational matters

A. Election of officers of the tenth meeting of the Conference of the Parties to the Vienna Convention

190. At the opening session of the high-level segment of the meeting, 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 tenth meeting of the Conference of the Parties to the Vienna Convention:

President:	Mr. César Vinicio Montero Suarez	Guatemala (Latin American and Caribbean States)
Vice-Presidents:	Ms. Annie Gabriel	Australia (Western European and other States)
	Mr. Sianga Abilio	Angola (African States)
	Mr.Abdullah Islam Jakob	Bangladesh (Asian and Pacific States)
Rapporteur:	Ms. Gulmira Sergazina	Kazakhstan (Eastern European States)

B. Election of officers of the Twenty-Sixth Meeting of the Parties to the Montreal Protocol

191. At the opening session of the high-level segment of the meeting, 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-Sixth Meeting of the Parties to the Montreal Protocol:

President:	Mr. Rodrigo Siles Lora	Bolivia (Latin American and Caribbean States)
Vice-Presidents:	Mr. Mikkel Sorensen	Denmark (Western European and other States)
	Ms. Ana Paulo Samo Gudo Chichava	Mozambique (African States)
	Mr. Abdullah Islam Jakob	Bangladesh (Asian-Pacific States)
Rapporteur:	Ms. Liana Ghahramanyan	Armenia (Eastern European States)

C. Adoption of the agenda of the high-level segment of the tenth meeting of the Conference of the Parties to the Vienna Convention and the Twenty-Sixth Meeting of the Parties to the Montreal Protocol

192. The following agenda for the high-level segment was adopted on the basis of the provisional agenda contained in document UNEP/OzL.Conv.9/1-UNEP/OzL.Pro.23.1:

1. Opening of the high-level segment**:**
   - (a) Statement by the President of the ninth meeting of the Conference of the Parties to the Vienna Convention;
   - (b) Statement by the President of the Twenty-Fifth Meeting of the Parties to the Montreal Protocol;
   - (c) Statement by representative(s) of the United Nations Environment Programme.
2. Organizational matters:
   - (a) Election of officers of the tenth meeting of the Conference of the Parties to the Vienna Convention;
   - (b) Election of officers of the Twenty-Sixth Meeting of the Parties to the Montreal Protocol;
   - (c) Adoption of the agenda of the high-level segment of the tenth meeting of the Conference of the Parties to the Vienna Convention and the Twenty-Sixth Meeting of the Parties to the Montreal Protocol;
   - (d) Organization of work;

(e) Credentials of representatives.

3. Presentations by the assessment panels on the status of their 2014 quadrennial assessment and emerging issues.

4. Presentation by the Chair of the Executive Committee of the Multilateral Fund on the work of the Executive Committee.

5. Statements by heads of delegation and discussion on key topics.

6. Report of the co-chairs of the preparatory segment and consideration of the decisions recommended for adoption by the tenth meeting of the Conference of the Parties to the Vienna Convention and the Twenty-Sixth Meeting of the Parties to the Montreal Protocol.

7. Dates and venues for the eleventh meeting of the Conference of the Parties to the Vienna Convention and the Twenty-Seventh Meeting of the Parties to the Montreal Protocol.

8. Other matters.

9. Adoption of decisions by the Conference of the Parties to the Vienna Convention at its tenth meeting.

10. Adoption of decisions by the Twenty-Sixth Meeting of the Parties to the Montreal Protocol.

11. Adoption of the report of the tenth meeting of the Conference of the Parties to the Vienna Convention and the Twenty-Sixth Meeting of the Parties to the Montreal Protocol.

12. Closure of the meeting.

D. Organization of work

193. The parties agreed to follow their customary procedures. In addition, the parties agreed to convene a ministerial round-table discussion on the main challenges facing the Montreal Protocol in the coming decade. The objective was to hold an open and interactive discussion to enhance the focus on key aspects of statements by head of delegations.

E. Credentials of representatives

194. The Bureaux of the tenth meeting of the Conference of the Parties to the Vienna Convention and the Twenty-Sixth Meeting of the Parties to the Montreal Protocol approved the credentials of the representatives of 100 of the 142 parties represented at the current meeting. The Bureaux provisionally approved the participation of other parties on the understanding that they would forward their credentials to the Secretariat as soon as possible. The Bureaux 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 Bureaux also recalled that the rules of procedure required that credentials 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 Bureaux authorized the Secretariat to follow up with Parties present at the current meeting without credentials to request them to submit those credentials to the Secretariat as soon as possible. In addition, the Bureaux 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. Presentations by the assessment panels on the status of their 2014 quadrennial assessment and emerging issues

195. Members of the Montreal Protocol's three assessment panels made presentations on their 2014 quadrennial assessments.

196. Mr. Paul Newman began the presentation of the 2014 Scientific Assessment Panel assessment by describing the changes observed in ozone-depleting substances and the ozone layer over the last three decades. He was followed by Mr. A.R. Ravishankara, who discussed the increased use of HFCs and its consequences, including ways to avoid the climate effects of HFCs and the role of banks in the future of the ozone layer and their impact on climate.

197. Mr. Nigel Paul then gave an overview of the key elements of the assessment of the Environmental Effects Assessment Panel. He began by summarizing the impact of ultraviolet radiation and climate change interactions on human health, air and water chemistry, terrestrial and aquatic ecosystems and construction materials in terms of projected effects to the end of the twenty-first century and then noted a number of currently observable effects, particularly in the southern hemisphere.

198. Finally, Ms. Bella Maranion presented an overview of the report by the Technology and Economic Assessment Panel, highlighting the key findings in the assessment reports by the Panel's Chemicals Technical Options Committee, Flexible and Rigid Foams Technical Options Committee, Halons Technical Options Committee, Medical Technical Options Committee, Methyl Bromide Technical Options Committee and Refrigeration, Air Conditioning and Heat Pumps Technical Options Committee.

199. Summaries of the presentations prepared by the presenters are set out in annex VI to the present report.

200. The parties took note of the information presented.

IV. Presentation by the Chair of the Executive Committee of the Multilateral Fund on the work of the Executive Committee

201. Mr. Premhans Jhugroo (Mauritius), in his capacity as Chair of the Executive Committee of the Multilateral Fund, reported on the progress made pursuant to the decisions adopted by the Executive Committee of the Multilateral Fund at its seventy-first, seventy-second and seventy-third meetings in the areas of policy, project implementation and monitoring, business planning and administration and finance, as detailed in the full report of the Committee to the Meeting of the Parties (UNEP/OzL.Pro.26/8). Among other things, he reported that 140 countries had approved HCFC consumption phase-out management plans (HPMPs), and China, the world's biggest producer of HCFCs, had received approval of the second tranche of its HCFC production phase-out management plan; that just five countries had yet to submit proposed HPMPs; and that approved consumption-sector projects currently covered 26 per cent of the consumption baseline of beneficiary Article 5 parties. Overall the Committee had approved 337 activities with funding of $205 million and would make available up to $10 million for demonstration projects to validate low-GWP alternatives. It had also made substantial information on minimizing the adverse climate impacts of HCFC phase-out in the refrigeration servicing sector available to the implementing agencies and others assisting Article 5 parties with relevant activities within the framework of their HPMPs. It had also approved guidelines for stage II HPMP preparation funding, and thirty countries had such funding in place. Consensus had not yet been reached on the criteria for stage II HPMP implementation funding, particularly with regard to conversions in small and medium-sized enterprises, but the first stage II HPMP had nevertheless been approved the previous week. Lastly, he noted that the secretariat of the Multilateral Fund had been requested to finalize the Multilateral Fund Climate Impact Indicator (MCII), taking into account the fifth assessment report of the Intergovernmental Panel on Climate Change, "Climate change 2013: The physical science basis", and that the Committee had agreed to reduce the frequency of its meetings to two per year starting in 2015, with the option of holding brief additional meetings to consider project proposals.

202. He then reported on behalf of the implementing agencies. The United Nations Development Agency (UNDP) had assisted 44 countries in implementing stage I HPMPs and a further 18 countries in requesting preparation assistance for stage II HPMPs, and significant progress had been made with demonstration projects to validate alternatives for the manufacture of small commercial air-source chillers and heat pumps, extruded polystyrene foam and medical devices.

203. Meanwhile, UNEP had assisted all 148 Article 5 parties in complying with their Montreal Protocol obligations, with 100 having received assistance through their HPMPs, thanks to the cooperation of other implementing agencies, and 104 having received support for institutional strengthening. UNEP had also facilitated South-South and regional cooperation and capacity-building, and had provided information clearing-house services to encourage the conversion to energy efficient, low-GWP alternatives in the refrigeration servicing sector and the safe use of flammable refrigerants. In addition, UNEP had worked with the United Nations Industrial Development Organization (UNIDO) on a demonstration project promoting low-GWP refrigerants for use in the air-conditioning sector of West African countries with high ambient temperatures.

204. UNIDO, for its part, was assisting in the implementation of 68 HPMPs, which had made significant progress toward the target of a 10 per cent reduction in baseline consumption and

production of HCFCs by 2015. Approvals had been granted for two stage I HPMPs, one stage II HPMP, and for 20 countries to receive tranches of funding under multi-year agreements. UNIDO had also assisted those striving to meet the 2015 deadline for a 100 per cent phase-out of methyl bromide.

205. As for the World Bank, he said that good progress had been made in implementing stage I HPMPs, with most countries in the process of converting to HCFC alternatives and over $72 million in Multilateral Fund grants having been committed to sustaining a consumption freeze. He also drew attention to China's recent announcement of the impending closure of five domestic production lines that would lead to an aggregate reduction equivalent to 93 million tonnes of carbon dioxide.

206. In closing, he said that the Multilateral Fund had performed to a high level in fulfilling its mandate and, in so doing, had helped to foster significant climate co-benefits.

V. Statements by heads of delegation and discussion on key topics

207. 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: India, Zimbabwe, China, United Arab Emirates, Cook Islands, Eritrea, Malaysia, Iraq, Myanmar, Djibouti, Saudi Arabia, Congo, Cuba, Angola, Zambia, Uganda, Armenia, Bangladesh, the former Yugoslav Republic of Macedonia, Rwanda, Mozambique, Maldives, United Republic of Tanzania, Venezuela (Bolivarian Republic of), Indonesia, Argentina, Bosnia and Herzegovina, European Union, Japan, Dominican Republic, Brazil, Cambodia, Trinidad and Tobago, Mauritius, Egypt, Malawi, Mongolia, Kyrgyzstan, Singapore, Pakistan, Sri Lanka, the Philippines, Kenya, Ecuador, Timor-Leste, Brunei Darussalam, Nicaragua, Algeria and Chile. The representatives of the International Pharmaceutical Aerosol Consortium and the International Institute of Refrigeration also delivered statements.

208. Representatives of many parties who spoke expressed thanks to the Government and people of France for their hospitality in hosting the current meeting, and to UNESCO for providing the facilities. Many also 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 Montreal Protocol.

209. Many representatives expressed pride at having ratified the Protocol and its amendments, reiterating their commitment to the objectives of the instrument. Several representatives drew attention to the pioneering role that their countries had played in the early development of the Protocol and in being among the first to implement its control measures. One representative said that his party’s success in implementing the protocol had been based on strong political will and leadership; an appropriate institutional set-up and legal framework; and partnership between the public and private sectors. A number of representatives said that they would continue to strive, along with other parties, to ensure the protection of the ozone layer.

210. Many representatives 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, and the role played by their national ozone units in coordinating and supporting activities. A number of representatives spoke of their commitment to phasing out HCFCs, describing the phase-out management plans being put in place to achieve that end. Several representatives described their countries’ achievements in phasing out ozone-depleting substances, including CFCs, halons, carbon tetrachloride and methyl bromide, ahead of schedule.

211. A number of representatives highlighted the role of in-country capacity-building to ensuring a caucus of trained and certified professionals with a range of specialist skills, including technicians in the air-conditioning and refrigeration sectors, customs officers, environmental inspectors, educators engaged in training trainers, and recovery and recycling practitioners. Several representatives stressed the role of awareness-raising and sensitization campaigns, including in schools, to ensure that the general republic gained knowledge of ozone-depleting substances and the products that contained them, and the actions required to ensure that their communities remained free of those substances. Some representatives said that it was important to ensure that non-specialists, for example in government, gained awareness of issues related to ozone-depleting substances, including alternatives and related equipment.

212. A number of representatives said that their countries, having successfully phased out ozone-depleting substances, placed particular priority on the protection of their borders against illicit trade in order to maintain compliance with the provisions of the Protocol, including through import controls, quota systems, licensing systems and issue of permits.

213. Several representatives, saying that their countries' 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, described multisectoral programmes with a range of components in addition to protection of the ozone layer. Some representatives spoke of mainstreaming ozone protection and climate change mitigation as elements of national policies and development plans. Some representatives placed protection of the ozone layer within a harmonious and integrated model that placed value first and foremost on “Mother Earth” and adopted a holistic approach to preservation of the global ecosystem. One representative said that the health of the ozone layer was inextricably linked to the well-being of peoples, ecosystems and future development trajectories.

214. A number of representatives reflected on the success of the Protocol over the years and the reason for it. Several referred to the latest evidence that the ozone layer was indeed recovering and praised the remarkable efforts by a wide range of partners in reaching the stage where the world could look towards achieving the ultimate aim of the Protocol, while stressing the need to remain vigilant and maintain momentum in ozone-protection activities. One representative said that the success of the Montreal Protocol epitomized how collective action address global problems. A number of representatives highlighted the role of the scientific assessment panels in ensuring that advocacy for the ozone layer was supported by sound, evidence-based science. Others highlighted the role of the Multilateral Fund in enabling developing countries to comply with their obligations under the Protocol, as well as the complementary support provided by donors and implementing agencies. One representative said that the Protocol represented a fair and effective regime, whereby those facing constraints were provided with the means to fulfil their commitments. Some representative underscored the important role played by regional initiatives, such as the regional ozone networks, in supporting national efforts.

215. Many representatives stressed that global environmental problems were intertwined and that synergistic efforts were needed in response. In addition to cooperation between multilateral environmental agreements and other bodies both within and outside the United Nations, a number of representatives called for flexible and innovative collaboration at a range of levels, including South-South cooperation and public-private partnerships, to ensure that developing countries received appropriate levels of technical assistance and support.

216. Many representatives saw the next stage of activities under the Montreal Protocol as being of crucial importance, as Article 5 parties entered stage II of their HCFC phase-out management plans and were faced with critical decisions on alternatives. A number of representatives described the measures their parties were taking to achieve the stipulated reductions in HCFC consumption and production, with many also expressing concern about the effectiveness, affordability, availability and technological support for alternatives to the substances and technologies being phased out. One representative said that alternatives should be technically proven, economically viable, safe and commercially available, taking into account supply chains and market readiness. In particular, the search for alternatives that adequately performed the tasks required of them in a cost-effective manner were both ozone and climate friendly was testing the resources and ingenuity of many parties.

217. Many representatives said that, in the light of the foregoing challenges, it was vital that the 2015–2017 replenishment of the Multilateral Fund was sufficiently robust to ensure 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, institutional strengthening and awareness raising. 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 uncertainty had been created by the failure to agree on guidelines for funding the phase-out of HCFC production, and one said that new challenges required better and broader mechanisms that took account of the problems faced by small and medium-sized enterprises as they grappled with difficult technological choices while trying to remain competitive. One representative said there was an urgent need for capacity-building and funding for research into and monitoring of the status of the ozone layer in developing countries to ensure full geographical coverage of such data. Another representative praised the efforts of the Ozone Research Managers to support training and scholarships in that area.

218. Central to the discussion on alternatives was the matter of HFCs, and representatives expressed a range of views on the extent to which HFCs should be dealt with under the Protocol and whether the Protocol should be amended accordingly. Some representatives urged the parties to accept responsibility for HFCs and to take relevant measures under the Protocol, in cooperation with other instruments, to complement international efforts to counteract the threat of global warming, with

several alluding to the growing impact of climate change on their countries. Saying that the need to act was urgent, several called for the establishment of a formal contact group at the current meeting to discuss HFCs, 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. Others said that substances with high global-warming potential should only be dealt with under the purview of the United Nations Framework Convention on Climate Change and the Kyoto Protocol.

219. A number of representatives drew attention to the specific challenges facing their countries or regions and called for the Montreal Protocol and its bodies to take particular account of those challenges in their decision-making processes. Those from small island developing States stressed the growing threat of rising sea levels, placing those countries at the forefront of climate change impact and exacerbating such problems as the dependence of their economies on vulnerable sectors such as fishing, the difficulty of disposing of hazardous waste, the challenge of controlling illegal trade and the negative effect of their isolated markets on technology choice. Representatives of countries with high ambient temperatures 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, which faced a number of challenges due to climate change, including warming and the shifting of altitudinal ecosystem boundaries, glacier melt and human migration.

220. Several representatives drew attention to challenges that were still facing the Montreal Protocol and implementation of its provisions, including illegal trade in ozone-depleting substances, destruction of banks of unwanted ozone-depleting substances and the selection of cost-effective alternatives for HCFC phase-out management plans. One representative said that phasing out HCFCs from major industrial concerns was a less complicated endeavour than the difficult task of phasing out HCFCs from smaller enterprises and the service sector. Another representative said that the uncertainties and complexities associated with those challenges underscored the need for increased and sustained assistance to Article 5 parties in terms of capacity-building and technology development and transfer. One representative said that the challenge of protecting the ozone layer should be considered within the broader challenge of pursuing economic growth while preserving and protecting the environment.

221. On a broader level, several representatives discussed what might be the future role of the Montreal Protocol in a rapidly changing environmental, economic and social context. One representative said that the positive trends and momentum generated under the Protocol to protect the ozone layer should be maintained through strengthening existing structures and socio-economic and legal frameworks. Another representative said that adapting to low-carbon clean energy and protecting the environment were key to the growth and sustainability of the global economy, while another stressed the role of global collaboration and cooperation as a prerequisite to sustainable development. Another representative said that while the Vienna Convention and its Montreal Protocol were among the most successful of environmental agreements, more flexibility and creativity was needed in facing new challenges. On broadening the scope of the Protocol, one representative, speaking on behalf of a group of countries, said that there was a clear opportunity to build on the Protocol's successes in protecting the ozone layer while at the same time protecting the climate and environment and encouraging green growth. Finally, several representatives reiterated that actions and decisions taken currently were crucial to the habitability of the Earth for future generations.

222. The representative of the United Arab Emirates conveyed an offer from his Government to host the Twenty-Seventh Meeting of the Parties to the Montreal Protocol in Dubai in 2015.

223. The representative of the International Institute of Refrigeration said that there was a need to develop and adopt high-efficiency technology in the refrigeration sector in all countries. The Institute continued to support such endeavours, including through organizing conferences and publishing guides and information notes to assist and inform stakeholders.

224. The representative of the International Pharmaceutical Aerosol Consortium congratulated parties for achieving substantial progress towards completing the transition away from CFC-based metered-dose inhalers. The Consortium had long supported and remained committed to ozone protection and climate change response measures that balanced patient health and environmental interests.

