

Report of the Committee for Environmental Protection (CEP XV)

Hobart, June 11–15, 2012

Item 1: Opening of the Meeting

- (1) The CEP Chair, Dr Yves Frenot (France), opened the meeting on Monday 11 June 2012 and thanked Australia for arranging and hosting the meeting in Hobart.
- (2) The Committee welcomed Pakistan as a new Member, following its accession to the Environmental Protocol.
- (3) The Committee expressed its sympathy and condolences to Brazil for the loss of Lieutenant Roberto Lopes dos Santos and Lieutenant Carlos Alberto Vieira Figueiredo during the February 2012 fire at Brazil's Comandante Ferraz Station, and to Belgium for the sudden passing away in September 2011 of Mr Alexandre de Lichtervelde, Belgium's late CEP representative.
- (4) The Chair summarised the work undertaken during the intersessional period. This included four informal contact groups, the SGMP work and other studies contributing to papers submitted to CEP XV. All the planned work decided at the end of CEP XIV was achieved.
- (5) It was emphasised that most of this work was conducted according to the tasks planned in the CEP 5 year work plan for the 2011-2012 intersessional period.

Item 2: Adoption of the Agenda

- (6) The Committee adopted the following agenda and confirmed the allocation of 44 working papers (WP), 46 information papers (IP), five secretariat papers (SP) and 13 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. Climate Change Implications for the Environment: Strategic Approach
6. Environmental Impact Assessment (EIA)
 - a. Draft Comprehensive Environmental Evaluations
 - b. Other EIA Matters
7. Area Protection and Management Plans
 - a. Management Plans
 - b. Historic Sites and Monuments
 - c. Site Guidelines
 - d. Human Footprint and Wilderness Values
 - e. Marine Spatial Protection and Management
 - f. Other Annex V Matters
8. Conservation of Antarctic Flora and Fauna
 - a. Quarantine and Non-Native Species
 - b. Specially Protected Species
 - c. Other Annex II Matters
9. Environmental Monitoring and Reporting
10. Inspection Reports
11. Cooperation with Other Organisations
12. Repair and Remediation of Environmental Damage
13. General Matters
14. Election of Officers
15. Preparation for Next Meeting
16. Adoption of the Report
17. Closing of the Meeting

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

- (7) New Zealand introduced WP 57, *Antarctic Environments Portal*, jointly prepared with Australia and the Scientific Committee on Antarctic Research (SCAR), which reported on a concept of developing an online Antarctic Environments Portal. The portal would be an efficient means to strengthen the link between Antarctic science and policy, enhance the CEP's advisory role to the ATCM, facilitate SCAR's advisory role to the ATCM and CEP, and assist in communicating information on Antarctic environments to the public.
- (8) Members welcomed the proposal, noting the importance of having ready access to information to support the Committee's work, and expressed their interest in contributing to the development of the portal during the intersessional period. Norway volunteered to share its experience with the Barents Portal, developed under the Joint Norwegian-Russian Commission on Environmental Protection, and the websites of relevant Arctic Council working groups. Belgium noted that it was actively involved with the Biodiversity Portal ANTABIF and offered to collaborate. Key questions raised by some Members were: resource implications, potential duplication of information published by SCAR and the Secretariat, multi-language in the four languages of the Antarctic Treaty, long-term ownership and management of the portal and its contents, how publications would be endorsed by the CEP, and the principles to govern what kind of information would be included.
- (9) New Zealand advised that these matters would be considered in the development and planning of the portal.
- (10) The Committee supported the concept of an Antarctic Environments Portal and looked forward to hearing from New Zealand, SCAR, Australia and interested Members next year on progress in developing a demonstration model.
- (11) The Committee revised and updated the Five-Year Work Plan, noting its continued utility (Appendix 1).
- (12) The Committee highlighted the importance of the Five-Year Work Plan for managing its work and priorities and agreed in future to discuss the Plan at the end of each agenda item.

Item 4: Operation of the CEP

- (13) The Secretariat presented SP 10, *Report of the Informal Contact Group on the improvement of the EIES and other Information Exchange matters*, which reported information about the current usage of the Electronic Information Exchange System (EIES) and recent improvements, and posed a series of questions concerning information exchange. Nine Members had been active participants in the Informal Contact Group. The Secretariat offered to continue working to improve the EIES.
- (14) The Chair noted that the EIES was an essential tool for exchanging information on current activities being undertaken in Antarctica, and commended the Secretariat for the ongoing improvement which would support the work of the CEP.
- (15) Chile and the United States encouraged further enhancements to the EIES to enable the submission of data spanning multiple species, sites and years. The United Kingdom noted that Members would need to continue to contribute all available data to the EIES in order to achieve a critical mass.
- (16) The Committee expressed its gratitude to the Secretariat for its work on improving the EIES, as well as for the broad range of tasks the Secretariat had undertaken to support the CEP, ATCM and intersessional work, and encouraged Members to accept the Secretariat's offer to facilitate additional adjustments to the EIES.
- (17) France noted that in this respect WP 29, *Improving the Functioning of the Electronic Information Exchange System (EIES) for Non-Governmental Activities in Antarctica*, submitted under ATCM Agenda Item 17, was of relevance.

Item 5: Climate Change Implications for the Environment: Strategic Approach

- (18) The United Kingdom introduced WP 33, *RACER – 'Rapid Assessment of Circum-Arctic Ecosystem Resilience': a tool from the Arctic to assess ecosystem resilience and areas of conservation importance, and its possible application to Antarctica*, prepared jointly with Norway, which introduced a new conservation tool developed by the WWF for identifying and mapping places of conservation importance across the Arctic on the basis of ecosystem resilience. The paper was presented in response to Recommendation 29

of the Antarctic Treaty Meeting of Experts (ATME) on Climate Change (Svolvær, Norway, 2010), which stated that the CEP should ‘*remain alert to the development of climate change related conservation tools elsewhere in the world that may also have application in an Antarctic context*’.

- (19) Members and ASOC welcomed the initiative as a potential contribution to the suite of tools available to the CEP, and noted its potential complementarity with existing tools, such as the Environmental Domains Analysis and the Antarctic Conservation Biogeographic Regions, in developing large-scale representative ecoregions.
- (20) While SCAR noted that the RACER methodology could assist in defining areas of high resilience within Antarctic Conservation Biogeographic Regions, he also raised a concern about the establishment of non-native species in such areas which is not considered in the model at the moment. SCAR offered to work with the United Kingdom and Norway intersessionally.
- (21) Australia welcomed the paper, noting that progress on the outstanding ATME recommendations could only be made if Members brought forward proposals for the Committee’s consideration. Australia indicated that it would be pleased to participate in discussions with the United Kingdom and Norway. As initial feedback, it noted the importance of considering the different management context and conservation objectives of the Arctic and Antarctic regions.
- (22) Several Members noted that significant differences in physical conditions and human activity between the Arctic and Antarctic would necessitate some adaptation of the methodology. Other points that were raised were: the need to reach agreed understandings of resilience and acceptable adaptation, the need to protect vulnerable areas, and the impact of other factors on resilience, such as ozone depletion. Spain also noted that an appropriate Spanish translation for the word ‘resilience’ would be required.
- (23) Brazil suggested that Admiralty Bay may be a useful test area, taking into account data available for both terrestrial and marine areas.
- (24) The Committee endorsed work to trial the RACER methodology in the Antarctic, while taking into account the need to adapt the methodology to the Antarctic context, and requested that the results of the trial be presented to CEP XVI to facilitate further discussion.

- (25) The Secretariat presented SP 8, *Actions taken by the CEP and the ATCM on the ATME Recommendations on Climate Change*, informing the Committee of actions taken under each of the 30 ATME recommendations.
- (26) New Zealand thanked the Secretariat for its work, noting that it was important not to lose sight of the recommendations of the ATME.
- (27) COMNAP presented IP 31, *Best Practice for Energy Management – Guidance and Recommendations*, in response to ATME (2010) Recommendation 4 (2), which requested that COMNAP report on progress made to implement best practice in energy management and to update Parties on the details of best practices in energy efficiency and alternative energy deployment. This report indicated that while reducing the use of fuel on Antarctic stations remained important, the major use of fuel was on ships and aircraft, in which respect energy savings had been generated by improving operational planning.
- (28) ASOC welcomed the initiatives from the United Kingdom and Norway in WP 33 and from COMNAP in IP 31 as useful contributions to the development of the CEP's strategic approach to climate change.
- (29) In response to concerns raised by France and the United States about the low rate of response by national Antarctic programmes to COMNAP's energy management survey, COMNAP indicated that the survey was conducted during the austral summer season, when most of its members were in Antarctica. However, COMNAP would continue to seek further survey responses, and endeavor to provide this information to CEP XVI.
- (30) SCAR presented IP 44, *Communicating the Science of Climate Change*, which responded to the Recommendation from the ATME on Climate Change and Impacts for Management and Governance for the Antarctic Region (2010), which identifies the need to develop an Antarctic climate change communication plan to bring the findings of the SCAR ACCE report to the attention of decision makers, the general public and the media. SCAR has showed how with funding from Norway, the United Kingdom and ASOC, it was actively implementing innovative ways to improve communication in this area. SCAR also referred to IP 45, *Antarctic Climate Change and the Environment: an Update*. SCAR has been working on a major update to the Executive Summary of the ACCE report, making this a much more comprehensive update than previous ones. This update will be submitted to a peer reviewed journal.

- (31) The United Kingdom further recalled that it had jointly engaged in work to communicate the science of climate change with Norway and ASOC.
- (32) IAATO noted that it placed a high priority on educating its members' clients on climate change in Antarctica and, for example, was currently creating a generic climate change lecture for its members' use. As such IAATO offered to assist SCAR with their communication initiative.
- (33) ASOC presented IP 58 rev.1, *Earth Hour Antarctica (2013)*, jointly prepared with Australia and the United Kingdom, which proposed a coordinated continent-wide switch off of all non-essential lights at Antarctic research stations for Earth Hour on 30 March 2013, within all operational and safety constraints, to demonstrate support for real action to tackle the threat of climate change.
- (34) Members whose stations had participated in previous Earth Hour initiatives, including the United Kingdom (Halley and Rothera Stations), Australia (Casey and Mawson Stations) and New Zealand (Scott Base) encouraged other national programmes to participate, and indicated that they would be happy to answer any questions on practical requirements regarding operational constraints.
- (35) COMNAP suggested that the 2012 COMNAP annual general meeting of July 2012 could be an appropriate forum to determine the practical, technical or operational issues associated with the Earth Hour initiative.

