

Report of the Twenty-second Meeting of the Committee for Environmental Protection (CEP XXII)

Prague, Czech Republic, July 1 – 5, 2019

- (1) Pursuant to Article 11 of the Protocol on Environmental Protection to the Antarctic Treaty, Representatives from 37 of the 40 Parties to the Protocol (Argentina, Australia, Belarus, Belgium, Brazil, Bulgaria¹⁸, Canada, Chile, China, the Czech Republic, Ecuador, Finland, France, Germany, India, Italy, Japan, Malaysia, Monaco, the Netherlands, New Zealand, Norway, Peru, Poland, Portugal, the Republic of Korea, Romania, the Russian Federation, South Africa, Spain, Sweden, Switzerland, Turkey, Ukraine, the United Kingdom, the United States, and Uruguay) met in Prague, the Czech Republic, from 1 to 5 July 2019, for the purpose of providing advice and formulating recommendations to the Parties in connection with the implementation of the Protocol.
- (2) In accordance with Rule 4 of the CEP Rules of Procedure, the meeting was also attended by representatives of the following Observers:
 - One Contracting Party to the Antarctic Treaty that is not a Party to the Protocol: Colombia;
 - the Scientific Committee on Antarctic Research (SCAR), the Scientific Committee for the Conservation of Antarctic Marine Living Resources (SC-CAMLR), and the Council of Managers of National Antarctic Programs (COMNAP); and
 - scientific, environmental and technical organisations: the Antarctic and Southern Ocean Coalition (ASOC), the International Association of Antarctica Tour Operators (IAATO), and the World Meteorological Organization (WMO).

Item 1: Opening of the Meeting

- (3) The CEP Chair, Ms Birgit Njåstad (Norway), opened the meeting on Monday 1 July 2019 and thanked the Czech Republic for organising and hosting the meeting in Prague.
- (4) The Committee paid its respects to the late Professor David Walton, who had worked with the CEP for many years and who had passed away suddenly on 12 February 2019. The Committee recognised Professor Walton's great personality and long involvement in Antarctic affairs, noting that he had worked as an ecologist at the British Antarctic Survey (BAS) for over 40 years. While his early research career focused on the ecology of Antarctic flora, his interests diversified into Antarctic science more broadly, including its conservation, policy and history. Professor Walton was head of terrestrial biology and head of environment and information at BAS, Chair of SCAR's Group of Specialists on Environmental Affairs and Conservation (GOSEAC), the SCAR representative to the CEP for many years, and was chosen as the first chief officer of the Standing Committee on the Antarctic Treaty System (SCATS). He also served as the first editor of the Antarctic Environments Portal and was an important member of the ATCM rapporteur team. The Committee noted that Professor Walton's absence would be deeply felt for many meetings to come.

Item 2: Adoption of the Agenda

- (5) The Committee adopted the following agenda and confirmed the allocation of 48 Working Papers (WP), 75 Information Papers (IP), 5 Secretariat Papers (SP) and 8 Background Papers (BP) to the agenda items:
1. Opening of the Meeting
 2. Adoption of the Agenda
 3. Strategic Discussions on the Future Work of the CEP
 4. Operation of the CEP
 5. Cooperation with other Organisations
 6. Repair and Remediation of Environment Damage
 7. Climate Change Implications for the Environment
 - a. Strategic Approach
 - b. Implementation and Review of the Climate Change Response Work Programme
 8. Environmental Impact Assessment (EIA)
 - a. Draft Comprehensive Environmental Evaluations
 - b. Other EIA Matters
 9. Area Protection and Management Plans
 - a. Management Plans
 - b. Historic Sites and Monuments
 - c. Site Guidelines
 - d. Marine Spatial Protection and Management
 - e. Other Annex V Matters
 10. Conservation of Antarctic Flora and Fauna
 - a. Quarantine and Non-native Species
 - b. Specially Protected Species
 - c. Other Annex II Matters
 11. Environmental Monitoring and Reporting
 12. Inspection Reports
 13. General Matters
 14. Election of Officers
 15. Preparation for the Next Meeting
 16. Adoption of the Report
 17. Closing of the Meeting

Item 3: Strategic Discussions on the Future Work of the CEP

- (6) The Netherlands introduced WP 19 *Antarctic Tourism Workshop, 3-5 April in Rotterdam, The Netherlands: Chair's Summary and Key Recommendations*, jointly prepared with the United Kingdom. It also presented IP 11 *Antarctic Tourism Workshop, 3-5 April in Rotterdam, The Netherlands: Chair's Report*, also jointly prepared with the United Kingdom, and IP 26 *Proactive Management of Antarctic Tourism: Time for a Fresh Approach*, jointly prepared with New Zealand. The Netherlands noted that many Members of the Committee participated, as well as

ASOC, IAATO, SCAR and a number of invited Antarctic tourism experts. Arthur Eijs (The Netherlands) and Jane Rumble OBE (United Kingdom) co-chaired the workshop. The workshop considered recent trends in Antarctic tourism and focused on three key areas related to tourism management: future tourism growth, diversification of tourism activities, and how to enhance compliance. For each of these areas, the workshop participants had agreed that the co-chairs should make recommendations to put forward to the CEP and ATCM.

- (7) With regards to the matter of tourism growth, the workshop participants recommended that the CEP:
 - work with SCAR to design and propose how to implement an environmental monitoring programme;
 - encourage all Parties to engage in the development of further site-specific visitor guidelines and the regular review of existing ones, with further consideration given to elaborating seasonal considerations in site guidelines; and
 - work with SCAR to further elaborate an understanding of the wilderness values with a view to their practical application and, in conjunction to that, support SCAR research into theoretical carrying capacity.
- (8) With regards to the matter of diversification, the workshop participants recommended that the CEP:
 - develop a framework for conducting pre-assessments relating to new, novel or particularly concerning activities. Heli-skiing might provide for a useful case study;
 - ensure that site guidelines were as specific as possible in terms of which activities were permitted or not at each site; and
 - revise and strengthen the general guidelines for visitors (Resolution 3 (2011)).
- (9) IAATO extended its thanks to the workshop organisers and welcomed the opportunity to contribute to future and ongoing discussions. With respect to the workshop's recommendations on the matter of growth, IAATO highlighted its members' commitment to operate within the parameters of relevant provisions of the Antarctic Treaty System, including ATCM Measures, Decisions and Resolutions. It expressed support for the environmental monitoring programme to guide evidence-based decisions on the management of human activity. It referred to its history of supporting similar projects, and of developing and reviewing visitor site guidelines. Acknowledging that there were different perspectives on what constitutes wilderness, IAATO agreed that developing an understanding of wilderness values was important.
- (10) With respect to the workshop's recommendations on matters of diversification, IAATO noted that it had submitted a catalogue of IAATO Operator Activities (IP 145 *A Catalogue of IAATO Operator Activities*). IAATO had also referred to ATCM XXXVII - IP 34, where it summarised adventure tourism activities undertaken by IAATO members, and ATCM XXXIV - IP 118, where it submitted IAATO's framework for operators considering any new activity that encouraged proactive management within the parameters of the Antarctic Treaty System.
- (11) With respect to compliance activities, IAATO referred to its Mandatory Observer Scheme, reported to the ATCM XXII (IP 138 *IAATO Mandatory Observer*

Scheme) and noted that it continued to welcome and encourage inspections under the Antarctic Treaty, reflecting on their value as a learning activity for member operators. IAATO concluded that it remained committed to working with Parties as required and to ensuring that its planned activities were safe and had no more than a minor or transitory impact on the environment.

- (12) ASOC also extended thanks to all participants in the workshop, and noted that its recommendations in IP 128 *Antarctic tourism: Using lessons learned to inform effective, proactive management* had relevance to the CEP. In relation to the workshop's recommendations on growth, ASOC recommended to: identify areas of representative biodiversity in the Antarctic Peninsula where tourism was not a permitted activity to serve as reference areas for comparison with visited areas; and take a precautionary approach to the expansion of new visited sites. In relation to diversification, ASOC agreed with the workshop recommendation to develop frameworks for the assessment of new activities.
- (13) Several Members emphasised the importance of creating an ongoing subsidiary group for enhanced engagement between National Competent Authorities, with a view to facilitate harmonisation in implementation of existing rules.
- (14) The Committee commended the workshop organisers and participants, and noted the timeliness and usefulness of the workshop and its recommendations. The Committee endorsed the recommendations addressed to the CEP in WP 19, and agreed, as a way forward:
 - To invite SCAR, in consultation with COMNAP, IAATO, ASOC and interested Parties, to design an environmental monitoring programme to assess the impacts of tourism, which includes a scoping assessment, having particular reference to the recommendations of the CEP tourism study relevant to monitoring and ongoing work, for consideration by CEP XXIII.
 - To invite SCAR, in consultation with interested Parties, to further elaborate an understanding of the wilderness values with a view to their practical application and to report to CEP XXIV.
 - To invite SCAR, in consultation with interested Parties, to undertake research into carrying capacity of sites, and to report to CEP XXIV.
 - To encourage all Parties to engage in the development of additional site-specific visitor guidelines and in the regular review of existing ones, with further consideration given to elaborating seasonal considerations in site guidelines.
 - To develop a framework for conducting pre-assessments relating to new, novel or particularly concerning activities and to that end:
 - include this as a priority activity in the CEP Five-year Work Plan;
 - encourage CEP members and observers to work in the intersessional period on such a framework, focusing on the environmental aspects;
 - note particularly the importance of the framework for facilitating a harmonised consideration of activities by national competent authorities;
 - note that such a framework could appropriately also address issues within the scope of ATCM discussions, and indicate its willingness to participate in joint work.

(15) The Committee also agreed to establish an ICG to address the existing guidance for visitors to the continent, with a view to strengthen that guidance and ensure that activities from visitors, including from tourism and non-governmental activities, singularly and cumulatively, have less than a minor or transitory impact. The Committee further agreed to the following ToRs:

1. To consider all relevant guidance for visitors to the continent;
2. To revise and, where needed, strengthen the guidelines adopted through Resolution 3 (2011);
3. To consider the coherence and relation between the general guidelines and site specific guidelines, as well as their systematic review methodology;
4. To consider how to ensure that site specific guidelines are as specific as possible in terms of considerations for which activities are suitable or not at each site;
5. To consider ways to improve planning, prioritisation and implementation of site specific guidelines development; and
6. To report back to CEP XXIII.

(16) The Committee welcomed the offer from Heike Herata, Germany to act as ICG convener.

CEP advice to the ATCM on the recommendations arising from the Antarctic Tourism Workshop

(17) The Committee advised the ATCM that it had endorsed the CEP relevant recommendations arising from the Antarctic Tourism Workshop, and had agreed to progress the recommendation by:

- inviting SCAR, in collaboration with others, to provide advice regarding a potential design for an environmental monitoring programme to assess the impacts of tourism, to further elaborate an understanding of the wilderness values with a view to their practical application and to undertake research into carrying capacity of sites;
- including as a priority action on its Five-year Work Plan the development of a framework for conducting pre-assessments relating to new, novel or particularly concerning activities; and
- establishing an ICG to address the existing guidance for visitors to the continent, with a view to strengthen that guidance and ensure that activities from visitors, including from tourism and non-governmental activities, singularly and cumulatively, have less than a minor or transitory impact with the following terms of reference:

- To consider all relevant guidance for visitors to the continent;
- to revise and, where needed, strengthen the guidelines adopted through Resolution 3 (2011);
- to consider the coherence and relation between the general guidelines and site specific guidelines, as well as their systematic review methodology;
- to consider how to ensure that site specific guidelines are as specific as possible in terms of considerations for which activities are suitable or not at each site;

- to consider ways to improve planning, prioritisation and implementation of site specific guidelines development; and
- to report back to CEP XXIII.

CEP Five-year Work Plan

- (18) The Committee briefly considered the Five-year Work Plan, adopted at CEP XXI (SP 2), as well as its Climate Change Response Work Programme (CCRWP), at the end of each agenda item.
- (19) The Committee revised and updated its Five-year Work Plan (Appendix 1).
- (20) The following Background Paper was also submitted under this agenda item:
 - BP 18 '*Arctic wilderness lessons*' for regulating and managing tourism in Antarctica. Background Paper on a research project on the protection of Antarctic wilderness (the Netherlands).

Item 4: Operation of the CEP

- (21) The Chair of the CEP referred to IP 157 *Committee for Environmental Protection (CEP): summary of activities during the 2018/19 intersessional period* (Norway), which summarised the work undertaken during the intersessional period based on the tasks set at CEP XXI, noting a substantial amount of intersessional work had taken place during the intersessional period responding to most of those tasks.

Item 5: Cooperation with Other Organisations

- (22) COMNAP presented IP 8 *Annual Report for 2018/19 of the Council of Managers of National Antarctic Programs (COMNAP)*, and reported on a successful COMNAP workshop held in June 2018 on "Understanding Sources of Plastics and Reducing Plastic Waste in the Antarctic Terrestrial and Marine Environments". As a result of the workshop, COMNAP agreed four recommendations for all National Antarctic Programmes, which focused on taking action on microplastics, educating expeditioners on plastic sources, and banning expeditioners from taking personal care products that contain microplastics to the Antarctic Treaty area. The recommendations were available on the COMNAP website. COMNAP also continued its focused work on the prevention of introduction of non-native species with a joint update with SCAR on the *Checklists for Supply Chain Managers* (WP 50) and with understanding the extent of non-native fly infestations in sewage treatment facilities (IP 38).
- (23) CCAMLR presented IP 13 *Report by the SC-CAMLR Observer to CEP*. It covered the five issues of common interest to the CEP and SC-CAMLR as identified in the first joint CEP/SC-CAMLR workshop. With respect to climate change and the Antarctic marine environment, CCAMLR reported in particular the important outcomes of the ICED-CCAMLR Projections Workshop which had considered the potential impacts of climate change on Antarctic krill in Area 48. With respect to spatial marine management and protected areas, CCAMLR noted that further development of spatial planning of MPAs in Domain 1 (Western Antarctic Peninsula–South Scotia Arc) had been undertaken by Argentina and Chile, and that Domains 3 and 4 (Weddell Sea) had been carried out by Germany. With respect to

ecosystem and environmental monitoring, CCAMLR had noted the usefulness of fixed cameras for providing ecosystem monitoring data and also noted ongoing reviews of the CCAMLR Ecosystem Monitoring Programme (CEMP). CCAMLR also highlighted the importance of capacity building, noting that the CCAMLR Scientific Scholarships Scheme continued to be a successful mechanism for developing capacity in CCAMLR.

- (24) Norway presented IP 30 *Report by the CEP Observer to the XXXV SCAR Delegates' Meeting*. It reported that SCAR had begun developing new Scientific Research Programmes (SRPs), directed towards overarching issues and areas of concern for policy and management and the needs for the CEP: Integrated Conservation Planning for Antarctica and the Southern Ocean (Ant-ICON), which would aim to answer fundamental science questions (as identified by the SCAR Horizon Scan) relating to the conservation and management of Antarctica and the Southern Ocean; Near-term Variability and Prediction of the Antarctic Climate System (AntClim^{now}), which would aim to investigate prediction of near-term conditions in the Antarctic climate system; and Antarctic Ice Sheet Dynamics and Global Sea Level (AISSL), which would aim to quantify the Antarctic ice sheet contribution to past and future global sea-level change. The SCAR Action Groups' Input Pathways of persistent organic pollutants to AntarCTica (ImPACT) and Plastics in Polar Environments (PLASTIC-AG) were highlighted as new Action and Expert Groups with particular relevance for the CEP.
- (25) SCAR presented IP 75 *Update on activities of the Southern Ocean Observing System (SOOS)*. It highlighted four SOOS outputs that were of direct relevance to the CEP: the establishment of five regional networks for enhanced coordination of observational activities in the Southern Ocean; a new online tool "SOOSmap" that enabled discovery of Southern Ocean observational data; the field planning and coordination tool "DueSouth"; and a new community paper with observational priorities for the Southern Ocean. SCAR noted that SOOS invited engagement and input to ensure an internationally coordinated system of observations to deliver an optimal suite of observations for all end-users.
- (26) SCAR also presented IP 49 *An update on the World Meteorological Organization-Scientific Committee on Antarctic Research Joint Fellowship Programme*, jointly prepared with WMO, and IP 74 *A Memorandum of Understanding between the Scientific Committee on Antarctic Research and the International Polar Heritage Committee*.
- (27) WMO presented IP 92 *WMO Annual Report 2018-2019*. It also referred to IP 93 *The International Programme for Antarctic Buoys*, jointly prepared with SCAR; IP 94 *The Year of Polar Prediction in the Southern Hemisphere: Consolidation Phase*; and IP 164 *Scoping Workshop: Towards Implementing an Antarctic Regional Climate Centre Network*. WMO drew particular attention to the ongoing Year of Polar Prediction (YOPP) of 2017–2019, which was entering its consolidation phase. Having endorsed the initiative to establish an Antarctic Regional Climate Change-Network (AntRCC-Network), WMO encouraged the support and engagement of the ATCM, CEP, SCAR, COMNAP, and other interested groups. Finally, WMO emphasised its cooperation with Antarctic and worldwide scientific and institutional actors in collaborations such as the World Climate Research Programme and the International Programme for Antarctic Buoys (IPAB).
- (28) The Committee thanked COMNAP, CCAMLR, Norway, SCAR and WMO for their

reports, and drew particular attention to IP 75 noting the value of SOOS to the CEP and encouraged Members to provide input where reasonable and relevant. The value of COMNAP's work, particularly in relation to plastics and emissions reduction was noted. Recalling its request at CEP XIX, the Committee expressed appreciation for SCAR's continued work on heritage, as reported in IP 74. It also noted both WMO and SCAR's updates on climate science were essential for ongoing discussions on the implications of climate change for Antarctica, noting that further updates would be useful for the work of the CEP.

Nomination of CEP Representatives to other organisations

(29) The Committee nominated:

- Dr Antonio Quesada (Spain) to represent the CEP at the 31st COMNAP Annual General Meeting, to be held in Plovdiv, Bulgaria, from 28 to 31 July 2019; and
- Dr Polly Penhale (United States) to represent the CEP at the 38th meeting of SC-CAMLR, to be held in Hobart, Australia, from 21 to 25 October 2019.

(30) The following paper was also submitted under this agenda item and taken as presented:

- IP 141 *The International Association of Antarctica Tour Operators joint Fellowship Program* (IAATO). This paper reported on IAATO joining COMNAP in setting up an international fellowship focused on adding to the understanding of human presence in the Antarctic. The fellowship contributes to the broader work of CCAMLR, COMNAP, SCAR, and WMO in offering fellowship and scholarship opportunities.

Item 6: Repair and Remediation of Environment Damage

(31) Australia introduced WP 46 *Report of the intersessional contact group established to review the Antarctic Clean-up Manual*. The ICG was convened by Dr Phillip Tracey from Australia and operated over two intersessional periods to collate information on relevant developments, review the Antarctic Clean Up-Manual, and suggest any modifications and additional guidance needed. The ICG had noted that clean-up continued to be a focus of research and action by Parties, with significant advances having been made since 2013. The ICG recommended that the CEP: consider forwarding the revised Antarctic Clean-Up Manual and draft Resolution attached to WP 46 for adoption by the ATCM; and note the summary of developments and advances in clean-up since 2013.

(32) The Committee thanked Australia for its work in convening the ICG, and the ICG participants for their contributions. The Committee highlighted the value of this work as several Parties were planning to undertake modernisation work on Antarctic stations, and also noted the desire of developing further guidelines on relevant topics in due course, such as guidance for separation and recovery of fuel spills in snow and for other topics identified in Section 3 of the Manual. The Committee noted the potential utility of maintaining a register of abandoned sites. The Committee agreed on the importance of regularly updating the Manual, and included a related action in its Five-year Work Plan. The Committee agreed to forward the revised Clean-Up Manual to the ATCM for adoption through a Resolution and to convey the draft Resolution attached to WP 46 to the ATCM for that purpose. The Committee made note of the summary of developments and advances in clean-up since 2013 and

agreed to draw it to the attention of the ATCM.