VI. Round-table discussion

225. On the morning of 21 November 2014, for one hour and a half, the high-level segment took the form of a round-table discussion moderated by Mr. Fernando Lugris, Director-General for Political Affairs, Ministry of Foreign Affairs, and Permanent Representative of Uruguay to UNEP. The panel comprised seven discussants, one from each of the United Nations regions: Mr. Shri Prakash Javadekar, Minister for Environment,Forests and Climate Change, India; Ms. Beatriz Domingorena, Vice-Minister, Secretariat of Environment and Sustainable Development, Argentina; Mr. Daniel Alan Reifsnyder, Deputy Assistant Secretary of State for Environment, United States of America; Mr. Thoriq Ibrahim, Minister of Environment, the Maldives; Ms. Hanne Inger Bjurstrom, Special Envoy for Climate, Norway; Mr. Miguel Arias Cañete, European Union Commissioner for Climate Action and Energy; and Mr. Mohamed Mubarak Bin Daina, Chief Executive, Supreme Council for the Environment, Bahrain.

226. Mr. Lugris opened the discussion by welcoming the representatives to what he described as a new exercise aimed at having a collective discussion about the future of the Montreal Protocol. Each discussant then made a short statement.

227. Mr. Cañete said that the main challenges in the coming decade were the elimination of the remaining ozone-depleting substances without causing harm to the climate system, which meant addressing the growing use of HFCs. The rise in emissions of these high-GWP substances – largely due to the implementation of the phase-out of ozone-depleting substances under the Protocol – had the potential to wipe out the significant climate benefits achieved under the Protocol to date. It was therefore incumbent on parties to phase down HFCs under the Protocol, which, he said, afforded the optimal mechanisms for taking action. The parties should enter into formal discussions on HFCs before the window of opportunity for action was lost and the costs of such action escalated. The European Union was considering the submission in 2015 of a proposal for an amendment to the Protocol with regard to HFCs, which foresaw ambitious action by industrialized countries and a cautious approach to consumption in developing countries, postponing the reduction of HFCs in those countries pending the collection of more data on HFC consumption and the availability of viable alternatives.

228. Ms. Domingorena stressed the importance of incentives for environmentally friendly innovation for the private sector, including small and medium-sized enterprises. Businesses needed to keep up with international environmental developments while remaining competitive in the global market. As the international community acted in concert to face existing and emerging environmental challenges, the paramount need for economic growth in developing countries could not be denied. She also highlighted the importance of combating illegal trade in ozone-depleting substances, including through the provision of capacity-building, institutional-strengthening and technology transfer for customs offices. It was widely recognized that additional funding and technology transfer would be fundamental in enabling developing countries to continue to meet their obligations under various multilateral environmental agreements. Tools, mechanisms and resources to enable the reduction of the production and consumption of ozone-depleting substances and greenhouse gases were of vital importance, as was the provision of clear technical, legal and financial information. Multilateral instruments should be creative and flexible, with synergies fostered between different sectors, including the private sector, for a cross-cutting approach to environmental protection.

229. Mr. Reifsnyder cautioned against complacency and the perception that the problem of ozone depletion had been solved once and for all. In its latest report, the Scientific Assessment Panel had clearly stated that the evidence of the recovery of the ozone layer was not, as yet, unequivocal. Of key importance was the recruitment of a new generation of champions for the ozone layer, who would take up the cause and keep the issue on the global agenda, including the significant challenges facing developing countries as they phased out HCFCs. He called on parties to continue to work cooperatively, including by exploiting linkages and synergies with other realms and conventions, such as the Framework Convention on Climate Change and the International Plant Protection Convention, in order to forge a shared sense of responsibility for the planet in the coming decade.

230. Mr. Javadekar said that the success of the Montreal Protocol showed the importance of consensus: when all countries worked together, agreements could be successfully implemented. He challenged the fairness of the assertion that the Montreal Protocol had had a much greater impact on climate change than had the Kyoto Protocol, saying that the Kyoto Protocol dealt with real pollution and emissions from polluting activities, whereas emissions of ozone-depleting substances occurred as a result of unintended leaks from imperfect systems. He stressed India's commitment to addressing its air pollution problems, in part by changing its energy mix, citing as an example the country's plans to produce 100,000 megawatts of solar power by 2022. He then turned to the question of HFCs. Noting

that intended nationally determined contributions, or INDCs, constituted one way for countries to tackle environmental issues based on their national circumstances, he suggested that INDCs could be applied to HFC phase-out. While the problems casued by the introduction of HFCs had to be adressed, the best way forward was to allow sufficient time, build consensus and foster a climate of respect, mutual confidence and trust.

231. Mr. Ibrahim laid out the challenges faced by the Maldives and other small island developing States. HFCs, especially R410a and R407c, were the main HCFC alternatives being used in the refrigeration and air-conditioning sector, and HFC consumption was therefore growing fast. That was clearly going to be the next challenge for his country. There were also challenges in the fisheries sector, as most fishing vessels used HCFC refrigerants. Alternatives, especially for older vessels, were difficult to find, and countries were driven toward HFC "drop-ins" to avoid costly equipment changes. He called on the Multilateral Fund to provide funding for the development of alternatives to HCFCs for fishing vessels, and he closed by saying that the spirit of partnership and cooperation that had always characterized the work of the Convention and the Protocol was the key to addressing future challenges.

232. Saying that the Montreal Protocol's success was due to international collaboration and political will, Ms. Bjurstrom stressed the need to give industry incentives to innovate in the right direction. She recognized the challenge posed by the remaining phase-out of ozone-depleting substances and stressed Norway's commitment to continuing to provide support but said that the troubling consequences of HCFC phase-out must also be acknowledged. The Protocol had led to the introduction of HFCs, which posed a serious climate threat, and parties had an obligation to ensure that their efforts did not cause adverse effects. Climate effects and ozone-depletion could both be avoided, and the Montreal Protocol was the right instrument to achieve that. She pointed out that regulating HFCs under the Montreal Protocol did not necessarily conflict with the Framework Convention on Climate Change, as the two treaties could complement each other, with emissions accounting and reporting managed under the Framework Convention on Climate Change. She announced that Norway was prepared to scale-up its financial contributions once an amendment to include the phase-down of HFCs under the Protocol was approved, adding that the parties should aim for an amendment by the following year. She recalled that when the Vienna Convention and the Montreal Protocol were first signed, technical solutions for all problems did not exist, yet the parties had taken a stand and had signed on the basis of the precautionary principle, and industry had followed suit, and those courageous actions had made the achievements of the Protocol possible.

233. Mr. Daina said that 70 per cent of the HCFCs consumed in his country were used for air-conditioning systems. The Government was working hard to phase out HCFCs, including by recycling and working with industry to develop low-global-warming potential alternatives. Bahrain was one of the very-high-ambient-temperature countries – with temperatures reaching as high as 50^{o}C – that were struggling to decrease their dependency on HCFCs. Until such time as reliable and effective alternative technologies were made available, he said, it would be impossible for such countries to enter into discussions on phasing down HFCs, currently the main alternatives for HCFCs.

234. Following the discussants' statements, the floor was opened for comments and questions regarding the challenges that lay ahead.

235. Mr. Cañete, asked about the need to go beyond the mandates of the Vienna Convention and Montreal Protocol in order to build synergies with other multilateral environmental agreements, said that protocols were often amended to adapt to changing times and that it was a matter of deciding whether to extend mechanisms that had proved successful in protecting the ozone layer to other such areas as global warming, underpinned by constant dialogue, consensus-building and cooperation between developed and developing countries. Mr. Reifsnyder added that in addition to addressing climate change the conversion to alternative refrigeration technologies, with proper monitoring, reporting and clarification of roles and responsibilities, could help to address the critical issue of food waste within the framework of the post-2015 development agenda. In the meantime, those questioning the legal grounds for tackling HFC management under the Protocol were, he said, trying to prevent any discussion of the subject in the present forum. Ms. Bjurstrom said that addressing HFCs under the Montreal Protocol was not a legal but a political matter and that, with the right incentives, industry could once again demonstrate its capacity to develop alternative technologies, including for use in countries with high ambient temperatures. Mr. Bin Daina, recalling that developing countries, as technology recipients, were reliant on global markets, warned that it would take time for the research on suitable alternatives to bear fruit. Mr. Javadekar said that since it was a shared challenge for humanity, research should be undertaken as a collective not-for-profit effort supported by the Green Climate Fund, and he suggested that an extraordinary meeting be convened to resolve the issue of technical and financial assistance for Article 5 parties, which could help to determine the way forward

for the Protocol. Several representatives emphasized the role of the Multilateral Fund for the Implementation of the Montreal Protocol in the provision of that assistance, including through the initiation of demonstration projects.

236. Mr. Lugris, in closing the session, thanked the panel members for their contributions to an open-minded discussion, expressing the hope that similar discussions would in the future become a regular feature of the high-level segments of meetings of the parties.

VII. Report of the co-chairs of the preparatory segment and consideration of the decisions recommended for adoption by the tenth meeting of the Conference of the Parties to the Vienna Convention and the Twenty-Sixth Meeting of the Parties to the Montreal Protocol

237. The Co-Chairs of the preparatory segment reported at various points during the meeting. They noted that, although negotiations during the preparatory segment had been difficult, considerable progress had been made on a number of important issues. Thanking the parties for their great 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 making it possible for the parties to do their work, they commended the draft decisions approved during the segment for adoption by the Meeting of the Parties.

VIII. Dates and venues for the eleventh meeting of the Conference of the Parties to the Vienna Convention and the Twenty-Seventh Meeting of the Parties to the Montreal Protocol

238. The representative of the United Arab Emirates conveyed an offer by his Government to host the Twenty-Seventh Meeting of the Parties to the Montreal Protocol in Dubai. The representative of Rwanda then announced that his Government too wished to host the Twenty-Seventh Meeting of the Parties but, in the light of the offer by the United Arab Emirates, would be happy instead to host the Twenty-Eighth Meeting of the Parties. The parties then adopted a decision providing that the Twenty-Seventh Meeting of the Parties would take place in Dubai in November 2015 and the Twenty-Eighth Meeting of the Parties in Kigali in November 2016. They also adopted a decision to the effect that the eleventh meeting of the Conference of the Parties to the Vienna Convention would be held back to back with the Twenty-Ninth Meeting of the Parties to the Montreal Protocol.

IX. Other matters

239. The parties took up no other matters during the high-level segment.

X. Adoption of decisions by the Conference of the Parties to the Vienna Convention at its tenth meeting

240. *The Conference of the Parties decides*:

X/1: Status of ratification of the Vienna Convention, the Montreal Protocol and the London, Copenhagen, Montreal and Beijing amendments to the Montreal Protocol

1. To note with satisfaction the universal ratification of the Vienna Convention for the Protection of the Ozone Layer, the Montreal Protocol on Substances that Deplete the Ozone Layer, and the London Amendment, the Copenhagen Amendment and the Montreal Amendment to the Montreal Protocol;

2. To note that, as at 1 November 2014, 196 parties had ratified the Beijing Amendment to the Montreal Protocol;

3. To urge Mauritania, which has not yet done so, to ratify, approve or accede to the Beijing Amendment to the Montreal Protocol, taking into account that universal participation is necessary to ensure the protection of the ozone layer;

X/2: Recommendations of the ninth meeting of the Ozone Research Managers

Recalling that, pursuant to the objectives defined in decision I/6 of the Conference of the Parties to the Vienna Convention for the Protection of the Ozone Layer, the Ozone Research Managers review ongoing national and international research and monitoring programmes with a view to ensuring the proper coordination of those programmes and identifying gaps that need to be addressed,

Recognizing the importance of continuing and enhancing the monitoring of changes in the ozone layer, including its projected recovery in an atmosphere whose conditions are different from pre-1980 conditions owing to changes in its composition,

Recognizing also that the latest assessment by the Scientific Assessment Panel suggests a potential influence of climate change on the ozone layer, especially in the tropics,

Recognizing further the need to increase knowledge and understanding of the atmosphere and its processes, with regard to which many uncertainties remain, including the intricate linkages between the ozone layer and climate and, therefore, the need to monitor and analyse the ozone layer and climate variables together whenever possible,

Noting the importance of capacity-building activities in parties operating under paragraph 1 of Article 5 of the Montreal Protocol that expand scientific expertise and have the added benefit of expanding the geographic area that can be measured and data archives in respect of the key variables related to the ozone layer and changing climate,

1. To take note with appreciation of the report of the ninth meeting of the Ozone Research Managers, published in 2014 (World Meteorological Organization Global Ozone Research and Monitoring Project Report No. 54);

2. To encourage parties to adopt and implement as appropriate the recommendations of the Ozone Research Managers under the topics of research, systematic observations, data archiving and capacity-building;

3. To accord priority to capacity-building activities, in particular the specific projects identified for priority funding under the General Trust Fund for Financing Activities on Research and Systematic Observations Relevant to the Vienna Convention, related to the inter-calibration of instruments, the training of instrument operators and increasing the number of ozone observations, especially through the relocation of available Dobson instruments;

4. To encourage the Ozone Research Managers to review, at their tenth meeting, in 2017, the capacity-building activities that have been conducted, with a view to assessing their effectiveness, and to include further specific recommendations in their report to the Conference of the Parties;

5. To encourage the national ozone focal points, or other appropriate officials, to distribute information on, and coordinate where relevant, monitoring, research and scientific activities in their countries;

X/3: General Trust Fund for Financing Activities on Research and Systematic Observations Relevant to the Vienna Convention

Recalling decision VI/2, by which the Conference of the Parties established the General Trust Fund for Financing Activities on Research and Systematic Observations Relevant to the Vienna Convention for the Protection of the Ozone Layer, and noting that the current life of the Trust Fund will expire at the end of 2015,

Noting with appreciation the contributions to the Trust Fund by several parties and the joint efforts of the World Meteorological Organization and the Ozone Secretariat in the implementation of the activities funded by the Trust Fund since it became operational in 2003,

Noting that important activities, including calibrations, inter-comparisons and relevant training, have been implemented successfully under the Trust Fund to date,

Noting with concern, however, that the resources available in the Trust Fund are not sufficient to enable substantial and sustainable improvements to be made to the global ozone observing system,

Noting that the coming decade is a crucial time during which the status of the recovery of the ozone layer will become clearer, but that such clarity will be dependent on continued high-quality observations,

Aware that improvements in ozone observations should take into account the existing strong and intricate linkages between ozone and climate, and carry out relevant observations and analyses for both ozone and climate wherever possible,

Noting that the Ozone Research Managers, at their ninth meeting, in 2014, reviewed the status and activities of the Trust Fund, considered options for the way forward for the Fund and provided specific recommendations on the matter,

1. To request the Executive Director of the United Nations Environment Programme to extend the life of the General Trust Fund for Financing Activities on Research and Systematic Observations Relevant to the Vienna Convention up to 31 December 2020;

2. To request the Ozone Secretariat to coordinate with the World Meteorological Organization to establish a small advisory committee for the Trust Fund, which would convene electronically or in the margins of other relevant meetings, consisting of not more than 10 members, including two co-chairs of the Scientific Assessment Panel, the two co-chairs of the Ozone Research Managers, one representative of the Ozone Secretariat and up to five scientists and experts in ozone observations, and one representative of the World Meteorological Organization as an observer, striving for equitable geographical and gender representation, with a mandate:

(a) To develop a long-term strategy and implementation objectives and priorities in the light of the four overarching goals identified by the Ozone Research Managers at their ninth meeting;

(b) To develop a short-term action plan that takes into account the most urgent needs of the Global Ozone Observing System and which will make the best possible use of the resources available in the Trust Fund;

(c) To ensure quality control of the individual project proposals developed under the Trust Fund, striving for regional balance in the projects supported by the Fund and identifying possibilities for complementary funding to maximize its resources;

3. To request the Ozone Secretariat to continue inviting parties, and relevant international organizations as appropriate, to make financial and/or in-kind contributions towards well-defined and well-budgeted project proposals developed under the Trust Fund;

4. To request the Ozone Secretariat to report to the Conference of the Parties at its eleventh meeting on the operation of, contributions to and expenditures from the Trust Fund and on the activities funded by the Trust Fund since its inception, as well as on the activities of the advisory committee;

X/4: Financial reports and budgets for the Vienna Convention

Recalling decision IX/3 on financial matters,

Taking note of the financial report on the Trust Fund for the Vienna Convention for the Protection of the Ozone Layer for the biennium 2012–2013, ended 31 December 2013,

Recognizing that voluntary contributions are an essential complement for the effective implementation of the Vienna Convention,

Welcoming the continued efficient management by the Secretariat of the finances of the Trust Fund for the Vienna Convention for the Protection of the Ozone Layer,

1. To take note with appreciation of the financial statement of the Trust Fund for the biennium 2012–2013, ended 31 December 2013, and the report on the actual expenditures for 2012 and 2013 as compared with the approvals for those years;

2. To approve the establishment of a working capital reserve equivalent to 15 per cent of the proposed budget for 2015 to be used to meet the final expenditures under the Trust Fund, noting that the working capital reserve shall be set aside from the existing fund balance;

3. To approve the revised 2014 budget for the Trust Fund in the amount of $1,280,309, the budget for 2015 in the amount of $800,937, the budget for 2016 in the amount of $773,578 and the budget for 2017 in the amount of $1,363,368, as set out in annex I to the report on the tenth meeting of the Conference of the Parties to the Vienna Convention and the Twenty-Sixth Meeting of the Parties to the Montreal Protocol;[1]

[1] UNEP/OzL.Conv.10/7-UNEP/OzL.Pro.26/10.

4. To authorize the Secretariat to draw down the amounts of $197,937 in 2015, $170,578 in 2016 and $760,368 in 2017 from the Fund balance;

5. To approve, as a consequence of the drawdowns referred to in paragraph 4 of the present decision, the payment of contributions by the parties amounting to $603,000 for each of the years 2015, 2016 and 2017, as set out in annex II to the report of the tenth meeting of the Conference of the Parties to the Vienna Convention and the Twenty-Sixth Meeting of the Parties to the Montreal Protocol;

6. To request the Secretariat to indicate in future financial reports of the Trust Fund for the Vienna Convention the amounts of cash in hand in the section entitled "Total reserves and fund balances", in addition to contributions that have not yet been received;

7. To urge all parties to pay their outstanding contributions as well as their future contributions promptly and in full;

8. To request the Executive Director of the United Nations Environment Programme to extend the Trust Fund until 31 December 2025;

X/5: Eleventh meeting of the Conference of the Parties to the Vienna Convention

To convene the eleventh meeting of the Conference of the Parties to the Vienna Convention back to back with the Twenty-Ninth Meeting of the Parties to the Montreal Protocol.