Item 6: Environmental Impact Assessment

6a) Draft Comprehensive Environmental Evaluation

- (36) There were no papers submitted under this item.

6b) Other EIA matters

- (37) The Republic of Korea presented IP 23, *Final Comprehensive Environmental Evaluation (CEE) for the Proposed Construction and Operation of the Jang Bogo Station, Terra Nova Bay, Antarctica*, which sought to address a number of queries and recommendations from Parties regarding the draft CEE presented at CEP XIV (2011). These included cumulative impacts relating to the concentration of bases in Terra Nova Bay; water recycling;

replacement of a proposed incinerator with a food waste reducer; introduction of a management plan for visits to a nearby skua colony, and a monitoring programme relating to this colony; non-native species introduction; an energy management plan with solar and wind energy; and further information on station decommissioning aided by the modular system design. The construction would start in December 2012.

- (38) Several Members acknowledged the high quality of the final CEE which provided responses to most of the concerns raised at CEP XIV on the basis of the draft CEE. While ASOC appreciated efforts to make Jang Bogo Station more environmentally friendly, it identified its continuing concerns regarding the cumulative impact of station construction and activity in Terra Nova Bay. ASOC further noted that the new station would place Korea at the forefront of science in the region, and hoped that Korea would take a leading role in the protection of the Ross Sea region. Germany noted that it would like information on modelling of the wind noise on the station structure, and data relating to the Skua colony, once the station is functioning.
- (39) Italy noted that it had already initiated several joint scientific projects with Korean scientists.
- (40) The Committee congratulated the Republic of Korea on the comprehensive nature of the final CEE. Members also expressed their best wishes to the Republic of Korea in operating Jang Bogo Station, and looked forward to further international cooperation and research activity in Terra Nova Bay.
- (41) The United Kingdom introduced IP 30, *The Final Comprehensive Environmental Evaluation (CEE) for the Proposed Exploration of Subglacial Lake Ellsworth, Antarctica*, and once again thanked Members for comments that had been made to the Draft CEE, both directly to the United Kingdom and to the ICG led by Norway. The Russian Federation noted that the United Kingdom's work would enrich humanity's knowledge.
- (42) The Committee congratulated the United Kingdom for the comprehensive nature of its final CEE.
- (43) Several Members acknowledged the way in which the proponents of each of the CEEs had followed the process of addressing Parties' comments, in order to limit and avoid environmental impacts in line with the Environmental Protocol.

- (44) New Zealand introduced WP 22, *Environmental Aspects and Impacts of Tourism and Non-governmental Activities in Antarctica*, and referred to IP 33 on the same subject. These papers outlined the results of a comprehensive study undertaken by New Zealand pursuant to a request by ATCM XXXII.
- (45) New Zealand summarised the study's findings, which provide an overview of tourism trends over time, the current characteristics of Antarctic tourism, a consideration of the potential environmental impacts that could arise from Antarctic tourism, a review of the sites visited by tourists, a review of the published literature on the impact of tourism in Antarctica, a summary of regulatory measures adopted by the Treaty Parties, an assessment of regulatory controls in place, and eight recommendations for future work. New Zealand noted that independent, reliable and complete data on all forms of Antarctic tourism were difficult to obtain, and suggested that the lack of comprehensive data and information readily available to the ATCM made any assessment of the environmental impacts of Antarctic tourism challenging.
- (46) The Committee thanked New Zealand for its dedication and hard work on this issue, and recognised the good level of participation from other Members and Observers. It noted that the study provided a significant step towards identifying the known and unknown impacts of tourism and non-governmental activities, and was an example of the CEP's ability to respond effectively to requests made by the ATCM.
- (47) Members acknowledged that the available information was incomplete, however it was considered unlikely that further research and refinement would significantly alter the findings. While expressing support for the aims of the study and associated recommendations, some Members suggested that these recommendations should be viewed as a menu of options for consideration by the ATCM rather than a fixed package to be adopted all at once. They also highlighted the need for further work to address current data gaps, noting that the study was a dynamic document requiring ongoing consideration by the CEP. The Committee agreed to include some of the recommendations in its 5 year work plan, when appropriate.
- (48) China appreciated the work done by New Zealand and looked forward to more discussions. It thanked IAATO for providing data, as IAATO had done a great deal of work on this topic.

- (49) ASOC commended New Zealand for producing a thorough study based on the information that was available. ASOC noted that although the publications cited stated that there had not been any conclusive evidence that tourism had had any impacts on the Antarctic environment, it was not possible to conclude that tourism had not had any impacts, due to the lack of data. Long term site occupation was not mentioned in the report, while in fact it was a form of actual impact and suggested that the CEP should acknowledge that tourist access to previously untouched areas fundamentally altered their pristine state. ASOC supported the recommendations from the study, although considered that it left out the critical need to develop a “vision” for Antarctic tourism, which would enable Parties to shape tourism developments instead of reacting to them.
- (50) IAATO thanked New Zealand for its work, noting that it was pleased to have provided data. IAATO would continue to engage in these discussions both in the CEP and ATCM.
- (51) Following discussion, the Committee agreed to endorse the study and forward it to the ATCM for consideration, noting that it would not be necessary to take forward all recommendations simultaneously, and that the ATCM could refer matters back to the CEP for further consideration and advice. The study contained the following recommendations:

Recommendation 1: To ensure that the ATCM has readily available to it a complete picture of tourism activities and to facilitate regular assessments of the environmental impacts of Antarctic tourism by the ATCM, the ATCM should develop a centrally managed database of tourism activities, which might be achieved through a redesign and concerted use of the EIES. Consideration will need to be given as to the data required, though much of the information currently collected through the post-visit reporting process would be of relevance, supplemented with accurate reporting of all authorised tourist activities including yacht visits and land-based expeditions.

Recommendation 2: To improve site-specific management a centrally managed ATCM database of tourist sites, including information on their environmental sensitivities, should be established, alongside the visitation database referred to in Recommendation 1.

Recommendation 3: An appropriate method of assessing site sensitivity should be developed and a relative sensitivity analysis undertaken for at

least the most heavily visited sites in Antarctica, including, for example, consideration of the vulnerability of tourist sites to non-native species establishment, for the purpose of more rigorously assessing appropriate management needs. Site sensitivity considerations should also be included in the Environmental Impact Assessment process for tourism activities.

Recommendation 4: Consideration should be given to the means by which site specific guidelines are reviewed and updated, including the appropriate frequency of review and the information required to support a review.

Recommendation 5: Consideration should be given to the regular review of trends in tourist activity at selected tourist sites, particularly those with high levels of visitation or those considered to be particularly sensitive to impact.

Recommendation 6: Consideration should be given to establishing an ATCM-approved on-site monitoring programme for the purposes of i) assessing the effectiveness of site-specific guidelines and ii) monitoring for impacts.

Recommendation 7: Consideration should be given to developing a series of ‘best estimate’ trigger levels to assist in guiding monitoring efforts. This could include identifying certain parameters (eg, the number of landed tourists per season at a site) that would, if reached, trigger a need for a review of the effectiveness of current management at the site. Such an approach would be underpinned by the site sensitivity analysis referred to in Recommendation 3 above.

Recommendation 8: Consideration should be given to identifying a range of potential management options that might be applied to managing tourism activities, including vessels and vessel operations while transporting tourists, as well as to the data and information needed to support the application of such measures

CEP Advice to the ATCM

- (52) The Committee endorsed the study on *Environmental Aspects and Impacts of Tourism and Non-governmental Activities in Antarctica*, and agreed to forward the study to the ATCM to support its consideration of tourism management.
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- (53) Brazil introduced WP 53, *Comandante Ferraz Station: Proposed Plan for the Demolition and Construction of Antarctic Emergency Modules*. The paper outlined a plan for the demolition and removal of the main building which was destroyed by the fire, and the construction and operation of Antarctic Emergency Modules (AEM) at the location of the Comandante Ferraz Station. Brazil indicated that the new station plan would be submitted to the ATCM as soon as the plan was prepared.
- (54) Brazil described the events surrounding the fire at its station and the tragic loss of life which resulted, and expressed gratitude to Chile, Argentina, Uruguay, the Russian Federation, Poland and the United Kingdom for their assistance during and after the fire, and to all those that conveyed their sympathy and solidarity. Brazil emphasised its efforts to uphold the Environmental Protocol and to mitigate the environmental impacts of the incident, both during the immediate aftermath of the fire, and through its plans for comprehensive ongoing clean-up activities, taking into consideration sampling conducted by Brazil and modelling based on meteorological and other data.
- (55) Members expressed their condolences to Brazil for the loss of Brazilian lives and the destruction of Comandante Ferraz station, which they noted had carried out invaluable scientific work. They welcomed Brazil's thorough and ongoing efforts to uphold its obligations under the Environmental Protocol, and to mitigate and avoid environmental impacts, despite the tragic and difficult circumstances. Members offered practical assistance to Brazil with its reconstruction efforts and to ensure Brazilian Antarctic science could continue.
- (56) Bulgaria thanked Brazil for saving the life of the Bulgarian Base Commander, who suffered a heart attack onboard the Brazilian ship *Almirante Maximiano*.
- (57) Some Members offered constructive suggestions on station design and how best to minimise the risk of similar tragedies occurring in the future. The Russian Federation, which had suffered three station fires and had lost lives as a result, and Spain, which was remodelling its station, favoured a modular design for stations, and offered to assist Brazil in this respect.
- (58) Thanking all Members who offered their condolences and support, Brazil expressed its determination to continue with its Antarctic research and to return to Antarctica during the 2012-13 austral summer. Brazil indicated that it was confident that it could work with others to rebuild its station, and reiterated its intention to do so while respecting and upholding the Environmental Protocol.