CEP advice to the ATCM on the review of the Antarctic Clean-Up Manual

- (33) The Committee endorsed the revised Antarctic Clean-Up Manual and agreed to forward to the ATCM for approval a draft Resolution encouraging its dissemination and use.
- (34) The Committee requested that the ATCM note the summary of developments and advances in clean-up since 2013 (Attachment C to WP 46).
- (35) Brazil presented IP 118 *Incident with a Brazilian container*, jointly prepared with Poland. Brazil informed the Committee of the circumstances surrounding a container that had fallen off the *MV Magnolia* in Admiralty Bay. It noted that debris had spread throughout the area including the shoreline of ASPA 128 Western shore of Admiralty Bay, King George Island, South Shetland Islands. It further reported ongoing efforts by Brazil, supported by a Chinese construction company, and Poland to clear debris resulting from the incident. Although no dangerous contaminants had been inside the container, precautionary actions have been taken, including continuous monitoring of the area by Brazil and Poland. Brazil emphasised that widespread dissemination of knowledge of incidents of this sort might contribute to avoidance of incidents in the future. It informed the Committee that an update would be provided at CEP XXIII.
- (36) The Committee thanked Brazil and Poland for the paper and their strong responses to the incident.

Item 7: Climate Change Implications for the Environment

7a) Strategic Approach

- (37) The Committee thanked SCAR and Professor Steven Chown for presenting the *SCAR Science Lecture 2019: What Does the Paris Climate Agreement mean for Antarctic and Southern Ocean Environmental Protection?* (IP 135), which outlined the implications of the 2015 Paris Climate Agreement for biodiversity and its protection in the broader Antarctic region, and for biodiversity conservation globally. The Committee noted that the lecture was impactful, widely attended, and provided useful and detailed context for its discussions.
- (38) The United Kingdom introduced WP 1 rev. 1 *The Antarctic Peninsula under a 1.5°C global warming scenario*. This paper synthesised scientific information on how a 1.5°C global average temperature increase scenario could impact the Antarctic Peninsula. The United Kingdom noted that the 1.5°C warming scenario identified by the UN Paris agreement was inevitable, with larger increases possible. It highlighted nine key findings outlined in WP 1 rev. 1 related to the nature, extent, and implications of warming in the Antarctic Peninsula area. It further noted that the Antarctic Peninsula had already experienced rapid change in atmospheric climate, ocean and ice conditions, and human activities. It reported that the implications were likely to be significant, requiring substantial research efforts and continued international collaboration. The United Kingdom encouraged the Committee to clearly factor climate impacts into all of its work.
- (39) The Committee thanked the United Kingdom for its report and for bringing this important and timely topic to its attention. It noted that it was important for the CEP

to remain informed about climate change, to take a leadership role in considering the implications of a climate change for the Antarctic environment, including the implications of possible warming beyond a 1.5°C scenario. It reflected that future warming could likely be worse than the 1.5°C scenario. The Committee encouraged its Members through their National Antarctic Programmes to develop scenario studies for other areas of Antarctica, as had been done for the Antarctic Peninsula. While calling for additional climate change research and monitoring to improve the basis for decision making, the Committee observed that it also must act in a precautionary manner and take action on the information already available. The Committee noted that it would be important to take the anticipated changes into account as it continued to develop its management tools and guidance material such as the CCRWP, the ASPA system and Non-Native Species Manual. The Committee emphasised the importance of considering regional variations in climate change, both for management actions and for research and long-term monitoring, and highlighted the need for a better understanding of the impacts of the combined pressures of human activities and climate change in Antarctica. It also called for the work of the Subsidiary Group on Climate Change Response (SGCCR) to be prioritised, for continued progress on the CCRWP, and for more Members to participate in their work during the coming intersessional period.

- (40) China also thanked the United Kingdom for submitting the report. China noted it held the opinion that the CEP should focus on Antarctica's role in the earth system and how change in other parts of the world would impact the Antarctic area. It highlighted a lot of scientific work would be required to achieve this goal. It noted that currently the research conducted in the Antarctic and the achievements are far from enough and should be strengthened. China suggested that the work of CEP and ATCM could provide more support and create more favourable conditions for scientific activities by the Parties and do more to promote international cooperation.
- (41) While expressing their thanks to the United Kingdom, WMO and the Czech Republic cautioned Members that limiting warming to 1.5°C, although desirable, was unlikely, and stressed that the CEP should consider the impacts of an even greater degree of warming on the Antarctic Peninsula.
- (42) ASOC expressed its appreciation to the United Kingdom for the paper, noting that the dramatic, climate-related changes to the Antarctic Peninsula described in the paper should give greater urgency to the discussions of the CEP and the ATCM on a variety of issues. In particular, ASOC hoped that the paper's conclusion, that non-native species introductions were the biggest threat to Antarctic biodiversity, would motivate accelerated work on the CCRWP, which had prioritised this issue.
- (43) ASOC presented IP 132 *Limiting global warming to 1.5°: the Antarctic context*, which complemented WP 1 rev. 1 by summarising the Antarctic elements of the IPCC's Special Report on Limiting Warming to 1.5 degrees. As evidence from the IPCC report suggests, limiting warming to 1.5°C requires immediate action from all sectors. ASOC emphasised that the ATCM and CEP should take a number of steps to minimise climate impacts and promote ecological resilience, including: incorporating climate considerations into EIAs; creating a strategic plan for representative protected areas across the Antarctic Treaty Area to promote climate resilience; implementing the CCRWP; and supporting action by 2023 at the IMO regarding the reduction of emissions from shipping.
- (44) SCAR presented IP 136 *Antarctic Climate Change and the Environment – 2019*

Update, which summarised updates from the SCAR Antarctic Climate Change and the Environment (ACCE) Expert Group as requested previously by the CEP. Highlights included: the increasing evidence of human-driven contribution to changes in the Antarctic atmosphere and the Southern Ocean; the increasing loss of ice from the Antarctic ice sheet as well as decreases in sea ice; and the demonstrated value of ice cores for understanding long-term changes. SCAR further provided updates on impacts related to the biological environment, highlighting impacts on seabirds and krill.

- (45) The Committee thanked SCAR for its update on the ACCE Report, recognized the importance of it for the work of the CEP and looked forward to future updates.
- (46) Portugal presented IP 70 *Projected distribution of Southern Ocean seabirds and fisheries due to climate change*, jointly submitted with South Africa, Spain, and the United Kingdom. It noted that albatrosses and petrels covered huge areas of the Southern Ocean, including within the Antarctic Treaty area, and warned that they were threatened by a wide range of factors, including fisheries bycatch and climate change. Portugal pointed out that recent research, described in the paper, showed that the distribution of seven large seabird species of the Southern Ocean would shift towards Antarctica, as would fisheries movements, increasing the bycatch risk and requiring improvements to fisheries management.

7b) Implementation and Review of the Climate Change Response Work Programme

- (47) The convener of the Subsidiary Group on Climate Change Response (SGCCR), Kevin Hughes (United Kingdom) introduced WP 36 *Report of the Subsidiary Group on Climate Change Response (SGCCR) 2018-2019*. It noted that the SGCCR was established in 2017 (Decision 1 (2017)) to facilitate the implementation of the CCRWP. The paper presented a proposed new format for the CCRWP, which was developed during the intersessional period by the SGCCR, and operating functions for the group, and details of the initial implementation of the CCRWP focussing on the priority issue of non-native species. The United Kingdom also informed the Committee that the SGCCR was interested in increasing its profile, as well as the profile of the CCRWP, on the ATS webpage, and that it welcomed new participants.
- (48) The SGCCR had made four recommendations to the CEP:
1. The Committee should examine the proposed updated format for the CCRWP and, if considered appropriate, agree to its application by the SGCCR to all the climate issues within the Work Programme during the 2019/20 intersessional period.
 2. To better communicate the links between the CCRWP and CEP Five-year Work Plan, the Committee should agree that:
 - issues listed in the CEP Five-year Work Plan that were relevant to the CCRWP should be labelled as such in the Five-year Work Plan;
 - research requirements listed in the CCRWP should be added to the list of science needs attached to the CEP Five-year Work Plan; and
 - during the Committee's annual review of the prioritisation of issues within the CEP Five-year Work Plan, consideration should be given to the priority status of linked issues in the updated CCRWP.

3. To progress the implementation of the CCRWP on the priority issue of 'Enhanced potential for non-native species (NNS) introduction, establishment and invasion', the CEP should:
 - request that COMNAP undertake a survey of National Antarctic Programmes' biosecurity practices, to communicate progress since the previous survey in 2008 (ATCM XXXI - IP 98) and share implemented biosecurity solutions;
 - encourage CEP Members and Observers to highlight recent research on the issue of non-native species that would inform the work of the CEP; and
 - encourage CEP Members to explore funding of relevant non-native species research with national science funding bodies (see Resolution 4 (2015)).
 4. The CEP's annual update to the ATCM on progress should include information on developments within the SGCCR.
- (49) With respect to the recommendation that research requirements listed in the CCRWP should be added to the list of science needs attached to the CEP Five-year Work Plan, the United Kingdom noted that this would best be done after the updates to the CCRWP had been completed and agreed.
- (50) The Committee engaged in extensive discussions regarding the usefulness and timeliness of these recommendations.
- (51) Many Members expressed general support for the recommendations as presented in WP 36. However, one Member expressed doubts regarding their adoption at this time.
- (52) China thanked the Convenor for the paper. China indicated that the recommendations included a complicated mechanism that could cover a wider range of issues and demand enormous research efforts. This resulted in a question between the ideal and the practical or manageable. China noted that this question had been mentioned several times in previous interventions. Following wide-ranging discussions to reach consensus on the recommendations, the Committee agreed to a revised version of the first of the SGCCR recommendations: The Committee should examine the proposed updated format for the CCRWP and, if considered appropriate, agree to its application by the SGCCR to relevant climate issues within the Work Programme during the 2019/20 intersessional period.
- (53) Several Members supported the SGCCR convener's comments recalling that the mandate created by Decision 1 (2017) to establish the SGCCR and commence work still applied, and that work would continue under the existing ToRs for the SGCCR, and encouraging all interested Members, Observers, and Experts to join and actively participate in the SGCCR.

Item 8: Environmental Impact Assessment (EIA)

8a) Draft Comprehensive Environmental Evaluations

- (54) The United States introduced WP 2 *Draft Comprehensive Environmental Evaluation (CEE) for Continuation and Modernization of McMurdo Station Area Activities*, which reported on the modernisation project of McMurdo Station and related ongoing activities. It noted that the draft CEE had been prepared in accordance with applicable provisions of Annex I, Article 3 of the Environment Protocol and the

Guidelines for Environmental Impact Assessment in Antarctica. The United States recalled that McMurdo Station was established in 1955 and that much of the infrastructure at the station dated back several decades and was nearing or had exceeded its intended life expectancy. The United States reported that the proposed activity consisted of two interrelated and interdependent parts: the modernisation of McMurdo Station through the McMurdo Master Plan and the continuation of science and associated operational activities in areas supported from the McMurdo Station area hub. It highlighted that the purpose of the proposed activity was to reduce the footprint and disturbance in the area and to ensure that resources at McMurdo Station continued to support scientific research efficiently, effectively and with a high standard of environmental stewardship.

- (55) The Republic of Korea introduced WP 15 *Report of the intersessional open-ended contact group established to consider the draft CEE for the "Continuation and Modernization of McMurdo Station Area Activities"*, which provided advice on the basis of comments on the draft CEE provided by nine Parties participating in the ICG that had been established in accordance with CEP procedures. It thanked the United States for its work and noted that participants had commented favourably on several aspects of the draft CEE. It highlighted that the participants had found that the draft CEE was generally clear, well-structured, and well-presented, but had noted a few inconsistencies between sections of the draft CEE. It reported that participants agreed that the draft CEE generally and broadly conformed to the requirements of Article 3 of Annex I to the Environment Protocol. Some participants, however, recommended reconsideration of the scope of the proposed activity and expressed the view that additional information would be required on a number of aspects for the final CEE to fully conform to the requirements of Article 3. The Republic of Korea stated that the draft CEE identified the majority of the impacts that were likely to be associated with the activity, but suggested adding additional potential impacts. It noted that the ICG had further advised that some activities within the project would have a more than minor or transitory impact. It suggested that if the United States decided to proceed with the proposed activity, the draft CEE could be strengthened by the inclusion of additional information, and recommended that the United States consider the comments made by the ICG.
- (56) The United States presented IP 82 *Initial Responses to Comments on the Draft Comprehensive Environmental Evaluation (CEE) for Continuation and Modernization of McMurdo Station Area Activities*, which responded to comments raised by the ICG in relation to the modernisation of McMurdo Station. It expressed appreciation for the efforts of the ICG participants and thanked the Republic of Korea for convening the group and providing an excellent summary of the responses. While pointing out that the draft CEE was unlike any previous CEE in relation to its long time period and broad scope, the United States noted that it fully conformed to the requirements of Article 3 of the Environment Protocol. It committed to providing additional detailed information on several issues that were raised, including: mitigation of environmental impacts; impact assessment methods; scale of impacts; alternatives; and description of the initial environment. With respect to those activities that had not been detailed sufficiently in the draft CEE, the United States assured members that it would provide a future EIA for those activities to the CEP. In addition, the United States noted that it would provide periodic feedback per the EIA Guidelines and cited IP 76 and IP 77 as examples of its CEE feedback reviews. The United States concluded that it was in the process of revising the CEE and that it would address the comments received from the ICG, from discussion during CEP XXII, and from the general public.

- (57) The Committee thanked the United States for presenting a solid and well-structured draft CEE and Members looked forward to receiving a final CEE. The Committee also thanked Ji Hee Kim from the Republic of Korea for convening the ICG and ICG participants for their hard work and constructive feedback. The Committee expressed its support for the ICG's conclusions and recommendations.
- (58) Several Members commended the United States on the quality of its draft CEE, noting the complexity of evaluating a long-term project with limited detailed information and acknowledging that the proposed activity pertained to an already degraded area and as such likely would significantly reduce the environmental impacts of the operations. Nonetheless, they stressed the importance of maintaining a gold standard when conducting EIAs and cautioned the potential for this Draft CEE setting a precedent with regard to level of detail and clarity. Several Members also indicated they would provide further comments to the United States on the draft CEE and there was a suggestion that a retrospective assessment of cumulative impacts of the station area before modernisation which supplemented to the CEE would be useful and helpful as an important reference for the EIA document preparation of other Antarctic stations.
- (59) Noting that several Members were planning to undertake modernisation projects at their research stations, the Committee highlighted the importance of the availability of clear guidance and therefore ensuring that the EIA Guidelines were consistent, fit-for-purpose and regularly reviewed to ensure that environmental assessments of these projects reach high standards. In light of these comments and the recommendations provided by the ICG reviewing the Draft CEE submitted by the US, the Committee agreed to include a related item in its Five-year Work Plan. Parties were also encouraged to submit information about EIAs they had prepared in the ATS EIA database.
- (60) ASOC stressed that because there would be an increased level of activity over an extended period of time during the construction period, it would be important to ensure that the operational footprint of the station and facilities supported from the station remained constant. ASOC looked forward to seeing the final CEE, further EIAs, and CEE follow up information, including information about environmental monitoring as mandated by Annex I, Article 5(1) of the Protocol. ASOC thanked the United States (IP 76 and 77), the United Kingdom (IP 29) and Italy (IP 109) for their papers which provided follow-up information about activities subject to CEEs in recent years.
- (61) The United States reiterated its commitment to consider all comments in its final CEE, and welcomed further discussions on updating the EIA Guidelines, including to consider guidance on approaches to address comments received on draft CEEs.
- (62) The Committee welcomed the United States' commitment to fully address in the final CEE the points raised by the ICG and in discussion during the meeting.

CEP advice to the ATCM on Draft Comprehensive Environmental Evaluation (CEE) for Continuation and Modernisation of McMurdo Station Area Activities.

- (63) The Committee discussed in detail the draft Comprehensive Environmental Evaluation (CEE) prepared by the United States for the 'Continuation and Modernization of McMurdo Station Area Activities' (WP 2). The Committee discussed the report by South Korea of the ICG established to consider the draft CEE

in accordance with the Procedures for Intersessional CEP Consideration of Draft CEEs (WP 15). The Committee also discussed additional information provided by the United States in response to the ICG comments (IP 82) and issues raised during the meeting.

(64) Having reviewed the draft CEE, the CEP advised the ATCM that:

- 1) The draft CEE generally conformed to the requirements of Article 3 of Annex I to the Protocol on Environmental Protection to the Antarctic Treaty.
- 2) If the United States decided to proceed with the proposed activity, there were some aspects for which additional information or clarification could be provided in the final CEE to enhance its comprehensiveness, as outlined in the ICG report and by Members during the meeting.
- 3) The United States was furthermore encouraged to consider the detailed comments provided by ICG participants, as well as the summary of the main issues as put forward in the ICG report, and issues raised during CEP XXI as summarised in the final report and provided directly to the United States.
- 4) The information provided in the CEE supported the conclusion that the impacts of some activities within the project would have a greater than minor or transitory impact, and this level of EIA had been appropriate for this project.
- 5) The draft CEE was thorough, systematic, clear, well-structured and well presented, although some minor adjustments could be considered to strengthen the document even further.

(65) The Committee noted that the CEP had updated its Five-year Work Plan to include an item on updating the Guidelines on EIAs as a result of the discussions arising from the draft CEP.

(66) China informed the Committee that it was working on a final CEE for the construction of its planned new station in the Ross Sea area. It noted that, in accordance to Article 3(6) of Annex I to the Protocol, the final CEE would be circulated among all Members 60 days prior to the commencement of the proposed activity.

8b) Other EIA Matters

(67) SCAR presented IP 50 *Draft SCAR Code of Conduct on Geosciences Field Research Activities in Antarctica*. SCAR informed the Committee that following substantial input from the geoscience community, it had updated its advice to geoscientists undertaking field research in Antarctica. This update was provided to the Committee in the form of a draft SCAR Code of Conduct on Geosciences Field Research Activities in Antarctica. SCAR noted that this update was consistent with the CEP's request that it provide advice on geological heritage and geoconservation. It welcomed input and comments from CEP Members, as well as COMNAP, with a view to submitting the SCAR Code of Conduct to CEP XXIII for possible endorsement by the ATCM through a Resolution. Interested Members were invited to contribute comments by emailing the SCAR Secretariat at info@scar.org.

(68) The Committee thanked SCAR for its significant contribution in drafting the Code of Conduct. The Committee affirmed the importance of reducing the impacts of geoscientific activity on the Antarctic environment. Several Members stated their interest in collaborating with SCAR as it worked to draft the final Code of Conduct,

to be presented at CEP XXIII.