XI. Adoption of decisions by the Twenty-Sixth Meeting of the Parties to the Montreal Protocol

241. *The Twenty-Sixth Meeting of the Parties decides*:

XXVI/1: Status of ratification of the Vienna Convention, the Montreal Protocol and the London, Copenhagen, Montreal and Beijing amendments to the Montreal Protocol

1. To note with satisfaction the universal ratification of the Vienna Convention for the Protection of the Ozone Layer, the Montreal Protocol on Substances that Deplete the Ozone Layer, and the London Amendment, the Copenhagen Amendment, and the Montreal Amendment to the Montreal Protocol;

2. To note that, as at 1 November 2014, 196 parties had ratified the Beijing Amendment to the Montreal Protocol;

3. To urge Mauritania, which has not yet done so, to ratify, approve or accede to the Beijing Amendment to the Montreal Protocol, taking into account that universal participation is necessary to ensure the protection of the ozone layer;

XXVI/2: Essential-use nominations for controlled substances for 2015

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,

Welcoming 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 2015 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 2015 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 2015 to notify the Ozone Secretariat of those quantities and to provide it with the details of a contact point by 31 December 2014;

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. That the party 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;

7. 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;

8. To encourage parties to fast-track their administrative 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 2015 of chlorofluorocarbons for metered-dose inhalers

(Metric tonnes)

Party	*2015*
China	182.61

XXVI/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 in the Russian Federation,

Noting also that the Russian Federation is successfully continuing efforts to introduce alternative solvents in its aerospace industry,

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 production and consumption of chlorofluorocarbon-113 in the Russian Federation for essential uses in its aerospace industry in the amount of 75 metric tonnes in 2015;

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, adopt newly designed equipment and complete the phase-out of chlorofluorocarbon-113 by 2016;

XXVI/4: Essential-use exemption for laboratory and analytical uses for 2015 in China

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

Recalling decision XI/15, by which the parties, among other things, eliminated the use of ozone-depleting substances for the testing of oil, grease and total petroleum hydrocarbons in water from the global exemption for laboratory and analytical uses,

Recalling also decision XXIII/6, by which parties operating under paragraph 1 of Article 5 of the Montreal Protocol were allowed until 31 December 2014 to deviate from the existing ban on the use of carbon tetrachloride for the testing of oil, grease and total petroleum hydrocarbons in water in individual cases where such parties considered doing so to be justified and in which it was clarified that any deviation beyond that should take place only in accordance with an essential-use exemption in respect of the use of carbon tetrachloride for the testing of oil, grease and total petroleum hydrocarbons in water beyond 2014,

Noting that a party has reported difficulty in implementing existing alternatives to the use of carbon tetrachloride for the testing of oil, grease and total petroleum hydrocarbons in water and claims to need more time for the revision and promotion of national standards,

1. To encourage that party, which has applied for an exemption, to complete the revision of its relevant national standard and to ensure that a revised national standard is brought into force as soon as possible, with a view to ensuring a smooth transition to a method that does not use ozone-depleting substances;

2. To authorize the level of consumption for 2015 necessary to satisfy essential uses of carbon tetrachloride for the testing of oil, grease and total petroleum hydrocarbons in water, as specified in the annex to the present decision;

Annex

Essential-use authorizations for 2015 for carbon tetrachloride for testing of oil, grease and total petroleum hydrocarbons in water

(Metric tonnes)

Party	*2015*
China	80

XXVI/5: Global laboratory and analytical-use exemption

Recalling decisions VII/11 and XXI/6, in which the Meeting of the Parties requested all parties to urge their national standards-setting organizations to identify and review their standards for laboratory and analytical procedures that mandate the use of Montreal Protocol controlled substances with a view to adopting, where possible, laboratory and analytical products and processes that do not use controlled substances,

Recalling also decisions VII/11, XI/15, XVIII/15 and XIX/18, by which the Meeting of the Parties eliminated specific uses from the global exemption for laboratory and analytical uses,

1. To extend the global laboratory and analytical-use exemption until 31 December 2021, under the conditions set out in annex II to the report of the Sixth Meeting of the Parties and decisions XV/8, XVI/16 and XVIII/15, for the controlled substances under the Montreal Protocol in all annexes and groups except Annex C, group 1;

2. To request the Technology and Economic Assessment Panel to report no later than 2018 on the development and availability of laboratory and analytical procedures that can be performed without using controlled substances under the Montreal Protocol;

3. To encourage parties to continue to investigate domestically the possibility of replacing ozone-depleting substances in laboratory and analytical uses and to share the resulting information;

XXVI/6: Critical-use exemptions for methyl bromide for 2015 and 2016

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 in 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,

Recalling further paragraphs 1 and 2 of decision XXV/4, in which the Meeting of the Parties requested that, by the thirty-sixth[2] meeting of the Open-ended Working Group, Australia submit the available results of its research programme and Canada submit the available results of its assessment of the impact of chloropicrin on groundwater to the Technology and Economic Assessment Panel for its consideration,

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 the additional information provided by Argentina at the Twenty-Sixth Meeting of the Parties allowed the co-chairs of the Methyl Bromide Technical Options Committee to show how an amount of methyl bromide would be justified for critical use by Argentina in line with decision IX/6,

1. To permit, for the agreed critical-use categories for 2015 and 2016 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 and 2016 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;

2. 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;

3. 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;

Annex

Table A

Agreed critical-use categories

(Metric tonnes)

2016	
Australia	Strawberry runners 29.760
Canada	Strawberry runners (Prince Edward Island) 5.261
United States of America	Strawberry field 231.54, cured pork 3.24
2015	
Argentina	Strawberry fruit 64.3, green pepper/tomato 70
China	Ginger protected 24.0, ginger open field 90.0

[2] This reference to the thirty-sixth meeting of the Open-ended Working Group should be understood to imply that submissions are required before the thirty-seventh meeting in order to take into account the additional meeting agreed to under decision XXVI/9, which will be the thirty-fifth meeting of the Open-ended Working Group.

Mexico	Strawberry nursery 43.539, raspberry nursery 41.418

Table B

Permitted levels of production and consumption[a]

(Metric tonnes)

2016	
Australia	29.760
Canada	5.261
United States of America	234.78
2015	
Argentina	134.3
China	114.0
Mexico	84.957

[a] Minus available stocks.

XXVI/7: Availability of recovered, recycled or reclaimed halons

Recognizing that the global production of halons for controlled uses was eliminated in 2009, but that some remaining uses, in particular for civil aviation, continue to rely on stocks of recovered, recycled or reclaimed halons for fire safety,

Noting that, despite efforts to evaluate the extent of accessible stocks of recovered, recycled or reclaimed halons, there is still uncertainty about the quantity of recovered, recycled or reclaimed halons that is accessible for continuing uses, such as in civil aviation,

Recalling the 1992 International Maritime Organization ban on the use of halons in new ships and noting that ships containing halons are now being decommissioned,

Recalling also the adoption by the Assembly of the International Civil Aviation Organization of resolutions A37-9 and A38-9, in which the Assembly expressed an urgent need to continue developing and implementing halon alternatives for civil aviation and called on manufacturers to use alternatives in lavatory fire extinguishing systems in newly designed and new production aircraft after 2011, in hand-held fire extinguishers in such aircraft after 2016, in engine and auxiliary power unit fire-extinguishing systems used in newly designed aircraft after 2014 and in the cargo compartments of new aircraft by a date to be determined by the Assembly in 2016,

Noting that the import and export of recovered, recycled or reclaimed halons is allowed under the Montreal Protocol and that the Technology and Economic Assessment Panel has found that the current distribution of recovered, recycled or reclaimed halon stocks potentially may not align with anticipated needs for such stocks,

Recalling paragraph 3 of decision XXI/7, concerning the import and export of recovered, recycled or reclaimed halons,

Taking note of the progress report of the Technology and Economic Assessment Panel provided to the parties before the thirty-fourth meeting of the Open-ended Working Group, including information on alternatives,

1. To encourage parties, on a voluntary basis, to liaise, through their national ozone officers, with their national civil aviation authorities to gain an understanding of how halons are being recovered, recycled or reclaimed to meet purity standards for aviation use and supplied to air carriers to meet ongoing civil aviation needs and on any national actions being taken to expedite the replacement of halons in civil aviation uses as called for by the Assembly of the International Civil Aviation Organization in its resolutions A37-9 and A38-9;

2. To also encourage parties, on a voluntary basis, to submit information provided in accordance with paragraph 1 of the present decision to the Ozone Secretariat by 1 September 2015;

3. To invite parties, on a voluntary basis, to reassess any national import and export restrictions other than licensing requirements with a view to facilitating the import and export of recovered, recycled or reclaimed halons and the management of stocks of such halons with the aim of enabling all parties to meet remaining needs in accordance with domestic regulations even as they make the transition to halon alternatives;

4. To request the Technology and Economic Assessment Panel, through its Halons Technical Options Committee:

(a) To continue to liaise with the International Civil Aviation Organization to facilitate the transition to halon alternatives, to approach the International Maritime Organization to estimate the amount and purity of halon 1211 and 1301 available from the breaking of ships and to report information on global stocks of recovered halons to the parties in its 2015 progress report;

(b) To report on existing and emerging alternatives for halons, including information on their characteristics and their rate of adoption, in particular for aviation uses;

5. To request the Ozone Secretariat to report to the parties, prior to the thirty-seventh meeting of the Open-ended Working Group, any information provided by parties in accordance with paragraph 1 of the present decision;

XXVI/8: Measures to facilitate the monitoring of trade in hydrochlorofluorocarbons and substituting substances

Recalling decisions IX/22, X/18 and XI/26 concerning customs codes for ozone-depleting substances and collaboration between the Ozone Secretariat and the World Customs Organization in that regard,

Recalling also decisions of the Meeting of the Parties aimed at the prevention of illegal trade in ozone-depleting substances, in particular decisions XIV/7, XVI/33, XVII/16, XVIII/18 and XIX/12,

Noting that, despite limitations on hydrochlorofluorocarbon (HCFC) consumption resulting from the provisions of the Montreal Protocol, more than 1 million tonnes of HCFCs are still traded globally and the illegal trade in HCFCs may disturb the process of phasing out those substances,

Noting also that in international trade HCFCs are replaced by alternative substances, which include hydrofluorocarbons (HFCs), and that the quantity of HFCs traded globally is expected to grow,

Recognizing that the existing Harmonized Commodity Description and Coding System (Harmonized System) code for HFCs is not HFC-specific and covers other non-ozone-depleting chemicals, which makes it difficult for customs authorities to recognize the illegal nature of the relevant import or export of HCFCs if declared as HFCs,

Mindful of the importance of a dedicated customs classification of goods for the prevention of illegal trade and of the positive impact in that regard of the new Harmonized System classification for HCFCs approved by the World Customs Organization, which entered into force in January 2012, and the new Harmonized System classification for mixtures containing, inter alia, HCFCs and HFCs or perfluorocarbons, which became effective at an earlier date,

Mindful also that World Customs Organization rules require that any application for amending a Harmonized System classification must be made several years in advance,

1. To request the Ozone Secretariat to liaise with the World Customs Organization to examine the possibility of designating individual Harmonized System codes for the most commonly traded fluorinated substitutes for HCFCs and chlorofluorocarbons (CFCs) classified under Harmonized System code 2903.39, explaining thereby the importance of a dedicated customs classification for those substances for the sole purpose of preventing the illegal trade in HCFCs and CFCs, and to communicate to the parties the results of those consultations as soon as possible, but not later than at the thirty-sixth meeting of the Open-ended Working Group, to be held in 2015;

2. To encourage parties that are contracting parties to the International Convention on the Harmonized Commodity Description and Coding System to undertake at their earliest convenience the necessary steps, following World Customs Organization procedures, to recommend the consideration of the customs classifications referred to in paragraph 1 of the present decision;

3. To encourage parties that are in a position to do so to consider establishing, on a voluntary basis, domestic customs codes for those substitutes referred to in paragraph 1;

XXVI/9: Response to the report by the Technology and Economic Assessment Panel on information on alternatives to ozone-depleting substances

Noting with appreciation volume 2 of the 2012 Technology and Economic Assessment Panel report on the task force progress report which responded to decision XXIII/9, volume 2 of the 2013 progress report of the Technology and Economic Assessment Panel which responded to decision XXIV/7 and volume 4 of the 2014 progress report which responded to decision XXV/5,

1. To request the Technology and Economic Assessment Panel, if necessary in consultation with external experts, to prepare a report identifying the full range of alternatives, including not-in-kind technologies, and identifying applications where alternatives fulfilling the criteria identified in paragraph 1 (a) of the present decision are not available, and to make that report available for consideration by the Open-ended Working Group at its thirty-sixth meeting and an updated report to be submitted to the Twenty-Seventh Meeting of the Parties that would:

(a) Update 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 energy efficiency, regional differences and high ambient temperature conditions in particular, and assessing whether they are:

(i) Commercially available;

(ii) Technically proven;

(iii) Environmentally sound;

(iv) Economically viable and cost effective;

(v) Safe to use in areas with high urban densities considering flammability and toxicity issues, including, where possible, risk characterization;

(vi) Easy to service and maintain;

and describe the potential limitations of their use and their implications for the different sectors, in terms of, but not limited to, servicing and maintenance requirements, and international design and safety standards;

(b) Provide information on energy efficiency levels in the refrigeration and air-conditioning sector referring to high-ambient temperature zones in international standards;

(c) Taking into account the uptake of various existing technologies, revise the scenarios for current and future demand elaborated in the October 2014 final report on additional information on alternatives to ozone-depleting substances of the Technology and Economic Assessment Panel's task force on decision XXV/5, and improve information related to costs and benefits with regard to the criteria set out in paragraph 1 (a) of the present decision, including reference to progress identified under stage I and stage II of HCFC phase-out management plans;

2. To convene a two-day workshop, back to back with an additional three-day meeting of the Open-Ended Working Group in 2015, to continue discussions on all issues in relation to hydrofluorocarbon management, including a focus on high-ambient temperature and safety requirements as well as energy efficiency, taking into account the information requested in the present decision and other relevant information;

3. To encourage parties to continue 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 minimizes environmental impact wherever the required technologies are available, and to request the Secretariat to compile any such submissions received;

4. To request the Executive Committee of the Multilateral Fund to consider providing additional funding to conduct inventories or surveys on alternatives to ozone-depleting substances in interested parties operating under paragraph 1 of Article 5 upon their request;

XXVI/10: 2015–2017 Replenishment of the Multilateral Fund

1. To adopt a budget for the Multilateral Fund for the Implementation of the Montreal Protocol for 2015–2017 of $507,500,000 on the understanding that $64,000,000 of that budget will be provided from anticipated contributions due to the Multilateral Fund and other sources for the 2012-2014 triennium, and that $6,000,000 will be provided from interest accruing to the Fund during the 2015–2017 triennium. The parties note that outstanding contributions from some parties with economies in transition in the period 2012–2014 stands at $8,237,606;

2. To adopt the scale of contributions for the Multilateral Fund based on a replenishment of $145,833,333 for 2015, $145,833,333 for 2016, and $145,833,333 for 2017 as it appears in annex III to the report of the tenth meeting of the Conference of the Parties to the Vienna Convention and the Twenty-Sixth Meeting of the Parties to the Montreal Protocol;

3. That the Executive Committee should take action to ensure, as far as possible, that the whole of the budget for 2015–2017 is committed by the end of 2017, and that parties not operating under paragraph 1 of Article 5 should make timely payments in accordance with paragraph 7 of decision XI/6;

XXVI/11: Extension of the fixed-exchange-rate mechanism to the 2015–2017 replenishment of the Multilateral Fund

1. To direct the Treasurer to extend the fixed-exchange-rate mechanism to the period 2015–2017;

2. That parties choosing to pay their contributions to the Multilateral Fund for the Implementation of the Montreal Protocol in national currencies will calculate their contributions based on the average United Nations exchange rate for the six-month period commencing 1 January 2014;

3. That, subject to paragraph 4 below, parties not choosing to pay in national currencies pursuant to the fixed-exchange-rate mechanism will continue to pay in United States dollars;

4. That no party should change the currency selected for its contribution in the course of the triennium 2015–2017;

5. That only parties with inflation rate fluctuations of less than 10 per cent, pursuant to published figures of the International Monetary Fund, for the preceding triennium will be eligible to use the fixed-exchange-rate mechanism;

6. To urge parties to pay their contributions to the Multilateral Fund in full and as early as possible in accordance with paragraph 7 of decision XI/6;

7. To agree that if the fixed-exchange-rate mechanism is to be used for the replenishment period 2018–2020, parties choosing to pay their contributions in national currencies will calculate their contributions based on the average United Nations exchange rate for the six-month period commencing 1 January 2017;

XXVI/12: Data and information provided by the parties in accordance with Article 7 of the Montreal Protocol

Noting with appreciation that 196 parties of the 197 that should have reported data for 2013 have done so and that 72 of those parties reported their data by 30 June 2014 in accordance with decision XV/15,

Noting that 158 of those parties reported their data by 30 September 2014 as required under paragraph 3 of Article 7 of the Montreal Protocol,

Noting with concern, however, that the Central African Republic has not reported 2013 data,

Noting that its failure to report its 2013 data in accordance with Article 7 places the party in non-compliance with its data-reporting obligations under the Montreal Protocol until such time as the Secretariat receives the 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 Central African Republic, 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 the Central African Republic at its fifty-fourth 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;

XXVI/13: 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 to the Protocol on 26 July 2001, the Copenhagen

and Montreal amendments on 28 June 2011 and the Beijing Amendment on 19 September 2014, and is classified as a party not operating under paragraph 1 of Article 5 of the Protocol,

Noting also that the Global Environment Facility has previously approved funding in the amount of $6,024,696 to enable Kazakhstan to achieve compliance with control measures of the Protocol other than those applicable to hydrochlorofluorocarbons and methyl bromide,

Noting with concern that a methyl bromide project submitted to the Global Environment Facility was rejected and that the Facility's consideration of a hydrochlorofluorocarbon project proposal was still at an early stage,

1. That Kazakhstan's annual consumption of the controlled substances in Annex C, group I (hydrochlorofluorocarbons), of 90.75 ODP-tonnes for 2011, 21.36 ODP-tonnes for 2012 and 83.32 ODP-tonnes for 2013 exceeds the party's maximum allowable consumption of 9.9 ODP-tonnes for those controlled substances for those years and that the party was therefore in non-compliance with the consumption control measures under the Protocol for hydrochlorofluorocarbons;

2. That Kazakhstan's annual consumption of the controlled substance in Annex E (methyl bromide) of 6.0 ODP-tonnes in 2011 and 19.0 ODP-tonnes in 2013 exceeds the party's maximum allowable consumption of zero ODP-tonnes for that controlled substance for those years and that the party was therefore in non-compliance with the consumption control measures under the Protocol for methyl bromide;

3. To note with appreciation the submission by Kazakhstan of a plan of action to ensure its return to compliance with the Protocol's hydrochlorofluorocarbon and methyl bromide control measures under which, without prejudice to the operation of the financial mechanism of the Protocol, Kazakhstan specifically commits itself:

(a) To reducing its consumption of hydrochlorofluorocarbons from 83.32 ODP-tonnes in 2013 to no greater than:

(i) 40 ODP-tonnes in 2014;

(ii) 9.9 ODP-tonnes in 2015;