- (59) The Russian Federation introduced WP 34, *Technology for investigating the water layer of subglacial Lake Vostok through the ice borehole 5G at the Russian Antarctic Vostok station*, which described the technological design that would enable direct observations and sampling of the lake as early as 2014–15. Russia also referred to IP 74, *Results of Russian activity for penetrating subglacial Lake Vostok in the season 2011-2012*, which reported that there had been a clean penetration from an ecological perspective, of 3679.60 metres of ice. The Russian Federation noted that the release of a significant amount of drilling fluid at the surface of the borehole, immediately pumped, confirmed that the liquid water of the lake rose up in the bottom of the borehole, preventing any contamination of the lake by the drilling fluid. A video about the activity was shown.
- (60) A number of Parties congratulated the Russian Federation for its significant scientific and technological achievement, which would generate an important leap in scientific knowledge of sub-glacial lakes.
- (61) While congratulating the Russian Federation, others raised questions about the process. Belgium asked why the thermal drill and organosilicon fluid that had originally been envisaged for the activity were not utilised, and whether there was any effect from the change in technology. Belgium also inquired whether it might have been possible to use the thermal drilling method and avoid potential pollution of the lake, if further progress had been delayed until the beginning of the following season. ASOC remained concerned about contamination, and in this respect asked for clarifications of the fate of leaked drill fluid, and contact of drill fluid with lake waters. ASOC noted the need to follow well-formulated research and operating protocols, even if this may result in a delay in obtaining scientific results, in order to safeguard Antarctica's environmental and scientific values.
- (62) In response, the Russian Federation clarified that it had no time to transfer to the thermal drill technology with the organosilicon fluid, because the precise thickness of the ice sheet was unknown and there was no clear indication of how close the drill was to penetrating into water. Furthermore, the thermal drilling technology would not have allowed for a core sample to be taken from the site. The option of inserting organosilicon fluid into the bore hole, and to wait another year before assuming drilling, had been dismissed due to the unknowns involved. The Russian Federation stated that drill fluid would not contaminate the lake, because there was no way that a liquid with a lighter density could have penetrated into the lake water under the pressure of four

atmospheres. Rather, the kerosene and Freon was contained within the centre of the freshly frozen bore hole, as lake water travelled up the drill shaft. It noted that pure water samples were expected to be collected in 2012/13, and that new technologies would be applied in 2014/15 to research on the water column, including procedures that would maximise clean conditions.

- (63) Italy presented IP 41, *Starting a feasibility study for the realization of a gravel runway near Mario Zucchelli Station*, which highlighted its intention to explore two sites for building a new gravel runway due to problems with the current ice runway. In the 2012/2013 season, a stratigraphical survey by drilling, helicopter radar surveys and the collection of meteorological data would be conducted for further analysis of the suitability of these sites for the proposed runway and in preparation for any necessary environmental impact assessment.
- (64) The Republic of Korea noted that a new gravel runway would be very useful for scientists in the region, and offered its strong support for cooperation with Italy to make this project possible.
- (65) ASOC noted that it looked forward to seeing the CEE before the project proceeded, and expressed its view that such a CEE should include an assessment of the cumulative impact of this and other facilities in the area.
- (66) India presented IP 43, *Establishment and Operation of New Indian Research Station "Bharati" at Larsemann Hills*, and thanked a number of Parties for their useful feedback during the CEE process.
- (67) The Committee congratulated India on the successful completion of Bharati Station in 2012, and looked forward to its contribution to collaborative scientific research in the area. China also thanked India for its kind assistance with cargo transportation in the Larsemann Hills during the construction of Bharati Station, after the loss of a Chinese helicopter.
- (68) Other papers submitted under this item were:
 - SP 6, *Annual list of Initial Environmental Evaluations (IEE) and Comprehensive Environmental Evaluations (CEE) prepared between April 1st 2011 and March 31st 2012* (Secretariat).
 - BP 36, *Resumen de la Auditoría Ambiental de Cumplimiento de la Estación Científica Ecuatoriana Pedro Vicente Maldonado* (Ecuador).

Item 7: Area Protection and Management Plans

7a) Management Plans

- i) *Draft Management Plans which have been reviewed by the Subsidiary Group on Management Plans*
- (69) Australia introduced WP 14, *Subsidiary Group on Management Plans – Report on 2011/12 Intersessional Work*, on behalf of the Subsidiary Group on Management Plans (SGMP). The Group had in the intersessional period reviewed one revised management plan: for ASPA No. 140, Parts of Deception Island, prepared by the United Kingdom.
- (70) The SGMP advised the Committee that the final revised management plan prepared by the United Kingdom was well written, of high quality, and adequately addressed the key points raised during its review. Accordingly, the SGMP recommended that the CEP approve the revised plan.
- (71) The Committee endorsed the SGMP's recommendation and agreed to forward the revised management plan for ASPA 140 to the ATCM for adoption.
- ii) *Draft revised Management Plans which had not been reviewed by the Subsidiary Group on Management Plans*
- (72) The Committee considered revised management plans for 13 Antarctic Specially Protected Areas (ASPAs) and one Antarctic Specially Managed Area (ASMA) under this category:
- WP 2, *Revised Management Plan for Antarctic Specially Protected Area (ASPAs) No. 151 Lions Rump, King George Island, South Shetland Islands* (Poland).
 - WP 3, *Revised Management Plan for Antarctic Specially Protected Area (ASPAs) No. 128 Western Shore of Admiralty Bay, King George Island, South Shetland Islands* (Poland).
 - WP 8, *Revision of the Management Plan for Antarctic Specially Protected Area (ASPAs) No. 129 Rothera Point, Adelaide Island* (United Kingdom).

- *WP 9, Revision of the Management Plan for Antarctic Specially Protected Area (ASP) No. 109 Moe Island, South Orkney Islands (United Kingdom).*
- *WP 10, Revision of the Management Plan for Antarctic Specially Protected Area (ASP) No. 111 Southern Powell Island and adjacent islands, South Orkney Islands (United Kingdom).*
- *WP 11, Revision of the Management Plan for Antarctic Specially Protected Area (ASP) No. 115 Lagotellerie Island, Marguerite Bay, Graham Land (United Kingdom).*
- *WP 12, Revision of the Management Plan for Antarctic Specially Protected Area (ASP) No. 110 Lynch Island, South Orkney Islands (United Kingdom).*
- *WP 42, Review of the Management Plan for ASMA No. 4: Deception Island (Argentina, Chile, Norway, Spain, United Kingdom and United States).*
- *WP 44, Revised Management Plan for Antarctic Specially Protected Area (ASP) No. 132 Potter Peninsula (Argentina).*
- *WP 52, Review of the Management Plan of Antarctic Specially Protected Area (ASP) No. 133 Harmony Point (Argentina and Chile).*
- *WP 54, Revised Management Plan for Antarctic Specially Protected Area (ASP) No. 145 Port Foster, Deception Island, South Shetland Islands (Chile).*
- *WP 58, Management Plan for Antarctic Specially Protected Area (ASP) No. 112 Coppermine Peninsula, Robert Island, South Shetland Islands (Chile).*
- *WP 60, Management Plan for Antarctic Specially Protected Area (ASP) No. 146 South Bay, Doumer Island, Palmer Archipelago (Chile).*
- *WP 61, Management Plan for Antarctic Specially Protected Area (ASP) No. 144 'Chile Bay' (Discovery Bay), Greenwich Island, South Shetland Islands (Chile).*

- (73) In introducing WP 2, which presented a revised management plan for ASPA 151, and WP 3, which presented a revised management plan for ASPA 128, Poland noted that only minor amendments were proposed.
- (74) Several Members sought clarification on a number of issues, particularly in relation to ASPA 128, including measures for the management of non-native flora species that had been identified in the Area, the consideration of ATCM Measures regarding control of overflights (which Chile raised), and the expanded boundaries (which IAATO requested should be clearly marked). Further, the United States noted that its field camp in ASPA 128 had been in place since before the area was declared an ASPA, and that it would raise other queries to improve the utility of the revised plan during the intersessional period.
- (75) The Committee agreed to refer the revised management plans for ASPAs No.s 128 and 151 to the SGMP for intersessional review.
- (76) With respect to WP 8 (ASPA 129), WP 9 (ASPA 109), WP 10 (ASPA 111), WP 11 (ASPA 115) and WP 12 (ASPA 110), the United Kingdom outlined minor changes, which included reformatting to comply with the *Guidelines for the Preparation of Management Plans for ASPAs*, information about access to the Areas, provision of coordinates for the boundaries of the Areas, and, where relevant, information about field camps.
- (77) The United Kingdom explained that the revisions to the management plan for ASPA 129 (in WP 8), which was originally established as a control area against which the effects of human impact from the adjacent Rothera Research Station could be monitored in an Antarctic fellfield ecosystem, comprised formatting changes and the addition of an introduction, noting that whereas the Area itself had little intrinsic nature conservation value, it did have value as a biological research and monitoring site.
- (78) Changes to the management plan for ASPA 109 (in WP 9), which was established to protect a representative sample of the maritime Antarctic ecosystem, environmental values (primarily terrestrial flora and fauna), and as a control site for comparison with areas subject to scientific activities, included a description of the Area's position in the Environmental Domains framework, and information on access and boundaries.