- (69) Chile presented four Information Papers under Agenda Item 8b. IP 25 *Evaluación Ambiental Antártica: Modelo de Aplicación Chileno* presenting a practical tool that Chile had been using for its EIAs in Antarctica and inviting Parties to consider it to facilitate the impact evaluation process. IP 17 *Reemplazo de oleoducto submarino por mangueras flotantes* informed the Committee on the replacement of a submarine pipeline at Base “Presidente Frei” with a floating hose, which would decrease the base’s impact on the marine environment. IP 19 *Plan maestro del Estado chileno: Reconstrucción de Base Aérea Antártica “Presidente Frei”, hacia una nueva matriz energética y materiales sustentables* discussed Chile’s plan to upgrade the energy infrastructure at “Presidente Frei” Base with an emphasis on sustainability, and IP 22 *Estación Marítima de bahía Fildes: plan de demolición e instalación* presenting a plan for the demolition and installation of new infrastructure at the Fildes Bay Maritime Station, which had been destroyed by a fire last year.
- (70) The Committee thanked Chile for its presentation of these four Information Papers.
- (71) Italy presented IP 109 *Progress update in the construction of the gravel runway in the area of Mario Zucchelli Station, Terra Nova Bay, Victoria Land, Antarctica*. This paper provided information about ongoing runway construction activities at Mario Zucchelli Station. Italy presented the activities it had undertaken to monitor environmental impacts during runway construction, and noted the runway’s current length of 1,350 metres and that a Basler aircraft had successfully landed on the runway in February 2019. Italy highlighted that there were synergies between environmental monitoring and ongoing scientific efforts in the area.
- (72) The Committee thanked Italy for presenting IP 109 and remarked that it looked forward to future updates on the runway at Mario Zucchelli Station.
- (73) The following papers were also submitted under this agenda item, and taken as presented:
- IP 12 *Numerical evaluation of mobile sources impact at environmental impact assessment in the Antarctic* (Belarus). This paper analysed possibilities for the use of dispersion modelling for assessing the impact of vehicles on the atmospheric air in the Antarctic.
 - IP 20 *Sistema de interconexión eléctrica, hacia la disminución del consumo de combustible fósil* (Chile). This paper explained the installation of an electrical grid interconnection programme to improve energy efficiency at the “Presidente Frei” Base.
 - IP 29 *Update and CEE Compliance Report: Rothera Wharf Reconstruction and Coastal Stabilisation Project* (United Kingdom). This paper updated the CEP on progress with the Rothera Wharf construction and explained how compliance with the CEE was ensured during the first season of construction.
 - IP 76 *The Environmental Impact Assessment Feedback Process: Review of Modernization of the Amundsen-Scott South Pole Station* (1998 CEE) (United States). This paper described the United States’ review of the modernisation of the Amundsen-Scott South Pole Station against the environmental impact assessment prepared for the project.
 - IP 77 *The Environmental Impact Assessment Feedback Process: Review of*

Project IceCube (2004 CEE) (United States). This paper described the United States' review of Project IceCube against the environmental impact assessment prepared for the project.

- IP 121 *Artigas Scientific Antarctic Station renewable energy, energy efficiency and waste management plan* (Uruguay). This paper informed about progress made on the renewable energy, energy efficiency and waste management plan the Government of Uruguay had been developing for the Artigas Scientific Antarctic Station.
- SP 9 *Annual list of Initial Environmental Evaluations (IEE) and Comprehensive Environmental Evaluations (CEE) prepared between 1 April 2018 and 31 March 2019* (ATS).

(74) The following Background Paper was also submitted under this agenda item:

- BP 8 *Initial EIA of Turkish Camp Site on Horseshoe Island* (Turkey).

Item 9: Area Protection and Management Plans

Item 9a) Management Plans

i.) *Draft Management Plans which have been reviewed by the Subsidiary Group on Management Plans*

(75) The convener of the Subsidiary Group on Management Plans (SGMP), Patricia Ortúzar (Argentina) introduced the first part of WP 64 *Subsidiary Group on Management Plans Report of activities during the intersessional period 2018-2019* on behalf of the SGMP. In accordance with terms of reference #1 to #3, the SGMP had been prepared to consider four draft Antarctic Specially Protected Area (ASP) management plans referred by the CEP for intersessional review:

- ASPA No. 125: Fildes Peninsula, King George Island (25 de Mayo) (Chile)
- ASPA No. 145: Port Foster, Deception Island, South Shetland Islands (Chile)
- ASPA No. 146: South Bay, Doumer Island, Palmer Archipelago (Chile)
- ASPA No. 150: Ardley Island (Ardley Peninsula), Maxwell Bay, King George Island (25 de Mayo) (Chile).

(76) The SGMP advised the CEP that the management plans were still under review by Chile, the proponent of all the plans, and that Chile had provided the SGMP with an update on their progress. Chile had informed the SGMP, and confirmed for the Committee, that they were still working with scientists to develop the management plans for ASPA 125 Fildes Peninsula, King George Island (25 de Mayo) and ASPA 150 Ardley Island, Maxwell Bay, King George Island (25 de Mayo). The SGMP noted that Chile planned to submit revised management plans for these two ASPAs to the SGMP during July 2019.

(77) Chile had further informed the SGMP that they intended to submit a revised version of the management plan for ASPA 146 South Bay, Doumer Island, Palmer Archipelago to the 2019 CCAMLR meeting and that a draft would also be submitted to the SGMP shortly before or after it was submitted to CCAMLR. Chile had informed the SGMP that they were working with Spain to review the boundaries of ASPA 145 Port Foster, Deception Island, South Shetland Islands. Chile had noted that the boundaries may be enlarged to improve protection of the marine life in the

region. The SGMP and Chile noted that if the boundaries of ASPA 145 were changed following consultation with Spain, the management plan would be removed from the SGMP and submitted directly to the CEP.

(78) The Committee thanked the SGMP for its advice and welcomed the progress made by Chile.

ii) Revised Draft Management Plans which have not been reviewed by the Subsidiary Group on Management Plans

(79) The Committee considered revised management plans for nine ASPAs and two Antarctic Specially Managed Areas (ASMAs) that had not been reviewed by the SGMP. In each case the proponent(s) summarised the suggested changes to the existing management plan and recommended its approval by the Committee and referral to the ATCM for adoption.

- WP 3 *Revised Management Plan for Antarctic Specially Protected Area No. 123 Barwick and Balham Valleys, Southern Victoria Land* (United States).
- WP 4 *Revised Management Plan for Antarctic Specially Protected Area No. 128 Western Shore of Admiralty Bay, King George Island, South Shetland Islands* (United States, Poland).
- WP 7 *Revised Management Plan for Antarctic Specially Protected Area No. 173 Cape Washington and Silverfish Bay, Terra Nova Bay, Ross Sea* (Italy, United States).
- WP 10 *Revision of the Management Plan for Antarctic Specially Protected Area (ASPAs) 154: Botany Bay, Cape Geology, Victoria Land* (New Zealand).
- WP 16 *Revised Management Plan for Antarctic Specially Protected Area No. 171, Narebski Point, Barton Peninsula, King George Island* (Republic of Korea).
- WP 20 *Revision of the Management Plan for Antarctic Specially Protected Area (ASPAs) No. 141, Yukidori Valley, Langhovde, Lützow-Holm Bay* (Japan).
- WP 27 *Revised Management Plan and maps for Antarctic Specially Managed Area No. 7 Southwest Anvers Island and Palmer Basin* (United States).
- WP 40 *Review of Antarctic Specially Protected Area (ASPAs) No. 142 – Svarthamaren* (Norway).
- WP 49 *Revision of the Management Plan for Antarctic Specially Protected Area No. 161 Terra Nova Bay, Ross Sea* (Italy).
- WP 53 *Revised Management Plan for Antarctic Specially Protected Area No. 151 Lions Rump, King George Island, South Shetland Islands* (Poland).
- WP 56 *Updated Management Plan and maps for Antarctic Specially Managed Area No 4 Deception Island* (Argentina, Chile, Norway, Spain, United Kingdom, United States, ASOC, IAATO).

(80) With respect to WP 3 (ASPAs 123), WP 4 (ASPAs 128), and WP 7 (ASPAs 173), the United States noted that only minor changes to the existing management plans were proposed, and included minor updates to the land-ice boundary in the map (ASPAs 123), the removal of a no-longer present refuge in the map (ASPAs 128), and revisions to achieve consistency with new agreements and guidance reached by the ATCM (ASPAs 123, 128, and 173).

- (81) With respect to WP 10 (ASPA 154), New Zealand noted that only minor changes to the existing management plan were proposed, including revision to helicopter access requirements and six new maps related to the access provisions and detailed mapping of the flora.
- (82) With respect to WP 16 (ASPA 171), the Republic of Korea noted that only minor changes to the existing management plan were proposed, and included editorial amendments for consistency, new information on meteorological data and faunal changes, new information for educational or outreach purposes, and new information on the location of field camps. It highlighted that the updated plan required compliance with the *Environmental Guidelines for operation of Remotely Piloted Aircraft Systems (RPAS) in Antarctica (version 1.1)* appended to Resolution 4 (2018).
- (83) With respect to WP 20 (ASPA 141), Japan noted that only minor changes to the existing management plan were proposed, and included updates to supporting documentation, a change to a high-water line boundary, and minor editorial amendments.
- (84) With respect to WP 40 (ASPA 142), Norway noted that only minor changes to the existing management plan were proposed, and included updated information on the number of breeding pairs of Antarctic petrels, editorial amendments, and text about signs warning of potential rock fall, management activities, and the installation of Automatic Weather Stations.
- (85) With respect to WP 49 (ASPA 161), Italy noted that only minor changes to the existing management plan were proposed, and included an update of references and the removal of Appendix 2 to the plan, and updates to Map 1 to include the location of the new gravel runway.
- (86) With respect to WP 53 (ASPA 151), Poland noted that only minor changes to the existing management plan were proposed, and included updated information on the number of penguins and pinnipeds, added information to the map, and editorial amendments for consistency.
- (87) With respect to WP 27 (ASMA 7), the United States noted that only minor changes to the existing management plan were proposed, and included updated maps and policies to ensure that visitors to the area would have access to the most current information.
- (88) With respect to WP 56 (ASMA 4), the United Kingdom reported on the review of the ASMA 4 management plan conducted by the Deception Island Management Group (DIMG). While noting that no significant changes had been made, it mentioned several amendments related to volcanic monitoring and alert procedures, and updates relating to biosecurity with the consequential deletion of the former Appendix 11 relating to “Practical Biosecurity Measures”. This was not intended to be seen as a reduction in the importance of biosecurity in relation to the island, but an acknowledgement of the wider suite of general information now available relating to non-native species within the Treaty system.
- (89) The Committee approved all of these revised management plans that had not been reviewed by the SGMP.
- (90) The Committee highlighted that review and revision of ASPA management plans

provided an opportunity for enhancing cooperation and information exchange among Members who conduct activities within or near specific ASPAs. It also made a note that it would be useful if Members could submit revised management plans with tracked changes to clearly identify proposed boundary changes, but also to clearly illustrate proposed changes on maps that included changes to boundaries.

CEP advice to the ATCM on revised management plans for ASPAs

(91) The Committee agreed to forward the following revised management plans to the ATCM for adoption by means of a Measure:

#	Name
ASPAs 123	<i>Barwick and Balham Valleys, Southern Victoria Land</i>
ASPAs 128	<i>Western Shore of Admiralty Bay, King George Island, South Shetland Islands</i>
ASPAs 141	<i>Yukidori Valley, Langhovde, Lützow-Holm Bay</i>
ASPAs 142	<i>Svarthamaren</i>
ASPAs 151	<i>Lions Rump, King George Island, South Shetland Islands</i>
ASPAs 154	<i>Botany Bay, Cape Geology, Victoria Land</i>
ASPAs 161	<i>Terra Nova Bay, Ross Sea</i>
ASPAs 171	<i>Narębski Point, Barton Peninsula, King George Island</i>
ASPAs 173	<i>Cape Washington and Silverfish Bay, Terra Nova Bay, Ross Sea</i>
ASMA 4	<i>Deception Island</i>
ASMA 7	<i>Southwest Anvers Island and Palmer Basin</i>

(92) The Committee then considered seven current management plans that had been reviewed and found not to need changes.

- WP 9 *Review of the Management Plan for ASPA No. 175: High altitude geothermal sites in the Ross Sea region (including parts of the summits of Mount Erebus, Ross Island and Mount Melbourne and Mount Rittmann, northern Victoria Land)* (New Zealand, United States).
- WP 29 *Review of the Management Plans for Antarctic Specially Protected Areas (ASPAs) 135 North-East Bailey Peninsula, 136 Clark Peninsula, 143 Marine Plain, 160 Frazier Islands and 162 Mawson's Huts* (Australia).
- WP 30 *Review of the Management Plan for Antarctic Specially Protected Area (ASPAs) 169, Amanda Bay, Ingrid Christensen Coast, Princess Elizabeth Land, East Antarctica* (Australia, China).

(93) With respect to WP 9 (ASPAs 175), New Zealand noted that it had conducted a comprehensive review of the existing management plan for ASPAs 175 in collaboration with the United States, and recommended that the CEP endorse their conclusion that no changes to the current plan were required.

(94) Noting that New Zealand and the United States had conducted a desktop review, the Committee commended them for minimising the potential impacts incurred by on-the-ground monitoring and encouraged other Members to take a similar approach when reviewing management plans when appropriate.

(95) With respect to WP 29 (ASPAs 135, 136, 143, 160 and 162), Australia reported on the review of the existing management plans for the five ASPAs. It concluded that

the management plans remained relevant for protecting the values for which the areas were designated and that revisions to the management plans were not required.

- (96) With respect to WP 30 (ASPA 169), Australia reported on the review of the existing management plan for ASPA 169, which it had conducted jointly with China, noting that it was designated in 2008 to protect emperor penguin colonies. Australia and China concluded that the current management plan remained effective and that no revisions were required.
- (97) The Committee concluded that no changes were required to the management plans for ASPAs 135, 136, 143, 160, 162, 169 and 175, and agreed that these remained current. It noted that, in accordance with Article 6(3) of Annex V to the Environment Protocol, a next review of the management plans should be initiated again in five years (2024) or before if information should indicate the need for this.

CEP advice to the ATCM on the five-yearly review of management plans for ASPAs

- (98) The Committee agreed to advise the ATCM that five-yearly reviews of the management plans for the following ASPAs had been conducted in accordance with Article 6 (3) of Annex V to the Environment Protocol, and that the existing management plans remain in force with the next reviews to be initiated in 2024:

- ASPA 135 North-East Bailey Peninsula, Budd Coast, Wilkes Land
- ASPA 136 Clark Peninsula, Budd Coast, Wilkes Land, East Antarctica
- ASPA 143 Marine Plain, Mule Peninsula, Vestfold Hills, Princess Elizabeth Land
- ASPA 160 Frazier Islands, Windmill Islands, Wilkes Land, East Antarctica
- ASPA 162 Mawson's Huts, Cape Denison, Commonwealth Bay, George V Land, East Antarctica
- ASPA 169 Amanda Bay, Ingrid Christensen Coast, Princess Elizabeth Land, East Antarctica
- ASPA 175 High Altitude Geothermal sites of the Ross Sea region.

iii) New draft management plans for protected/managed areas

- (99) The Committee considered draft management plans for three proposed new ASPAs:
- WP 6 *Proposal for a new Antarctic Specially Protected Area at the Rosenthal Islands, Anvers Island, Palmer Archipelago* (United States).
 - WP 35 *Draft Antarctic Specially Protected Area Management Plan for the Léonie Islands and south-east Adelaide Island, Antarctic Peninsula* (United Kingdom and the Netherlands).
 - WP 47 *Proposal for a new Antarctic Specially Protected Area at Inexpressible Island and Seaview Bay, Ross Sea* (China, Italy and Republic of Korea).
- (100) With respect to WP 6, the United States stated that given rapid ice-loss in the region of the proposed ASPA and the potential threat to this pristine area due to the increasing tourism activities in the Antarctic Peninsula area, the United States considered it appropriate to take a precautionary approach and submit a draft management plan for the proposed ASPA at the Rosenthal Islands directly to CEP

XXII for consideration without conducting a prior assessment process. The United States emphasised the importance of the site for research on bird colonies and for long-term monitoring and comparison studies. It noted that information on the proposed ASPA had also been submitted to CCAMLR's Working Group on Ecosystem Monitoring and Management (WG-EMM). The United States recommended that the Committee forward the proposal to the SGMP for review in the intersessional period.

- (101) While expressing support for the proposed ASPA, some Members raised questions regarding the nature of the proposed area, 75 percent of which was marine, and to the ecological and environmental values of the area. Those Members encouraged further discussion on these aspects of the management plan during intersessional review by the SGMP.
- (102) ASOC welcomed the proposed ASPA being established with precaution in mind, and noted that it served as an example of an inviolate area, which were currently underrepresented in the system of ASPAs.
- (103) With respect to WP 35, the United Kingdom reported that it had submitted a prior assessment for this proposed multi-site ASPA to CEP XXI. It noted that additions had been made to include the protection of the Horton, Hurley and Turner Glaciers, which provided a dramatic backdrop to the Léonie Islands and enhanced the area's aesthetic and wilderness values. The United Kingdom also highlighted the importance of the area as a control site against which to compare potential impacts at Rothera Research Station.
- (104) The Committee expressed support for the proposed ASPA and highlighted the benefits of the prior assessment process for potential new protected areas. ASOC noted that it was pleased to see a further area proposed with precaution in mind and suggested that it would protect important wilderness values.
- (105) In response to a question regarding the size of the proposed ASPA, the United Kingdom noted that the wider area around the proposed ASPA was tightly regulated for scientific use, and that the proposed management plan would reinforce existing measures at the site and in surrounding areas.
- (106) China introduced WP 47, on behalf of the co-proponents. The process of developing a draft management plan for the new proposed ASPA was illustrated. Two workshops had been held in Xiamen and Rome in the 2018/19 intersessional period involving all parties with an interest in the area. Information on the proposed ASPA had also been submitted to CCAMLR's Working Group on Ecosystem Monitoring and Management (WG-EMM). The proponents highlighted the fruitful cooperation developed among participants.
- (107) The Committee thanked China for its presentation, noting in particular the collaborative nature of the process, and that matters raised during discussions on the proposed area at CEP XXI had been considered during the development of the draft management plan. The Committee expressed support for the proposed ASPA.
- (108) While expressing support for the proposed area, ASOC questioned the need for campsites in the ASPA. It encouraged the co-proponents to consider designating additional ASPAs in Inexpressible Island which is an ecologically significant area.

- (109) The Committee agreed to forward the three draft management plans for proposed new ASPAs to the SGMP for review. It also invited Members to join the SGMP and welcomed their contributions to discussion during the 2019/20 intersessional period.

CEP advice to the ATCM on new draft management plans for protected/managed areas

- (110) The Committee agreed to advise the ATCM that it had decided to forward the following three draft management plans for protected areas to the SGMP for review:

- Proposal for a new Antarctic Specially Protected Area at the Rosenthal Islands, Anvers Island, Palmer Archipelago.
- Draft Antarctic Specially Protected Area Management Plan for the Léonie Islands and south-east Adelaide Island, Antarctic Peninsula.
- Proposal for a new Antarctic Specially Protected Area at Inexpressible Island and Seaview Bay, Ross Sea.

iv) Other matters relating to management plans for protected areas

- (111) The following papers were submitted under this item, and taken as presented:

- IP 71 *Initiation of the revision process of the Management Plan for Antarctic Specially Managed Area Admiralty Bay (ASMA No. 1)* (Brazil, Ecuador, Peru, Poland, United States). The paper proposed a working plan for the review of the ASMA Management Plan.
- IP 119 *Advances in the revision of the Management Plan for the Antarctic Specially Protected Area No. 112, Coppermine Peninsula, Robert Island, South Shetland Islands* (Chile). The paper reported on the ongoing revision of the management plan for ASPA 112 to be submitted in 2020.
- IP 122 *Estado de avance de la revisión del Plan de Manejo de la ZAEP 133 "Punta Armonía"* (Argentina, Chile). The paper summarised key tasks carried out in the intersessional period on the revision of ASPA 133 Harmony Point, including fieldwork by a multi-disciplinary assessment team.

9b: Historic Sites and Monuments

- (112) The United Kingdom introduced WP 22 *Proposed addition to the list of Historic Sites and Monuments of the wreck of Sir Ernest Shackleton's vessel Endurance*. It noted that while the exact location of the wreck of Sir Ernest Shackleton's vessel *Endurance* was unknown, it met many of the criteria of Resolution 3 (2009) Guidelines for the designation and protection of Historic Sites and Monuments. The UK noted that it had assessed the site against the *Guidelines for the assessment and management of Heritage in Antarctica*, as annexed to Resolution 2 (2018).
- (113) The Committee thanked the United Kingdom and highlighted the importance of the *Endurance* to Antarctic history. It also noted Amundsen's tent as an example of an important Antarctic artefact that had been protected as an HSM even though its exact location was unknown. Following further discussion on whether Resolution 5 (2001) would provide adequate protections to the wreck, the Committee approved the designation of the wreck as a new HSM.