(iii) 3.95 ODP-tonnes in 2016, 2017, 2018 and 2019;

(iv) Zero ODP-tonnes by 1 January 2020, save for consumption restricted to the servicing of refrigeration and air-conditioning equipment between the period 2020 and 2030 as prescribed in the Protocol;

(b) To reducing its consumption of methyl bromide from 19.0 ODP-tonnes in 2013 to no greater than:

(i) 6.0 ODP-tonnes in 2014;

(ii) Zero ODP-tonnes by 1 January 2015, save for critical uses that may be authorized by the parties;

(c) To monitoring its system for licensing imports and exports of ozone-depleting substances;

4. To invite the relevant implementing agencies to work with Kazakhstan to secure the reconsideration of the party's proposed methyl bromide project and consideration of the party's proposed hydrochlorofluorocarbon project by the Global Environment Facility;

5. To urge Kazakhstan to work with the relevant implementing agencies to implement its plan of action to phase out consumption of hydrochlorofluorocarbons and methyl bromide;

6. To monitor closely the progress of Kazakhstan with regard to the implementation of its plan of action and 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. In that regard, Kazakhstan should continue to receive international assistance to enable it to meet those 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;

7. To caution Kazakhstan, in accordance with item B of the indicative list of measures that may be taken by the Meeting of the Parties in respect of non-compliance, that, in the event that Kazakhstan fails to return to compliance, the parties will consider measures consistent with item C of the indicative list of measures. Those measures may include the possibility of actions available under

Article 4, such as ensuring that the supply of hydrochlochlorofluorocarbons 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;

XXVI/14: Requests for the revision of baseline data by Libya and Mozambique

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 under the Non-Compliance Procedure for the Montreal Protocol, 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 Libya and Mozambique have presented sufficient information, in accordance with decision XV/19, to justify their requests for the revision of their consumption data for hydrochlorofluorocarbons for 2010 and 2009, respectively, 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:

	Previous hydrochlorofluorocarbon data (ODP-tonnes)		*New hydrochlorofluorocarbon data (ODP-tonnes)*	
Party	*2009*	*2010*	*2009*	*2010*
1. Libya	–	131.91	–	139.26
2. Mozambique	4.3	–	8.68	–

XXVI/15: Non-compliance with the Montreal Protocol by the Democratic People's Republic of Korea

Noting that the Democratic People's Republic of Korea ratified the Montreal Protocol on Substances that Deplete the Ozone Layer on 24 January 1995, the London and Copenhagen amendments to the Protocol on 17 June 1999, and the Montreal and Beijing Amendments on 13 December 2001, and is classified as a party operating under paragraph 1 of Article 5 of the Protocol,

Noting also that the Executive Committee has approved $22,905,529 from the Multilateral Fund for the Implementation of the Montreal Protocol in accordance with Article 10 of the Protocol to enable the Democratic People's Republic of Korea to achieve compliance with the Protocol,

1. That annual consumption by the Democratic People's Republic of Korea of the controlled substances in Annex C, group I (hydrochlorofluorocarbons), of 90.6 ODP-tonnes for 2013 exceeds the party's maximum allowable consumption of 78.0 ODP-tonnes for those controlled substances for that year and that the party was therefore in non-compliance with the consumption control measures under the Protocol for hydrochlorofluorocarbons;

2. That the annual production by the Democratic People's Republic of Korea of hydrochlorofluorocarbons of 31.8 ODP-tonnes in 2013 exceeds the party's maximum allowable production of 27.6 ODP-tonnes for those controlled substances for that year and that the party was therefore in non-compliance with the production control measures under the Protocol for hydrochlorofluorocarbons;

3. To note with appreciation the submission by the Democratic People's Republic of Korea of a plan of action to ensure its return to compliance with the Protocol's hydrochlorofluorocarbon consumption control measures in 2015 and production control measures in 2016;

4. To note that under that plan of action, without prejudice to the operation of the financial mechanism of the Protocol, the Democratic People's Republic of Korea specifically commits itself:

(a) To reducing its consumption of hydrochlorofluorocarbons from 90.6 ODP-tonnes in 2013 to no greater than:

(i) 80.0 ODP-tonnes in 2014;

(ii) 70.16 ODP-tonnes in 2015, 2016 and 2017;

(iii) Levels allowed under the Montreal Protocol in 2018 and subsequent years;

(b) To reducing its production of hydrochlorofluorocarbons from 31.8 ODP-tonnes in 2013 to no greater than:

(i) 29.0 ODP-tonnes in 2014;

(ii) 27.6 ODP-tonnes in 2015;

(iii) 24.84 ODP-tonnes in 2016 and 2017;

(iv) Levels allowed under the Montreal Protocol in 2018 and subsequent years;

(c) To monitoring its system for licensing imports and exports of ozone-depleting substances;

5. To urge the Democratic People's Republic of Korea to work with the relevant implementing agencies to implement its plan of action to phase out consumption and production of hydrochlorofluorocarbons;

6. To closely monitor the progress of the Democratic People's Republic of Korea with regard to the implementation of its plan of action and 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. In that regard, the Democratic People's Republic of Korea should continue to receive international assistance to enable it to meet those 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;

7. To caution the Democratic People's Republic of Korea, in accordance with item B of the indicative list of measures that may be taken by the Meeting of the Parties in respect of non-compliance, that, in the event that the Democratic People's Republic of Korea fails to return to compliance, the parties will consider measures consistent with item C of the indicative list of measures. Those measures may include the possibility of actions available under Article 4, such as ensuring that the supply of hydrochlochlorofluorocarbons that are the subject of non-compliance is ceased so that exporting parties are not contributing to a continuing situation of non-compliance;

XXVI/16: Non-compliance with the Montreal Protocol by Guatemala

Noting that Guatemala ratified the Montreal Protocol on Substances that Deplete the Ozone Layer on 7 November 1989 and the London, Copenhagen, Montreal and Beijing amendments to the Protocol on 21 January 2002, and is classified as a party operating under paragraph 1 of Article 5 of the Protocol,

Noting also that the Executive Committee has approved $9,608,694 from the Multilateral Fund for the Implementation of the Montreal Protocol in accordance with Article 10 of the Protocol to enable Guatemala to achieve compliance with the Protocol,

1. That Guatemala's annual consumption of the controlled substances in Annex C, group I (hydrochlorofluorocarbons), of 11.3 ODP-tonnes for 2013 exceeds the party's maximum allowable consumption of 8.3 ODP-tonnes for those controlled substances for that year and that the party was therefore in non-compliance with the consumption control measures under the Protocol for hydrochlorofluorocarbons;

2. To note with appreciation the submission by Guatemala of a plan of action to ensure its return to compliance with the Protocol's hydrochlorofluorocarbon control measures and its decision to reduce its hydrochlorofluorocarbon consumption in 2014 below its allowable consumption by the excess amount consumed in 2013;

3. To note that under that plan of action, without prejudice to the operation of the financial mechanism of the Protocol, Guatemala specifically commits itself:

(a) To reducing its consumption of hydrochlorofluorocarbons from 11.3 ODP-tonnes in 2013 to no greater than:

(i) 4.35 ODP-tonnes in 2014;

(ii) Levels allowed under the Montreal Protocol in 2015 and subsequent years;

(b) To monitoring its system for licensing imports and exports of ozone-depleting substances;

4. To urge Guatemala to continue to work with the relevant implementing agencies to implement its plan of action to phase out consumption of hydrochlorofluorocarbons;

5. To monitor closely the progress of Guatemala with regard to the implementation of its plan of action and 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. In that regard, Guatemala should continue to receive international assistance to enable it to meet those 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;

6. To caution Guatemala, in accordance with item B of the indicative list of measures that may be taken by the Meeting of the Parties in respect of non-compliance, that, in the event that Guatemala fails to return to compliance, the parties will consider measures consistent with item C of the indicative list of measures. Those measures may include the possibility of actions available under Article 4, such as ensuring that the supply of hydrochlorofluorocarbons that are the subject of non-compliance is ceased so that exporting parties are not contributing to a continuing situation of non-compliance;

XXVI/17: Membership changes in the Technology and Economic Assessment Panel

1. To thank Mr. Lambert J. M. Kuijpers (Netherlands) for his long and outstanding service as Co-Chair of the Technology and Economic Assessment Panel;

2. To endorse the reappointment of Mr. Kuijpers as a Co-Chair of the Refrigeration, Air Conditioning and Heat Pumps Technology Options Committee for a transitional term of one year and to endorse the appointment of Mr. Kuijpers as a Senior Expert of the Technology and Economic Assessment Panel for a subsequent period of one year in accordance with paragraph 2.3 of the terms of reference of the Panel;

3. To endorse the appointment of Mr. Ashley Woodcock (United Kingdom of Great Britain and Northern Ireland) as Co-Chair of the Technology and Economic Assessment Panel for a term of four years in accordance with paragraph 2.3 of the terms of reference of the Panel;

4. To endorse the re-appointment of Ms. Marta Pizano (Colombia) as Co-Chair of the Technology and Economic Assessment Panel for a term of four years in accordance with paragraph 2.3 of the terms of reference of the Panel;

5. To endorse the appointment of Mr. Fabio Polonara (Italy) to the Technology and Economic Assessment Panel and as a new Co-Chair of the Refrigeration, Air Conditioning and Heat Pumps Technical Options Committee for a term of four years in accordance with paragraph 2.3 of the terms of reference of the Panel;

XXVI/18: 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 2014;

2. To confirm the positions of Canada, the Dominican Republic, Ghana, Lebanon and Poland as members of the Committee for one further year and to select Bosnia and Herzegovina, Cuba, Mali, Italy and Pakistan as members of the Committee for a two-year period beginning on 1 January 2015;

3. To note the selection of Ms. Elisabetta Scialanca (Italy) to serve as President and Mr. Mazen Hussein (Lebanon) to serve as Vice-President and Rapporteur of the Committee for one year beginning on 1 January 2015;

XXVI/19: 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 2014;

2. To endorse the selection of Bahrain, Brazil, the Comoros, Egypt, Grenada, India and the United Republic of Tanzania as members of the Executive Committee representing parties

operating under paragraph 1 of Article 5 of the Protocol and the selection of Australia, Belgium, Italy, Japan, Sweden, the Russian Federation and the United States of America as members representing parties not so operating, for one year beginning on 1 January 2015;

3. To note the selection of Mr. John Thompson (United States of America) to serve as Chair and Mr. Leslie Smith (Grenada) to serve as Vice-Chair of the Executive Committee for one year beginning on 1 January 2015;

XXVI/20: Co-Chairs of the Open-ended Working Group of the Parties to the Montreal Protocol

To endorse the selection of Mr. Paul Krajnik (Austria) and Ms. Emma Rachmawaty (Indonesia) as Co-Chairs of the Open-ended Working Group of the Parties to the Montreal Protocol in 2015;

XXVI/21: Financial reports and budgets for the Montreal Protocol

Recalling decision XXV/20 on financial reports of the trust funds and budgets for the Montreal Protocol,

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

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

1. To take note with appreciation of the financial statement of the Trust Fund for the biennium 2012–2013, ended 31 December 2013, and the report on the actual expenditures for 2012 and 2013 as compared with the approvals for those years;

2. To approve the revised budget for 2014 in the amount of $5,065,460 and the budget for 2015 in the amount of $5,922,857, and to note the budget for 2016 in the amount of $5,033,230, as set out in annex IV to the report of the tenth meeting of the Conference of the Parties to the Vienna Convention and the Twenty-Sixth Meeting of the Parties to the Montreal Protocol;[3]

3. To authorize the Secretariat to draw down the amounts of $788,527 in 2014 and $1,645,924 in 2015, and to note the proposed drawdown of $756,297 in 2016;

4. To approve, as a consequence of the drawdowns referred to in paragraph 3 of the present decision, that the contributions to be paid by the parties amount to $4,276,933 for 2014 and 2015, and to note the contributions of $4,276,933 for 2016, as set out in annex V to the report of the tenth meeting of the Conference of the Parties to the Vienna Convention and the Twenty-Sixth Meeting of the Parties to the Montreal Protocol;

5. That no funds shall be spent to cover the travel costs to meetings of members of the Assessment Panels from parties not operating under paragraph 1 of Article 5 of the Protocol;

6. To reaffirm a working capital reserve at a level of 15 per cent of the annual budget to be used to meet the final expenditures under the Trust Fund, noting that the working capital reserve shall be set aside from the existing fund balance;

7. To request the Secretariat to indicate in future financial reports of the Trust Fund for the Montreal Protocol, the amounts of cash in hand in the section entitled “Total reserves and fund balances”, in addition to contributions that have not yet been received;

8. To encourage parties, non-parties and other stakeholders to contribute financially and by other means to assist members of the three assessment panels and their subsidiary bodies with a view to ensuring their continued participation in the assessment activities under the Protocol;

9. To note with concern that a number of parties have not paid their contributions for 2014 and prior years, and to urge those parties to pay both their outstanding contributions and future contributions promptly and in full;

[3] UNEP/OzL.Conv.10/7-UNEP/OzL.Pro.26/10.

10. To request the Executive Director of the United Nations Environment Programme to extend the Trust Fund until 31 December 2025;

XXVI/22: Twenty-Seventh and Twenty-Eighth Meetings of the Parties to the Montreal Protocol

1. To convene the Twenty-Seventh Meeting of the Parties to the Montreal Protocol in Dubai, United Arab Emirates, in November 2015;

2. To convene the Twenty-Eighth Meeting of the Parties to the Montreal Protocol in Kigali, Rwanda, in November 2016.

Comments made at the time of the adoption of decisions

242. Following the adoption of the decisions by the Twenty-Sixth Meeting of the Parties, one representative, speaking on behalf of the Latin American and Caribbean countries, said that those countries were ready to work collaboratively and constructively to put in place a comprehensive framework of multilateral cooperation to enable them to comply with their obligations under the Montreal Protocol. Furthermore, he said, the economic and social realities of developing countries had to be taken into account in all cases, including with regard to requests for exemptions, and the countries of the region were gratified by the flexibility in that regard shown by all parties. The countries of the region had made important advances in their implementation of the Protocol, which had not only permitted them to benefit from international cooperation but also to serve as sources of support and experience for other developing countries striving to succeed likewise in their efforts to protect the ozone layer. They had, however, reiterated on numerous occasions their view that an increase in the budget for institutional strengthening, which had been at the same level for 12 years, was indispensable to enable them to comply with their growing obligations under the Protocol. Finally, he urged the Meeting of the Parties and the Conference of the Parties to continue to facilitate the participation of the Latin American and Caribbean countries by not allowing restrictions on translation or interpretation, which would impede their participation in the negotiations and the adoption of decisions.

XII. Adoption of the report of the tenth meeting of the Conference of the Parties to the Vienna Convention and the Twenty-Sixth Meeting of the Parties to the Montreal Protocol

243. The parties adopted the present report on Friday, 21 November 2014, on the basis of the draft report set out in documents UNEP/OzL.Conv.10/L.1/Add.1-UNEP/OzL.Pro.26/L.1 and Add.1 and 2.

XIII. Closure of the meeting

244. Following the customary exchange of courtesies, the tenth meeting of the Conference of the Parties to the Vienna Convention and the Twenty-Sixth Meeting of the Parties to the Montreal Protocol were declared closed at midnight on Friday, 21 November 2014**.**

Annex I

Trust Fund for the Vienna Convention for the Protection of the Ozone Layer
Approved budgets for 2014, 2015, 2016 and 2017

(United States dollars)

			Work months	*2014*	*2015*	*2016*	*2017*
10 Personnel and conference services component							
1100	Professional Staff						
	1101	Executive Secretary (D-2) (shared with MP)	6	143 800	143 800	143 800	143 800
	1104	Senior Scientific Affairs Officer (P-5) (shared with MP)	6	107 000	107 000	107 000	107 000
	1107	Programme Officer (Communication and Information) (P-3)	12	114 125	152 274	155 776	159 359
1199	**Subtotal**			**364 925**	**403 074**	**406 576**	**410 159**
1300	Administrative support						
	1301	Administrative Assistant (G-7) (shared with MP)	6	26 000	26 000	26 000	26 000
	1303	Programme Assistant (G-6)	12	37 000	38 110	39 253	40 431
	1304	Programme Assistant (Data)(G-6) (shared with MP)	6	22 000	22 000	22 000	22 000
	1305	Research Assistant (G-6) (shared with MP)	6	21 000	21 000	21 000	21 000
	1310	Meetings Services Assistant (G-6)	12	15 592	38 110	39 253	40 431
	Subtotal			**121 592**	**145 220**	**147 507**	**149 862**
	1322	Conference servicing cost of the preparatory meetings and meetings of the parties (shared with MP every three years)		252 000			252 000
	1324	Conference servicing cost of the Bureau Meeting		20 000			20 000
	1327	Conference servicing cost of the Meeting of the Ozone Research Managers		24 000			24 000

			Work months	*2014*	*2015*	*2016*	*2017*
	1328	Promotion activities for the protection of the ozone layer		10 000	10 000	10 000	10 000
1399	**Subtotal**			**306 000**	**10 000**	**10 000**	**306 000**
1600	Travel on official business						
	1601	Staff travel on official business		30 000	30 000	30 000	30 000
1699	**Subtotal**			**30 000**	**30 000**	**30 000**	**30 000**
1999 Component total				**822 517**	**588 294**	**594 082**	**896 020**
30 Meeting participation component							
3300	Support for participation						
	3304	Travel cost of A5 members to the Bureau meeting		20 000			20 000
	3307	Travel costs of A5 members to the meeting of the Ozone Research Managers		175 000			175 000
3399	**Subtotal**			**195 000**	**0**	**0**	**195 000**
3999 Component total				**195 000**	**0**	**0**	**195 000**
40 Equipment and premises component							
4100	Expendable equipment (items under $1,500)						
	4101	Miscellaneous expendables (shared with MP)		8 000	8 000	8 000	8 000
4199	**Subtotal**			**8 000**	**8 000**	**8 000**	**8 000**
4200	Non-expendable equipment						
	4203	Other office equipment (server, fax, scanner, furniture, etc.,)		5 000	5 000	5 000	5 000
	4205	Equipment and peripherals for paperless conferences		5 000	5 000	5 000	5 000
4299	**Subtotal**			**10 000**	**10 000**	**10 000**	**10 000**
4300	Premises						
	4301	Rental of office premises (shared with MP)		17 500	17 500	17 500	17 500
4399	**Subtotal**			**17 500**	**17 500**	**17 500**	**17 500**