- (79) Introducing WP 10, the United Kingdom explained that the proposed revisions to the management plan for ASPA 111, which protected predominantly breeding bird and seal populations, and to a lesser extent terrestrial vegetation, comprised the addition of an introduction, a reference to the Area's position in the Environmental Domains framework, information on access and boundaries, and the designated campsite.
- (80) Changes to the management plan for ASPA 115, which protected environmental values, primarily terrestrial flora and fauna and avifauna, also addressed access, the Environmental Domains context, and information about structures within the Area.
- (81) When discussing WP 12, which covered ASPA 110, the United Kingdom explained that management of this Area, which protected one of the largest areas of *Deschampsia antarctica* in the Treaty area, needed to be revised in light of an increase in the level of fur seal presence within the Area and the recognition of the increased biodiversity of the terrestrial communities.
- (82) The Committee agreed to forward the revised management plans for ASPA No.s 109, 110, 111, 115 and 129 to the ATCM for adoption.
- (83) With respect to WP 42, prepared jointly by Argentina, Chile, Norway, Spain, the United Kingdom and the United States, Norway explained that the Deception Island Management Group had conducted its first five-yearly review of the Management Plan for ASMA 4, which protects areas of unique and important natural, scientific, historic, educational and aesthetic value, and which were also subject to a wide range of competing demands. In this context, Norway also thanked ASOC and IAATO for their contributions to the five-yearly review.
- (84) Norway remarked that the proposed changes to the Management Plan included: protection of areas not subjected to substantial human activity; guidance that Deception Island should not be used as an emergency harbour, if possible; updated census figures for chinstrap penguins in the ASMA, which indicated a marked and significant decline; an extensive package of visitor guidelines and changes to the visitor code of conduct; and inclusion of guidelines to reduce the risk of non-native species introduction to Deception Island.
- (85) Spain highlighted that Deception Island is an active volcano and this posed additional risks to human activities, both for those entering the area and

anyone required to provide emergency assistance. Based on this, Spain emphasised that all activities needed to be considered carefully, and that restrictions and prohibitions may be warranted in some circumstances.

- (86) The Russian Federation praised the scientific basis of the revised Management Plan and emphasised the importance of management decisions responding to scientific data.
- (87) The Committee approved the revised Management Plan for ASMA 4 and agreed to forward it to the ATCM for adoption.
- (88) With respect to WP 44, Argentina outlined the proposed changes to the management of ASPA 132, originally designated as a site of special scientific interest, as including editorial changes, revised maps, revised data and new information.
- (89) The Committee agreed to forward the revised Management Plan for ASPA 132 to the SGMP for review.
- (90) On behalf for Argentina and Chile, Argentina presented WP 52, which outlined minor changes to the management plan for ASPA 133. The Committee approved the revised Management Plan for ASPA 133 and agreed to forward it to the ATCM for adoption.
- (91) With respect to WP 54 (ASPA 145), WP 60 (ASPA 146) and WP 61 (ASPA 144), Chile said the proposed revisions were for the management of ASPAs that included marine areas, and that it would therefore be appropriate to refer them to the Commission on the Conservation of Antarctic Marine Living Resources (CCAMLR) before further consideration by the Committee. Chile also advised Members that further revisions would be made to the map of ASPA 145 (WP 54) before forwarding to CCAMLR.
- (92) Noting the proposed revisions and the need to consult CCAMLR, the Committee agreed to forward the management plans for ASPAs No.s 144, 145 and 146 to the SGMP.
- (93) Concerning WP 58, submitted by Chile, the Committee approved the revised Management Plan for ASPA 112 and agreed to forward it to the ATCM for adoption.

iii) *New draft management plans for protected/managed areas*

- (94) The Committee considered three proposals to designate new Antarctic Specially Protected Areas (ASPAs) under this category:
- WP 19, *The proposed designation of an Antarctic Specially Protected Area for high altitude geothermal areas of the Ross Sea region* (New Zealand).
 - WP 40, *Proposal for a new Antarctic Specially Protected Area at Cape Washington and Silverfish Bay, Terra Nova Bay, Ross Sea* (Italy & United States).
 - WP 41, *Proposal for a new Antarctic Specially Protected Area at Taylor Glacier and Blood Falls, Taylor Valley, McMurdo Dry Valleys, Victoria Land* (United States).
- (95) In introducing WP 19, New Zealand noted that three sites in the Ross Sea area contain high altitude geothermal activity - Mount Erebus (ASPA No. 130: Tramway Ridge, Mount Erebus, Ross Island) Mount Melbourne (ASPA No. 118: Summit of Mount Melbourne, Victoria Land), and Mount Rittman in Victoria Land. All three sites contain unique biodiversity in warm geothermal soils. New Zealand proposed the designation of one ASPA for these three geothermal areas of the Ross Sea region and presented a draft management plan for a multi-site ASPA.
- (96) New Zealand suggested that this manner of ASPA designation represented a more strategic approach to protecting a rare environment type in Antarctica, and applied consistent measures to protect the highly sensitive and unique species assemblages to the same high standard in a single management plan.
- (97) The Committee welcomed New Zealand's proposal, and the United States, noting the mutual interest between New Zealand and the United States in high altitude geothermal areas, suggested that joint field work using shared logistical support might be possible during the 2012/13 field season to refine the proposed management plan.
- (98) The United Kingdom commended New Zealand on its proposal and suggested that intersessional discussion should consider whether the three areas considered under the proposal would be best protected as three separate ASPAs or as one larger ASPA.

- (99) ASOC commented that New Zealand's proposal represented a creative and strategic initiative to protect unusual or rare habitats, and encouraged other Members to take a similar approach.
- (100) In accordance with suggestions outlined in WP 19, the Committee agreed to refer the draft management plan for a proposed new ASPA for high altitude geothermal areas of the Ross Sea region to the SGMP for initial review and comment by October 2012, prior to the 2012/13 summer field season. New Zealand planned to address any identified issues during the 2012/13 season and to submit both a revised draft management plan and an outline of its responses to the SGMP's advice. Following further review by the SGMP, a final draft management plan would be submitted to CEP XVI.
- (101) In introducing WP 40, the United States and Italy highlighted the scientific value of the area proposed for designation as an ASPA, noting that it includes one of the largest emperor penguin colonies in Antarctica and a rich Antarctic silverfish nursery. While the penguin colony had attracted interest for tourism, the boundaries proposed would reduce the area available for tourism. In view of the size of the marine component proposed in the ASPA, they also proposed forwarding the draft plan to CCAMLR for consideration in accordance with Decision 9 (2005).
- (102) New Zealand noted the scientific importance of this part of the Ross Sea, and that it viewed the proposal as complementary to developing proposals for wider marine protection within CCAMLR and offered to contribute to the development of the proposed management plan. Similar offers were made by the Republic of Korea, which was in the process constructing a station in the vicinity of the proposed ASPA, and Germany, which had an existing research station in the area (Gondwana).
- (103) While expressing support for the designation of a new ASPA in this area, the United Kingdom questioned whether it was necessary to exclude tourist visits to the area proposed for designation. IAATO expressed its appreciation that the intersessional consultations, to which it offered to contribute, would consider the tourism issues. Given the low levels of visitation at very defined periods of the year, IAATO hoped that they might find a way to allow controlled visitation to the area without compromising other values.
- (104) The Committee agreed to forward the draft management plan for a proposed new ASPA for Cape Washington and Silverfish Bay to the SGMP. The SGMP would

provide advice to the United States and Italy on the draft management plan, to be considered first by CCAMLR and to then be discussed by CEP XVI.

- (105) In introducing WP 41, the United States noted that the proposed management plan had been developed following extensive consultation with the scientific community, SCAR and interested CEP members. Increased activity on the Taylor Glacier and recent ice-core drilling projects highlighted the need to protect the Blood Falls as these activities have the potential to influence the unique microbial community and chemistry of the feature. They further noted that this would be the first sub-glacial ASPA and the first to be explicitly designed in three dimensions.
- (106) The Committee commended this proposal as the first ASPA defined in three dimensions, approved the proposed designation of a new ASPA for Taylor Glacier and Blood Falls and agreed to forward it to the ATCM for adoption.

Advice to the ATCM

- (107) In reviewing the advice of the SGMP, and following the Committee's assessment, the Committee agreed to forward the following management plans to the ATCM for adoption:

#	Name
ASPA 109	Moe Island, South Orkney Islands
ASPA 110	Lynch Island, South Orkney Islands
ASPA 111	Southern Powell Island and adjacent islands, South Orkney Islands
ASPA 112	Coppermine Peninsula
ASPA 115	Lagotellerie Island, Marguerite Bay, Graham Land
ASPA 129	Rothera Point, Adelaide Island
ASPA 133	Harmony Point
ASPA 140	Parts of Deception Island
New ASPA	Blood Falls
ASMA 4	Deception Island

iv) Other matters relating to management plans for protected/managed areas

- (108) Australia introduced further elements of the intersessional work of the SGMP (in WP 14).

- (109) The Committee thanked the SGMP for its work which it saw as important for the efficiency of its meetings.
- (110) The Committee appointed Ms Birgit Njåstad from Norway as the new convener of SGMP. The Committee thanked Mr Ewan McIvor from Australia for his convenership over the past 4 years.
- (111) Mindful of the heavy workload of proposed management plans to be reviewed, the Committee agreed to defer the SGMP’s consideration of actions arising from the ASMA workshop and revised the proposed 2012/13 work plan accordingly:

Terms of Reference	Suggested tasks
ToR 1 to 3	Review draft management plans referred by CEP for intersessional review and provide advice to proponents
ToR 4 and 5	Work with relevant Parties to ensure progress on review of management plans overdue for five-yearly review
	Review and update SGMP work plan
Working Papers	Prepare report for CEP XVI against SGMP ToR 1 to 3
	Prepare report for CEP XVI against SGMP ToR 4 and 5

- (112) The Republic of Korea presented IP 24, *Management Report of Nareŕbski Point (ASPA 171) and Ardley Island (ASPA 150) during the 2011/2012 period*, which provided a summary of flora and fauna surveys undertaken in these ASPAs.
- (113) Chile congratulated the Republic of Korea for conducting the surveys, and Argentina and Germany for their assistance, and expressed a willingness to contribute to further data collection in the area in the future.
- (114) IAATO presented IP 38, *Establishing IAATO Safety Advisories*, which described the establishment by its members of a formalised internal system that aims to enhance safety for operators in the Antarctic. When operators are involved in incidents, a process is followed to ensure review of the incident and, where appropriate, record the lessons learned and make the lessons available to the whole industry. Following the grounding of the MV *Sea Spirit* on December 9, 2011, IAATO prepared the first dedicated Advisory for Whalers Bay, Deception Island. IAATO further noted that previous

recommendations to enhance safety will be converted into this format and redistributed via the IAATO Field Operations Manual.