- (114) Argentina introduced WP 25 *Proposal for designation of a new Historic Site and Monument "C.A Larsen Multiexpedition cairn"*, jointly prepared with Norway, Sweden and the United Kingdom. It provided a summary of the reassessment of a site installed in 1892 by Norwegian Captain Carl Anton Larsen. Argentina reported that notification of the finding had been presented in ATCM XXXIX - WP 48 rev. 1, and proposed the designation of the site as a new HSM.
- (115) Sweden thanked Argentina for leading the work and for managing the four already established HSMs related to the Swedish Antarctic Expedition that took place between 1901 and 1903 and was led by Otto Nordenskjöld and Carl Anton Larsen.
- (116) The Committee thanked the co-authors for their proposal, and approved the designation of the C.A Larsen Multiexpedition cairn as a new HSM.
- (117) Spain introduced WP 18 rev. 1 *Notification of pre-1958 historic remains: The Spanish shipwreck "San Telmo"*, which proposed that the CEP afford protection to the remains of the *San Telmo*, a ship from the Royal Spanish Armada that vanished in the Drake Passage in September 1819, whose location remained unknown. Spain recommended that the wreck and associated materials be provided interim protection in accordance with Resolution 5 (2001) if its location were identified, and noted its intention to submit a proposal to declare the wreck of the *San Telmo* an HSM according to the Guidelines for the Assessment and Management of Heritage in Antarctica.
- (118) The Committee acknowledged the relevance of protecting the site of the *San Telmo* wreck and noted that it was particularly important given that it was also a gravesite. The Committee agreed that if its location were identified, the wreck and all materials belonging to the ship or the crew would be afforded interim protection under Resolution 5 (2001), and noted Spain's intention of designating the site as an HSM.
- (119) Australia introduced WP 31 *Notification of the discovery of pre-1958 historic remains at Camp Lake, Vestfold Hills, East Antarctica*, which summarised its discovery of pre-1958 historic remains associated with early Australian National Antarctic Research Expedition's (ANARE) activities in the vicinity of Camp Lake. Australia reported that the historic remains appeared to have stemmed from ANARE's early exploration of the Vestfold Hills in 1955 and included a rock cairn; two rock outlines of cleared tent sites; remnants of wooden crates; wire; a bar of soap; amphibious vehicle tracks; and a possible flag pole foundation. It noted that it was assessing the heritage significance of the remains, consistent with Resolution 2 (2018).
- (120) The Committee noted the discovery of the pre-1958 historic remains and acknowledged that the remains would be subject to interim protection in accordance with Resolution 5 (2001).

CEP advice to the ATCM on additions to the List of Historic Sites and Monuments

- (121) The Committee agreed to forward two proposals for additions to the List of Historic Sites and Monuments to the ATCM for approval by means of a Measure.

#	Description
New HSM	<i>Wreck of Sir Ernest Shackleton's vessel Endurance</i>
New HSM	<i>C.A. Larsen Multiexpedition cairn</i>

(122) The Committee agreed that the interim protection afforded to pre-1958 sites in accordance with Resolution 5 (2001) would apply to the historical remains at Camp Lake, Vestfold Hills, East Antarctica and if its location is discovered, the *San Telmo* wreck.

(123) The United Kingdom introduced WP 58 *The Benefits of Conservation Management Plans for Antarctic Heritage*. It recalled discussions at ATCM XLI relating to the new *Guidelines for the assessment and management of Heritage in Antarctica* as annexed to Resolution 2 (2018), and noted that the CEP had added to its Five-year Work Plan the issue of Conservation Management Plans for discussions at its 2020 meeting. The United Kingdom noted the global significance of Antarctic heritage, despite Antarctica's remote location. Having reviewed a number of examples of Conservation Management Plans developed for Antarctic HSMs, the United Kingdom recommended that the CEP:

- Note that a number of examples of Conservation Management Plans had already been developed for Antarctic HSMs, and that these had proved a useful tool to direct and inform the ongoing management of HSMs;
- Recommend that Parties undertaking management of HSMs consider whether it would be helpful to develop Conservation Management Plans, in a format and style tailored, as appropriate, for each HSM (noting that some HSMs were unlikely to need such plans);
- Encourage Parties to share Conservation Management Plans, or other examples of best practice tools developed to underpin the future sustainability of Antarctic HSMs; and
- Consider at CEP XXIII whether to endorse additional guidance in relation to Conservation Management Plans.

(124) The United Kingdom offered to lead discussions during the intersessional period with a view to providing some guidance on this topic to CEP XXIII.

(125) The Committee thanked the United Kingdom for its work and expressed support for the paper's recommendations. It also encouraged Members undertaking conservation management work to consider HSM designation as a management tool. It noted that not all cultural heritage sites would require a Conservation Management Plan and that any plans that were developed should be fit-for-purpose. The Committee welcomed the offer by the United Kingdom to lead intersessional discussions and report back to CEP XXIII.

(126) Argentina introduced WP 65 *Proposal to redesign the format of the list of Historic Sites and Monuments*, noting that its paper served as a response to the call from CEP XXI to consider the format of the list of HSMs in greater detail. Following analysis of the existing list of HSMs as well as the fields included in other relevant sources, in particular the cover sheet required to follow proposals for new HSMs provided in Resolution 2 (2018), Argentina had identified a series of additional fields to incorporate in the list of HSMs, including: Name, Type, Conservation Status, Description of the historical context, Applicable criteria in accordance with Resolution 3 (2009), Management tools and Photos. With the intention of increasing visibility, Argentina also requested that the ATS update its website to incorporate the new fields and proposed that the information be formatted in a style similar to the Site Guidelines for Visitors. The Committee thanked Argentina for its paper. It agreed to the proposal for the incorporation of new fields of information to the list of

HSMs contained in WP 65, and agreed to forward the proposed new format to the ATCM for approval and adoption through a Decision.

- (127) The Committee agreed to a proposed process for implementing the new format for current HSM. For the purpose of incorporating the current list of HSM into the new format, the Committee agreed to create an online forum on the CEP discussion forum where Parties undertaking management would be able to share with Members information relevant to an HSM to facilitate the drafting of a Working Paper presenting a list of the HSMs (current and the newly approved listings) in the new format. The Secretariat agreed to assist the CEP in establishing this forum on the ATS website.

CEP advice to the ATCM on redesigning the format of the list of Historic Sites and Monuments

- (128) The Committee agreed to a new format for the list of Historic Sites and Monuments, incorporating the following new fields of information in addition to the current fields (as identified in the current HSM list presented in Measure 9 (2016)):

- Name
- Type
- Conservation Status
- Description of the historical context
- Applicable criteria in accordance with Resolution 3 (2009)
- Management tools
- Photos
- Physical features of the environment and cultural and local context

- (129) Belgium presented IP 34 *Inspection du Site et Monument Historique N°45, Plaque de l'expédition de Gerlache, île Brabant, pointe Metchnikoff*, which documented an inspection of HSM 45 led by a Belgian team on 3 March 2019. It reported that the Gerlache Expedition Plaque was very well maintained and noted the discovery of remaining debris from an indeterminate research camp that could potentially predate the Environment Protocol. It highlighted that, although the team was not equipped for complete site rehabilitation, partial cleanup was conducted.

- (130) The following paper was also submitted under this agenda item, and taken as presented:

- IP 160 *C.A. Larsen Multiexpedition cairn* (Norway). It provided a short historical background on Carl Anton Larsen and the expedition that first erected the cairn and pole.

Item 9c: Site Guidelines

- (131) The United States introduced WP 26 *Revisions to the Visitor Site Guide for Site No. 26 Torgersen Island, Arthur Harbor, southwest Anvers Island*. It reported that the guidelines were modified following a comprehensive review of ASMA No.7, which included consideration of the provisions for access to the Torgersen Island Visitor Zone. Owing to recent declines in the local breeding population of Adélie penguins, the United States recommended that the Visitor Zone be closed to all visits except for scientific or management purposes during the main breeding period of 1 October to 15 January inclusive.

- (132) The Committee thanked the United States for its paper, noting that the proposed revision was aligned with the recommendation of the Antarctic Tourism Workshop held in Rotterdam in April 2019 encouraging Parties, when developing and reviewing site guidelines, to give further consideration to elaborating seasonal considerations.
- (133) The Committee agreed to forward the revised Site Guidelines for Torgersen Island to the ATCM for adoption.
- (134) The United Kingdom introduced WP 54 *Revision of Guidelines for Visitor Sites in the South Shetland Islands: Revised Guidelines for Yankee Harbour and Half Moon Island*, jointly prepared with IAATO. The United Kingdom noted that, at its recent annual meeting, IAATO amended its site guidelines for Yankee Harbour and Half Moon Island to update factual content and increase protection for the site. Given that IAATO operators regularly visited both these sites and had taken proactive steps to amend the site guidelines where they recognised change was required, the United Kingdom suggested that it was reasonable to follow these changes across into Antarctic Treaty site guidelines so that they apply to all visitors to the sites. The United Kingdom also referred to CEP discussions, emphasising the need for a dynamic system of site guidelines revisions and updates.
- (135) The Committee supported the United Kingdom's approach and emphasised that site guidelines should be flexible and responsive to changes, and take into account advice from experts and expert organisations such as IAATO. The Committee agreed to forward the Site Guidelines for Yankee Harbour and Half Moon Island to the ATCM for adoption.
- (136) Argentina introduced WP 63 *Revision of Site Guidelines to Snow Hill Hut*, jointly prepared with Sweden, and noted that the current guidelines were adopted in 2007. Argentina reported that the proposed modifications were primarily related to: safety measures for visitors; the strengthening of protection by the establishment of a new closed area with archaeological value near the hut; the establishment of clear communication channels for the coordination prior to each visit; and the update of the map and the photographs. Argentina added that, following informal consultations with IAATO, it had modified the landing requirements to include ships carrying 200 or fewer passengers aboard.
- (137) Sweden acknowledged Argentina's efforts in preserving and protecting the Snow Hill Hut, noting it was a particularly important site for Swedish Antarctic history.
- (138) The Committee agreed to forward the revised Site Guidelines for Snow Hill Hut for adoption by the ATCM.
- (139) The United Kingdom introduced WP 55 *Visitor Site Guidelines Assessment and Review Checklists*, jointly submitted with Argentina, ASOC, Australia, IAATO, and the United States. It recalled that the CEP XXI had expressed support for the development of a formal checklist to aid the future review of Site Guidelines. It noted that two checklists had been developed, *Site Guidelines for Visitors checklist for new sites* and *Site Guidelines for Visitors checklist for sites with existing guidelines*. It recommended that: the CEP endorse both sets of guidelines; encourage Parties assessing sites for new guidelines or reviewing existing guidelines to make use of the checklists; and request the Secretariat make the checklists available on the ATS Website.

- (140) The Committee thanked the proponents for their work, and noted the use of the check lists would be useful in increasing the clarity of Site Guidelines and transparency of the development and review of site guidelines. Following discussions the proposed checklists were combined into one and text was edited to improve clarity and better reflect that the single checklist could be used to both assess new sites and review existing site guidelines.
- (141) The Committee agreed to endorse the Site Guidelines for Visitors checklist, encourage Parties that are either assessing sites for new guidelines or reviewing existing guidelines to make use of the checklist, request the Secretariat to make the checklist available on the ATS website, and forward the checklist to the ATCM for adoption through a Resolution.

CEP advice to the ATCM on Site Guidelines for Visitors

(142) The Committee agreed to forward the following revised Site Guidelines to the ATCM for adoption:

- Torgersen Island, Arthur Harbor
- Yankee Harbour
- Half Moon Island
- Snow Hill Hut

(143) The Committee also endorsed the Site Guidelines for Visitors Checklist. To encourage Parties to make use of the checklist, the CEP asked the Secretariat to make the checklist available on the website and agreed to forward the checklist to the ATCM to encourage the use of the list by means of a Resolution.

(144) IAATO presented IP 142 *Report on IAATO Operator Use of Antarctic Peninsula Landing Sites and ATCM Visitor Site Guidelines, 2018-19 Season*, which reported the data collected by IAATO from IAATO Operator Post Visit Report Forms for the 2018-2019 season. It informed the Committee that the 2018/19 total number of passengers from ships making landings in the Antarctic Peninsula (44,303) had surpassed the previous 2017/18 season total (41,517) and that the increase in tourism levels was expected to continue into the 2019/20 season. IAATO emphasised that over 95% of all landed tourism activity in the Antarctic Peninsula continued to be focused on traditional commercial ship-borne tourism. IAATO highlighted that most visited sites were covered either by ATCM Site Guidelines for Visitors, IAATO operator landing site guidelines, or National Programme management guidelines. It further observed that all visits were conducted in accordance with landing limits established in applicable Site Guidelines for Visitors, and that the IAATO ship scheduler had been used effectively to ensure that no limits had been exceeded.

(145) The Committee thanked IAATO for the report and welcomed its continued commitment to reporting to the CEP on the use of the IAATO operator landing site guidelines and ATCM Site Guidelines for Visitors. It observed that regular updates from IAATO were useful to inform the work of the Committee.

(146) Spain presented IP 43 *Site management of Elephant Point, Livingston Island, South Shetland Islands* (IAATO, Portugal, Spain, United Kingdom). It focused on management tools needed to further preserve Elephant Point, as the area was increasingly visited by tourist and scientists. Following a recent site visit and a

review of the different protection and management tools available, Spain proposed the development of Site Guidelines for Visitors as the most practical approach for this area. Spain stated that it would be working with IAATO over the intersessional period to prepare guidelines for the next CEP meeting.

(147) IAATO noted that, at its annual meeting, the suggestions from IP 43 had been accepted as site guidelines for Elephant Point and would only be replaced once the ATS had developed further guidelines.

(148) The following paper was also submitted under this agenda item, and taken as presented:

- IP 148 *Evaluating the efficacy of viewing distance guideline in minimizing visitor disturbance to penguins: A camera trap approach* (Ecuador). The paper described research designed to improve our understanding of how the presence of humans could influence penguins' behaviour at early phases of the summer at a highly visited site in the Antarctic Peninsula using a camera trap approach.

9d) Marine Spatial Protection and Management

(149) New Zealand introduced WP 48 *Harmonisation of Marine Protection Initiatives across the Antarctic Treaty System*. The paper reported on informal discussions held by interested Parties to develop a response to the ATCM's request in Resolution 5 (2017) "to consider any appropriate actions within the Antarctic Treaty Consultative Meeting's competence to contribute to the achievement of the specific objectives set forth in CCAMLR Conservation Measure 91-05". New Zealand informed the Committee that intersessional work had focused on drafting a list of general complementary measures that could support connectivity between land and ocean, and strengthen marine protection initiatives. It pointed out that participants had agreed that a staged approach to the work would be appropriate, starting with broad initiatives, and aiming to progress towards addressing appropriate complementary actions to contribute to the objectives of CCAMLR MPAs. It noted that participants had also agreed that many aspects of the CEP's ongoing work supported marine protection, and that this work would not open or duplicate discussion regarding the identification, designation or management of CCAMLR MPAs.

(150) The Committee thanked New Zealand for leading informal discussions and for its paper. A few Members suggested that intersessional discussions had lacked the necessary time to reach a satisfactory comprehensiveness and that their views had not been entirely reflected in WP 48.

(151) A number of general points were raised during this discussion, including: the importance of ensuring that discussions in the CEP/ATCM did not duplicate CCAMLR's important work or vice-versa; the need to work towards articulating different views and perspectives; the need to reflect the participants' view in an objective and balance way; the potential benefit of further discussing and refining terminology (considering terms such as synergy and integration replacing the term complementarity); the added value of drawing on outcomes of the Joint SCAR/CEP Workshop on Further Developing the Protected Area System; the importance of working with and considering the knowledge of other organisations, in particular CCAMLR and SCAR; that discussions about harmonisation of marine protection required careful and detailed consideration; and that the CEP played an important role in ensuring marine protection across

Antarctica.

- (152) While most Members had expressed a desire to formalise further discussions on harmonisation of marine protection initiatives through an ICG, a few Members felt that this was premature and indicated a need for further informal discussions to clarify the remit of the task.
- (153) Most Members underlined the importance of responding to the request from the ATCM through Resolution 5 (2017) in a timely and responsive manner, and regretted that the Committee was not able to initiate formalised discussions. The Committee welcomed New Zealand's offer to continue to facilitate informal discussions during the coming intersessional period.
- (154) China pointed out that the Working Paper did not reflect its opinions correctly, and reiterated that its concerns expressed in the last year's CEP still remain. However, China is willing to continue the discussion through an informal ICG.
- (155) SCAR drew the Committee's attention to the SCAR Expert Group on Birds and Marine Mammals and research related to the analysis of Retrospective Analysis of Antarctic Tracking Data and the identification of Areas of Ecological Significance. SCAR noted that relevant data would be released further in the year and would provide insight into both important areas and threats facing the Southern Ocean ecosystem.
- (156) ASOC presented IP 130 *ASOC update on Marine Protected Areas in the Southern Ocean 2018-2019*, which provided an update on MPA discussions at CCAMLR XXXVII in October 2018. It also referred to IP 108 *Developments in the process for adoption of a Marine Protected Area in the west Antarctic Peninsula and south Scotia Arc (DIMPA)*, submitted by Argentina and Chile, and expressed its support for the establishment of the proposed MPA in CCAMLR MPA Planning Domain 1. ASOC highlighted that this proposal was particularly relevant in the global context of climate change and biodiversity loss. Reflecting on WP 48, ASOC recommended to continue discussions on the harmonisation of marine protection initiatives.
- (157) Uruguay congratulated the authors of IP 130 and IP 108 and highlighted the relevance of both papers to the CEP's discussions on marine spatial protection. It expressed its willingness to participate in future developments to the establishment and management of the MPA in Domain 1.
- (158) The following paper was also submitted under this agenda item, and taken as presented:
- IP 108 *Developments in the process for adoption of a Marine Protected Area in the west Antarctic Peninsula and south Scotia Arc (DIMPA)* (Argentina, Chile). This paper described the progress made during 2017 and 2018 towards the establishment of an MPA in Domain 1.

Item 9e) Other Annex V Matters

- (159) Argentina presented the second part of WP 64 *Subsidiary Group on Management Plans Report of activities during the intersessional period 2018-2019*, which addressed the SGMP's work during 2018/19 under its ToRs 4 and 5. Argentina reminded the Committee that ToRs 4 and 5 had tasked the SGMP to work with

relevant Parties to ensure progress on review of management plans overdue for five-year review; consider further improvements to the Guidance for assessing an area for a potential Antarctic Specially Managed Area designation; and review and update the SGMP work plan.

(160) Argentina reported that no Members requested assistance on their management plan reviews. The SGMP’s intersessional work had thus focused on reviewing the “Guidance for assessing an area for a potential ASMA designation”. The convenor stated that modifications proposed by the SGMP had been incorporated into a draft flowchart, which the SGMP recommended that the CEP adopt and attach to its report, encourage use, and include in the Guidelines at a future review. The SGMP also proposed a Work Plan for the upcoming intersessional period, noting that the CEP may wish to add more tasks such as those arising from the outcomes of the *SCAR/CEP Workshop on Further Developing the Antarctic Protected Area System* held prior to CEP XXII.