				Work months	*2014*	*2015*	*2016*	*2017*
4999 Component total					**35 500**	**35 500**	**35 500**	**35 500**
50 Miscellaneous component								
	5100	Operation and maintenance of equipment						
		5101	Maintenance of equipment and others (shared with MP)		7 500	7 500	7 500	7 500
	5199	**Subtotal**			**7 500**	**7 500**	**7 500**	**7 500**
	5200	Reporting costs						
		5201	Reporting		7 500	7 500	7 500	7 500
		5202	Reporting (Ozone Research Managers)		15 000			10 000
	5299	**Subtotal**			**22 500**	**7 500**	**7 500**	**17 500**
	5300	Sundry						
		5301	Communications		20 000	20 000	20 000	20 000
		5302	Freight charges		15 000	15 000	15 000	15 000
		5304	Others (Ozone layer protection public awareness campaign)		5 000	5 000	5 000	5 000
		5305	30th anniversary celebrations			30 000		
	5399	**Subtotal**			**40 000**	**70 000**	**40 000**	**40 000**
	5400	Hospitality						
		5401	Hospitality		10 000			15 000
	5499	**Subtotal**			**10 000**	**0**	**0**	**15 000**
5999 Component total					**80 000**	**85 000**	**55 000**	**80 000**
99	**Total direct cost**				**1 133 017**	**708 794**	**684 582**	**1 206 520**
	Total budget				**1 133 017**	**708 794**	**684 582**	**1 206 520**
	Programme support costs (13 per cent)				*147 292*	*92 143*	*88 996*	*156 848*
	Grand total (inclusive of programme support costs)				**1 280 309**	**800 937**	**773 578**	**1 363 368**
	Drawdown				*677 309*	*197 937*	*170 578*	*760 368*
	Contribution from the parties				**603 000**	**603 000**	**603 000**	**603 000**
	Working capital reserve					106 319	106 319	106 319

Explanatory notes for the revision to the approved budget for 2014 and the approved budgets for 2015, 2016 and 2017 for the Trust Fund for the Vienna Convention for the Protection of the Ozone Layer

Budget line	*Comment*
Personnel component 1101–1107	Indicative Professional-level salary costs applicable to the Nairobi duty station have been used for the budget proposals. Salary costs for staff at the Professional level are made up of: (a) the basic salaries; (b) post adjustment as determined and reviewed throughout the year by the International Civil Service Commission based on the cost of living index of the duty station where the staff are assigned; and (c) entitlements such as home leave travel and education grant. However, where information on actual staff costs is available, the figures have been adjusted accordingly. The inflation rate used for 2015–2017 is 2.3 per cent to take into account annual salary step increments as well as revisions decided by the International Civil Service Commission. For the posts whose costs are shared with the Trust Fund for the Montreal Protocol (1101 and 1104), the increase in costs is reflected in the budget of that Trust Fund, as the budget is approved on an annual basis.
1107	The 2014 budget is decreased to reflect installation costs and 8 months' salary and emoluments of the Communication and Information Officer who joined the Secretariat at the end of May 2014. The 2015 and 2016 budgets reflect salary and emoluments only.
Administrative support/personnel 1301–1310	The 2015–2017 budget proposals reflect trends in actual costs and a 3 per cent inflationary rate. However, for the posts whose costs are shared with the Trust Fund for the Montreal Protocol (1301, 1304 and 1305), the increase is reflected in the budget of that Trust Fund, as the budget is approved on an annual basis.
1303	The budget line for the Programme Assistant on line 1303 was previously inadvertently budgeted at 70 per cent. The line is increased to reflect 100 per cent annual salary.
1310	The post of the Meeting Services Assistant was filled in August 2014. The 2014 budget reflects five months' salary cost. The budget was previously inadvertently budgeted at 70 per cent. The line is increased in 2015–2017 to reflect 100 per cent annual salary.
Conference services 1322–1328	Necessary funds may be transferred from the conference servicing budget lines should such services be required to be rendered either by individual consultancies or under corporate contracts. The current conference servicing costs are based on the following background and assumptions:
1322	The conferencing costs of the tenth and eleventh meetings of the Conference of the Parties to the Vienna Convention are shared with the Twenty-Sixth and Twenty-Ninth Meetings of the Parties to the Montreal Protocol since they will be held jointly in 2014 and 2017. The budget is increased in 2014 to reflect the cost increase of holding the tenth meeting of the Conference of the Parties to the Vienna Convention in Paris and the 2017 meeting cost is maintained at the 2014 level.
1324	Two Bureau meetings are scheduled for 2014 and 2017. The first meeting in the year is held back to back with the Ozone Research Managers' meeting and the second one takes place back to back with the meeting of the Bureau of the Meeting of the Parties to the Montreal Protocol. The meetings have provision for interpretation and document translation into the appropriate languages based on the membership of the Bureau.
1327	Based on the actual cost for the ninth Meeting of the Ozone Research Managers in May 2014, the budget is decreased for 2014 and 2017.
1328	A minimum amount is proposed for each year to cover activities in connection with the celebration of the International Day for the Protection of the Ozone Layer.
Travel on official business 1601	The budgets include travel of Secretariat officers in connection with the organization of the Ozone Research Managers' meetings and the meetings of the Conference of the Parties, in addition to travel related to provision of support to network and capacity-building meetings.
Meeting participation 3304 and 3307	The participation of representatives of parties operating under paragraph 1 of Article 5 in the various Convention meetings is assumed at $5,000 per representative per meeting taking into account not more than one person's travel costs per country, using the most appropriate and advantageous economy-class fare and United Nations daily subsistence allowances. Considering that the meeting of the Conference of the Parties to the Vienna Convention is normally held jointly with the Meeting of the Parties to the Montreal Protocol, the participation costs are borne by the Trust Fund for the Montreal Protocol.

Budget line	*Comment*
3304	The participation costs are based on two Bureau meetings respectively in 2014 and 2017 for four participants from developing countries or countries with economies in transition, being held back to back with the Ozone Research Managers' meeting and the meeting of the Conference of the Parties to the Vienna Convention.
3307	One Ozone Research Managers' meeting was held in May 2014. The next meeting will be held in 2017. Funding has been reserved for participation by 35 experts from qualifying developing countries that submit national reports.
Equipment and premises component 4101–4301	The budgets for non-expendable equipment (4203–4205) have been maintained at the approved 2014 levels.
	The Secretariat is maintaining its electronic data processing systems to make the documentation of the Protocol and the Convention available electronically to the parties. This requires periodic procurement of necessary peripherals and software licences, and also updating of the existing computer servers.
	A minimum provision has been made to enable the Secretariat to replace some equipment each year.
4301	The rental cost is shared with the Trust Fund for the Montreal Protocol. The reduction in rent due to smaller office space occupied by the Secretariat from June 2014 is reflected in the Trust Fund for the Montreal Protocol budget, as the budget is approved on an annual basis. The Nairobi rental rates are determined by the United Nations Controller.
Miscellaneous component 5101–5401	Provisions under these budget lines are generally steady at the approved 2014 levels.
5202	Based on the preliminary costings for the report of the ninth Meeting of the Ozone Research Managers, the cost is decreased for the ninth and tenth meetings.
5305	A minimum amount has been set aside to cover activities in connection with the celebration of the thirtieth anniversary of the Vienna Convention.
5401	This budget line provides for the hospitality cost of the joint meetings of the Conference of the Parties and the Meeting of the Parties held in 2014 and 2017 and is slightly increased to reflect trends in increased costs.

Annex II

Trust Fund for the Vienna Convention for the Protection of the Ozone Layer
Scale of contributions by the parties for 2015, 2016 and 2017 based on the United Nations scale of assessments
(General Assembly resolution 67/238 of 24 December 2012 with a maximum assessment rate of 22 per cent)
(in 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*	*2015 contributions by parties*	*2016 contributions by parties*	*2017 contributions by parties*
1	Afghanistan	0.005	0.000	0.000	0	0	0
2	Albania	0.010	0.000	0.000	0	0	0
3	Algeria	0.137	0.137	0.137	823	823	823
4	Andorra	0.008	0.000	0.000	0	0	0
5	Angola	0.010	0.000	0.000	0	0	0
6	Antigua and Barbuda	0.002	0.000	0.000	0	0	0
7	Argentina	0.432	0.432	0.431	2 596	2 596	2 596
8	Armenia	0.007	0.000	0.000	0	0	0
9	Australia	2.074	2.074	2.067	12 465	12 465	12 465
10	Austria	0.798	0.798	0.795	4 796	4 796	4 796
11	Azerbaijan	0.040	0.000	0.000	0	0	0
12	Bahamas	0.017	0.000	0.000	0	0	0
13	Bahrain	0.039	0.000	0.000	0	0	0
14	Bangladesh	0.010	0.000	0.000	0	0	0
15	Barbados	0.008	0.000	0.000	0	0	0
16	Belarus	0.056	0.000	0.000	0	0	0
17	Belgium	0.998	0.998	0.995	5 998	5 998	5 998
18	Belize	0.001	0.000	0.000	0	0	0
19	Benin	0.003	0.000	0.000	0	0	0
20	Bhutan	0.001	0.000	0.000	0	0	0
21	Bolivia (Plurinational	0.009	0.000	0.000	0	0	0

	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*	*2015 contributions by parties*	*2016 contributions by parties*	*2017 contributions by parties*
	State of)						
22	Bosnia and Herzegovina	0.017	0.000	0.000	0	0	0
23	Botswana	0.017	0.000	0.000	0	0	0
24	Brazil	2.934	2.934	2.924	17 634	17 634	17 634
25	Brunei Darussalam	0.026	0.000	0.000	0	0	0
26	Bulgaria	0.047	0.000	0.000	0	0	0
27	Burkina Faso	0.003	0.000	0.000	0	0	0
28	Burundi	0.001	0.000	0.000	0	0	0
29	Cabo Verde	0.001	0.000	0.000	0	0	0
30	Cambodia	0.004	0.000	0.000	0	0	0
31	Cameroon	0.012	0.000	0.000	0	0	0
32	Canada	2.984	2.984	2.974	17 934	17 934	17 934
33	Central African Republic	0.001	0.000	0.000	0	0	0
34	Chad	0.002	0.000	0.000	0	0	0
35	Chile	0.334	0.334	0.333	2 007	2 007	2 007
36	China	5.148	5.148	5.131	30 940	30 940	30 940
37	Colombia	0.259	0.259	0.258	1 557	1 557	1 557
38	Comoros	0.001	0.000	0.000	0	0	0
39	Congo	0.005	0.000	0.000	0	0	0
40	Cook Islands	-	0.000	0.000	0	0	0
41	Costa Rica	0.038	0.000	0.000	0	0	0
42	Côte d’Ivoire	0.011	0.000	0.000	0	0	0
43	Croatia	0.126	0.126	0.126	757	757	757
44	Cuba	0.069	0.000	0.000	0	0	0
45	Cyprus	0.047	0.000	0.000	0	0	0

	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*	*2015 contributions by parties*	*2016 contributions by parties*	*2017 contributions by parties*
46	Czech Republic	0.386	0.386	0.385	2 320	2 320	2 320
47	Democratic People's Republic of Korea	0.006	0.000	0.000	0	0	0
48	Democratic Republic of the Congo	0.003	0.000	0.000	0	0	0
49	Denmark	0.675	0.675	0.673	4 057	4 057	4 057
50	Djibouti	0.001	0.000	0.000	0	0	0
51	Dominica	0.001	0.000	0.000	0	0	0
52	Dominican Republic	0.045	0.000	0.000	0	0	0
53	Ecuador	0.044	0.000	0.000	0	0	0
54	Egypt	0.134	0.134	0.134	805	805	805
55	El Salvador	0.016	0.000	0.000	0	0	0
56	Equatorial Guinea	0.010	0.000	0.000	0	0	0
57	Eritrea	0.001	0.000	0.000	0	0	0
58	Estonia	0.040	0.000	0.000	0	0	0
59	Ethiopia	0.010	0.000	0.000	0	0	0
60	European Union	2.500	2.500	2.492	15 025	15 025	15 025
61	Fiji	0.003	0.000	0.000	0	0	0
62	Finland	0.519	0.519	0.517	3 119	3 119	3 119
63	France	5.593	5.593	5.575	33 615	33 615	33 615
64	Gabon	0.020	0.000	0.000	0	0	0
65	Gambia	0.001	0.000	0.000	0	0	0
66	Georgia	0.007	0.000	0.000	0	0	0
67	Germany	7.141	7.141	7.118	42 919	42 919	42 919
68	Ghana	0.014	0.000	0.000	0	0	0
69	Greece	0.638	0.638	0.636	3 834	3 834	3 834

	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*	*2015 contributions by parties*	*2016 contributions by parties*	*2017 contributions by parties*
70	Grenada	0.001	0.000	0.000	0	0	0
71	Guatemala	0.027	0.000	0.000	0	0	0
72	Guinea	0.001	0.000	0.000	0	0	0
73	Guinea-Bissau	0.001	0.000	0.000	0	0	0
74	Guyana	0.001	0.000	0.000	0	0	0
75	Haiti	0.003	0.000	0.000	0	0	0
76	Holy See	0.001	0.000	0.000	0	0	0
77	Honduras	0.008	0.000	0.000	0	0	0
78	Hungary	0.266	0.266	0.265	1 599	1 599	1 599
79	Iceland	0.027	0.000	0.000	0	0	0
80	India	0.666	0.666	0.664	4 003	4 003	4 003
81	Indonesia	0.346	0.346	0.345	2 080	2 080	2 080
82	Iran (Islamic Republic of)	0.356	0.356	0.355	2 140	2 140	2 140
83	Iraq	0.068	0.000	0.000	0	0	0
84	Ireland	0.418	0.418	0.417	2 512	2 512	2 512
85	Israel	0.396	0.396	0.395	2 380	2 380	2 380
86	Italy	4.448	4.448	4.433	26 733	26 733	26 733
87	Jamaica	0.011	0.000	0.000	0	0	0
88	Japan	10.833	10.833	10.797	65 108	65 108	65 108
89	Jordan	0.022	0.000	0.000	0	0	0
90	Kazakhstan	0.121	0.121	0.121	727	727	727
91	Kenya	0.013	0.000	0.000	0	0	0
92	Kiribati	0.001	0.000	0.000	0	0	0
93	Kuwait	0.273	0.273	0.272	1 641	1 641	1 641
94	Kyrgyzstan	0.002	0.000	0.000	0	0	0
95	Lao People’s	0.002	0.000	0.000	0	0	0

	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*	*2015 contributions by parties*	*2016 contributions by parties*	*2017 contributions by parties*
	Democratic Republic						
96	Latvia	0.047	0.000	0.000	0	0	0
97	Lebanon	0.042	0.000	0.000	0	0	0
98	Lesotho	0.001	0.000	0.000	0	0	0
99	Liberia	0.001	0.000	0.000	0	0	0
100	Libya	0.142	0.142	0.142	853	853	853
101	Liechtenstein	0.009	0.000	0.000	0	0	0
102	Lithuania	0.073	0.000	0.000	0	0	0
103	Luxembourg	0.081	0.000	0.000	0	0	0
104	Madagascar	0.003	0.000	0.000	0	0	0
105	Malawi	0.002	0.000	0.000	0	0	0
106	Malaysia	0.281	0.281	0.280	1 689	1 689	1 689
107	Maldives	0.001	0.000	0.000	0	0	0
108	Mali	0.004	0.000	0.000	0	0	0
109	Malta	0.016	0.000	0.000	0	0	0
110	Marshall Islands	0.001	0.000	0.000	0	0	0
111	Mauritania	0.002	0.000	0.000	0	0	0
112	Mauritius	0.013	0.000	0.000	0	0	0
113	Mexico	1.842	1.842	1.836	11 071	11 071	11 071
114	Micronesia (Federated States of)	0.001	0.000	0.000	0	0	0
115	Monaco	0.012	0.000	0.000	0	0	0
116	Mongolia	0.003	0.000	0.000	0	0	0
117	Montenegro	0.005	0.000	0.000	0	0	0
118	Morocco	0.062	0.000	0.000	0	0	0
119	Mozambique	0.003	0.000	0.000	0	0	0

	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*	*2015 contributions by parties*	*2016 contributions by parties*	*2017 contributions by parties*
120	Myanmar	0.010	0.000	0.000	0	0	0
121	Namibia	0.010	0.000	0.000	0	0	0
122	Nauru	0.001	0.000	0.000	0	0	0
123	Nepal	0.006	0.000	0.000	0	0	0
124	Netherlands	1.654	1.654	1.649	9 941	9 941	9 941
125	New Zealand	0.253	0.253	0.252	1 521	1 521	1 521
126	Nicaragua	0.003	0.000	0.000	0	0	0
127	Niger	0.002	0.000	0.000	0	0	0
128	Nigeria	0.090	0.000	0.000	0	0	0
129	Niue	-	0.000	0.000	0	0	0
130	Norway	0.851	0.851	0.848	5 115	5 115	5 115
131	Oman	0.102	0.102	0.102	613	613	613
132	Pakistan	0.085	0.000	0.000	0	0	0
133	Palau	0.001	0.000	0.000	0	0	0
134	Panama	0.026	0.000	0.000	0	0	0
135	Papua New Guinea	0.004	0.000	0.000	0	0	0
136	Paraguay	0.010	0.000	0.000	0	0	0
137	Peru	0.117	0.117	0.117	703	703	703
138	Philippines	0.154	0.154	0.153	926	926	926
139	Poland	0.921	0.921	0.918	5 535	5 535	5 535
140	Portugal	0.474	0.474	0.472	2 849	2 849	2 849
141	Qatar	0.209	0.209	0.208	1 256	1 256	1 256
142	Republic of Korea	1.994	1.994	1.987	11 984	11 984	11 984
143	Republic of Moldova	0.003	0.000	0.000	0	0	0
144	Romania	0.226	0.226	0.225	1 358	1 358	1 358
145	Russian Federation	2.438	2.438	2.430	14 653	14 653	14 653

	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*	*2015 contributions by parties*	*2016 contributions by parties*	*2017 contributions by parties*
146	Rwanda	0.002	0.000	0.000	0	0	0
147	Saint Kitts and Nevis	0.001	0.000	0.000	0	0	0
148	Saint Lucia	0.001	0.000	0.000	0	0	0
149	Saint Vincent and the Grenadines	0.001	0.000	0.000	0	0	0
150	Samoa	0.001	0.000	0.000	0	0	0
151	San Marino	0.003	0.000	0.000	0	0	0
152	Sao Tome and Principe	0.001	0.000	0.000	0	0	0
153	Saudi Arabia	0.864	0.864	0.861	5 193	5 193	5 193
154	Senegal	0.006	0.000	0.000	0	0	0
155	Serbia	0.040	0.000	0.000	0	0	0
156	Seychelles	0.001	0.000	0.000	0	0	0
157	Sierra Leone	0.001	0.000	0.000	0	0	0
158	Singapore	0.384	0.384	0.383	2 308	2 308	2 308
159	Slovakia	0.171	0.171	0.170	1 028	1 028	1 028
160	Slovenia	0.100	0.000	0.000	0	0	0
161	Solomon Islands	0.001	0.000	0.000	0	0	0
162	Somalia	0.001	0.000	0.000	0	0	0
163	South Africa	0.372	0.372	0.371	2 236	2 236	2 236
164	South Sudan	0.004	0.000	0.000	0	0	0
165	Spain	2.973	2.973	2.963	17 868	17 868	17 868
166	Sri Lanka	0.025	0.000	0.000	0	0	0
167	Sudan	0.010	0.000	0.000	0	0	0
168	Suriname	0.004	0.000	0.000	0	0	0
169	Swaziland	0.003	0.000	0.000	0	0	0
170	Sweden	0.960	0.960	0.957	5 770	5 770	5 770