- (115) India presented IP 61, *Report of the Larsemann Hills Antarctic Specially Managed Area (ASMA) Management Group*, prepared jointly with Australia, China, Romania and the Russian Federation. India noted that discussions within the management group on the first five-yearly review of the management plan had raised a number of issues which were being further discussed, and a revised management plan would be submitted to the CEP XVI.
- (116) Belgium welcomed the management group's deliberations on the issue of designating the Stornes Peninsula as an ASPA to serve as a reference site and suggested that the protection could be extended to the Broknes Peninsula for its biological and paleolimnological value. Generally speaking, Belgium highlighted the value of the lakes on the Broknes and Grovnes Peninsula for biological and paleolimnological research.
- (117) Brazil presented IP 66, *Working Plan Proposal for the Review of the Admiralty Bay Antarctic Specially Managed Area Management Plan (ASMA No. 1)*, and reported that the management group planned to establish a discussion forum on the Secretariat website and to visit all stations and refuges during the next summer season, in preparation for submission of a revised management plan for consideration at CEP XVI.
- (118) The United States presented IP 78, *Amundsen-Scott South Pole Station, South Pole Antarctica Specially Managed Area (ASMA No. 5) 2012 Management Report*, which summarised the continuing challenges in managing diverse activities in the ASMA. The United States expressed its satisfaction at the constructive relationship established with the tourist industry in expectation of high visitor numbers associated with celebrations of the centenaries of Roald Amundsen and Robert Falcon Scott reaching the South Pole, drawing particular attention to the success of the visitor centre. The United States also invited Members to provide advice to enhance the management of the ASMA, and material which might enhance the utility of the recently launched website www.southpole.aq.
- (119) IAATO thanked the United States for its productive cooperation during the centenary year. In response to a query from ASOC, IAATO indicated that a decline in visitor numbers was expected in the short term, but numbers could not be accurately predicted beyond the next few years.

- (120) Norway presented IP 82, *Deception Island Specially Managed Area (ASMA No 4) Management Group Report*, prepared jointly with Argentina, Chile, Spain, the United Kingdom and the United States, which summarised the activities undertaken within the Deception Island ASMA, and the work of the management group during the intersessional period.
- (121) In response to a query from France concerning an incident involving the scattering of barley seeds at Telefon Bay, IAATO indicated that the seeds had been scattered unexpectedly as part of a religious ceremony by tourists. The operator had collected the seeds, reprimanded the group and threatened them with no longer being allowed ashore. While enquires within the science community indicated that any seeds inadvertently not collected were probably not viable, IAATO has instituted a ‘barley watch’ at the site to monitor for any possible introduction and will report back to the CEP.
- (122) Other papers submitted under this Item included:
- SP 7, *Status of Antarctic Specially Protected Area and Antarctic Specially Managed Area Management Plans*.

7b) Historic Sites and Monuments

- (123) The Russian Federation introduced WP 36, *Proposal on Revision of Historic Sites and Monuments under Management of the Russian Federation*, encompassing revisions to the descriptions of HSM No. 4 (Lenin’s Bust), HSM No. 7 (Kharma’s Stone), HSM No. 8 (Shcheglov’s Monument), HSM No. 9 (Soviet Expedition Cemetery), HSM No. 10 (Oasis Station Observatory) and HSM No. 11 (Vostok Station Tractor). The changes made included updated descriptions (including titles) and corrections to the coordinates.
- (124) Chile introduced WP 56 rev.1, *Proposal for modification of Historic Site No. 37*, which proposed modifications to the description of the HSM, to incorporate associated structures.
- (125) The Committee approved the revised descriptions for HSM No.s 4, 7, 8, 9, 10, 11 and 37 and agreed to forward them to the ATCM for adoption.

Advice to the ATCM

(126) After considering the revisions of the descriptions of seven Historic Sites and Monuments the Committee agreed to forward the revised descriptions to the ATCM for adoption:

#	Name of site/monument
HSM 4	Pole of Inaccessibility Station Building
HSM 7	Ivan Khmara's Stone
HSM 8	Anatoly Shcheglov's Monument
HSM 9	Buromsky Island Cemetery
HSM 10	Soviet Oasis Station Observatory
HSM 11	Vostok Station Tractor
HSM 37	O'Higgins Historic Site

(127) Argentina introduced WP 46, *Final Report of the Informal Discussions on Historic Sites and Monuments*, held during the intersessional periods 2010-11 and 2011-12, under Argentina's leadership. The following Members and Observers actively contributed to these discussions: Argentina, Australia, Brazil, Germany, India, New Zealand, Norway, United Kingdom, Uruguay, IAATO and ASOC.

(128) Argentina reported that discussions in the second intersessional period had focused on the exploration of possible wider use of 'Site Guidelines for Visitors', the potential application of management plans, or equivalent, to HSMs, and the role of specialists and external experts, particularly given the material and situational diversity of Antarctic heritage.

(129) Members warmly thanked Argentina and the other participants for their productive work, noting in particular the efforts made to incorporate all views. Specific mention was made of the personal contribution of Lic. Rodolfo Andrés Sánchez.

(130) Members agreed that sharing of experiences in management of HSMs was very valuable given the no 'one size fits all' diverse nature of HSMs, and supported continuing discussion.

(131) The informal discussion group had prepared a list of additional information that could be added to the list of HSMs adopted under Resolution 5 (2011)

to improve transparency and accessibility to a wider audience, as follows. It was proposed that the Party or Parties responsible for the establishment of the particular HSM should play the primary role in establishing whether any additional information would be useful.

- (132) Several Members supported this approach. The United States noted that additional information, including a specific name for each HSM, would be very useful to meet their domestic requirements.

INTRODUCTION
<ul style="list-style-type: none"> • HSM number and name*
<ul style="list-style-type: none"> • Original proposing Party*
<ul style="list-style-type: none"> • Party undertaking management*
<ul style="list-style-type: none"> • Type (historic site or monument/commemorative)
DESCRIPTION OF THE SITE
<ul style="list-style-type: none"> • Location*
<ul style="list-style-type: none"> • Physical Features & Local/Cultural Landscape
<ul style="list-style-type: none"> • Historical / Cultural Features
DESCRIPTION OF THE HISTORICAL CONTEXT
SITE GUIDELINES FOR VISITORS (link, if applicable)
PHOTOS AND MAPS
ASPAs Designation (if applicable)
<ul style="list-style-type: none"> • Management Plan link
<p>Those items as marked * are information to be provided by Parties according to Resolution 5 (2011). The CEP notes that, according to such a Resolution, ‘if it is desired to keep any additional background information on the record, this material may be annexed to the report of the CEP for inclusion in the Final Report of the ATCM’.</p>

- (133) The Committee also agreed with the conclusion that any review and revision of an existing Site Guidelines for Visitors (SGVs) should ensure that the guidance addresses the need to protect any historical or cultural values of the site. In order to achieve this goal the following criteria on how to deal with SGVs -in relation to HSMs- should be taken into consideration: a) The presence of an HSM in a heavily visited area could be a strong motivation to consider the development and adaptation of SGV for the site; b) The presence of a particularly vulnerable HSM in an area less visited could also potentially be a motivation for developing and adopting an SGV for the site; and c) There could be merit in considering whether existing SGVs provide sufficient protection to the HSMs Parties are responsible for (and if not, initiate a review in cooperation with other relevant/interested Parties, as appropriate).

- (134) Finally, the Committee agreed that Parties should engage with heritage specialists, and/or with national representatives to external expert bodies (eg, the ICOMOS International Polar Heritage Committee) when preparing management plans (or other applicable management mechanisms) specifically tailored to HSMS.
- (135) China presented IP 14, *Brief Introduction of the Maintenance and Conservation Project of No.1 Building at Great Wall Station*. This building was designated as HSM No. 86 under Measure 12 (2011). Japan thanked China, and stated that it looked forward to China providing more data once the restoration work is completed.
- (136) Other papers submitted under this item included:
- BP 41, *Antarctic Heritage Trust Conservation Update* (New Zealand)

7c) Site Guidelines

- (137) The Committee discussed proposals for revised site guidelines for one site and new guidelines for three new sites.
- (138) The United Kingdom introduced WP 15, *Site Guidelines for D’Hainaut Island, Mikkelsen Harbour, Trinity Island*, prepared jointly with Argentina and the United States, in conjunction with IAATO; and WP 16, *Site Guidelines for Port Charcot, Booth Island*, prepared jointly with Argentina, France, Ukraine, the United States, in conjunction with IAATO.
- (139) On behalf of the Deception Island Management Group (Argentina, Chile, Norway, Spain, United Kingdom and the United States), in conjunction with IAATO, Norway introduced WP 45, *Site Guidelines for Visitors, Pendulum Cove, Deception Island, South Shetland Islands*, which aim to minimise the risk of visitor-related pressures at this site of outstanding natural and historic value, as well as to safeguard visitor safety. Norway noted an amendment under landing requirements of ships, deleting Landing Requirement “Maximum 2 ships per day (midnight to midnight)”.
- (140) The Committee approved the three sets of Guidelines and agreed to forward them to the ATCM for adoption.

Advice to the ATCM

- (141) After considering the new site guidelines for three sites the Committee agreed to forward the following site guidelines to the ATCM for adoption:
- D'Hainaut Island, Mikkelsen Harbour, Trinity Island
 - Port Charcot, Booth Island
 - Pendulum Cove, Deception Island
-
- (142) Ecuador introduced WP 59, *Review of the Site Visitor Guidelines for Aitcho Islands*, prepared jointly with Spain. Proposed changes to the existing guidelines included replacement of anchoring points and replacement of a designated route crossing the island to avoid further impacts on the moss beds.
- (143) The Committee thanked Ecuador and Spain for their important paper and acknowledged the important work they had undertaken to assess the damage to the moss beds and to bring the information to the Committee.
- (144) The Committee strongly expressed its significant concern over the tracks through the moss beds on Barrientos Island - Aitcho Island and the damage that had occurred.
- (145) The Committee agreed on the importance of removing opportunities for further damage to the site and considered a number of options to achieve that aim. Several Members noted the importance of further monitoring and research at the site in order to assess recovery of the moss beds and to ensure adequate information is available to inform decisions on future activities at the site.
- (146) The Committee recognised IAATO's intent to introduce a moratorium on walks through closed area B among its members at least for the 2012/13 season and recognised the importance of removing all visitation to at least the area of damage so as to allow opportunities for longer term management to be considered.
- (147) The Committee agreed to place a moratorium on access to the central area of Barrientos Island - Aitcho Island other than for reasons of scientific research and monitoring; to amend the site guidelines to take account of the moratorium; to encourage those national programmes active in the area

to cooperate in collecting further data and information on the damage that has occurred as well as on developing a monitoring programme to assess recovery of the site; and to reassess the issue, including the site guidelines, at CEP XVI.