(161) The Committee thanked the SGMP for its report and agreed to attach the flowchart to its report (Appendix 2) and to encourage use and include in the “Guidelines for assessing an area for a potential Antarctic Specially Managed Area designation” at a future review; encouraged further participation among Members; and agreed to adopt the following SGMP work plan for 2019/20:

Terms of Reference	Suggested tasks
ToR 1 to 3	Review draft management plans referred by CEP for intersessional review and provide advice to proponents (including the four pending plans from previous intersessional period)
ToR 4 and 5	Work with relevant Parties to ensure progress on review of management plans overdue for five year review
	Consider options for supporting proponents to conclude the revision of management plans that remain for several intersessional periods under the scope of the SGMP
	Review and update SGMP work plan
Working Papers	Prepare report for CEP XXIII against SGMP ToRs 1 to 5

(162) Norway introduced WP 44 *Proposed Criteria for de-designation of Antarctic Specially Protected Areas*, jointly prepared with Australia, New Zealand, and the United Kingdom. In accordance with a task identified in the Five-year Work Plan, it proposed a set of criteria for de-designation of ASPAs, as well as an outline of a possible process for ASPA de-designation. The suggested process included guidance on: how the CEP should be asked to consider the potential de-designation of an ASPA; the potential outcomes following an initial notification to the CEP; and the process going forward for a potential de-designation of an ASPA. Norway noted that the Antarctic protected area system was dynamic and that de-designations required rigorous consideration and monitoring.

- (163) The Committee thanked the proponents of WP 44 and emphasised the importance of discussing and formulating criteria for the de-designation of protected areas. While expressing general support for the proposal put forward, some Members suggested that the proposed criteria and process for de-designation lacked clarity and would benefit from further consideration. One Member noted that the results of this work and the suggested criteria could be used for the goal of elaborating guidance for the five yearly review of management plans. It was also suggested that new proposal procedures should be developed when new values emerged and preconditions should be set when the CEP required relevant expertise. ASOC added that de-designation of protected areas required careful consideration and that there was no urgent need to de-designate ASPAs at present.
- (164) The Committee agreed that further discussion on protected area de-designation was required, and welcomed the offer from Norway to lead further intersessional work and report back to the CEP XXIII.
- (165) Canada introduced WP 67 *Coastal Camping Coordination*, jointly prepared with the United States. The paper considered issues related to an increasing number of visitors engaging in vessel-supported short overnight stays (VSSOSs) and associated points relating to site management. It noted that the ATCM and CEP had discussed VSSOSs in previous meetings. It drew attention to the Antarctic Tourism Workshop held in Rotterdam in April 2019, at which coastal camping had been further discussed. It provided five recommendations:
- encourage Treaty Parties to reconsider including explicit guidance on camping in Site Guidelines for Visitors;
 - encourage IAATO to work with member-operators that are experienced in or interested in coastal camping to generate an updated list of current and prospective camping locations;
 - request that SCAR and other relevant experts evaluate the suitability of prospective sites for camping and develop guidance to be included in Site Guidelines for Visitors;
 - promote discussions amongst NCAs that currently review coastal camping activities and other interested Parties and observers to enhance harmonisation on issues such as numbers of campers and camping locations; and
 - consider the development of coastal camping guidelines to help ensure consistent application of best practices and minimise impacts to the Antarctic environment.
- (166) Canada noted that further guidance would be useful and needed, as tourism activities were expected to increase.
- (167) Members engaged in wide-ranging discussion, which raised many key issues relating to the clear value and possible limitations of developing guidance related to VSSOSs, including:

- Recognition of the timeliness of WP 67 and subsequent discussion due to many Members' observations of increased interest in VSSOSs;
- The importance of improving coordination among competent authorities who permit or authorise these activities;
- A general desire to agree upon shared guidelines in order to minimise cumulative impacts of VSSOSs and related activities as assessed during the EIA process;
- The importance of gaining clarity in identifying appropriate VSSOS sites;
- The value of guidelines to ensure conflict is avoided between VSSOSs and scientific activities;
- The need for clear language when describing the different type of "camping" activities that occur in Antarctica noting that this point had already been discussed at the ATCM in the past and that "non-permanent installation" was then used;
- The desire to provide guidance for competent authorities without unintentionally further incentivising coastal camping; and
- Recognition that improvement in the control of tourism activities would be necessary to ensure that activities are undertaken respectful of such guidance on camping, such as the establishment of on-board observers.

(168) IAATO drew the Committee's attention to ATCM XXXVI - IP 98 (*IAATO Guidelines for Short Overnight Stays*) and highlighted its ongoing efforts to better track VSSOS activity in its post-season reports and to keep its Field Operations Manual (FOM) updated. It reminded the Committee that the FOM was available upon request.

(169) The Committee acknowledged the existing and ongoing work of IAATO to develop guidance to ensure VSSOSs were conducted in a safe and environmentally sound manner. It also welcomed offers from IAATO and SCAR to support the proponents of WP 67 and other interested Members to develop further criteria and guidance related to VSSOSs.

(170) The Committee thanked Canada and the United States for drawing its attention to this important topic. The Committee expressed general support for the recommendations and agreed on the usefulness of additional guidance regarding VSSOSs.

(171) The Committee agreed to:

- encourage Parties and invited Experts with an interest in vessel supported short overnight stays to participate in the ICG reviewing visitor site guidelines with a view to ensuring that short overnight stays are considered in the updating of the guidelines;
- invite IAATO to work with member-operators that are experienced in or interested in short overnight stays to review the list of current camping locations, as reported in IP 98 (2013), and update the committee as appropriate;
- invite SCAR and other relevant experts to develop criteria, with reference to IAATO's camp site selection criteria, that can be used in considering new

camping areas for consideration by CEP 23; and

- add an item to the Five-year Work Plan to develop guidelines for short overnight stays to ensure consistent application of best practices and minimise impacts to the Antarctic environment.

(172) Australia and SCAR introduced WP 70 *Recommendations arising from the Joint SCAR/CEP Workshop on Further Developing the Antarctic Protected Area System, Prague, Czech Republic, 27-28 June 2019*, prepared jointly with the United States and the Czech Republic. They also referred to IP 165 *Co-convenor's report of the joint SCAR/CEP Workshop on Further Developing the Antarctic Protected Area System, Prague Czech Republic, 27-28 June 2019*, also prepared jointly with the United States and the Czech Republic.

(173) Australia and SCAR informed the CEP that the Joint SCAR/CEP Workshop on Further Developing the Antarctic Protected Area System was hosted by the Czech Ministry of the Environment at the Masaryk College in Prague, Czech Republic, from 27-28 June 2019. The workshop was co-convened by Ewan McIvor (Australia), Chandrika Nath (SCAR), Polly Penhale (United States) and Aleks Terauds (SCAR), and was attended by 50 participants, including 9 representatives of SCAR, representatives of 19 CEP Members and representatives of 3 CEP Observers (see list of participants in IP 165).

(174) Australia and SCAR highlighted that the workshop was highly constructive, and had demonstrated the value of continuing the effective engagement between SCAR and the CEP, in general, and particularly on the systematic further development of the protected area system. They highlighted the co-conveners' observations regarding key outcomes under the workshop terms of reference, including general agreement that:

- the current series of ASPAs continued to serve an important purpose, but in general had not been identified in a systematic manner;
- initiating further work to systematically develop the protected area system, in conjunction with the application of other tools, would help to advance the protection of Antarctica's outstanding values;
- it remained important to draw on the best available science and also to continue to build the level of scientific information over time;
- dedicated work should be initiated to develop a series of ASPAs that address the criteria in Article 3.2 of Annex V; and
- any future protected area system would need to be implemented effectively and efficiently.

(175) Australia and SCAR advised the Committee that five recommendations had been agreed by participants during the workshop:

- Recommendation 1: That the CEP considers the draft Report on the State of the Antarctic Protected Area System (Attachment A to WP 70), which is an objective report not an evaluation or assessment, and as appropriate, forwards the report to the ATCM in accordance with its role to provide advice on the 'operation and further elaboration of the Antarctic Protected Area system'.
- Recommendation 2: That the CEP encourages Members, SCAR and other

Observers and Experts to prioritise and support further research that will build on the existing body of scientific evidence to support the further development of the protected area system in accordance with Article 3.2 of Annex V.

- Recommendation 3: Recognising SCAR's role in facilitating access to data, that the CEP requests SCAR to consider establishing a repository of information relevant to identifying ASPAs within a systematic environmental-geographic framework (eg, environmental datasets, human activity data, analyses of the implications of global pressures).
- Recommendation 4: That the CEP initiates a programme of work involving close engagement with SCAR and other stakeholders (eg, COMNAP, IAATO, ASOC), to develop a framework for systematically developing the protected area system (eg, to identify goals/objectives, related science requirements, priorities for actions to be taken by the CEP and Parties, timeframe for action, measures to evaluate progress).
- Recommendation 5: That the CEP supports a programme of work to review and rationalise its existing protected area guidance materials. This could also involve consideration of guidance for the five-yearly review of management plans.

(176) The Committee recognised that the workshop was a productive forum for discussion and reflection to address actions and priorities in the CEP Five-year Work Plan. Members highlighted several important aspects of the workshop, including:

- The outcomes of the workshop reflected a substantial amount of work on the part of the co-conveners and more than 50 workshop participants;
- All workshop discussions were informed by a wide body of literature, including peer reviewed publications, as well as scientific presentations delivered at the workshop; and
- The recommendations emerging from the workshop reflected the breadth of information considered, and were agreed by all workshop participants.

(177) Members provided some constructive advice to advance discussions on how best to develop the Antarctic Protected Areas system. Members highlighted the value of:

- considering not only protected areas but also refuges for Antarctic flora and fauna;
- including redundancy in the Protected Areas system;
- establishing protected areas for values that had not yet been protected, such as aesthetics;
- ensuring that the general framework for management was flexible;
- considering connectivity between land and sea in the further development of the system; and
- engaging SCAR and IAATO, who are working on a systematic conservation planning process focused on the Antarctic Peninsula, which could inform further development of the system.

(178) China recalled that there had been intensive discussions in those two days, and that divergent or various opinions had been expressed. Notes of these different opinions had also been taken and presented in the plenary. It noted that in general, intensive discussion and divergent views were essential to the success of a

workshop. In respect to the outcomes of the workshop, China stated that ToR 1 had not been fully discharged by reference to last year's WP 16. China is of the view that there was a general recognition or agreement that an assessment or evaluation on the basis of scientific methodology was crucial in providing scientific advice. Consequently, China recommended that the CEP should initiate an assessment in accordance with the last year's WP 16. Moreover, China indicated that some different opinions expressed in the workshop had been missed in both WP 70 and IP 165, and as a result they had not been reflected in the recommendations. China urged that recommendations should have covered all views in a balanced and scientific way.

(179) Some Members agreed on the importance of an assessment.

(180) Australia advised that the co-convenors of the workshop had made best efforts to reflect the key points raised during the workshop in the papers presented to the Meeting.

(181) ASOC commended the workshop conveners and participants for their hard work. It noted that there were no legal, scientific, or practical barriers to expanding the Antarctic protected areas system. ASOC encouraged the CEP to proceed without delay on all recommendations resulting from this workshop.

(182) Following discussion, the Committee:

- Agreed to forward the draft Report on the State of the Antarctic Protected Area System (Attachment A to WP 70) to the ATCM, noting it was an objective report not an evaluation or assessment, in accordance with its role to provide advice on the 'operation and further elaboration of the Antarctic Protected Area system'.
- Agreed to assess the effectiveness of the current series of ASPAs with regard to the provisions of Article 3.2 of Annex V, and in light of the other provisions of the Environment Protocol (including consideration of methodologies).
- Encouraged Members, SCAR and other Observers and Experts to prioritise and support further research that will build on the existing body of scientific evidence to support the further development of the protected area system in accordance with Article 3.2 of Annex.
- Recognised SCAR's role in facilitating access to data, and encouraged SCAR to consider establishing a repository of information relevant to identifying ASPAs within a systematic environmental-geographic framework (eg, environmental datasets, human activity data, analyses of the implications of global pressures – see Attachment B to WP 70).
- Agreed to initiate a programme of work involving close engagement with SCAR and other stakeholders (eg, COMNAP, IAATO, ASOC), and to develop a guideline for systematically developing the protected area system, including identifying goals/objectives, assessment of current protected areas, related science requirements, priorities for actions to be taken by the CEP and Parties, timeframe for action and implementation, and measures to evaluate progress.
- Agreed to support a programme of work to review and rationalise its existing protected area guidance materials, noting it could also involve consideration of guidance for the five-yearly review of management plans.

- (183) The CEP updated its Five-year Work Plan to include actions agreed by the Committee from discussions on the Protected Areas workshop.

CEP advice to the ATCM on the Protected Areas Workshop

- (184) In accordance with its role to provide advice on the operation and further elaboration of the Antarctic Treaty System, the Committee agreed to advise the ATCM that it had considered a draft report on the State of the Antarctic Protected Area System (Attachment A to WP 70), noting it was an objective report and not an evaluation or assessment. The Committee agreed to forward the report to the ATCM.
- (185) The Secretariat presented SP 7 *Visits to sites and protected areas reporting and mapping developments*, which provided background on the development of two interactive maps detailing visits to sites and to Protected Areas, and demonstrated the new tools on the website. The Secretariat invited Members to access and use the maps, and provide comments directly to the Secretariat.
- (186) The Committee thanked the Secretariat for these useful developments. It noted that the maps could only be as good as the data on which they were based, and encouraged Members to take extra precaution to ensure that they recorded data in a timely and correct manner into the EIES.
- (187) SCAR presented IP 24 *Systematic Conservation Plan for the Antarctic Peninsula Project Updates*, submitted jointly with IAATO. It provided an update and next steps on a collaborative project undertaken by SCAR and IAATO to develop a systematic conservation plan for the Antarctic Peninsula. SCAR pointed out the project aimed to inform the Antarctic community on how best to concurrently manage biodiversity and human activities in the region, and contribute to the sustainable management of IAATO activities into the future. It further reported on the establishment of a Liaison Group to provide advice, input and data to the project. SCAR invited interested parties to contact the SCAR Secretariat via scp@scar.org stating their interest in the liaison group and indicating in what capacity they would wish to participate.
- (188) In response to a question, SCAR noted that the project was currently focused on the assessment phase and that implementation would be considered in the future.
- (189) The Committee thanked SCAR and IAATO for their initiative and took note of the call for participation in the project.
- (190) ASOC presented IP 134 *Systematic expansion of the Antarctic protected areas network*, which examined some key issues concerning the requirement under Annex V to the Environment Protocol to identify and include in the series of ASPAs a range of area categories. ASOC recommended Parties to work cooperatively towards achieving the area protection objectives of the Environment Protocol to which all Parties had committed. ASOC recommended that Parties consider ways to streamline ASPA listing and review so that there can be a focus on the expansion of the ASPA system; and that Parties develop approaches to earmark new areas as part of a systematic conservation planning process rather than individually.
- (191) The following papers were also submitted under this agenda item, and taken as

presented:

- IP 40 *Report of the Antarctic Specially Managed Area No. 6 Larsemann Hills Management Group* (Australia, China, India and the Russian Federation). This paper reported on the commencement of a review of the ASMA management plan for ASPA 174 Stornes and the ASMA management plan for ASMA 6 Larsemann Hills.
- IP 52 *A snapshot of terrestrial biodiversity protection in Antarctic Specially Protected Areas* (Australia and SCAR). This paper summarised the first continent-wide assessment of terrestrial biodiversity protection within ASPAs.
- IP 86 *Topic Summary: CEP Discussions on Further Developing the Antarctic Protected Area System* (Australia). This paper presented a summary of CEP meeting documents and discussions on the topic of further developing the Antarctic Protected Areas system.
- IP 117 *Relevance of Rip Point, Nelson Island, to be proposed as ASPA* (Chile). This paper reported on a review of the scientific information available for the site with a view to assessing tools for better protecting it in accordance with CEP guidelines.
- IP 119 *Advances in the revision of the Management Plan for the Antarctic Specially Protected Area No. 112, Coppermine Peninsula, Robert Island, South Shetland Islands* (Chile). This paper reported on the ongoing revision of the management plan for ASPA 112.

Item 10: Conservation of Antarctic Flora and Fauna

Item 10a) Quarantine and Non-native Species

- (192) The United Kingdom introduced WP 34 *Non-native Species Response Protocol*, prepared jointly with Spain, Argentina, France, and New Zealand. The paper highlighted that the CEP Non-native Species Manual recognised that the response to a non-native species introduction should be undertaken as a priority, to prevent an increase in the species' distribution range and to make eradication simpler, cost effective, and more likely to succeed. The response protocol aimed to assist Parties in their response to a non-native species introduction, facilitating a more rapid and appropriate response, and thereby help reduce the risk to Antarctic ecosystems. Recognising that there would still be a need for site specific advice, the paper recommended that the CEP consider the draft Non-native Species Response Protocol and, if deemed acceptable, request that the Antarctic Treaty Secretariat append it to the CEP Non-native Species Manual.
- (193) The Committee thanked the United Kingdom, Spain, Argentina, France, and New Zealand for developing the Non-native Species Response Protocol. It observed that the topic of responding to non-native species invasion had high importance and that the protocol would be a very useful tool for Parties. The Committee agreed to request that the Antarctic Treaty Secretariat append the Non-native Species Response Protocol to the CEP Non-native Species Manual and to encourage its use broadly. The Committee further noted IAATO's intention to add this protocol to its Field Operations Manual.
- (194) COMNAP introduced WP 50 *Review and Update of the "Checklists for supply chain managers of National Antarctic Programs for the reduction in risk of transfer of*

non-native species”, prepared jointly with SCAR. The paper presented an update of the 2010 checklists of the same name. It noted that both the original checklist and this updated version had been prepared as a collaborative effort between COMNAP and SCAR. COMNAP further informed the Committee that the original 2010 checklist had been translated into several languages and was widely used. It also noted that work was underway to develop a new checklist aimed at reducing intra-continental transfer of species. COMNAP and SCAR recommended: that the CEP replace the 2010 version of the checklists currently found in the CEP Non-native Species Manual with the revised 2019 version of the checklists, and that Parties encourage their National Antarctic Programmes and other supply chain managers and operators in their countries to use the checklists on a voluntary basis.

(195) The Committee thanked SCAR and COMNAP for their efforts to update these very important checklists. It noted that the 2010 checklists were widely used by Parties, National Antarctic Programmes, and IAATO. The Committee agreed that it would replace the 2010 version of the checklists currently found in the CEP Non-native Species Manual with the revised 2019 version of the checklists, and that Members would encourage their National Antarctic Programmes and other supply chain managers and operators in their countries to use the checklists on a voluntary basis. The Committee noted the importance of making this guidance widely available so that all operators have access to these checklists, and encouraged its translation into multiple languages.

(196) The Committee also welcomed the announcement from COMNAP and SCAR that they are developing a checklist aimed at reducing the intra-continental transfer of species. It observed that this important work would be highly relevant for many national programmes.

(197) The following papers were also submitted under this agenda item, and taken as presented:

- IP 27 *Marine non-native species in the Antarctic Treaty area* (United Kingdom). This paper presented recent knowledge regarding the introduction pathways/vectors, risk, known status and potential impacts of marine non-native species in the Antarctic Treaty area.
- IP 32 *Anthropogenic transfer of terrestrial species within Antarctica: assessing the risks* (United Kingdom, Spain). This paper presented recent knowledge regarding the pathways and risks of transfer of non-native species between Antarctic biogeographic regions.
- IP 38 *Report on the extent of sewage treatment plant infestations across the Antarctic Treaty area: Survey results* (COMNAP). This paper presented the results of a COMNAP survey to identify any flies present in station sewage treatment facilities across the Antarctic Treaty area and an update on the non-native fly extent at facilities on King George Island.
- IP 120 *Report of the 2018/2019 summer campaign of the joint monitoring programme of non-native flies in King George Island / Isla 25 de Mayo* (Uruguay, Argentina, Brazil, Chile, China, Germany, Republic of Korea, the Russian Federation). The paper provided an update of a joint monitoring programme to collect relevant data on the presence of the non-native fly *Trichocera maculipennis* in stations on King George Island to inform

management actions to control the fly.

- IP 150 *Eradication of a non-native grass *Poa annua* L. from Western Shore of Admiralty Bay, King George Island, South Shetland Islands – update 2018/2019* (Poland). This paper presented the results of a research study on the eradication of the non-native species *Poa annua* from ASPA No 128 Western Shore of Admiralty Bay and Arctowski Station.