	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*	*2015 contributions by parties*	*2016 contributions by parties*	*2017 contributions by parties*
171	Switzerland	1.047	1.047	1.044	6 293	6 293	6 293
172	Syrian Arab Republic	0.036	0.000	0.000	0	0	0
173	Tajikistan	0.003	0.000	0.000	0	0	0
174	Thailand	0.239	0.239	0.238	1 436	1 436	1 436
175	The former Yugoslav Republic of Macedonia	0.008	0.000	0.000	0	0	0
176	Timor-Leste	0.002	0.000	0.000	0	0	0
177	Togo	0.001	0.000	0.000	0	0	0
178	Tonga	0.001	0.000	0.000	0	0	0
179	Trinidad and Tobago	0.044	0.000	0.000	0	0	0
180	Tunisia	0.036	0.000	0.000	0	0	0
181	Turkey	1.328	1.328	1.324	7 982	7 982	7 982
182	Turkmenistan	0.019	0.000	0.000	0	0	0
183	Tuvalu	0.001	0.000	0.000	0	0	0
184	Uganda	0.006	0.000	0.000	0	0	0
185	Ukraine	0.099	0.000	0.000	0	0	0
186	United Arab Emirates	0.595	0.595	0.593	3 576	3 576	3 576
187	United Kingdom of Great Britain and Northern Ireland	5.179	5.179	5.162	31 127	31 127	31 127
188	United Republic of Tanzania	0.009	0.000	0.000	0	0	0
189	United States of America	22.000	22.000	21.928	132 224	132 224	132 224
190	Uruguay	0.052	0.000	0.000	0	0	0
191	Uzbekistan	0.015	0.000	0.000	0	0	0
192	Vanuatu	0.001	0.000	0.000	0	0	0

	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*	*2015 contributions by parties*	*2016 contributions by parties*	*2017 contributions by parties*
193	Venezuela (Bolivarian Republic of)	0.627	0.627	0.625	3 768	3 768	3 768
194	Viet Nam	0.042	0.000	0.000	0	0	0
195	Yemen	0.010	0.000	0.000	0	0	0
196	Zambia	0.006	0.000	0.000	0	0	0
197	Zimbabwe	0.002	0.000	0.000	0	0	0
	Total	**102.501**	**100.330**	**100.000**	**603 000**	**603 000**	**603 000**

Annex III

Contributions by parties to the ninth replenishment of the Multilateral Fund (2015, 2016 and 2017)
(Replenishment totals $507.5 million, of which $437.5 million is from new contributions)

.	*Country*	*United Nations scale of assessment for the period 2013–2015*	*Adjusted United Nations scale of assessment with no party contributing more than 22 per cent*	*Annual contributions for years 2015, 2016 and 2017 (United States dollars)*	*Average inflation rate for the period 2012–2014 (per cent)*	*Qualifying fixed-exchange-rate mechanism use: yes=1, no=0*	*Fixed-exchange-rate mechanism users' currencies rates of exchange* [a]	*Fixed-exchange-rate mechanism users' national currencies*	*Fixed-exchange-rate mechanism users' payments in national currencies (United States dollars)*
1	Andorra	0.008	0.011086	16 168			0.72967	Euro	
2	Australia	2.074	2.874158	4 191 481	2.31	1	1.10283	Australian dollar	4 622 505
3	Austria	0.798	1.105872	1 612 730	2.14	1	0.72967	Euro	1 176 755
4	Azerbaijan	0.040	0.055432	80 839	2.09	1	0.78390	Azerbaijani Manat	63 369
5	Belarus	0.056	0.077605	113 174	32.03	0	9 776.66667	Belarusian ruble	
6	Belgium	0.998	1.383033	2 016 923	1.52	1	0.72967	Euro	1 471 681
7	Bulgaria	0.047	0.065133	94 985	0.54	1	1.42700	Bulgarian Lev	135 544
8	Canada	2.984	4.135240	6 030 559	1.47	1	1.09750	Canadian dollar	6 618 538
9	Croatia	0.126	0.174611	254 642	1.76	1	5.57017	Croatian kuna	1 418 396
10	Cyprus	0.047	0.065133	94 985	1.16	1	0.72967	Euro	69 308
11	Czech Republic	0.386	0.534920	780 092	1.77	1	20.02833	Czech Koruna	15 623 950
12	Denmark	0.675	0.935418	1 364 151	1.26	1	5.44550	Danish Krone	7 428 485
13	Estonia	0.040	0.055432	80 839	2.75	1	0.72967	Euro	58 985
14	Finland	0.519	0.719232	1 048 881	2.20	1	0.72967	Euro	765 333
15	France	5.593	7.750804	11 303 256	1.30	1	0.72967	Euro	8 247 609
16	Germany	7.141	9.896029	14 431 709	1.54	1	0.72967	Euro	10 530 337
17	Greece	0.638	0.884143	1 289 376	-0.07	1	0.72967	Euro	940 814
18	Holy See	0.001	0.001386	2 021			0.72967	Euro	
19	Hungary	0.266	0.368624	537 577	2.58	1	223.38333	Hungarian Forint	120 085 657
20	Iceland	0.027	0.037417	54 566	3.86	1	113.79833	Icelandic Krona	6 209 525
21	Ireland	0.418	0.579266	844 763	1.01	1	0.72967	Euro	616 396
22	Israel	0.396	0.548779	800 302	1.35	1	3.48817	Israeli Sheqel	2 791 587
23	Italy	4.448	6.164058	8 989 251	1.56	1	0.72967	Euro	6 559 157
24	Japan	10.833	15.012419	21 893 111	0.99	1	102.77000	Japanese Yen	2 249 955 013
25	Kazakhstan	0.121	0.167682	244 537	5.96	1	173.58667	Kazakhstani Tenge	42 448 316

26	Latvia	0.047	0.065133	94 985	1.01	1	0.72970	Euro	69 311
27	Liechtenstein	0.009	0.012472	18 189			0.89100	Swiss Franc	
28	Lithuania	0.073	0.101164	147 530	1.53	1	2.51950	Lithuanian Litas	371 703
29	Luxembourg	0.081	0.112250	163 698	1.89	1	0.72967	Euro	119 445
30	Malta	0.016	0.022173	32 335	1.74	1	0.72967	Euro	23 594
31	Monaco	0.012	0.016630	24 252			0.72967	Euro	
32	Netherlands	1.654	2.292120	3 342 676	1.97	1	0.72967	Euro	2 439 039
33	New Zealand	0.253	0.350609	511 304	1.25	1	1.19133	New Zealand Dollar	609 134
34	Norway	0.851	1.179320	1 719 841	1.61	1	6.06033	Norwegian Krone	10 422 810
35	Poland	0.921	1.276326	1 861 309	1.57	1	3.04867	Polish Zloty	5 674 509
36	Portugal	0.474	0.656871	957 937	1.08	1	0.72967	Euro	698 975
37	Romania	0.226	0.313192	456 738	2.93	1	3.25683	Romanian Leu	1 487 520
38	Russian Federation	2.438	3.378591	4 927 112	6.42	1	34.93833	Russian Roubles	172 145 082
39	San Marino	0.003	0.004157	6 063	1.71	1	0.72967	Euro	4 424
40	Slovakia	0.171	0.236973	345 585	1.77	1	0.72967	Euro	252 162
41	Slovenia	0.100	0.138580	202 096	1.62	1	0.72967	Euro	147 463
42	Spain	2.973	4.119996	6 008 328	1.31	1	0.72967	Euro	4 384 077
43	Sweden	0.960	1.330372	1 940 126	0.32	1	6.53700	Swedish Krona	12 682 605
44	Switzerland	1.047	1.450937	2 115 950	-0.29	1	0.89100	Swiss Franc	1 885 312
45	Tajikistan	0.003	0.004157	6 063	5.81	1	4.86833	Tajikistani Somoni	29 516
46	Ukraine	0.099	0.137195	200 076	3.91	1	10.33117	Ukrainian Hryvnia	2 067 013
47	United Kingdom of Great Britain and Northern Ireland	5.179	7.177081	10 466 576	2.34	1	0.60083	British Pound Sterling	6 288 668
48	United States of America	22.000	22.000000	32 083 333	1.84	1	1.00000	United States Dollar	32 083 333
49	Uzbekistan	0.015	0.020787	30 314	11.10	0	2 241.08333	Uzbekistani Som	
	Total	**78.285**	**100.00**	**145 833 333**					

[a] As per the World Economic Outlook database, International Monetary Fund website.
[b] Average United Nations operational rate of exchange from January to June 2014.

Annex IV

Trust fund for the Montreal protocol on substances that deplete the Ozone Layer

Approved 2014 and 2015 and proposed 2016 budgets

(United States dollars)

				Work months	*2014*	*2015*	*2016*
10 Personnel and conference services component							
	1100	Professional Staff					
		1101	Executive Secretary (D-2) (shared with the Vienna Convention (VC))	6	163 000	173 215	175 391
		1102	Deputy Executive Secretary (D-1)	12	117 000	312 000	319 176
		1103	Senior Legal Officer (P-5)	12	215 000	214 801	224 742
		1104	Senior Scientific Affairs Officer (P-5) (shared with VC)	6	100 000	103 738	108 585
		1105	Senior Administrative Officer (P-5) (paid by UNEP)	-			
		1106	Programme Officer (P-4) (Data and Information Systems)	12	178 000	182 094	186 282
		1107	Programme Officer (P-3) (Communication and Information) (paid from VC)	-			
		1108	Programme Officer (P-4) (Monitoring and Compliance)	12	236 000	256 428	248 671
	1199	**Subtotal**			**1 009 000**	**1 242 276**	**1 262 847**
	1200	Consultants					
		1201	Assistance in data-reporting, data analysis and promotion of the implementation of the Protocol		60 000	75 000	75 000
	1299	**Subtotal**			**60 000**	**75 000**	**75 000**
	1300	Administrative support					
		1301	Administrative Assistant (G-7) (shared with VC)	6	25 838	26 530	28 106
		1302	Administrative Assistant (G-6)	12	37 000	38 110	39 253

			Work months	*2014*	*2015*	*2016*
	1303	Programme Assistant (G-6) (paid from VC)	0			
	1304	Programme Assistant (Data) (G-6) (shared with VC)	6	20 000	20 230	20 497
	1305	Research Assistant (G-6) (shared with VC)	6	22 000	22 260	23 558
	1306	Information Management Assistant (G-6)	12	30 000	30 900	31 827
	1307	Data Assistant (G-7) (Computer Information Systems Assistant)	12	53 000	54 590	56 228
	1308	Administrative Assistant - Fund (G-7) (paid by UNEP - approved for upgrade to P-2, Associate Administrative Officer)	0			
	1309	Team Assistant/Logistics Assistant (G-4) (paid by UNEP)	0			
	1310	Meetings Services Assistant (G-6) (paid from VC)	0			
	1320	Temporary assistance		22 000	22 000	22 000
	Subtotal			**209 838**	**214 620**	**221 469**
	1321	Conference servicing costs of the Open-ended Working Group meetings		588 000	524 700	529 700
	1322	Conference servicing costs of the preparatory meetings and meetings of the parties (shared with VC every three years, applies to the Twenty-Sixth and Twenty-Ninth Meetings of the Parties to the Montreal Protocol and tenth and eleventh meetings of the Conference of the Parties to the Vienna Convention in 2014 and 2017)		420 000	464 700	469 700
	1323	Communications of A5 assessment panel members and organization costs of assessment panel meetings		79 000	70 000	70 000
	1324	Conference servicing cost of the Bureau meetings		20 000	20 000	20 000
	1325	Conference servicing costs of the Implementation Committee meetings		115 600	115 600	115 600

				Work months	*2014*	*2015*	*2016*
		1326	MP informal consultation meetings		10 000	10 000	10 000
		1329	Conference servicing costs of the workshop back to back with OEWG meeting		182 400		
		1330	Conference servicing costs of the two-day workshop on HFC management back to back with three-day OEWG meeting			524 700	
	1399	**Subtotal**			**1 415 000**	**1 729 700**	**1 215 000**
	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	**Subtotal**			**225 000**	**225 000**	**225 000**
1999	**Component total**				**2 918 838**	**3 486 596**	**2 999 316**
30 Meeting participation component							
	3300	Support for participation					
		3301	Travel of A5 countries to assessment panel meetings		450 000	450 000	450 000
		3302	Travel of A5 countries to the preparatory meetings and meetings of the parties		350 000	350 000	350 000
		3303	Travel of A5 countries to the OEWG meetings		300 000	300 000	300 000
		3304	Travel of A5 countries to the Bureau meetings		20 000	20 000	20 000
		3305	Travel of A5 countries to the Implementation Committee meetings		125 000	125 000	125 000
		3306	Consultations in an informal meeting		10 000	10 000	10 000
		3308	Travel of A5 countries to the workshop back to back with OEWG meeting		85 000		

				Work months	*2014*	*2015*	*2016*
		3309	Travel of A5 countries to the two-day workshop on HFC management back to back with three-day OEWG meeting			300 000	
	3399	**Subtotal**			**1 340 000**	**1 555 000**	**1 255 000**
3999	**Component total**				**1 340 000**	**1 555 000**	**1 255 000**
40 Equipment and premises component							
	4100	Expendable equipment (items under $1,500)					
		4101	Miscellaneous expendables (shared with VC)		20 000	18 000	18 000
	4199	**Subtotal**			**20 000**	**18 000**	**18 000**
	4200	Non-expendable 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	41 870	41 870
	4399	**Subtotal**			**51 870**	**41 870**	**41 870**
4999	**Component total**				**96 870**	**84 870**	**84 870**
50 Miscellaneous component							
	5100	Operation and 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					

				Work months	*2014*	*2015*	*2016*
		5201	Reporting		22 000	20 000	20 000
		5202	Reporting (assessment panels)		10 000	5 000	5 000
		5203	Reporting (Protocol awareness)		5 000	5 000	5 000
	5299	**Subtotal**			**37 000**	**30 000**	**30 000**
	5300	Sundry					
		5301	Communications		10 000	10 000	10 000
		5302	Freight charges		18 000	10 000	10 000
		5303	Training		12 000	10 000	10 000
		5304	Others (International Ozone Day)		10 000	10 000	10 000
	5399	**Subtotal**			**50 000**	**40 000**	**40 000**
	5400	Hospitality					
		5401	Hospitality		20 000	25 000	25 000
	5499	**Subtotal**			**20 000**	**25 000**	**25 000**
5999 Component total					**127 000**	**115 000**	**115 000**
99	**Total direct cost**				**4 482 708**	**5 241 466**	**4 454 186**
	Total budget				**4 482 708**	**5 241 466**	**4 454 186**
	Programme support costs (13 per cent))				582 752	681 391	579 044
	Grand total (inclusive of programme support costs)				**5 065 460**	**5 922 857**	**5 033 230**
	Draw down				788 527	1 645 924	756 297
	contribution from the parties				4 276 933	4 276 933	4 276 933
	Working capital reserve				677 974	677 974	677 974

Explanatory notes for the revision to the approved budget for 2014 and the approve budget for 2015 and proposed budget for 2016 of the Trust Fund for the Montreal Protocol on Substances that Deplete the Ozone Layer

Budget line	*Comment*
Personnel component 1101–1108	Indicative Professional-level salary costs applicable to the Nairobi duty station have been used for the budget proposals. Salary costs for staff at the Professional level are made up of: (a) the basic salaries; (b) post adjustment as determined and reviewed by the International Civil Service Commission throughout the year based on the cost of living index of the duty station where the staff are assigned; and (c) entitlements such as home leave travel and education grant. However, where information on actual staff costs is available, the figures have been adjusted accordingly. The inflation rate used for 2015–2016 is 2.3 per cent to take into account annual salary step increments as well as revisions decided by the International Civil Service Commission.
1101	The revised 2014 budget is reduced to reflect only salary and emoluments of the Executive Secretary. The approved budget was based on 2013 costs, which included repatriation costs for the former Executive Secretary and installation costs of the new Executive Secretary.
1102	The post of the Deputy Executive Secretary is expected to be filled by November 2014. The anticipated expenditure in 2014 will cover the salary and emoluments of the officer for two months as well as installation costs. The proposed budgets for 2015 and 2016 represent full years' salary and emoluments.
1105	The post of Senior Administrative Officer continues to be paid by the United Nations Environment Programme (UNEP) from the programme support costs based on actual expenditures.
1107	The post of the Programme Officer (Communication and Information) is paid from the Vienna Convention Trust Fund.
1106 and 1108	The budgets are increased to reflect the costs associated with the upgrades to the P-4 level. Although the upgrades took effect in 2012, the budgets were inadvertently maintained at the P-3 level.
Consultants 1201	Assistance in data reporting, updating of publications, translation of essential features of the Ozone Secretariat website and the maintenance of a fully interlinked digital system at the Secretariat will continue to be required. The 2014 amount has been decreased slightly in line with actual needs. However, the 2015 and 2016 levels have been kept at the originally approved 2014 level. Funds under this line may be transferred to line 1100 to create or support short-term Professional posts if necessary.
Administrative support/personnel 1301–1310	The 2015–2016 budget proposals reflect trends in actual costs and a 3 per cent inflationary rate.
1303 and 1310	The posts of Programme Assistant and Meeting Services Assistant are funded from the Vienna Convention Trust Fund.
Administrative support/conference services	Necessary funds may be transferred from the conference servicing budget lines (1321–1326) should such services be required either through individual consultancies or corporate contracts.
1321–1326	The current conference servicing costs are based on the following assumptions:
1321	The revised 2014 budget provides for one meeting of the Open-ended Working Group, held in Paris. The proposed budgets for 2015 and 2016 provide for one meeting each year to be held in Nairobi or at another United Nations venue in the six official United Nations languages; any additional costs arising from holding the meetings at any other locations will be reflected in revised budgets that will be presented to parties for approval.
1322	The revised Montreal Protocol budget for 2014 is shared with the Vienna Convention budget for the tenth meeting of the Conference of the Parties to the Vienna Convention. The revised 2014 budgeted amount is based on the cost of holding the Meeting of the Parties in Paris in 2014 in the six official United Nations languages. The proposed budgets for 2015 and 2016 are based on estimated costs of holding the Meeting of the Parties in Nairobi or at another United Nations venue. Any additional costs arising from holding the meetings in any other locations will be borne by the Governments hosting the meetings. In the event that the meetings are not hosted by Governments, the additional costs will be reflected in revised budgets that will be presented to parties for