- (148) On this basis the Committee prepared a draft Resolution and recommended its adoption by the ATCM.

Advice to the ATCM

The Committee agreed to forward to the ATCM for adoption the revised Site Guidelines for Aitcho/Barrientos Island and a related draft Resolution.

- (149) IAATO introduced IP 37, *Report on IAATO operator use of Antarctic Peninsula Landing Sites and ATCM Visitor Site Guidelines, 2011-2012 Season*. The United Kingdom indicated its intention to carry out work to propose Site Guidelines for Orne Island in the coming season, working with other Parties and Observers.

7d) Human footprint and wilderness values

- (150) New Zealand introduced WP 50, *Concepts for Wilderness protection in Antarctica using tools in the Protocol* and referred to further information in IP 60, *Further information about wilderness protection in Antarctica and use of tools in the Protocol*, both prepared jointly with the Netherlands. These papers sought to progress the discussion on how areas of wilderness significance could be better protected, and proposed the development of practical guidance material to support the protection of wilderness values when applying the environmental impact assessment and area protection tools of Annex I and Annex V of the Protocol.
- (151) New Zealand noted that while wilderness could be conceived of as an area untouched by humans, and the Antarctic had long been considered as such an area, it was becoming progressively less untouched due to the cumulative impact of human activity. The paper sought to quantify the tangible aspects of wilderness, and acknowledged that intangible aspects, such as aesthetic value, were the subject of ongoing discussion. New Zealand and Netherlands thanked ASOC and others for their assistance in preparing the two papers.

- (152) The Committee commended New Zealand and the Netherlands on their work, acknowledged that there had been gradual degradation of some aspects of Antarctic wilderness, and discussed the importance of inviolate areas in conservation planning.
- (153) Acknowledging the inherent difficulties in defining, assessing and managing wilderness values, the United States noted that the CEP's slow and steady pace on addressing this topic had proven a useful approach. Norway informed the Committee that it would contribute working examples of its consideration of wilderness values in the high Arctic, to assist CEP discussions. IAATO noted the importance of Antarctic wilderness to tour operators and their clients, and stood ready to provide support to the CEP.
- (154) The Committee welcomed the offer of New Zealand and the Netherlands to bring further work to CEP XVI resulting from intersessional work to:
- (a) develop guidance material to assist Parties to take account of wilderness values when undertaking environmental impact assessment of proposed activities and/or developing proposals for protected areas on the basis of their wilderness values; and
 - (b) explore possibilities for consideration of inviolate areas in conservation planning, and potential synergies with protection of wilderness areas in the development of proposals for protected areas in conjunction with SCAR.
- (155) The Committee also welcomed SCAR's offer to collaborate in this work.
- (156) ASOC presented IP 49, *Annex V Inviolable and Reference Areas: Current Management Practices*, which suggested that the designation of inviolate areas in accordance with Annex V of the Protocol should be applied widely as a tool to help protect wilderness and scientific values. ASOC noted that only 30 square kilometres of the Antarctic Treaty area were designated as inviolate areas within the present 71 existing ASPAs.
- (157) The Committee thanked ASOC for its paper, and some Members highlighted the value of designating inviolate areas for future potential scientific research. The United Kingdom encouraged Members to incorporate restricted areas into new and existing ASPAs, as had been done for ASPA No. 126 on Byers Peninsula.

- (158) Belgium stressed that the designation of inviolate areas would be an invaluable tool for scientific research and considered that scientific progress could be hindered by the lack of reference areas preserved from human footprint.
- (159) ASOC presented IP 52, *Data Sources for Mapping the Human Footprint in Antarctica*, which proposed the compilation of available data on research, logistics, tourism and fishing into a common format as a first step toward the construction of a model of the human footprint in Antarctica. ASOC suggested that the CEP could discuss with SCAR and COMNAP how best to integrate and analyse this information, and that it should be added to the five year work plan. During discussion, it was noted that the proposed Antarctic Environments Portal (WP 57) could serve as a tool for addressing ASOC's proposal.

7e) Marine spatial protection and management

- (160) Ukraine presented IP 68, *Progress of Ukraine on Designation of Broad-scale Management System in the Vernadsky Station Area*, in response to increasing scientific, logistic and tourism activities in the area, and invited interested Parties to take part in further discussion on environmental protection and management for this area.
- (161) Dr. Polly Penhale (United States), in her capacity as CEP Observer to CCAMLR, presented IP 80, *Report of the CEP Observer to the CCAMLR Workshop on Marine Protected Areas, Brest, France, 29 August to 2 September 2011*. She referred Members to the full report on the CCAMLR website (http://www.ccamlr.org/pu/e/e_pubs/sr/11/a06.pdf). She noted that the Workshop considered regionalisation analyses for the circumpolar pelagic environment and for the Crozet Basin and northern Kerguelen Plateau region (Indian Ocean) and reviewed progress on draft proposals for circumpolar pelagic habitats, newly exposed benthic habitats created by ice-shelf collapse, East Antarctica, and the Ross Sea Region. She further noted that the Workshop recognised that SC-CCAMLR and CEP have common interests in marine protection which may result in having ASPAs and ASMAs designated by the ATCM within CCAMLR MPAs.
- (162) ASOC presented IP 54, *Implications of Antarctic Krill Fishing in ASMA No. 1 – Admiralty Bay*, which highlighted the occurrence of krill fishing in ASMA 1 during 2009/10, an activity not explicitly identified in the ASMA's

Management Plan. ASOC reminded Members that the Area was established, in part, because Admiralty Bay had a high concentration of breeding seabirds and seals, and stated that penguin numbers in the Area had decreased, and that the scientific research of the past several decades into fish, krill, benthic communities and seabirds in the Area could be jeopardised by fishing. This was the first instance of reported fishing in an ASMA and set a precedent of concern.

- (163) To address these concerns, ASOC recommended an immediate review of the Management Plan and an interim prohibition of all commercial fishing in the Area, and expressed its view that CCAMLR should implement a precautionary closure of fisheries in ASMAs with marine components, as well as complementary conservation measures and incident reporting to the ATCM.
- (164) Poland pointed out that monitoring of penguins in Admiralty Bay by the USA is part of the CCAMLR system and has been conducted for 40 years. Since krill is a critical item of penguin diet it was surprising to see trawlers catching krill in Admiralty Bay, potentially damaging this long term data set. Poland considers that krill harvesting near biological monitoring sites has to be totally forbidden to avoid such cases in the future. The restricted zone should be determined by penguin feeding activity, which could be up to 50km from the rookery. This restriction could be introduced to management plans of ASMAs and ASPAs and it could also be the first step in MPA designation. Poland also pointed out that other monitoring activity by its scientists in King George Bay could be threatened by fishing activities.
- (165) Japan expressed its view that prohibition on fishing should be introduced only when it is necessary to achieve the objectives of a management plan.
- (166) The SC-CAMLR Observer to CEP advised the Committee that as there was no mention of harvesting in the management plan for ASMA 1, in contrast to the management plan for ASMA 7, it was unclear whether the fishing in ASMA 1 was compatible with the objectives of the ASMA and therefore it had brought this matter to the attention of the CEP in *IP 28 Report by the SC-CAMLR Observer to the Fifteenth Meeting of the Committee for Environmental Protection*.
- (167) The Committee thanked ASOC for raising this issue. In the light of the concerns raised by several Members and ASOC that krill fishing may not

be compatible with the scientific values of the ASMA, Brazil agreed to send a revised version of IP66 to SC-CAMLR's Working Group on Ecosystem Monitoring and Management in order that the issue of krill fishing in ASMA 1 could be addressed during the intersessional period following the established procedure.

- (168) The SC-CAMLR Observer to CEP thanked the CEP for its clear advice on this issue and undertook to ensure that the concerns raised by the Committee regarding krill fishing in ASMA 1 were included in the discussions held in CCAMLR in order to improve awareness of the interaction of spatial management measures in the region.
- (169) ASOC presented IP 50, *Antarctic Ocean Legacy: A Marine Reserve for the Ross Sea* and the related information in IP 51, *Antarctic Ocean Legacy: A vision for circumpolar protection* which called for the creation of a network of marine protected areas and no-take marine reserves in the Southern Ocean.
- (170) ASOC explained that these proposals were developed by the Antarctic Ocean Alliance and were based on rigorous scientific research. They identify three additional areas that could be included in a Ross Sea MPA / marine reserve and 19 marine areas around Antarctica worthy of protection.
- (171) Other papers submitted under this Item were:
- IP 34, *Using ASMAs and ASPAs when necessary to complement CCAMLR MPAs* (IUCN)

7f) Other Annex V matters

- (172) The United States introduced WP 38, *Developing Protection for a Geothermal Area; Volcanic Ice Caves at Mount Erebus, Ross Island*, jointly prepared with New Zealand, which encouraged Parties to develop strategies to protect the unique environments of geothermal areas in the vicinity of Mount Erebus.
- (173) The United States observed that these areas attracted significant scientific research interest from a range of disciplines. The Mount Erebus ice caves are home to microbial communities that are isolated from surface dwelling microbes and have developed a unique lifestyle. In recent years, the ice caves at the summit have become popular shelters for those working in

the area. These sites are particularly vulnerable to contamination through introduced microbes or organic matter and such contamination decreases their value to science. Contamination has already been observed in some ice caves.