Item 10b) Specially Protected Species

- (198) The United Kingdom presented IP 42 *Emperor penguins - vulnerable to projected rates of warming and sea ice loss; an international collaboration to inform species-related conservation decision-making and conservation planning*, prepared jointly with ASOC, Australia, Finland, France, Germany, Monaco, Norway and SCAR. The United Kingdom reported that an international group of experts had collaborated to review the dependence and vulnerability of emperor penguins to climate change. The paper noted that emperor penguins are threatened by the ongoing loss of their breeding habitat as sea ice declines. The co-authors considered that species-related management options, informed by the best available science, could be developed in order to reduce or eliminate other anthropogenic stressors from emperor penguins and thereby improve the resilience of this species. The paper concluded that emperor penguins should continue to be the focus of collaborative international research.
- (199) The Committee thanked the United Kingdom and the other co-authors for the useful paper. Several Members shared existing efforts to improve understanding of the dependence and vulnerability of emperor penguins to climate change. ASOC noted that its member organisation WWF had supported the satellite monitoring of emperor penguin populations and looked forward to further progress on the issue. The Committee encouraged further research and collaboration on the subject.
- (200) Monaco suggested an informal intersessional group to investigate management and conservation planning options that might be considered for the species.

Item 10c) Other Annex II Matters

- (201) SCAR introduced WP 17 *SCAR's Code of Conduct for the Use of Animals for Scientific Purposes in Antarctica*. This paper represented the culmination of a substantial review and revision of the Code of Conduct during the 2017/18 and 2018/19 intersessional periods. The revised non-mandatory code of conduct was included in Attachment A. SCAR highlighted that content of the code of conduct had been expanded to include all animals for which information was available and for which relevant research was being conducted. It noted it had also completed typographical, grammatical, and phrasing updates. SCAR recommended that the CEP: recognise that broad and extensive consultation had been undertaken in this review and revision; recognise that the revised code of conduct replaced the existing code of conduct; and consider the revised code of conduct for dissemination and encouragement of adoption when planning and undertaking work that involved the use of animals in Antarctica.
- (202) The Committee thanked SCAR for the considerable work it had completed to produce the Code of Conduct for the Use of Animals for Scientific Purposes in Antarctica. After some slight adjustments, the Committee endorsed SCAR's Code of Conduct for use of animals for scientific purposes, and agreed to forward it to the

ATCM for approval by a draft Resolution on encouraging its dissemination and use. The usefulness of having this code of conduct translated was highlighted.

CEP advice to the ATCM on SCAR's Code of Conduct for the Use of Animals for Scientific Purposes in Antarctica

(203) The Committee endorsed SCAR's Code of Conduct for use of animals for scientific purposes in Antarctica, and agreed to forward it to the ATCM for approval by a draft Resolution on encouraging its dissemination and use.

(204) SCAR introduced WP 68 *Anthropogenic Noise in the Southern Ocean: an Update*. In response to a request from CEP XVII, SCAR noted that it had completed a comprehensive review of peer-reviewed literature and convened a committee of experts, chaired by Mahlon C. (Chuck) Kennicutt, to provide further advice on this issue, and bring all relevant information together. SCAR also referred to BP 3 *Anthropogenic Noise in the Southern Ocean: an Update*, which supports the Working Paper with more details on scientific knowledge regarding the effect of noise on marine wildlife. Based on its findings, SCAR observed that research on acoustic environments and anthropogenic noise was continuing to progress, with most studies conducted outside the Antarctic region. It also noted that the state-of-knowledge of potential impacts of anthropogenic noise on marine life was varied. In concluding, SCAR noted that there are significant gaps in the scientific knowledge needed to advance evidence-based policy-making on the impacts of noise in Antarctic marine environments. SCAR outlined a number of actions that would be required to address these gaps:

- expanding the scope of studies of species and taxonomic groups' exposure-response to anthropogenic noise;
- standardising methodologies, experimental approaches and metrics of effectiveness;
- improving knowledge of the spatial and temporal scales of natural ambient and anthropogenic sound in Antarctic waters;
- conducting risk assessments that determine the likelihood that individuals and populations will be exposed to harmful levels of sound;
- facilitating accessibility to all types of data and encouraging data sharing;
- improving mitigation and management solutions; and
- fostering a collaborative relationship between all stakeholders.

SCAR recommended that the CEP encourage the development of this research and related activities to address gaps in the evidence-base needed to support decision-making and policy development relating to the impacts of noise in the Antarctic marine environment. Recognising broad interest in this topic, SCAR indicated that it would be happy to work with interested parties to summarise this knowledge for the Antarctic Environments Portal.

(205) By fully supporting the recommendations in WP 68, Germany stressed the need to urgently close the several significant gaps in knowledge mentioned by SCAR, since competent authorities would still need to come to a conclusion if a permit for activities that involved underwater noise were to be requested. Germany informed about its research to support decision-making in this regard in IP 31 *Results from the international workshop "The Effects of Noise on Marine*

Mammals in Antarctica” held in November 2018 in Germany. Its paper reported on its research to support decision-making in this regard and Germany explained that the workshop had been convened to determine the current state of knowledge on the effects of noise on marine mammals in Antarctica. The workshop had also facilitated discussion among marine mammal experts regarding research priorities. Germany elaborated that workshop participants had recommended a brief series of future workshops to refine marine mammal noise exposure criteria for Antarctica to have a criteria matrix that addresses Antarctic native marine mammal species only and the three main sources of underwater noise, namely: seismic airguns, hydroacoustic equipment, and ships. Germany highlighted that it would issue a call for workshops in the series in the second half of 2019, and would inform the CEP Contact Points about it and invite interested parties to answer the call.

- (206) ASOC noted that it was possible for action to be taken on this matter. Referring to recommendations from its IP 131 *Emerging Issues for Southern Ocean Vessel Management*, ASOC encouraged Members to commit to applying the existing Convention on Migratory Species Guidelines to reduce underwater noise, and to support further work being undertaken by the International Maritime Organization to address noise from shipping.
- (207) The Committee thanked SCAR for its comprehensive work and for its introduction of WP 68. It also thanked Germany for its useful presentation of IP 31. The Committee emphasised the importance of understanding and addressing the effects of noise in marine environments. It was in this context noted that this item in the 5YWP should be given a higher priority level. Members agreed that it would be useful to have a summary of SCAR’s findings on the Antarctic Environments Portal, noting that these summaries would also be useful as supporting material for permitting authorities and assessment of activities. The Committee thanked SCAR for its willingness to work with interested parties on this task. It also noted the value of connecting this work with the work of the Arctic Council’s Working Group on Protection of the Arctic Marine Environment.
- (208) The Committee encouraged research and other activities to address gaps in management-relevant knowledge regarding the impacts of noise on the Antarctic environment, and in particular encouraged National Antarctic Programmes to follow up on this call.
- (209) Germany presented IP 10 *An update to the state of knowledge of wildlife responses to unmanned aerial vehicles*, jointly prepared with Portugal, SCAR and Spain. The paper summarised the major findings and discussion that emerged from the SCAR workshop “*Drones and Antarctic Biology*” held at the SCAR Biology Symposium in Leuven on 9 July 2017. It noted that a scientific publication had been compiled to provide details on the key outcomes and recommendations (Mustafa *et al.* 2018).
- (210) The following paper was also submitted under this agenda item, and taken as presented:
- IP 97 *New IAATO Procedures for Operating in the Vicinity of Whales* (IAATO). This paper summarised the new IAATO actions that would commence in the 2019/20 Antarctic season to mitigate ship strike risks.
- (211) The following Background Paper was also submitted under this agenda item:

- BP 3 *Anthropogenic Noise in the Southern Ocean: an Update* (SCAR), which supported WP 68 provided in response to a request from CEP XVII that SCAR update information on anthropogenic sound in the Southern Ocean.

Item 11: Environmental Monitoring and Reporting

- (212) The United Kingdom introduced WP 14 *Reducing Plastic Pollution in Antarctica and the Southern Ocean*. Noting that marine plastic pollution was increasingly being recognised as a major conservation issue both globally and within the Antarctic Treaty area, it stressed the importance of reducing transportation of macroplastics and microplastics to the Antarctic region. It referred the Committee to IP 33 *Quantifying and understanding the impacts of plastic pollution in the Southern Ocean*, which it jointly submitted with Peru, as well as IP 133 *Mitigating microplastic pollution in Antarctica*, submitted by ASOC; IP 8 *Annual Report for 2018/19 of the Council of Managers of National Antarctic Programs (COMNAP)*, submitted by COMNAP; and IP 99 *Reducing Single-Use Plastic and Waste Generated by Polar Tourism*, submitted by IAATO; all of which provided further information relevant to WP 14. The United Kingdom made six recommendations to the Committee regarding efforts that could be undertaken to reduce plastic pollution in the Antarctic.
- (213) ASOC presented IP 133 *Mitigating microplastic pollution in Antarctica*, which included additional details on microplastics research in the Southern Ocean. ASOC noted that action to address this issue was already underway, and that Coalition of Legal Toothfish Operators (COLTO) members were installing laundry water filters to capture microplastic on their vessel. It further noted that COMNAP had also recommended that National Antarctic Programmes ban personal care products containing microbeads. To facilitate the implementation of mitigation methods by those operating in the Antarctic, IP 133 provided an appendix with practical information on various laundry water filtration methods. ASOC observed that because it was impossible to recover microplastics from the marine environment, installing laundry filters and banning personal care products containing microbeads were simple, yet meaningful, steps that could be taken to prevent further contamination of Antarctic marine ecosystems.
- (214) COMNAP welcomed WP 14 and drew the Committee's attention to recommendations from COMNAP's plastics workshop held in 2018 that can be found on the COMNAP website. It noted that they are broadly aligned with the United Kingdom's recommendations in their paper. COMNAP also thanked ASOC for its paper, and noted that information on microplastics and filters had been shared with all National Antarctic Programmes.
- (215) The Committee thanked the United Kingdom for raising this important topic for discussion, as well as Peru, ASOC, IAATO, and COMNAP for their informative papers. It recognised that this issue was a significant problem in Antarctica and the Southern Ocean that could have long-lasting environmental impacts. It expressed wide support for taking steps to minimise impacts of microplastics and macroplastics in the region. The Committee encouraged those Members who reported relevant research projects to continue providing updates.
- (216) The Committee agreed that there is scope for further work to progress actions and measures on this important topic in the coming years. Since the Committee could not agree on recommendations regarding macroplastics, the Committee agreed to

the amended proposed recommendations and to forward them to the ATCM through a draft Resolution.

CEP advice to the ATCM on mitigating microplastic pollution in Antarctica

- (217) The Committee considered a report on mitigating microplastic pollution in Antarctica, and agreed to forward a draft resolution recommending steps that could be undertaken to reduce plastic pollution in the Antarctic.
- (218) New Zealand introduced WP 52 *Antarctic Environments Portal*, jointly prepared with Australia, the Netherlands, Norway, SCAR, Spain, and the United States, and referenced IP 23 *Antarctic Environments Portal: Content Management Plan* (Australia, the Netherlands, New Zealand, Norway, SCAR, Spain, United States).
- (219) New Zealand highlighted that the Antarctic Environments Portal had continued to support the work of the CEP by making available to all CEP Members and Antarctic Treaty Parties, up-to-date, state-of-knowledge reports on issues of relevance to the Committee's work programme. New Zealand acknowledged the significant contributions of the late Professor David Walton in his role as editor of the Portal. It observed that his tireless work in bringing scientific knowledge to support the work of the Antarctic Treaty system would be his enduring legacy.
- (220) New Zealand and its co-authors recommended that the CEP:
- renew its support for the Antarctic Environments Portal, recognising that it continued to support the work of the Committee;
 - review the Content Management Plan and provide suggestions for further issues to be covered through Information Summaries in the Portal, relevant to the CEP's agenda and interests; and
 - ensure the Portal continued to support the work of the Committee, by identifying how they could assist the ongoing operation of the Portal through SCAR with direct funding or support-in-kind.
- (221) While discussing this paper, Members raised many key points to consider in ensuring the continuing utility of the Antarctic Environments Portal, including:
- keeping the Portal as an independent, third party, neutral entity that was not affiliated with or financed by the ATCM or CEP;
 - keeping costs manageable and the financial impact neutral for SCAR's Secretariat;
 - ensuring that the materials presented on the topic were apolitical and based on the best available science;
 - continuing to increase geographic representation in portal materials;
 - focussing on essential issues relevant to the work of the CEP to avoid duplication with other similar services;
 - ensuring that the processes for both accessing and contributing to the Portal were clear, open to all scientists, and had high visibility; and
 - suggesting to develop the Content Management Plan taking into account the list of science needs identified in the Five-year Work Plan and in the Climate Change Response Work Plan.

- (222) In the spirit of transparency, the Netherlands informed the Committee that it intended to make a financial contribution to support the Portal for two years. The United Kingdom and New Zealand also indicated that they would make financial contributions. Spain indicated that it intends to support the translation of Portal materials into Spanish; and France indicated that it intended to continue to support the translation of Portal materials into French.
- (223) While supporting the fact that the Antarctic Environments Portal continued to contribute to SCAR's role of providing independent and objective scientific advice to the CEP, China drew the attention of the Committee to the fact that the Antarctic Environments Portal is an independent third-party information platform not officially affiliated with, or managed, financed, or directed by the CEP or ATCM.
- (224) SCAR informed the Committee that it was very pleased to assume the operation of the Antarctic Environments Portal after the end of the current arrangements, and to ensure the ongoing delivery of content of relevance to the CEP and to its Members. It reminded the Committee that doing so was well-aligned with SCAR's role in providing independent and objective advice to the Antarctic Treaty System. It indicated that all scientists would be welcome to contribute as it worked to expand the geographic coverage of materials presented in the Portal. Finally, SCAR acknowledged the importance of maintaining transparency regarding financial contributions to maintain neutrality in the finished products presented on the Portal. It noted that it had a very strict set of guidelines aimed to preserve transparency and neutrality when considering accepting monetary contributions.
- (225) The Committee thanked the authors of WP 52 for their work on the Antarctic Environments Portal. The Committee broadly agreed on the recommendations provided in WP 52. It stressed the need for using the Portal to address priority issues in the Five-year Work Plan. It thanked SCAR for assuming management of the Portal in the coming year and agreed to adopt the recommendations as presented in WP 52.
- (226) The United Kingdom introduced WP 62 *The Status and Monitoring of Antarctic Seal Species*. It examined the status of Antarctic seal species, and explored relevant methods of protection in the ATCM and CEP as well as current levels of protection. It suggested that current low levels of protection might reflect a lack of data on seal numbers and status in the Antarctic. The United Kingdom recommended that the Committee urge SCAR and other scientists to increase research into Antarctic seal species. It recommended that the Committee encourage interested Parties to join informal intersessional work in assessing the available management tools for the protection of Antarctic seals and considering whether additional protection for Antarctic seals was required.
- (227) The Committee thanked the United Kingdom for raising this important issue. Expressing their support for the recommendations in the paper, a number of Members and Observers noted ongoing research on Antarctic seals and urged for more research. The Committee highlighted tools that are currently in development, such as the Important Marine Mammal Areas (IMMA) and the Retrospective Analysis of Antarctic Tracking Data (RAATD) and might be useful to these efforts. It expressed support for ongoing intersessional discussions on these topics.

- (228) SCAR reiterated the existence of ongoing relevant research. It echoed the Committee's observations about the potential of initiatives like the Retrospective Analysis Antarctic Tracking Data (RAATD), Important Marine Mammal Areas (IMMA), and the use of remotely sensed data to inform the management and conservation of seals. SCAR drew the Committee's attention to its own activities in these initiatives through groups such as the Expert Group on Birds and Marine Mammals (EG-BAMM) and the Action Group on Remote Sensing.
- (229) Australia presented IP 100 *Progress with development of a methodology to assess the relative sensitivity of sites to visits by tourists*, prepared jointly with New Zealand, Norway, the United Kingdom, the United States and IAATO. The paper provided an update on work since CEP XIX in relation to Recommendation 3 of the CEP Tourism Study. Australia noted that, over the last intersessional period, the methodology to assess the relative sensitivity of sites to visits by tourists had been updated based on feedback from Members and Observers. Australia noted the co-authors' intention to trial the methodology and report back on its process to CEP XXIII.
- (230) The Committee thanked Australia for the progress report. It encouraged Members to engage in the trial over the coming intersessional period, and looked forward to receiving a further update in the coming year.
- (231) The following papers were also submitted under this agenda item, and taken as presented:
- IP 6 *The Reference Elevation Model of Antarctica: A New Tool for Supporting Research and Operations on the Continent* (United States), which noted that the Model was a powerful tool for Antarctic field logistics and planning as well as research and monitoring of environmental change on the Antarctic continent.
 - IP 23 *Antarctic Environments Portal: Content Management Plan* (Australia, the Netherlands, New Zealand, Norway, SCAR, Spain, United States). This paper invited the Committee to provide comments on the content management plan and provide feedback on the Portal website.
 - IP 33 *Quantifying and understanding the impacts of plastic pollution in the Southern Ocean* (United Kingdom, Peru). This paper encouraged Parties to support scientific research efforts on plastics in the Southern Ocean, with a view to supporting evidence-based decision making by the Committee on this issue.
 - IP 99 *Reducing Single-Use Plastic and Waste Generated by Polar Tourism* (IAATO). This paper provided a brief overview of recent efforts and presented IAATO's new guidelines for visitors.
 - IP 102 *Environmental Monitoring and Management Plan for Contaminated Areas at the Comandante Ferraz Antarctic Station (EACF)* (Brazil). This paper noted that the Brazilian Antarctic Programme had been complying with the guidelines established by the Madrid Protocol as relevant to the EACF surroundings.
 - IP 124 *Avances de Colombia en la elaboración de un Índice de Sensibilidad Ambiental a Derrames de hidrocarburos para la Isla Rey Jorge* (Colombia).
 - IP 154 *Antarctic Data Analysis: A tool to support evidence-based environmental management* (New Zealand). This paper presented and

welcomed input on the primary outcome of a New Zealand research project to develop a tool that would enable environmental managers to understand and minimise environmental impacts when assessing the planning, permitting, and implementation of Antarctic activities.

(232) The following Background Paper was also submitted under this agenda item:

- BP 20 *DNA Metabarcoding as a tool for marine conservation, monitoring and management* (Portugal, Australia, Germany, New Zealand, United Kingdom).

Item 12: Inspection Reports

(233) Chile introduced WP 39 *General recommendations of the joint inspections between Argentina and Chile, in accordance with Article VII of the Antarctic Treaty and Article 14 of the Protocol on Environmental Protection*, and referred to IP 83 *Report of the Joint Inspections' Program undertaken by Argentina and Chile under Article VII of the Antarctic Treaty and Article 14 of the Environmental Protocol*, both prepared jointly with Argentina. It reported that Chile and Argentina conducted joint inspections between 17 February and 2 March of 2019 of the following facilities: Palmer Station (United States), Akademik Vernadsky Station (Ukraine), Port Lockroy (United Kingdom) and St. Kliment Ohridski Station (Bulgaria). Chile noted that an observer from Uruguay and the Republic of Korea also joined the inspection.

(234) While the inspection report (IP 83) presented twelve general recommendations for consideration, Chile drew the Committee's attention to three recommendations relevant to the CEP:

- A wider circulation of "Checklist A: Antarctic Stations and Subsidiary Installations" (Resolution 3 (2010)) would seem desirable as well as better training of Antarctic station personnel regarding its proper use. Taking into account the usual limited time for conducting inspections, it recommended that stations have a completed "Checklist A" available for the inspection team prior to the inspection, to assist in the process. It was highlighted that of four inspected stations, only one provided a complete and updated checklist for the inspectors, making a decisive contribution to the visit (Recommendation c).
- For Consultative Parties to consider discussing that inspected Parties provide feedback to following ATCM about the consideration given to the particular recommendations made during inspections. The lack of proper follow-up to recommendations from inspections seemed to undermine the effectiveness of the inspection system, with the consequent misuse of significant logistical resources. Giving the example of the four inspected stations, only one had adequately addressed all of the observations made as a result of previous inspections (Recommendation e).
- As two of the inspected stations had ATCM designated Historic Sites and Monuments (HSMs), it seemed appropriate to consider that the inspector team's field observations regarding what defines an HSM, as contained in the inspections report, could be used as valuable input for ongoing discussions about HSM designation and management, recalling that the designation of HSMs implies further responsibilities for those Consultative Parties who are proponents of the HSM management (Recommendation l).