Budget line	*Comment*
	approval.
1323	The revised 2014 budget is reduced to reflect projected costs of meetings of the assessment panels and the technical options committees of the Technology and Economic Assessment Panel and communication and other sundry costs related to the work of panel members. The proposed budget for each year in 2015 and 2016 is a reduction from the 2014 budget as 2014 was an assessment year and more meetings were expected to be convened in 2014.
1324	One Bureau meeting is scheduled for each of the years 2015 and 2016 with provision for interpretation and document translation into the appropriate languages based on the membership of the Bureau.
1325	The proposed revised 2014 budget reflects increased meeting costs related to convening two meetings of the Implementation Committee in Paris. The proposed budget for 2015 and 2016 are maintained steady at the revised 2014 level to accommodate generally increased costs of interpretation and document translation.
1326	At least one informal consultation meeting per year expected to take place in Nairobi is envisaged for 2015 and 2016 to facilitate the work of assisting the parties and promoting ratification of and compliance with the Montreal Protocol and its amendments.
1329	The proposed revised 2014 budget reflects increased cost of convening the hydrofluorocarbon (HFC) workshop in Paris.
1330	The 2015 budget reflects the conference services cost for holding a two-day workshop on HFC management back to back with a three-day OEWG meeting in Nairobi or at another United Nations venue.
Travel on official business 1601–1602	Travel on official business for 2015 and 2016 is maintained at the 2014 level.
Meetings/participation component 3301–3308	Participation of representatives of developing countries The participation of representatives of parties operating under paragraph 1 of Article 5 in the various Protocol meetings is budgeted at $5,000 per representative per meeting taking into account no more than the travel costs for one person per country using the most appropriate and advantageous economy-class fare and United Nations daily subsistence allowances.
3301	The budget provision requested in 2015 and 2016 for travel of members and experts of the assessment panels and the technical options committees attending assessment panel meetings has been maintained at the 2014 approved level to ensure completion of the work of the panels (see UNEP/OzL.Pro.WG.1/34/INF/2, sect. III.B).
3302	The budget provision is based on an average of 70 participants attending the Meeting of the Parties to the Montreal Protocol in 2015 and 2016.
3303	Participation costs are based on some 60 participants attending the Open-ended Working Group meetings in both 2015 and 2016.
3304	Participation costs are based on one Bureau meeting per year for four Bureau members from developing countries or countries with economies in transition at each meeting.
3305	The participation costs for the two Implementation Committee meetings per year are based on eight members from developing countries and countries with economies in transition at each meeting and one representative each from three or four countries invited by the Implementation Committee at each meeting. Provision has also been made for travel by the Implementation Committee President or Vice-President from a country operating under paragraph 1 of Article 5 to attend two Executive Committee meetings a year.
3306	Funds have been allocated to finance the participation of two participants from developing countries and countries with economies in transition in informal consultations in 2015 and 2016 on critical issues relating to the Montreal Protocol. It is expected that these consultations will be held in Nairobi.
3308	The budget reflects the additional cost of daily subsistence allowances for participants from developing countries and countries with economies in transition attending the HFC workshop held back to back with the Open-ended Working Group meeting in Paris in 2014.
3309	Travel cost of Article 5 party participants in the two-day workshop to be held back to back with three-day Open-ended Working Group meeting
Equipment and premises component 4101–4301	

Budget line	*Comment*
4101	The slightly reduced budget reflects costs associated with the expendable equipment for the operation of the secretariat.
4205	A small amount has been allocated to provide for increased server capacity as required to respond to the demands of paperless meetings and to enable the Secretariat to replace equipment as required.
4301	The allocation for rental of premises in 2015 and 2016 reflects reduced rental costs as the Secretariat has moved into smaller office space as of June 2014. The reduction in rent will be reflected in the 2015 costs. The Nairobi rental rates are determined by the United Nations Controller.
Miscellaneous component 5101– 5401	
5201–5203	General reporting costs, including editing, translation, and duplication, publishing and printing, are provided for under lines 5201 to 5203.
5201	The revised 2014 budget is slightly increased to cover increased reporting costs associated with the meetings in 2014. However, in 2015 and 2016, the line reverts to the original 2014 amount owing to the anticipated slightly reduced printing costs.
5202	This budget is reserved for reporting by assessment panels. The proposed budgets for 2015 and 2016 are reduced since these are not assessment years and less reporting is required.
5203	A small amount is allocated for editing, translation, duplication, publication and printing related to Protocol awareness campaigns.
5301	Careful monitoring of telecommunications resources and the use of electronic mail instead of facsimile communications has enabled the Secretariat to maintain a relatively low budget provision under this line. The use of free communications technology also enables the Secretariat to reduce expenditure against this budget line.
5302	Of the 197 parties to the Montreal Protocol, only 11 countries still require that paper documents be mailed to them, which means that the cost of dispatching correspondence and meeting documentation has been further reduced. This budget is further reduced to reflect the associated savings.
5303	The provision for training will be maintained to meet evolving training needs and to cater for training schemes introduced by the United Nations as a result of its continuing human resources reform programme and guidelines for continuous training to encourage high performance delivery by staff. The budget is slightly reduced to reflect trends in actual expenditure.
5304	The Ozone Secretariat will continue to provide assistance to specific countries during 2015 and 2016 to assist in their preparations for the celebration of the International Day for the Preservation of the Ozone Layer.
5401	This budget line provides for the hospitality cost of the Open-ended Working Group meeting and the Meeting of the Parties and is slightly increased to reflect trends in increased costs.

Annex V

Trust Fund for the Montreal Protocol on Substances that Deplete the Ozone Layer
Scale of contributions by the parties for 2015 based on the United Nations scale of assessments
(General Assembly resolution 67/238 of 24 December 2012 with a maximum assessment rate of 22 per cent)

(United States dollars)

	Party	*United Nations scale of assessments for 2013–2015*	*Adjusted United Nations scale to exclude non-contributors*	*Adjusted United Nations scale with 22 per cent maximum assessment rate considered*	*2015 contributions by parties*	*Indicative 2016 contributions by parties*
1	Afghanistan	0.005	0.000	0.000	0	0
2	Albania	0.010	0.000	0.000	0	0
3	Algeria	0.137	0.137	0.137	5 840	5 840
4	Andorra	0.008	0.000	0.000	0	0
5	Angola	0.010	0.000	0.000	0	0
6	Antigua and Barbuda	0.002	0.000	0.000	0	0
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	0	0
12	Bahamas	0.017	0.000	0.000	0	0
13	Bahrain	0.039	0.000	0.000	0	0
14	Bangladesh	0.010	0.000	0.000	0	0
15	Barbados	0.008	0.000	0.000	0	0
16	Belarus	0.056	0.000	0.000	0	0
17	Belgium	0.998	0.998	0.995	42 543	42 543
18	Belize	0.001	0.000	0.000	0	0
19	Benin	0.003	0.000	0.000	0	0
20	Bhutan	0.001	0.000	0.000	0	0
21	Bolivia (Plurinational State of)	0.009	0.000	0.000	0	0
22	Bosnia and Herzegovina	0.017	0.000	0.000	0	0
23	Botswana	0.017	0.000	0.000	0	0
24	Brazil	2.934	2.934	2.924	125 072	125 072
25	Brunei Darussalam	0.026	0.000	0.000	0	0
26	Bulgaria	0.047	0.000	0.000	0	0
27	Burkina Faso	0.003	0.000	0.000	0	0
28	Burundi	0.001	0.000	0.000	0	0
29	Cabo Verde	0.001	0.000	0.000	0	0
30	Cambodia	0.004	0.000	0.000	0	0
31	Cameroon	0.012	0.000	0.000	0	0
32	Canada	2.984	2.984	2.974	127 204	127 204
33	Central African Republic	0.001	0.000	0.000	0	0
34	Chad	0.002	0.000	0.000	0	0
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

	Party	*United Nations scale of assessments for 2013–2015*	*Adjusted United Nations scale to exclude non-contributors*	*Adjusted United Nations scale with 22 per cent maximum assessment rate considered*	*2015 contributions by parties*	*Indicative 2016 contributions by parties*
38	Comoros	0.001	0.000	0.000	0	0
39	Congo	0.005	0.000	0.000	0	0
40	Cook Islands	-	0.000	0.000	0	0
41	Costa Rica	0.038	0.000	0.000	0	0
42	Côte d'Ivoire	0.011	0.000	0.000	0	0
43	Croatia	0.126	0.126	0.126	5 371	5 371
44	Cuba	0.069	0.000	0.000	0	0
45	Cyprus	0.047	0.000	0.000	0	0
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	0	0
48	Democratic Republic of the Congo	0.003	0.000	0.000	0	0
49	Denmark	0.675	0.675	0.673	28 774	28 774
50	Djibouti	0.001	0.000	0.000	0	0
51	Dominica	0.001	0.000	0.000	0	0
52	Dominican Republic	0.045	0.000	0.000	0	0
53	Ecuador	0.044	0.000	0.000	0	0
54	Egypt	0.134	0.134	0.134	5 712	5 712
55	El Salvador	0.016	0.000	0.000	0	0
56	Equatorial Guinea	0.010	0.000	0.000	0	0
57	Eritrea	0.001	0.000	0.000	0	0
58	Estonia	0.040	0.000	0.000	0	0
59	Ethiopia	0.010	0.000	0.000	0	0
60	European Union	2.500	2.500	2.492	106 572	106 572
61	Fiji	0.003	0.000	0.000	0	0
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	0	0
65	Gambia	0.001	0.000	0.000	0	0
66	Georgia	0.007	0.000	0.000	0	0
67	Germany	7.141	7.141	7.118	304 411	304 411
68	Ghana	0.014	0.000	0.000	0	0
69	Greece	0.638	0.638	0.636	27 197	27 197
70	Grenada	0.001	0.000	0.000	0	0
71	Guatemala	0.027	0.000	0.000	0	0
72	Guinea	0.001	0.000	0.000	0	0
73	Guinea-Bissau	0.001	0.000	0.000	0	0
74	Guyana	0.001	0.000	0.000	0	0
75	Haiti	0.003	0.000	0.000	0	0
76	Holy See	0.001	0.000	0.000	0	0
77	Honduras	0.008	0.000	0.000	0	0
78	Hungary	0.266	0.266	0.265	11 339	11 339
79	Iceland	0.027	0.000	0.000	0	0
80	India	0.666	0.666	0.664	28 391	28 391

	Party	*United Nations scale of assessments for 2013–2015*	*Adjusted United Nations scale to exclude non-contributors*	*Adjusted United Nations scale with 22 per cent maximum assessment rate considered*	*2015 contributions by parties*	*Indicative 2016 contributions by parties*
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	0	0
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	0	0
88	Japan	10.833	10.833	10.797	461 796	461 796
89	Jordan	0.022	0.000	0.000	0	0
90	Kazakhstan	0.121	0.121	0.121	5 158	5 158
91	Kenya	0.013	0.000	0.000	0	0
92	Kiribati	0.001	0.000	0.000	0	0
93	Kuwait	0.273	0.273	0.272	11 638	11 638
94	Kyrgyzstan	0.002	0.000	0.000	0	0
95	Lao People's Democratic Republic	0.002	0.000	0.000	0	0
96	Latvia	0.047	0.000	0.000	0	0
97	Lebanon	0.042	0.000	0.000	0	0
98	Lesotho	0.001	0.000	0.000	0	0
99	Liberia	0.001	0.000	0.000	0	0
100	Libya	0.142	0.142	0.142	6 053	6 053
101	Liechtenstein	0.009	0.000	0.000	0	0
102	Lithuania	0.073	0.000	0.000	0	0
103	Luxembourg	0.081	0.000	0.000	0	0
104	Madagascar	0.003	0.000	0.000	0	0
105	Malawi	0.002	0.000	0.000	0	0
106	Malaysia	0.281	0.281	0.280	11 979	11 979
107	Maldives	0.001	0.000	0.000	0	0
108	Mali	0.004	0.000	0.000	0	0
109	Malta	0.016	0.000	0.000	0	0
110	Marshall Islands	0.001	0.000	0.000	0	0
111	Mauritania	0.002	0.000	0.000	0	0
112	Mauritius	0.013	0.000	0.000	0	0
113	Mexico	1.842	1.842	1.836	78 522	78 522
114	Micronesia (Federated States of)	0.001	0.000	0.000	0	0
115	Monaco	0.012	0.000	0.000	0	0
116	Mongolia	0.003	0.000	0.000	0	0
117	Montenegro	0.005	0.000	0.000	0	0
118	Morocco	0.062	0.000	0.000	0	0
119	Mozambique	0.003	0.000	0.000	0	0
120	Myanmar	0.010	0.000	0.000	0	0
121	Namibia	0.010	0.000	0.000	0	0
122	Nauru	0.001	0.000	0.000	0	0
123	Nepal	0.006	0.000	0.000	0	0

	Party	*United Nations scale of assessments for 2013–2015*	*Adjusted United Nations scale to exclude non-contributors*	*Adjusted United Nations scale with 22 per cent maximum assessment rate considered*	*2015 contributions by parties*	*Indicative 2016 contributions by parties*
124	Netherlands	1.654	1.654	1.649	70 508	70 508
125	New Zealand	0.253	0.253	0.252	10 785	10 785
126	Nicaragua	0.003	0.000	0.000	0	0
127	Niger	0.002	0.000	0.000	0	0
128	Nigeria	0.090	0.000	0.000	0	0
129	Niue	-	0.000	0.000	0	0
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	0	0
133	Palau	0.001	0.000	0.000	0	0
134	Panama	0.026	0.000	0.000	0	0
135	Papua New Guinea	0.004	0.000	0.000	0	0
136	Paraguay	0.010	0.000	0.000	0	0
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	0	0
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	0	0
147	Saint Kitts and Nevis	0.001	0.000	0.000	0	0
148	Saint Lucia	0.001	0.000	0.000	0	0
149	Saint Vincent and the Grenadines	0.001	0.000	0.000	0	0
150	Samoa	0.001	0.000	0.000	0	0
151	San Marino	0.003	0.000	0.000	0	0
152	Sao Tome and Principe	0.001	0.000	0.000	0	0
153	Saudi Arabia	0.864	0.864	0.861	36 831	36 831
154	Senegal	0.006	0.000	0.000	0	0
155	Serbia	0.040	0.000	0.000	0	0
156	Seychelles	0.001	0.000	0.000	0	0
157	Sierra Leone	0.001	0.000	0.000	0	0
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	0	0
161	Solomon Islands	0.001	0.000	0.000	0	0
162	Somalia	0.001	0.000	0.000	0	0
163	South Africa	0.372	0.372	0.371	15 858	15 858
164	South Sudan	0.004	0.000	0.000	0	0
165	Spain	2.973	2.973	2.963	126 735	126 735
166	Sri Lanka	0.025	0.000	0.000	0	0

	Party	*United Nations scale of assessments for 2013–2015*	*Adjusted United Nations scale to exclude non-contributors*	*Adjusted United Nations scale with 22 per cent maximum assessment rate considered*	*2015 contributions by parties*	*Indicative 2016 contributions by parties*
167	Sudan	0.010	0.000	0.000	0	0
168	Suriname	0.004	0.000	0.000	0	0
169	Swaziland	0.003	0.000	0.000	0	0
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	0	0
173	Tajikistan	0.003	0.000	0.000	0	0
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	0	0
176	Timor-Leste	0.002	0.000	0.000	0	0
177	Togo	0.001	0.000	0.000	0	0
178	Tonga	0.001	0.000	0.000	0	0
179	Trinidad and Tobago	0.044	0.000	0.000	0	0
180	Tunisia	0.036	0.000	0.000	0	0
181	Turkey	1.328	1.328	1.324	56 611	56 611
182	Turkmenistan	0.019	0.000	0.000	0	0
183	Tuvalu	0.001	0.000	0.000	0	0
184	Uganda	0.006	0.000	0.000	0	0
185	Ukraine	0.099	0.000	0.000	0	0
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	0	0
189	United States of America	22.000	22.000	21.928	937 830	937 830
190	Uruguay	0.052	0.000	0.000	0	0
191	Uzbekistan	0.015	0.000	0.000	0	0
192	Vanuatu	0.001	0.000	0.000	0	0
193	Venezuela (Bolivarian Republic of)	0.627	0.627	0.625	26 728	26 728
194	Viet Nam	0.042	0.000	0.000	0	0
195	Yemen	0.010	0.000	0.000	0	0
196	Zambia	0.006	0.000	0.000	0	0
197	Zimbabwe	0.002	0.000	0.000	0	0
	Total	**102.501**	**100.330**	**100.000**	**4 276 933**	**4 276 933**

Annex VI

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

I. Technology and Economic Assessment Panel presentation on the replenishment of the Multilateral Fund for the Implementation of the Montreal Protocol

1. Ms. Shiqiu Zhang, co-chair of the Technology and Economic Assessment Panel task force on the funding requirement for the 2015–2017 replenishment of the Multilateral Fund (decision XXV/8), started the presentation on the supplemental report to the task force's assessment report on the funding requirement for the replenishment. She elaborated on the mandate given, on the timeline that applied before the supplemental report had been submitted to UNEP and on the fact that a small addendum to the report had been published in October 2014 on equal funding distribution. She emphasized that the Panel's estimated total funding requirement for the triennium 2015–2017 (and for subsequent triennia) had not changed compared to what was reported in the May 2014 task force report. She continued with an explanation of case 1, "commitment based" phase-out, in which funding for stage II HPMPs addressed the difference between the total reduction committed to in stage I agreements (expressed as a percentage) and the 35 per cent reduction level for 2020. Case 2, the "funding-based" phase-out, addressed the difference between the total of the forecast reduction (in each sub-sector) on which stage I HPMP funding was based and the 35 per cent reduction level for 2020. Values would all be expressed in ODP-tonnes. She mentioned that, for many non-low-volume-consuming (LVC) countries, the stage II HPMP consumption to be addressed in case 2 was significantly lower than that to be addressed in case 1, because additional phase-out had occurred in stage I. She also said that, for a few non-LVC countries, no additional funding would be needed for the 2020 reduction target, since they were expected to exceed their 2020 reduction targets in stage I. She presented tables for case 1 and case 2 with specific percentages for certain countries and the related amounts of HCFCs in ODP-tonnes. For case 1, the average weighted reduction to be funded was 20 per cent of the baseline, and for case 2 it was 12 per cent, a substantial difference.

2. Mr. Lambert Kuijpers, co-chair of the task force, noted that, in addition to the three disbursement schedules in the May 2014 report, a fourth (25-25-25-25 per cent over four years) had been considered. He said that the result of less front loading was a reduction of $50 million for the first triennium with the addition of that amount to the next triennium; he also said that slow disbursement schedules were not consistent with project implementation practices, which required procurement in the first one or two years of a project. He continued with an elaboration on the foam (HCFC) percentage in the total amounts addressed. Varying the foam proportion (compared to the task force calculations) to be addressed in stage II of HPMPs would lead to significant differences in funding in the two next triennia. For case 1, a 10 per cent increase in the foam proportion (to 60 per cent) would result in a decrease of about $53 million while a 10 per cent decrease (to 40 per cent) would result in an increase of about $59 million. For case 2, a 10 per cent increase (to 60 per cent) would result in a decrease of about $33 million, and a 10 per cent decrease (to 40 per cent) in an increase of about $38 million. He said that the various foam proportions would also result in different climate impacts. Reducing the foam percentage from 60 to 40 per cent in case 1 would increase avoidance from 105 to 130 metric tonnes CO_2-equivalent and, in case 2, in an avoidance increase from 69 to 86 metric tonnes CO_2-equivalent. That would occur at a climate cost effectiveness of about $4.8 per tonne CO_2-equivalent.