- (174) The United States recommended that interested Parties and SCAR develop an inventory of ice cave features, a Code of Conduct to address current contamination and minimise further contamination, and a voluntary moratorium on entering any cave other than for scientific purposes until a Code of Conduct could be implemented.
- (175) In thanking the United States and New Zealand for this initiative, the United Kingdom and Chile both strongly supported the development of appropriate guidance material for other geothermal areas in Antarctica, and drew this to the attention of the Deception Island Management Group.
- (176) Following a query from France, the United States clarified that the Code of Conduct would be complementary to the protection within the framework of the proposed ASPA for high altitude geothermal areas of the Ross Sea region.
- (177) SCAR noted its willingness to work alongside Parties to further develop this initiative.
- (178) In response to the proposal, the Committee adopted the following recommendations:
- Encourage interested Parties and their scientists to collaborate in generating an inventory of Mount Erebus ice caves that identifies the location, size, history of human activity and current microbial community characteristics in each ice caves.
 - Encourage interested Parties and their scientists to collaborate in developing a Code of Conduct that recognises the current level of microbiological contamination in the Mount Erebus ice caves and strives to prevent further contamination in ice caves of interest for microbiology studies.
 - Encourage scientists, interested Parties, and SCAR to work together to develop appropriate guidance material for other geothermal areas in Antarctica.

(179) The Committee also noted the other recommendations in the proposal:

- Encourage Parties to adopt a temporary moratorium on informal visits or visits for any purpose other than scientific research inside all Mount Erebus ice caves until a Code of Conduct is agreed.
- Encourage Parties to adopt a temporary moratorium on entry for any purpose into Mount Erebus ice caves that are currently believed to be pristine until a Code of Conduct can be agreed.
- Encourage scientists working in Mount Erebus ice caves to sterilise their gear and clothing to the best of their abilities and eliminate the use of gasoline powered tools inside caves, acknowledging that best practices will be identified when developing the Code of Conduct.

(180) Australia introduced WP 23 rev.1, *Antarctic Conservation Biogeographic Regions*, jointly prepared with New Zealand and SCAR, which presented the results of recent analyses of the relationships between the best available Antarctic terrestrial biodiversity data, the Environmental Domains adopted under Resolution 3 (2008), and other relevant spatial frameworks. The analyses identified 15 biologically distinct ice-free regions encompassing the Antarctic continent and offshore islands within the Antarctic Treaty area.

(181) Among other potential applications, Australia, New Zealand and SCAR recommended that the Committee endorse the classification represented by the Antarctic Conservation Biogeographic Regions as a dynamic model for identifying ASPAs within a systematic environmental-geographic framework, and also as a basis for managing the risk of transfer of species between locations in Antarctica.

(182) The Russian Federation added that it would make its researchers aware of these analyses with a view to making a contribution to future work on the Antarctic Conservation Biogeographic Regions. The Netherlands highlighted the utility of cross-referencing the map of Antarctic Conservation Biogeographic Regions with other maps, such as those on visitation frequency, in order to identify areas requiring special consideration for management or protection.

(183) In response to queries from China and Argentina about the intended application of the model, Australia explained that the model was not intended

to be prescriptive and was provided as one of a number of tools available for facilitating the designation of ASPAs. It would be most relevant to the designation of examples of major terrestrial ecosystems.

- (184) In response to a query from the United States, SCAR informed the Committee that while its current analyses focused on ice-free areas, it intended to include sub-glacial and other ice-covered areas in future analyses. SCAR also referred Members to IP 40 rev.1, *SCAR Products available to support the deliberations of the ATCM*, for a description of the methods used for data collection and management. SCAR remarked that various other studies supported the analyses conducted, but emphasised the need for more data in the future development of Biogeographic Regions. Some Members indicated their national programmes could contribute additional biodiversity data. SCAR encouraged the use of the Antarctic Biodiversity Database.
- (185) The Committee congratulated SCAR and the researchers responsible for the study presented in WP 23 rev.1 on their thorough analysis towards a systematic approach to area protection.
- (186) The Committee endorsed the recommendations in WP23 rev.1 and
- agreed that the Antarctic Conservation Biogeographic Regions should be used consistently and in conjunction with other tools agreed within the Antarctic Treaty system as a dynamic model for the identification of areas that could be designated as Antarctic Specially Protected Areas within the systematic environmental-geographic framework referred to in Article 3(2) of Annex V of the Protocol;
 - requested the Antarctic Treaty Secretariat to make the spatial data layer representing the Antarctic Conservation Biogeographic Regions available via its website;
 - reiterated its agreement that Members should encourage the further collection and timely submission of spatially explicit biological data;
 - recognised the relevance of the Antarctic Conservation Biogeographic Regions to its work to address non-native species risks, particularly the risk of transfer of species between locations in Antarctica; and
 - agreed to incorporate the attached ‘Map of Antarctica showing the 15 Antarctic Conservation Biogeographic Regions’ into the CEP Non-Native Species Manual, and to identify opportunities

to utilise the Antarctic Conservation Biogeographic Regions to manage non-native species risks.

CEP Advice for the ATCM

- (187) The Committee recommends that the ATCM adopt the Antarctic Conservation Biogeographic Regions by means of a Resolution.
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- (188) The Russian Federation introduced WP 35, *Proposals on preparation of revised management plans of Antarctic Specially Protected and Antarctic Specially Managed Areas*, which proposed that, in reviewing any management plans for ASPAs or ASMAs primarily designated to protect living values, the proponent Party should submit to the CEP a report with the results of a scientific monitoring programme on the state of those values.
- (189) The Russian Federation expressed the view that scientific monitoring was necessary to enable objective decisions with respect to management plans. In addition to anthropogenic threats, the Antarctic ecosystem was very sensitive and would react to a range of external factors. This necessitated the collection of objective data to detect long-term changes in the biological values being protected and to ensure the initial values continue to warrant protection.
- (190) As an example of an existing long-term monitoring plan, the Russian Federation cited CCAMLR's Conservation Measure in relation to marine protected areas, which provided protection for a defined period and which could be extended if an extension was supported by scientific monitoring. The Russian Federation proposed that a similar approach be used by the CEP.
- (191) While Members agreed with the need for monitoring of protected areas over the long-term to ensure that protection remained effective, some expressed concern that a compulsory system could compel access to protected areas, which could compromise the values being protected. Some Members also expressed concern that compulsory monitoring might discourage management plan revision, if compliance might be problematic.
- (192) The Committee thanked the Russian Federation for its work and reiterated the importance of long-term monitoring of biological values both for the detection of long-term change and to confirm that the values to be protected are still relevant. However, Members expressed concern that in those cases

where remote monitoring may not be feasible visitation may affect the values of the site, requiring monitoring could be counter-productive.

- (193) The Russian Federation, acknowledging Members' reservations to its proposal at this stage, expressed its intention to continue work on this matter.
- (194) Australia introduced IP 26, *Analyses of the Antarctic Protected Areas System Using Spatial Information*, which updated the CEP on Australia's acquisition of a comprehensive dataset of spatial information representing the boundaries of all ASPAs and ASMAs, and informed the CEP of the availability of this dataset on the Secretariat's website. Australia presented examples of how the dataset could assist in assessing and further developing the Antarctic protected areas system, and support other CEP activities.
- (195) The Committee thanked Australia for acquiring the data set and making it freely available and noted the utility of the information for supporting a systematic approach to area protection and management. Members expressed their gratitude to Australia for sharing this dataset, and indicated their intention to use the resource to complement their work. Argentina reserved the right to review nomenclature used on the Secretariat website.

Item 8: Conservation of Antarctic Flora and Fauna

8a) Quarantine and Non-native Species

- (196) SCAR introduced WP 5, *Outcomes of the International Polar Year Programme: Aliens in Antarctica*, accompanied by BP 1, *Continent-wide risk assessment for the establishment of non-indigenous species in Antarctica*, which together reported on the assessment of the risks of the establishment of non-native species, and which concluded that the highest current risk is posed to the Western Antarctic Peninsula coast and the islands off the coast of the Peninsula.
- (197) The report concluded that by 2100 the risk of the establishment of non-native species would continue to be highest in the Antarctic Peninsula area, but as a result of climate change would also increase substantially in the coastal, ice-free areas to the west of the Amery Ice Shelf and to a lesser extent in the Ross Sea region. SCAR recommended that the CEP:
 - (i) include the spatially explicit, activity-differentiated risk assessments in further development of strategies to mitigate the risks posed by terrestrial

non-native species; (ii) develop a surveillance strategy for areas at high risk of non-native species establishment; and (iii) give additional attention to the risks posed by intra-Antarctic transfer of propagules.

- (198) SCAR informed the Committee that research indicated the average seed load during the International Polar Year (IPY) 2007-09 period was 9.5 seeds per person, and approximately 70,000 seeds arrived in Antarctica during the first summer of the IPY, with scientists, science-support and tourism-support personnel having higher loads than tourists.
- (199) In response to a question from Norway, SCAR commented that while the current analyses focussed on vascular plants, the assessment had broader implications. SCAR saw value in further research on other biological groups and on methods for identifying natural colonisation.
- (200) Several Members informed the Committee of national efforts to mitigate non-native species risks. The United States mentioned that they will report at CEP XVI on their experience in terms of management against intra-continental transfer of non-native species.
- (201) IAATO indicated that it would encourage surveillance for non-native species by operators, and said it had launched a communications campaign directed at field staff, who had been identified as major seed carriers.
- (202) The Committee thanked SCAR and emphasised that this subject was of major interest to the CEP, including aspects relating to the increasing risks due to climate change, and the further development of the Non-native Species Manual.
- (203) The Committee endorsed the recommendations of WP 5, and agreed:
- to include the spatially explicit, activity-differentiated risk assessments in further development of strategies to mitigate the risks posed by terrestrial non-native species;
 - in collaboration with SCAR, COMNAP, IAATO, the IUCN and Parties, to develop a surveillance strategy for areas at high risk of non-native species establishment as identified by the Aliens in Antarctica project. Such a strategy should include a mechanism to differentiate natural from anthropogenic colonizations (see Hughes & Convey 2012; ATCM XXXIII WP 15 *Guidance for visitors and environmental managers following the discovery of*

a suspected non-native species in the terrestrial and freshwater Antarctic environment; ATCM XXXIII IP 44 Suggested framework and considerations for scientists attempting to determine the colonisation status of newly discovered terrestrial or freshwater species within the Antarctic Treaty Area).