(235) Ukraine thanked the inspection team for conducting the inspection at Akademik

Vernadsky Station and for providing very useful feedback. It noted that since Ukraine began its work at Akademik Vernadsky in 1996, standards for environmental protection had improved and the station was in the process of being upgraded. Ukraine stressed that the feedback would be used to train personnel and be incorporated a follow-up report. In conclusion, Ukraine mentioned that the focus of its ten-year plan beginning in 2021 would be on environmental values and waste management. It referred the Committee to IP 105, which provided a follow up on actions taken by Ukraine in response to recommendations made by previous inspections.

- (236) The United Kingdom thanked the inspection team for inspecting Port Lockroy, which it noted was an HSM that also functioned as a museum. The United Kingdom highlighted that it undertook extensive environmental monitoring, including annual assessments of breeding success of Gentoo penguins, at Port Lockroy. These activities informed site management and the suitability of site guidelines. The United Kingdom expressed support for all three highlighted recommendations, with a focus on Recommendations C and E. It noted that they were acting on some of the recommendations in the inspection report and drew the Committee's attention to its comments recorded in IP 83.
- (237) The United States stated its appreciation for the inspection at Palmer Station, and the resulting exchange with colleagues. In regards to Recommendation C, it noted that, while the Checklist was an excellent tool, Members should not be limited to the questions on the checklist as they may wish to share other relevant information. In regards to Recommendation E, the United States noted the value of providing feedback to the ATCM regarding inspection reports. It further expressed that such follow-up should not be mandatory and could usefully be pursued on a case-by-case basis. The United States noted that it had twice received recommendations regarding its wastewater treatment and emphasised that the station currently met the standards of the Protocol and that planning is ongoing.
- (238) Bulgaria thanked the inspection team for inspecting St. Kliment Ohridski station. Referring to the recent inspection at St. Kliment Ohridski station, Bulgaria commented on the importance of protecting Antarctica through the inspection process. It noted its previous efforts to address recommendations made during a 2014 inspection. This included the creation of a new National Program for Polar Research to provide financing for scientific activities, and a number of successful scientific expeditions hosted by the base and international scientific collaboration. It noted efforts to improve waste management at the station. It highlighted the fact that the Lame Dog Hut at St. Kliment Ohridski was the oldest building on Livingston Island which has a particular technical and architectural value, and as such had been designated as HSM 91 in 2015. Since then, unusual weather had resulted in structural damage and an inventory of the items at the museum would soon be underway, with a draft management plan to follow. Bulgaria also reiterated its commitment to incorporating the recommendations emerging from the inspection of St. Kliment Ohridski station, and more broadly to protect Antarctica.
- (239) Uruguay and the Republic of Korea thanked Argentina and Chile for the invitation to join the inspection team as observers, noting it had been a very fruitful experience for all involved.
- (240) Highlighting the value of inspections in its own programmes, IAATO noted it welcomed inspections and offered to provide assistance with the inspection process

that involved tourist operators.

(241) The Committee thanked Chile and Argentina for the report and for the efforts on the inspections undertaken during 2019. There was broad support for the three recommendations highlighted from the inspection report. The Committee noted that follow up reports on recommendations after inspections were a useful, but not mandatory, process, and the use of Checklist A, although recommended, was not a limitation on inspecting Parties.

(242) The following paper was also submitted under this agenda item, and taken as presented:

- IP 105 *Follow-up the Recommendations of the Inspections at Vernadsky station since 1999* (Ukraine). This paper detailed actions taken by Ukraine to follow the recommendations presented after earlier inspections at Vernadsky station.

(243) The following Background Papers were submitted under this agenda item:

- BP 7 *Follow-up to the Recommendations of the Inspection at the SANAP Summer Station* (South Africa).
- BP 10 *Follow-up to the Recommendations of the Inspections at the Eco-Nelson Facility* (Czech Republic).
- BP 19 *Follow-up to the Recommendations of the Inspection at the SANAE Station* (South Africa).

Item 13: General Matters

(244) France introduced WP 41 *The Ice Memory Project*, jointly prepared with Italy, and noted that the project was launched in 2015 and featured an international scientific collaboration between several States. The first phase of the project, currently underway, involved collecting ice cores from the deep layers of key endangered glaciers before they lost their ability to preserve environmental history in optimal conditions. The second phase of the project involved the long-term storage of these ice cores for future generations of scientists. France recommended that the CEP and ATCM offer their feedback on the project and discuss the possibility of initiating and coordinating international collaboration to all Parties interested in taking part in the storage of ice cores in Antarctica.

(245) The Committee thanked France and Italy for their paper. It recognised the scientific value of the Ice Memory project and expressed broad support towards the general aim of the project and its underlining principles. It noted that the project could have profound implications for safeguarding and improving our understanding of Antarctic environmental history.

(246) Several Members noted that there were still a number of environmental aspects of the project that needed further attention, and stressed the need to ensure that the project comply with the provisions of the Environment Protocol. Some Members highlighted the potential risks and environmental impacts that could derive from long distance transportation of ice cores, including non-native species invasion, and underlined the importance of conducting environmental impact assessment.

(247) The Committee agreed that further discussions on the implementation of the Ice Memory Project would be beneficial, particularly in relation to concerns raised

regarding potential environmental risks, and called for further interaction and information in the planning process. The Committee encouraged interested Members to work with France and Italy on this matter.

- (248) SCAR expressed its willingness to work with interested Parties to help progress the aims of this project through both existing and developing SCAR groups.
- (249) China introduced WP 45 *Report of the Informal Discussion for the intersessional period of 2018/19 on the revised draft Code of Conduct for Protection of Dome A area in Antarctica*. China recalled ATCM XLI - WP 14, in which it provided an overview of the informal intersessional discussions it had led during the 2017/18 intersessional period regarding to the draft code of conduct for the protection of the Dome A area. Based on feedback, China had revised the draft code of conduct. China had then encouraged interested Members and Observers to contribute to the revised draft code of conduct through informal discussions at the CEP Forum on 7 January 2019. China noted that Germany, New Zealand, France, the United States, Australia and ASOC provided comments, which were summarised in WP 45.
- (250) China noted that the Members' concerns had focused on two main issues: the application of the code of conduct to other National Antarctic Programmes, and the potential restrictions for scientific activities planned and implemented by other Parties. China stressed that the code of conduct would not limit access to the Dome A area, and reminded Members that it would welcome bilateral and multilateral consultations on improving the protection of the values of the area. It recommended that the CEP support its efforts to protect the Dome A area by encouraging further improvements to the conduct and facilitating cooperation and coordination with China.
- (251) The Committee thanked China for its paper and acknowledged the scientific value of the Dome A area. Several Members sought further information and clarification on the potential implication and use of the code of conduct on other National Antarctic Programmes and science in the area.
- (252) Some Members highlighted the potential for collaboration with other countries performing research in the area and with large international projects such as the Ice Memory Project. Some Members also noted the importance of Parties committing to work collaboratively for the coordination of activities in the area, as it is done elsewhere throughout the continent, with the ultimate goal of protecting the values present in Dome A.
- (253) ASOC also thanked China for the opportunity to participate in the informal discussions. In addition to supporting China's desire to use the precautionary approach to protect the area's unique values, ASOC noted that their suggestion to develop ASPA proposals for the area in the future was very positive. ASOC encouraged all ATCPs to work cooperatively to coordinate activities and to develop ASPAs in other areas with important scientific and environmental values to achieve concrete and timely outcomes.
- (254) The Committee acknowledged China's ongoing efforts on the protection of the values of the Dome A area and some Members expressed support for its recommendation to encourage further improvements to the code of conduct. Most Members encouraged the cooperation with China during the next intersessional period and to contribute to the improvement of its draft code of conduct, although it

was noted that it may not be appropriate to continue such exchanges as an informal contact group discussion on the ATS discussion forum.

(255) The Secretariat presented SP 8 *The Secretariat Website*, which presented an outline of the progress made during the current year in the redesign of the institutional website of the Antarctic Treaty Secretariat (beta.ats.aq). It provided a summary of the project's background and current status, highlighting the new features that were relevant to the Committee through on-screen demonstrations and asked for feedback from Members and Observers.

(256) The Committee thanked the Secretariat for its update, and welcomed its hard work on redesigning the ATS website. It highlighted that these website updates were critical for increasing the visibility on the Committee's activities.

(257) Colombia reported that it had satisfactorily concluded internal national procedures to adhere to the Protocol and that it expected to finalise ratification soon.

(258) The following papers were also submitted under this agenda item, and taken as presented:

- IP 41 *Footprint in Antarctica* (Australia). This paper summarised recent Australian research, which used satellite imagery and GIS mapping techniques to examine the area of the Antarctic continent covered by buildings, and the area of ice-free ground that was physically disturbed.
- IP 56 *The Harmonization of Turkish Law to the Protocol on Environmental Protection to the Antarctic Treaty* (Turkey). The paper gave a brief report on Turkey's studies on the harmonisation of Turkish Law to the Protocol on Environmental Protection to the Antarctic Treaty and described a way forward.
- IP 68 *Outcomes of the 2017 UN Conference on Oceans and a look forward to the 2020 conference in Lisbon, Portugal* (Portugal, Sweden, WMO). The paper described the potential of the ATS to contribute positively to the implementation of SDG14 (Life Below Water) of the UN 2030 Agenda for Sustainable Development.
- IP 95 *Results of PEI International Workshop on Education and Outreach April 2017, Rovereto, Italy* (Italy, Germany, India, Portugal) which provided the results of the International workshop on education and outreach of Polar Educators International (PEI) association, held in April 2017.

(259) The following Background Paper was also submitted under this agenda item:

- BP 25 *Implementación de nuevos equipos para el tratamiento de desechos sólidos-líquidos, en la Estación "Pedro Vicente Maldonado"* (Ecuador).

Item 14: Election of Officers

(260) The Committee agreed to re-elect Dr Kevin Hughes from the United Kingdom to serve a second two-year period as CEP Vice-Chair.

(261) The Committee warmly congratulated Dr Kevin Hughes on his appointment.

Item 15: Preparation for the Next Meeting

(262) The Committee adopted the Preliminary Agenda for CEP XXIII (Appendix 3).

Item 16: Adoption of the Report

(263) The Committee adopted its Report.

Item 17: Closing of the Meeting

(264) The Committee welcomed Tito Acero to the floor, noting his upcoming retirement from his position as Assistant Executive Secretary of the Antarctic Treaty Secretariat. The Committee warmly thanked Mr Acero for many years of dedication to the Antarctic Treaty System and to the CEP in particular, and recognised his commitment to excellence and hard work.

(265) The Chair closed the Meeting on Friday, 5 July 2019.

Birgit Njåstad

Chair of the Committee for Environmental Protection

Appendix 1. CEP Five-year Work Plan

Issue / Environmental Pressure: Introduction of non-native species	
Priority: 1	
Actions: <ol style="list-style-type: none"> 1. Continue developing practical guidelines & resources for all Antarctic operators. 2. Implement related actions identified in the Climate Change Response Work Programme. 3. Consider the spatially explicit, activity-differentiated risk assessments to mitigate the risks posed by terrestrial non-native species. 4. Develop a surveillance strategy for areas at high risk of non-native species establishment. 5. Give additional attention to the risks posed by intra-Antarctic transfer of propagules. 	
Intersessional period 2019/20	<ul style="list-style-type: none"> • Initiate work to develop a non-native species response strategy, including appropriate responses to diseases of wildlife • To help the Committee in assessing the effectiveness of the Manual, request a report from COMNAP on the implementation of quarantine and biosecurity measures by its members
CEP XXIII 2020	<ul style="list-style-type: none"> • Discuss the intersessional work concerning the development of a response strategy for inclusion in the Non-native Species Manual, and the implementation of quarantine and biosecurity measures by COMNAP members. Review IMO report on biofouling guidelines • SCAR to present information on existing mechanism to assist with the identification of non-native species
Intersessional period 2020/21	<ul style="list-style-type: none"> • Ask SCAR to compile a list of available biodiversity information sources and databases to help Parties establish which native species are present at Antarctic sites and thereby assist with identifying the scale and scope of current and future introductions

	<ul style="list-style-type: none"> • Develop generally applicable monitoring guidelines. More detailed or site-specific monitoring may be required for particular locations • Request a report from Parties and Observers on the application of biosecurity guidelines by their members
CEP XXIV 2021	<ul style="list-style-type: none"> • Discuss the intersessional work concerning the development of monitoring guidelines for inclusion in the NNS Manual. • Consider the reports from Parties and Observers on the application of biosecurity guidelines by their members
Intersessional period 2021/22	<ul style="list-style-type: none"> • Initiate work to assess the risk of marine non-native species introductions
CEP XXV 2022	<ul style="list-style-type: none"> • Discuss the intersessional work concerning the risks of marine non-native species
Intersessional period 2022/23	<ul style="list-style-type: none"> • Develop specific guidelines to reduce non-native species release with wastewater discharge • Review the progress and contents of the CEP Non-native Species Manual
CEP XXVI 2023	<ul style="list-style-type: none"> • CEP to consider if intersessional work is required to review/update the Non-native Species Manual
Intersessional period 2023/24	<ul style="list-style-type: none"> • As appropriate, intersessional work to review the Non-native Species Manual
CEP XXVII 2024	<ul style="list-style-type: none"> • CEP to consider report of ICG, if established, and consider adoption of revised Non-native Species Manual by the ATCM through a resolution
<p>Science knowledge and information needs:</p> <ul style="list-style-type: none"> • Identify terrestrial and marine regions and habitats at risk of introduction • Identify native species at risk of relocation and vectors and pathways for intra-continental transfer • Synthesise knowledge of Antarctic biodiversity, biogeography and bioregionalisation and undertake baseline studies to establish which native species are present • Identify pathways for the introduction of marine species (including risks associated with 	

wastewater discharge)

- Assess risks and pathways for introduction of microorganisms that might impact on existing microbial communities
- Monitor for non-native species in the terrestrial and marine environments (including microbial activity near sewage treatment plant discharges)
- Identify techniques to rapidly respond to non-native species introductions
- Identify pathways for introduction of non-native species without any direct human intervention

Issue / Environmental Pressure: Tourism and NGO activities	
Priority: 1	
Actions:	
<ol style="list-style-type: none"> 1. Provide advice to ATCM as requested. 2. Advance recommendations from ship-borne tourism ATME. 	
Intersessional period 2019/20	<p>Work on framework for pre-assessment relating to new, novel or particularly concerning activities</p> <p>Continued work on site sensitivity methodology</p>
CEP XXIII 2020	<p>Consideration of advice from SCAR on potential design of an environmental monitoring programme to assess the impacts of tourism</p> <p>Consider outcomes of discussions relating to pre-assessment relating to new, novel or particularly concerning activities</p> <p>Discuss the trial site sensitivity methodology</p>
Intersessional period 2020/21	
CEP XXIV 2021	<p>Consider report from SCAR and others on wilderness values and their practical application</p> <p>Report from SCAR on carrying capacity</p>
Intersessional period 2021/22	
CEP XXV 2022	
Intersessional period 2022/23	

CEP XXVI 2023	
Intersessional period 2023/24	
CEP XXVII 2024	
Science knowledge and information needs: <ul style="list-style-type: none"> • Consistent and dedicated monitoring of tourism impacts • Monitor visitor sites covered by Site Guidelines 	

Issue / Environmental Pressure: Climate Change Implications for the Environment	
Priority: 1	
Actions: <ol style="list-style-type: none"> 1. Consider implications of climate change for management of Antarctic environment. 2. Implement the Climate Change Response Work Programme. 	
Intersessional period 2019/20	<ul style="list-style-type: none"> • Subsidiary group conducts work in accordance with agreed work plan
CEP XXIII 2020	<ul style="list-style-type: none"> • Standing agenda item • Consider subsidiary group report • SCAR provides update to ACCE report, with input as appropriate from WMO, ICED and SOOS • Consider review of subsidiary group • Review implementation of actions arising from 2016 joint CEP/SC-CAMLR workshop • Plan for five-yearly joint SC-CAMLR/CEP workshop during 2021/22 intersessional period
Intersessional period 2020/21	
CEP XXIV 2021	<ul style="list-style-type: none"> • Finalise plans for joint SC-CAMLR/CEP workshop during 2021/22 intersessional period
Intersessional period 2021/22	<ul style="list-style-type: none"> • Regular five-yearly joint SC-CAMLR CEP workshop

CEP XXV 2022	
Intersessional period 2022/23	
CEP XXVI 2023	
Intersessional period 2023/24	
CEP XXVII 2024	

Science knowledge and information needs:

- Improve understanding of current and future change to the terrestrial (including aquatic) biotic and abiotic environment due to climate change
- Long-term monitoring of change to the terrestrial (including aquatic) biotic and abiotic environment due to climate change
- Continue to develop biogeographic tools to provide a sound basis for informing Antarctic area protection and management at regional and continental scales in light of climate change, including identifying the need to set aside reference areas for future research and identifying areas resilient to climate change
- Identify and prioritise Antarctic biogeographic regions most vulnerable to climate change
- Understand and predict near-shore marine changes and impacts of the change.
- Long-term monitoring of change to the near-shore marine biotic and abiotic environment due to climate change
- Assessment on impact of ocean acidification to marine biota and ecosystems
- Understand population status, trends, vulnerability and distribution of key Antarctic species
- Understand habitat status, trends, vulnerability and distribution
- Southern Ocean observations and modelling to understand climate change
- Identify areas that may be resilient to climate change
- Monitor emperor penguin colonies, including using remote sensing and complementary techniques, to identify trends in populations and potential climate change *refugia*

Issue / Environmental Pressure: Processing new and revised protected / managed area management plans**Priority: 1****Actions:**

1. Refine the process for reviewing new and revised management plans.

2. Update existing guidelines.	
3. Develop guidelines to ASMA preparation.	
Intersessional period 2019/20	<ul style="list-style-type: none"> • SGMP conducts work as per agreed work plan including the consideration of three management plans corresponding to new ASPAs proposals. Consider options for supporting proponents to conclude the revision of management plans that remain for several intersessional periods under the scope of the SGMP. • Informal discussions led by Norway on guidance for de-designation of ASPAs
CEP XXIII 2020	<ul style="list-style-type: none"> • Consider SGMP report • Consider outcomes of informal discussions on guidance for de-designation of ASPAs
Intersessional period 2020/21	<ul style="list-style-type: none"> • SGMP conducts work as per agreed work plan
CEP XXIV 2021	<ul style="list-style-type: none"> • Consider SGMP report
Intersessional period 2021/22	<ul style="list-style-type: none"> • SGMP conducts work as per agreed work plan
CEP XXV 2022	<ul style="list-style-type: none"> • Consider SGMP report
Intersessional period 2022/23	<ul style="list-style-type: none"> • SGMP conducts work as per agreed work plan
CEP XXVI 2023	<ul style="list-style-type: none"> • Consider SGMP report
Intersessional period 2023/24	<ul style="list-style-type: none"> • SGMP conducts work as per agreed work plan
CEP XXVII 2024	<ul style="list-style-type: none"> • Consider SGMP report
<p>Science knowledge and information needs:</p> <ul style="list-style-type: none"> • Monitoring to assess the status of values at ASPA 107 Emperor Island • Use remote sensing techniques to monitor changes in vegetation within ASPAs • Long-term monitoring of biological values in ASPAs 	

Issue / Environmental Pressure: Operation of the CEP and Strategic Planning

Priority: 2	
Actions:	
<ol style="list-style-type: none"> 1. Keep the five-year work plan up to date based on changing circumstances and ATCM requirements. 2. Identify opportunities for improving the effectiveness of the CEP. 3. Consider long-term objectives for Antarctica (50-100 years' time). 4. Consider opportunities for enhancing the working relationship between the CEP and the ATCM. 	
Intersessional period 2019/20	
CEP XXIII 2020	
Intersessional period 2020/21	
CEP XXIV 2021	
Intersessional period 2021/22	
CEP XXV 2022	
Intersessional period 2022/23	
CEP XXVI 2023	
Intersessional period 2023/24	
CEP XXVII 2024	

Issue / Environmental Pressure: Repair or Remediation of Environmental Damage
Priority: 2
Actions:
<ol style="list-style-type: none"> 1. Respond to further request from the ATCM related to repair and remediation, as appropriate. 2. Monitor progress on the establishment of Antarctic-wide inventory of sites of past activity.