3. He continued with an elaboration of the funding profile. The funding equalization options presented in the supplemental report included a redistribution of existing funding commitments, where options for equalization presented in the October addendum to the May report all assumed that existing funding commitments would not be redistributed. He also noted that there were a number of key scenarios, from a base case with different funding amounts per triennium to a scenario in which HPMP stage II funding and part of the funding for 2025 commitments were combined and averaged over the next two triennia. He showed a number of tables with the various amounts specified per triennium. Many scenarios – both for case 1 and case 2 – resulted in very uneven distributions. A scenario where funding for HPMP II plus part of the 2012–2023 funding was distributed equally over the first and second trienniums gave a fairly stable outcome over two trienniums. Nevertheless, he said, the task force confirmed its recommendation regarding funding in the May 2014 report.

4. He said that an in-depth study had been performed on the impact of funding for existing HPMP stage I agreements on the decrease of consumption in selected future years (funding for non-LVCs and LVCs), but the task force was not able to give any quantitative results. That was because funding would depend heavily on the consumption levels reported for those years, which were difficult to estimate. Where it concerned servicing, he said that the introduction of more low-GWP technologies might lead to increased funding requirements to address safety and health issues; the task force, however, had not developed recommendations beyond those called for in decision 60/44 of the Executive Committee of the Multilateral Fund. He also said that extensive consideration had been given to multinational and non-eligible enterprises. Many multinational operations were taking place in countries that had already committed to large reductions; non-eligible enterprises might need to be considered in the future, but it would depend heavily on the infrastructure of a country when they were to be addressed.

5. He also said that a cost estimate for the conduct of surveys of high-GWP alternatives to ozone-depleting substances and for preparing projects had been provided, based on the levels of funding provided under Executive Committee decision 71/42, on the preparation of stage II HPMPs. Costs would amount to $10.45 million. He said that such a survey could also address the current consumption of low-GWP substances in Article 5 parties. For the conversion away from high-GWP substances, he said that the long-term development in cost effectiveness factors was difficult to forecast and that the “historic” cost effectiveness factors had therefore been important for the determination of the funding for stage II HPMPs. As an example, he said that avoidance of 50 per cent of high GWP-alternatives in room air-conditioning applications would equal about 95 metric tonnes CO_2-equivalent in case 1 and about 63 metric tonnes CO_2-equivalent in case 2. That would imply a climate cost effectiveness of about $5.9 per tonne CO_2, at a cost effectiveness of $10.1/kg.

6. He mentioned that production capacity for HFCs was expected to grow by a factor of two in the next decade, especially in Article 5 parties, due mainly to an increase in demand for new equipment rather than the conversion of existing HCFC-based production lines. Therefore, supporting the maximum possible phase-in of low-GWP alternatives might be the most practicable way forward to limit increases in HFC consumption. He also noted that not-in-kind technologies were unlikely to deliver a substantial saving in the near term; various methods of heating and cooling, however, such as district cooling, might provide additional savings.

7. On swing plants, he said that HCFC production in swing plants other than in China had been about 40,000 tonnes in the year 2012 (down from a 2009 level of 66,000 tonnes). He said that if funding for swing plants were based on capacity of 50,000 tonnes, at a cost of $1–1.5 per kg, it would add a funding requirement of $9.5–14.5 million per triennium. The total funding for production phase-out given in the May report would then increase to $82–87 million for the first triennium (2015–2017) and to $75–80 million for the second triennium (2017–2020).

8. In concluding, he said that the most significant impact on the replenishment would be the way that case 1 and case 2 were considered for funding for the next two triennia and that any major change in the proportion of foams versus room air-conditioning would have an impact on the relative funding levels for the next two triennia, but not on the overall funding requirement. He also said that there was a need to consider the longer term operation of the Multilateral Fund, as well as how the Fund operated in real terms, including where it concerned the requirements of the implementing agencies with regard to disbursement schedules and other parameters.

II. Methyl Bromide Technical Options Committee presentation on methyl bromide critical-use nominations

9. The Co-Chairs of the Methyl Bromide technical options committee, Mr. Mohammed Besri, Mr. Ian Porter and Ms. Marta Pizano, presented the final recommendations for critical-use nominations and other issues.

10. Mr. Porter introduced the presentation by summarizing methyl bromide consumption in Article 5 parties and non-Article 5 parties. He reported that global consumption of methyl bromide for controlled uses had fallen from 64,420 tonnes in 1991 to 2,388 tonnes in 2013. He noted that in accordance with paragraph 1 (b) (ii) of decision IX/6 Article 5 parties (as well as non-Article 5 parties) would need to report on stocks if applying for future critical-use exemptions.

11. He stressed that the Methyl Bromide Technical Options Committee assessed nominations using the strict criteria of decision IX/6, whereby a use of methyl bromide should qualify as "critical" only if there were no technically and economically feasible alternatives (or substitutes) available to the user or suitable for the crops and circumstances of the nomination. That required parties to provide

technical data to justify the lack of effectiveness of key alternatives in a particular sector, which was particularly important as new critical-use nominations from sectors in Article 5 parties generally reported target pathogens that were generally similar to those in sectors in non-Article 5 parties.

12. He then provided an overview of recommendations for critical-use exemptions for three non-Article 5 parties (Australia, Canada and the United States) and three Article 5 parties that had submitted nominations for 2016 and 2015, respectively. Consensus had been achieved on all nominations.

13. For commodity uses, one nomination of 3.240 tonnes had been received from the United States for dry cure pork and that amount was recommended. Research had identified several promising chemical and non-chemical alternatives (phosphine, insecticides and sulfuryl fluoride with heat), but the party had demonstrated that they were not yet effective on a commercial scale.

14. For pre-plant soil uses, the three non-Article 5 parties had requested amounts totalling 266.561 tonnes and that amount was fully recommended. For the first time, Article 5 parties had requested amounts of 505 tonnes, and a reduced amount of 198.957 tonnes was recommended.

15. The Australian nomination of 29.76 tonnes for strawberry runners was recommended in the amount of 28.765 tonnes. The Committee considered that no technical or economic alternatives were available for bulking stages of runner multiplication in soil. The party had substantiated that substrates were not economically feasible and had also provided an update on its active research programme during the thirty-fourth meeting of the Open-ended Working Group and was to provide an update to the Working Group at its thirty-sixth meeting.

16. The Canadian nomination of 5.261 tonnes for strawberry runners was recommended. The Committee considered that micropropagated plants had been adopted to replace methyl bromide for early multiplication stages and the party had substantiated that substrate technology was not economically feasible for the final stages of multiplication. The Committee was unclear whether important groundwater studies would proceed at Prince Edward Island and reminded the party that an update was required for the thirty-sixth meeting of the Open-ended Working Group in accordance with decision XXV/4.

17. The United States nomination of 231.540 tonnes for strawberry fruit was recommended. The Committee had noted that the Party had indicated that even though restrictions had affected uptake of key alternatives, the nomination would be the last one for the sector.

18. Mr. Besri then presented an overview of Article 5 party nominations for critical-use exemptions after the phase-out date of 2015.

19. Two nominations from Argentina of 145 tonnes for the tomato and pepper sector and 100 tonnes for the strawberry fruit sector were not recommended. He explained that despite new information being provided after the thirty-fourth meeting of the Open-ended Working Group the submission did not provide suitable specific data that supported the ineffectiveness of alternatives registered and available in Argentina. The need for methyl bromide was therefore not supported in accordance with decision IX/6. That was particularly important as the nominated sectors had effective alternatives in many other countries and no other party had submitted critical-use nominations for those sectors.

20. One nomination from China for 90 tonnes for open field ginger production was recommended in full, but a nomination of 30 tonnes for protected ginger was recommended for 24 tonnes. The Committee considered the methyl bromide dosage rate used for outdoor ginger in China, 40 g/m^2, which was considered suitable for the control of the target pathogens and weeds. The Committee also considered that China faced unique pathogens and weeds compared to sectors in non-Article 5 parties (e.g., Japan) that had phased out methyl bromide.

21. Two nominations received from Mexico for 70 tonnes for the raspberry nursery sector and 70 tonnes for the strawberry nursery sector were recommended at reduced amounts of 43.539 tonnes and 41.418 tonnes, respectively. After the thirty-fourth meeting of the Open-ended Working Group, the party had provided additional information showing promising results with key alternatives, but no request for reassessment had been made and the party accepted the interim recommendations.

III. Technology and Economic Assessment Panel presentation on alternatives to ozone-depleting substances

22. Mr Paul Ashford, co-chair of the decision XXV/5 task force, introduced the presentation on the final report, noting that it was an update of the interim report presented at the thirty-fourth meeting

of the Open-ended Working Group. Although the presentation covered the entire report, it would focus on the changes and updates made between the thirty-fourth meeting of the Open-ended Working Group and the current meeting, partly as a result of informal discussions that had taken place with parties at the thirty-fourth meeting of the Open-ended Working Group.

23. The main changes identified by Mr. Ashford were the revision of the business as usual (BAU) scenarios to exclude the impact of any regulatory action taken after 2010, changes in data presentation to allow for easier comparisons between sector impacts and the easier identification of sectors of particular importance for potential mitigation strategies. Additionally, he mentioned that it had been decided by the task force to gather all of the information relating to alternatives capable of operation in high ambient temperature conditions into a single annex for ease of reference. It was stressed, however, that no new information had become available during the intervening period.

24. Information on the consumption of HCFCs and HFCs for both refrigeration and air-conditioning (RAC) and insulating foams under the BAU scenario was presented. Mr Roberto Peixoto, co-chair of the task force, explained the refrigerant use patterns, placing particular emphasis on the challenges created by high ambient temperature conditions in certain regions. Mr Lambert Kuijpers, co-chair of the task force, then described the comparative consumption curves for RAC and foam applications, which served to indicate the importance of the RAC sector in the projected growth of total HFC consumption under the BAU scenario. RAC consumption was expected to be 1,650 metric tonnes CO_2-equivalent in 2020 globally, for both the BAU and the mitigation scenarios. Under BAU consumption was expected to double by 2030, mainly due to growth in Article 5 parties. The numbers could be compared to foam blowing agent consumption by 2020, which was expected to be about 180 metric tonnes CO_2-equivalent globally under the BAU scenario.

25. Mr. Kuijpers then described the potential for avoiding consumption in the RAC sector by way of two mitigation scenarios – one of which was more progressive than the other. In RAC, only a very strict MIT-2 scenario would lead to a decrease in RAC consumption in Article 5 parties after an expected peak in around 2025 of about 1,100 metric tonnes CO_2-equivalent. Indicative costs for avoidance in both cases were provided for both non-Article 5 and Article 5 parties, and for both types of countries a range of $1.1–$3.3 billion was given. Mr Ashford presented similar information on mitigation scenarios for the foam sector before summarizing the potential cumulative savings from each of the mitigation scenarios (MIT-1 and MIT-2) as 3,800 metric tonnes CO_2-equivalent and 12,000 metric tonnes CO_2-equivalent, respectively, by 2030.

26. Mr Dan Verdonik reviewed other uses of HFCs, with a particular focus on some of the challenges faced with halon replacement in the aviation sector. Relevant quantitative information was also provided for the metered-dose inhaler (MDI) sector. The MDI sector used HFC-134a and HFC-227ea with cumulative emissions of 173 metric tonnes CO_2-equivalent globally between 2014 and 2025 under a BAU scenario. It was noted that complete avoidance of HFC-based MDIs was not yet possible. By contrast, reliance on HFCs in the sterilants sector was almost non-existent.

27. In summarizing the findings of the report Mr Verdonik said that BAU scenarios had been defined for RAC and for foam blowing agent consumption in which RAC was the dominant sector in terms of BAU consumption. Mitigation scenarios had also been identified that could save 3,800 metric tonnes CO_2-equivalent and 12,000 metric tonnes CO_2-equivalent, respectively, by 2030. He also noted that, while the assessment had been refined between meetings, the technologies in question continued to mature, with cost data still emerging in many cases.

IV. Presentations by the assessment panels on the 2014 quadrennial assessments

A. Environmental Effects Assessment Panel

28. Measured changes in UV-B radiation since the 1990s have mostly been small, and due less to the effects of ozone depletion than to factors such as cloud, and snow and ice cover. Large short-term increases in UV-B have been measured at some high latitude locations in response to episodic decreases of ozone, including the Arctic ozone depletion in spring 2011. Without the Montreal Protocol, it has been modelled that, by the end of the twenty-first century, UV levels around the globe would have exceeded, often substantially, levels previously experienced even in the most extreme environments. It has been estimated that the increase in UV-B would have led to an increase of up to two million cases of skin cancer a year by 2030 compared with those occurring with the effective implementation of the Montreal Protocol. With the Protocol, changing behaviour with regard to sun exposure by many fair-skinned populations has probably had a more significant effect on human

health than any increase in UV-B owing to ozone depletion. As the ozone layer recovers, strategies to avoid overexposure to solar UV radiation remain important for public health, but should aim to balance the harmful and beneficial effects of sun exposure. Based on current understanding, substitutes for the ozone-depleting substances or their breakdown-products do not pose a significant threat to the environment. New understanding highlights the vulnerability of organisms and environmental processes (including food production) to very large increases in UV caused by uncontrolled stratospheric ozone depletion, but the magnitude of such damage has not been quantified. In most parts of the world, changes in UV-B due to factors such as cloud, snow and ice cover, and UV-B penetration into water bodies, have had a more significant effect on ecosystems than UV-B changes due to ozone depletion over the last three decades. Southern hemisphere ecosystems have responded to severe ozone depletion there, partly owing to increased UV-B radiation, partly as a result of climate-mediated effects.

B. Scientific Assessment Panel

29. The Scientific Assessment Panel co-chairs gave a presentation on the 2014 assessment report of the Scientific Assessment Panel. The assessment represented the combined efforts of 282 scientists from 36 countries with the help of numerous individuals and organizations. The assessment comprised a three-page executive summary and an assessment for decision makers, together with the full five chapters of the scientific assessment of ozone depletion, 2014. The executive summary and the assessment for decision makers had been released on 10 September 2014, while the five-chapter assessment was to be released in early January 2015. They described the approach adopted in the development of the assessment for decision makers and the executive summary. It was noted that the five science chapters, currently available only from the web, had been used to develop the assessment for decision makers, synthesizing the findings of the scientific chapters to produce a policy-relevant document for use by the parties to the Montreal Protocol.

30. The executive summary summarized the key findings of the assessment, and the assessment for decision makers discussed the findings in more detail. The assessment for decision makers and its executive summary were based on the five science chapters of the 2014 assessment. Three key issues were highlighted in the presentation: changes in ozone-depleting substances and the ozone layer; the emerging issue of HFCs and their connection to climate change; and a number of options for the parties to consider.

31. On the first issue, it was noted that upper stratospheric ozone had been increasing over the 2000–2013 period. Furthermore, models were able to reproduce both the 1997 depletion due to ozone-depleting substances and the 2000–2013 increase. Models revealed that the 2000–2013 upper stratospheric ozone increase was due both to a decrease in ozone-depleting substances and an increase in greenhouse gases. In addition, it was noted that global total ozone-depleting substances amounts were decreasing. Global total column ozone was no longer declining, and there were hints that it might be increasing, but that increase was not yet statistically certain. Models were able to simulate the total ozone decline during the 1960–1996 period, and those same models projected a recovery to 1980 levels in the 2025–2040 period. The future model projections showed differing amounts of ozone changes for different greenhouse gas scenarios. Hence, ozone layer recovery was influenced by climate change.

32. On the second issue, it was noted the ozone-depleting substances were also greenhouse gases and that their abatement helped climate change. It was also noted that HFCs had been used as substitutes for CFCs and HCFCs in many applications, that HFCs did not destroy the ozone layer, and that HFCs were increasing very rapidly in the atmosphere. The contributions of HFCs to climate change were noted to be very small (<1 per cent) currently. It was also pointed out that the projections of HFC usage would lead to a very significant climate forcing contribution in the coming decades, perhaps reaching as much as 0.4 watts per square metre by 2050. The role of HFO-1234yf as a replacement for HFC-134a was noted. The possible production of trifluoroacetic acid (TFA) from the degradation of HFO-1234yf was noted to be small in the coming decade but its role beyond that period required reevaluation in the future.

33. On the third issue, it was noted that the options available to advance the return of the ozone layer to 1980 levels were not as extensive as in the past, i.e., the Montreal Protocol had done a great deal and the remaining options were limited. Those options showed that the cumulative effects of the elimination of emissions from all banks and production would advance the return to 1980 ozone levels by 11 years.

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

34. Ms. Bella Maranion, Co-Chair of the Technology and Economic Assessment Panel, reported on progress and presented an overview of the Panel's 2014 assessment report, noting that the report would be based on the 2014 assessment reports of the six technical options committees. She acknowledged the significant efforts of the committee co-chairs and members of the Panel in overseeing the process over the year and confirmed that the Panel, in its report for the following year, would provide additional information on past and projected efforts aimed at achieving geographic and gender balance among the members of the panel and its technical options committees. She also acknowledged the efforts and participation of over 120 experts from over 40 countries in the development of the reports. The 2014 Technical Options Committee assessment reports and the Panel's 2014 assessment report would be delivered to the parties in early 2015. The Panel co-chairs would then work with the co-chairs of the other assessment panels to produce a synthesis report. Since the Panel and committee reports would not be completed until early 2015, she explained that at the current time she could only present an overview of some of the topics that would be discussed in each technical options committee's assessment report.

35. She then continued to report on the following topics for the six committees. The report of the Chemicals Technical Options Committee would consider continuing use of ozone-depleting substances as process agents, emissions from feedstock uses and updates on solvent use. The report of the Flexible and Rigid Foams Technical Options Committee would review progress and remaining challenges with the transition, provide a quantitative update on global consumption of foam blowing agents, consider the status of low global-warming-potential alternatives and update bank estimates and management strategies. The Halons Technical Options Committee report would have a particular focus on the civil aviation sector. That sector was the least prepared to deal with diminishing global halon supplies, and it was very likely that a request for an essential use exemption would come from the sector in the future. The Medical Technical Options Committee report would note the near-complete phase-out of CFCs in metered-dose inhalers and assess alternatives to CFC-based metered-dose inhalers, including HFCs, as well as the status of alternatives to HCFCs for sterilization. The Methyl Bromide Technical Options Committee report would note the significant decline in non-quarantine and pre-shipment consumption, the remaining challenges in finding alternatives for nursery plant materials and dry cure pork, and the fact that continuing quarantine and pre-shipment uses were offsetting the benefits of the phase-out of controlled methyl bromide uses. The Refrigeration, Air Conditioning and Heat Pumps Technical Options Committee report would consider the status of the transition and alternatives in the various refrigeration and air-conditioning applications. She concluded by again thanking the many experts that had participated in the process and indicating that the Technology and Economic Assessment Panel looked forward to presenting the completed reports to the parties the following year.