<p>3. Consider guidelines for repair and remediation.</p> <p>4. Members develop practical guidelines and supporting resources for inclusion in the Clean-up Manual.</p> <p>5. Continue developing bioremediation and repair practices for inclusion in the Clean-up Manual.</p>	
Intersessional period 2019/20	Continuous review of the Manual. Parties to work on the development of new techniques or guidelines.
CEP XXIII 2020	Insertion of new tools and guidelines as they become available and agreed by the Committee.
Intersessional period 2020/21	Continuous review of the Manual. Parties to work on the development of new techniques or guidelines.
CEP XXIV 2021	Continuous review of the Manual and insertion of new tools and guidelines as they become available.
Intersessional period 2021/22	Continuous review of the Manual. Parties to work on the development of new techniques or guidelines.
CEP XXV 2022	Continuous review of the Manual and insertion of new tools and guidelines as they become available.
Intersessional period 2022/23	Continuous review of the Manual. Parties to work on the development of new techniques or guidelines.
CEP XXVI 2023	Continuous review of the Manual and insertion of new tools and guidelines as they become available.
Intersessional period 2022/23	Continuous review of the Manual. Parties to work on the development of new techniques or guidelines.
CEP XXVII 2024	Continuous review of the Manual and insertion of new tools and guidelines as they become available.
<p>Science knowledge and information needs:</p> <ul style="list-style-type: none"> • Research to inform the establishment of appropriate environmental quality targets for the repair or remediation of environmental damage in Antarctica • Techniques to prevent mobilisation of contaminants such as melt water diversion and containment barriers • Techniques for <i>in situ</i> and <i>ex situ</i> remediation of sites contaminated by fuel spills or other hazardous substances 	

Issue / Environmental Pressure: Monitoring and state of the environment reporting

Priority: 2	
Actions:	
<ol style="list-style-type: none"> 1. Identify key environmental indicators and tools. 2. Establish a process for reporting to the ATCM. 3. SCAR to support information to COMNAP and CEP. 	
Intersessional period 2019/20	
CEP XXIII 2020	
Intersessional period 2020/21	
CEP XXIV 2021	<ul style="list-style-type: none"> • Consider monitoring report by UK on ASPA 107
Intersessional period 2021/22	
CEP XXV 2022	
Intersessional period 2022/23	
CEP XXVI 2023	
Intersessional period 2023/24	
CEP XXVII 2024	
Science knowledge and information needs:	
<ul style="list-style-type: none"> • Long-term monitoring of change to the terrestrial (including aquatic) biotic and abiotic environment due to climate change • Long-term monitoring of change to the near-shore marine biotic and abiotic environment due to climate change • Monitor bird populations to inform future management actions • Use remote sensing techniques to monitor changes in vegetation within ASPAs and more widely • Monitor emperor penguin colonies, using remote sensing and complementary techniques, to identify potential climate change <i>refugia</i> • Long-term monitoring of biological values in ASPAs • Long-term monitoring to verify or detect environmental impacts associated with human activities • Long-term monitoring and sustained observations of environmental change 	

- Consistent and dedicated monitoring of tourism impacts
- Systematic and regular monitoring of visitor sites covered by Site Guidelines
- Long-term monitoring of biological indicators at sites visited by tourists

Issue / Environmental Pressure: Marine spatial protection and management	
Priority: 2	
Actions:	
<ol style="list-style-type: none"> 1. Cooperation between the CEP and SC-CAMLR on common interest issues. 2. Cooperate with CCAMLR on Southern Ocean bioregionalisation and other common interests and agreed principles. 3. Identify and apply processes for spatial marine protection. 4. Consider connectivity between land and ocean, and complementary actions that could be taken by Parties with respect to MPAs. 	
Intersessional period 2019/20	Informal discussions led by New Zealand on matters relating to Resolution 5 (2017)
CEP XXIII 2020	Consider outcomes from informal discussions led by New Zealand on matters relating to Resolution 5 (2017)
Intersessional period 2020/21	
CEP XXIV 2021	
Intersessional period 2021/22	
CEP XXV 2022	
Intersessional period 2022/23	
CEP XXVI 2023	
Intersessional period 2023/24	
CEP XXVII 2024	

Issue / Environmental Pressure: Site specific guidelines for tourist-visited sites	
Priority: 2	
Actions:	
<ol style="list-style-type: none"> 1. Periodically review the list of sites subject to Site Guidelines and consider whether development of guidelines should be need for additional sites. 2. Regular review of all existing Site Guidelines to ensure that they are accurate and up to date, this includes precautionary updates where appropriate. 3. Provide advice to ATCM as required. 4. Review the format of the Site Guidelines. 	
Intersessional period 2019/20	<ul style="list-style-type: none"> • Develop guidelines for short overnight stays to ensure consistent application of best practices and minimise impacts to the Antarctic environment.
CEP XXIII 2020	<ul style="list-style-type: none"> • Standing agenda item; Parties to report on their reviews of Site Guidelines
Intersessional period 2020/21	<ul style="list-style-type: none"> • Development of a repository of pictures to aid in the regular review of Site Guidelines
CEP XXIV 2021	<ul style="list-style-type: none"> • Standing agenda item; Parties to report on their reviews of Site Guidelines
Intersessional period 2021/22	
CEP XXV 2022	
Intersessional period 2022/23	
CEP XXVI 2023	
Intersessional period 2023/24	
CEP XXVII 2024	
Science knowledge and information needs:	
<ul style="list-style-type: none"> • Long-term monitoring to assess the status and recovery of vegetation at Barrientos Island • Systematic and regular monitoring of visitor sites covered by Site Guidelines 	

Issue / Environmental Pressure: Overview of the protected areas system	
Priority: 2	
Actions:	
<ol style="list-style-type: none"> 1. Apply the Environmental Domains Analysis (EDA) and Antarctic Conservation Biogeographic Regions (ACBR) to enhance the protected areas system. 2. Maintain and develop Protected Area database. 3. Assess the extent to which Antarctic IBAs are or should be represented within the series of ASPAs. 	
Intersessional period 2019/20	<ul style="list-style-type: none"> • United Kingdom to lead discussion with interested Members and Observers, on Antarctic Specially Protected Areas and Important Bird Areas • Undertake work to advance actions agreed by the Committee from discussions on the protected areas workshop
CEP XXIII 2020	<ul style="list-style-type: none"> • Consider report of intersessional work on Antarctic Specially Protected Areas and Important Bird Areas • Review progress on the work to advance actions agreed by the Committee from discussions on the protected areas workshop
Intersessional period 2020/21	<ul style="list-style-type: none"> • Undertake work to advance actions agreed by the Committee from discussions on the protected areas workshop
CEP XXIV 2021	<ul style="list-style-type: none"> • Review progress on the work to advance actions agreed by the Committee from discussions on the protected areas workshop
Intersessional period 2021/22	
CEP XXV 2022	
Intersessional period 2022/23	
CEP XXVI 2023	
Intersessional period 2023/24	
CEP XXVII 2024	
Science knowledge and information needs:	
<ul style="list-style-type: none"> • Continue to develop biogeographic tools to provide a sound basis for informing Antarctic area protection and management at regional and continental scales in light of climate 	

change, including identifying the need to set aside reference areas for future research and identifying areas resilient to climate change

- Use remote sensing techniques to monitor changes in vegetation within ASPAs and more widely, to inform the further development of the Antarctic protected areas system

Issue / Environmental Pressure: Implementing and improving the EIA provisions of Annex I	
Priority: 2	
Actions:	
<ol style="list-style-type: none"> 1. Refine the process for considering CEEs and advising the ATCM accordingly. 2. Develop guidelines for assessing cumulative impacts. 3. Review EIA guidelines and consider wider policy and other issues. 4. Consider application of strategic environmental assessment in Antarctica. 	
Intersessional period 2019/20	<ul style="list-style-type: none"> • Discuss changes to the EIA database with a view to giving proposals to the Secretariat. Discuss the mechanisms to provide answers to the comments that are transmitted through the intersessional contact groups or other means on the global environmental impact assessments • Consider potential changes required to EIA database to improve its utility • Establish ICG to review draft CEEs as required • Members and Observers work to progress and coordinate information that will assist development of guidance on identifying and assessing cumulative impacts • Members to work on further guidance with regards to commenting processes related to CEEs.
CEP XXIII 2020	<ul style="list-style-type: none"> • Consideration of ICG reports on draft CEE, as required
Intersessional period 2020/21	<ul style="list-style-type: none"> • Establish ICG to review draft CEEs as required • Consider Members work related to commenting processes related to CEEs. • Members and Observers work to progress and coordinate information that will assist development of guidance on identifying and assessing cumulative impacts
CEP XXIV 2021	<ul style="list-style-type: none"> • Ask SCAR to provide guidance on how to do an

	<p>environmental baseline condition survey, and consider their advice in due course</p> <ul style="list-style-type: none"> • Consideration of ICG reports on draft CEE, as required
Intersessional period 2021/22	<ul style="list-style-type: none"> • Establish ICG to review draft CEEs as required • Members and Observers work to progress and coordinate information that will assist development of guidance on identifying and assessing cumulative impacts
CEP XXV 2022	<ul style="list-style-type: none"> • Encourage parties to provide feedback on the utility of the revised set of <i>Guidelines for Environmental Impact Assessment in Antarctica</i> in the preparation of EIAs • Consideration of the options for preparing guidance on identifying and assessing cumulative impacts • Consideration of ICG reports on draft CEE, as required
Intersessional period 2022/23	<ul style="list-style-type: none"> • Establish ICG to review draft CEEs as required
CEP XXVI 2023	<ul style="list-style-type: none"> • Consideration of ICG reports on draft CEE, as required
Intersessional period 2023/24	<ul style="list-style-type: none"> • Establish ICG to review draft CEEs as required
CEP XXVII 2024	<ul style="list-style-type: none"> • Consideration of ICG reports on draft CEE, as required

Issue / Environmental Pressure: Designation and management of Historic Sites and Monuments	
Priority: 2	
<p>Actions:</p> <ol style="list-style-type: none"> 1. Maintain the list and consider new proposals as they arise. 2. Consider strategic issues as necessary, including issues relating to designation of HSM versus clean-up provisions of the Protocol. 3. Review the presentation of the HSM list with the aim to improve information availability. 	
Intersessional period 2019/20	<ul style="list-style-type: none"> • Informal intersessional discussions to consider how the CEP can better develop conservation management plans as tools to protect Antarctic heritage • Contribute information on the HSMs that have already been designated, in accordance with the new list format that was agreed at CEP XXII as basis for Working Paper.

CEP XXIII 2020	<ul style="list-style-type: none"> • Review proposals relating to how conservation management plans can contribute to the management of HSMs • • Consider the list of HSM in new format
Intersessional period 2020/21	<ul style="list-style-type: none"> • Consider how environmental impact assessments can form a part of Historic Site and Monument assessment
CEP XXIV 2021	<ul style="list-style-type: none"> • Review proposals relating to EIAs and the HSM listing process
Intersessional period 2021/22	
CEP XXV 2022	
Intersessional period 2022/23	
CEP XXVI 2023	
Intersessional period 2022/23	
CEP XXVII 2024	

Issue / Environmental Pressure: Biodiversity knowledge	
Priority: 2	
Actions:	
<ol style="list-style-type: none"> 1. Maintain awareness of threats to existing biodiversity. 2. CEP to consider further scientific advice on wildlife disturbance. 	
Intersessional period 2019/20	Informal intersessional discussions relating to assessing the protection of Antarctic seals.
CEP XXIII 2020	<p>Report on informal intersessional discussions relating to assessing the protection of Antarctic seals</p> <p>Report from relevant parties relating to further protection of emperor penguins</p>
Intersessional period 2020/21	

CEP XXIV 2021	
Intersessional period 2021/22	
CEP XXV 2022	
Intersessional period 2022/23	
CEP XXVI 2023	
Intersessional period 2023/24	
CEP XXVII 2024	

Science knowledge and information needs:

- Research on the environmental impacts of remotely piloted aircraft systems (RPAS), particularly on wildlife responses including:
 - a range of species including flying seabirds and seals;
 - both behavioural and physiological responses;
 - demographic effects, including breeding numbers and breeding success;
 - ambient environmental conditions, for example, wind and noise;
 - the effects of RPAS of different sizes and specifications;
 - the contribution of RPAS noise to wildlife disturbance;
 - comparisons with control sites and human disturbance; and
 - habituation effects.
- Collection and submission of further spatially explicit biodiversity data
- Research on the impacts of underwater noise on Antarctic marine mammals
- Synthesis of available knowledge on the biogeography, bioregionalisation and endemism within Antarctica
- Site-specific, timing-specific and species-specific studies to understand the impacts arising from interactions between human activities and wildlife and support evidence-based guidelines to avoid disturbance
- Inventory of Mt Erebus ice caves and microbial communities
- Regular population counts and research to understand the status and trends in the southern giant petrel population

Issue / Environmental Pressure: Outreach and education

Priority: 3

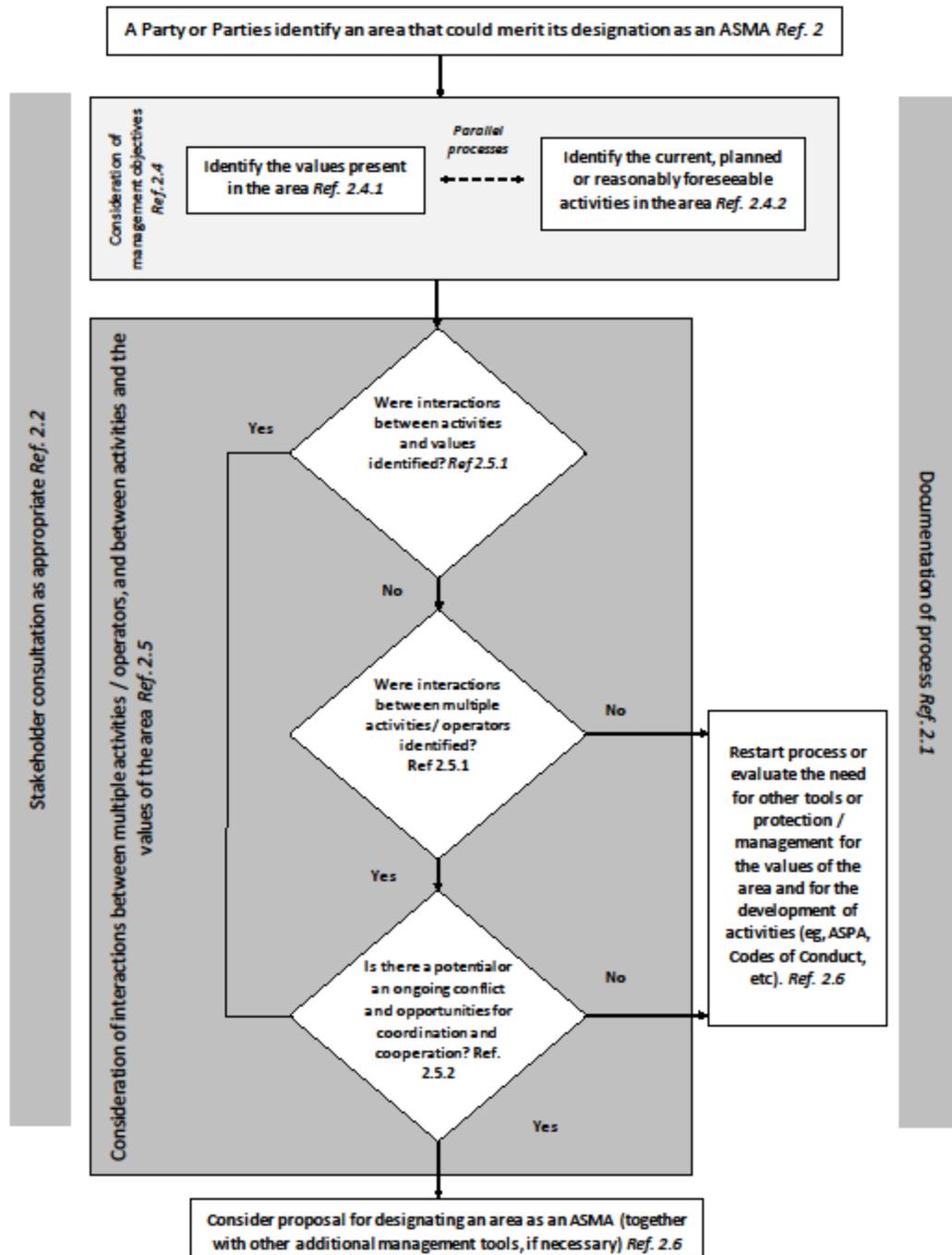
Actions:	
<ol style="list-style-type: none"> 1. Review current examples and identify opportunities for greater education and outreach. 2. Encourage Members to exchange information regarding their experiences in this area. 3. Establish a strategy and guidelines for exchanging information between Members on Education and Outreach for long term perspective. 	
Intersessional period 2019/20	
CEP XXIII 2020	Bulgaria to draw to the Committee's attention any outcomes from the ICG on Education and Outreach of direct relevance to the work of the CEP
Intersessional period 2020/21	
CEP XXIV 2021	
Intersessional period 2021/22	
CEP XXV 2022	
Intersessional period 2022/23	
CEP XXVI 2023	
Intersessional period 2023/24	
CEP XXVII 2024	

Issue / Environmental Pressure: Protection of outstanding geological values	
Priority: 3	
Actions:	
<ol style="list-style-type: none"> 1. Consider further mechanisms for protection of outstanding geological values. 	
Intersessional	

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period 2019/20	
CEP XXIII 2020	<ul style="list-style-type: none">• Consider advice from SCAR
Intersessional period 2020/21	
CEP XXIV 2021	
Intersessional period 2021/22	
CEP XXV 2022	
Intersessional period 2022/23	
CEP XXVI 2023	
Intersessional period 2023/24	
CEP XXVII 2024	

Appendix 2. Flowchart to illustrate/summarise the process of evaluating and drawing conclusions with regard to assessing an area for potential ASMA designation.



Appendix 3. Preliminary Agenda for CEP XXIII (2020)

1. Opening of the Meeting
2. Adoption of the Agenda
3. Strategic Discussions on the Future Work of the CEP
4. Operation of the CEP
5. Cooperation with other Organisations
6. Repair and Remediation of Environment Damage
7. Climate Change Implications for the Environment
 - a. Strategic Approach
 - b. Implementation and Review of the Climate Change Response Work Programme
8. Environmental Impact Assessment (EIA)
 - a. Draft Comprehensive Environmental Evaluations
 - b. Other EIA Matters
9. Area Protection and Management Plans
 - a. Management Plans
 - b. Historic Sites and Monuments
 - c. Site Guidelines
 - d. Marine Spatial Protection and Management
 - e. Other Annex V Matters
10. Conservation of Antarctic Flora and Fauna
 - a. Quarantine and Non-native Species
 - b. Specially Protected Species
 - c. Other Annex II Matters
11. Environmental Monitoring and Reporting
12. Inspection Reports
13. General Matters
14. Election of Officers
15. Preparation for the Next Meeting
16. Adoption of the Report
17. Closing of the Meeting