- to give additional attention, in collaboration with its partners, to the risks posed by intra-Antarctic transfer of propagules, given that such assessments only formed a small part of the Aliens in Antarctica project.
- (204) The Committee warmly welcomed SCAR's WP 6, *Reducing the Risk of Inadvertent Non-Native Species Introductions Associated with Fresh Fruit and Vegetable Importation to Antarctica*, and confirmed that prevention of the introduction of non-native species is a high priority for Members.
- (205) The Committee endorsed the two recommendations of WP 6 and agreed to:
- encourage Parties to implement the COMNAP/SCAR checklists for supply chain managers, and
 - investigate further methods to reduce the risk of non-native species introductions to Antarctica associated with fresh food.
- (206) Australia introduced WP 25 rev.1, *Guidelines to minimise the risks of non-native species and disease associated with Antarctic hydroponics facilities*, jointly submitted with France, which responded to the request by CEP XIV for discussion of best practice in the use of such facilities.
- (207) Several Members commended the proposed guidelines. The United Kingdom expressed interest in further information on pests occurring in hydroponic units and in the availability of a risk assessment that takes into consideration the location of the facility and the susceptibility of the surrounding ecosystem to colonisation by common pest species.
- (208) Japan also requested that the ATS compile all relevant guidelines, including past guidelines, and make these available to Parties via the website.
- (209) Following a suggestion by SCAR, the Committee agreed that the guidelines should be amended to include a reference to floor level insect traps. This minor change was included in the draft guidelines during the meeting.

- (210) The Committee agreed to include the proposed revised *Guidelines to minimise the risks of non-native species and disease associated with Antarctic hydroponics facilities* in the Non-Native Species Manual.
- (211) Spain presented IP 13, *Colonisation status of the non-native grass Poa pratensis at Cierva Point, Danco Coast, Antarctic Peninsula*, jointly prepared with Argentina and the United Kingdom, and noted the need to eradicate this non-native species as soon as possible.
- (212) Australia encouraged the authors to report on the success of the attempts to eradicate the plant, noting that their experience may help inform actions to respond to other non-native species introductions, as outlined in IP 29. In response to a query from the Chair regarding the eradication method and the potential existence of other non-native species underneath the roots of the grass, the United Kingdom clarified that they had not yet developed a method of eradication and that other Parties' advice on successful methods would be welcomed.
- (213) The United Kingdom presented IP 29, *Colonisation status of known non-native species in the Antarctic terrestrial environment (updated 2012)*, which updated information presented to the CEP in 2010 and 2011 on the colonisation status of known non-native species in the Antarctic terrestrial environment. While the information indicated that there had been no attempts to eradicate any of the known non-native species in the past year, SCAR and South Africa referred to eradication programmes underway in associated and dependent systems in the sub-Antarctic, which may provide useful lessons for the Antarctic.
- (214) Several Members and ASOC expressed appreciation for the updated information, expressed their concern that the efforts to date had not halted the introduction of new non-native species or the expansion of those species already established, and reaffirmed the need for Members to increase their collaborative efforts to address this issue. It was also noted that one method of dispersal of non-native species was through their use by native species (eg, skuas using grasses for nests).
- (215) Other papers submitted under this Item included:
- BP 1, *Continent-wide risk assessment for the establishment of non-indigenous species in Antarctica*.

8b) Specially Protected Species

(216) No papers were submitted under this Agenda item.

8c) Other Annex II Matters

(217) Germany presented IP 20, *Evaluation of the “Strategic assessment of the risk posed to marine mammals by the use of airguns in the Antarctic Treaty area”*. Germany informed that this evaluation is available at www.umweltbundesamt.de/antarktis-e/archiv/evaluation_airguns_antarctic.pdf, and invited Members to comment on this evaluation.

(218) SCAR presented IP 21, *Anthropogenic Sound in the Southern Ocean: an Update*, which responded to the request of CEP XIV for an overview of research developments regarding the potential impacts of anthropogenic sound in the Southern Ocean. SCAR also informed the Committee of publication of a substantial scientific synthesis on the subject by the Subsidiary Body on Scientific and Technological Advice of the Convention on Biological Diversity (*The impacts of underwater noise on marine and coastal biodiversity and habitats*, UNEP/CBD/SBSTTA/16/INF/12).

(219) Germany raised some further points. Noting that SCAR referred to the important Southhall review of 2007 with respect to Temporary Threshold Shift (TTS), it was important to recognise that more recent publications (by Lucke in 2009 and by Popov in 2011) demonstrated that for “high frequency whales” (whales communicating in high frequencies) the thresholds are significantly below those extrapolated by Southhall, which therefore requires an exclusion zone for seismic surveys up to several kilometres. So far, no accepted threshold for TTS exists.

(220) In addition the present international focus had changed from injury to disturbance (eg, Second International Conference on Noise on Aquatic Life 2010 in Cork). The third conference will take place in August 2013 in Budapest, Hungary. Moreover, a lot of research has recently dealt with behavioural changes due to acoustic disturbance. For example, for beaked whales, eg, Tyack *et al.* (2011) suggested a disturbance threshold of 142 dB SEL, which is much lower than any value used so far by regulators to define disturbance, Germany suggested that it might be helpful to include an update on the work to the Population Consequences of Acoustic Disturbance (PCAD) model.

- (221) In conclusion, Germany emphasised, that anthropogenic sound can have far reaching effects and poorly understood impacts on the marine environment. Germany agreed with SCAR's conclusions that policies for the region of the Antarctic Treaty would benefit very much from further research in the Southern Ocean. Lastly, Germany informed the Members about a new German research project to foster a better understanding of the impact of masking on Antarctic whales, the results of which will be presented to CEP.
- (222) ASOC thanked Germany and also SCAR for their documents. In particular, ASOC thanked Germany for consistently bringing the issue of noise in the Antarctic to the attention to the CEP, and also in this instance for using strategic and precautionary perspectives to address risks to marine mammals resulting from the use of airguns. ASOC urged Members to take into consideration the recommendations in IP20 from Germany (regarding appropriate EIAs and consideration of technological alternatives for the collection of seismic measuring data).
- (223) The Committee noted with interest the information from Germany and SCAR, and requested regular updates on further research in this area from SCAR and Members.
- (224) SCAR agreed to provide updates on this issue, including substantive new data when it is available, to the Committee. In response to a query from the Russian Federation, SCAR suggested the impact of wind turbine noise on humans might be best examined within the joint SCAR-COMNAP Expert Group on Human Biology and Medicine.
- (225) SCAR presented IP 35, *Antarctic Conservation for the 21st Century: Background, progress, and future directions*, reporting on initial steps undertaken by SCAR, New Zealand and IUCN on the development of an integrated and comprehensive future strategy for the conservation of Antarctica, and the associated and dependent ecosystems.
- (226) In response to a query from the Netherlands, SCAR confirmed that it had taken the question of Antarctic conservation values into consideration within the SCAR Social Science Action Group, and with prominent experts in this area. ASOC noted that the focus of the strategy appeared to be on biodiversity values and hoped that this would be expanded to include non-living elements as they cover a large proportion of the Antarctic area.

(227) The Committee expressed its keen interest in the steps taken to date in this respect, and a number of Members offered to maintain collaborative engagement in the work.

Item 9: Environmental Monitoring and Report

(228) The United Kingdom introduced WP 7, *Remote sensing for monitoring Antarctic Specially Protected Areas: use of multispectral and hyperspectral data for monitoring Antarctic vegetation*, which highlighted ongoing efforts to make wider use of satellite and airborne remote sensing methods to monitor ASPAs and the wider Antarctic environment.

(229) Members expressed strong interest in this technique of data collection and opportunities to exchange information and collaborate. Useful information in this respect could include: the remote sensing data method and knowledge that was used to compile a vegetation map of Japan; Chile's flora research projects in the Antarctic Peninsula region; Norway's remote sensing data on vegetation in the high Arctic; France's remote sensing projects programmes in the Kerguelen Islands, which address validity issues of ground truthing; and Australia's high resolution vegetation remote sensing projects in East Antarctica, specifically moss beds at Casey Station and within ASPA 135.

(230) The United Kingdom welcomed the useful comments and offers of information, and clarified that it was also conducting ground-truthing measurements. Additional queries that could be addressed included China's suggestion that moisture content in soil and vegetation should be kept in mind while collecting hyperspectral data, and India's caution about comparing the data methods to examine Arctic tundra vegetation with those for Eastern Antarctic small lichens and mosses.

(231) The Committee:

- i. Acknowledged the significant value offered by the combination of satellite and aerial monitoring as a new technique for gathering detailed evidence of vegetation change, linked to localised climate change;;
- ii. Encouraged Parties with work programmes related to vegetation change to consider collaboration with the UK in further developing and applying these monitoring techniques; in particular to identify

particular geographic areas or scientific programmes suitable for these techniques;

- iii. Invited Parties to comment on the methodology and to share their experiences of applying similar techniques.
- (232) Germany introduced WP 18, *Penguin monitoring via remote sensing*, and referred to IP 46, *Pilot study on monitoring climate-induced changes in penguin colonies in the Antarctic using satellite images*, referring the Committee to the available study at www.uba.de/uba-info-medien-e/4283.html.
- (233) Germany also outlined the results of an informal expert meeting held in May 2012 in Germany, which recommended that the further development of penguin monitoring via remote sensing should be a high priority, and should involve relevant programmes such as CCAMLR's Ecosystem Monitoring Programme and the *Southern Ocean Observing System* (SOOS).
- (234) China, Japan, Australia, the United States and Argentina shared information on their penguin research and the use of remote sensing.
- (235) The Committee agreed that Germany would coordinate and lead an informal intersessional contact group on the topic of remote sensing as an additional tool for monitoring Antarctic penguin populations, which would liaise with CCAMLR and report to the CEP XVI.
- (236) New Zealand introduced WP 20, *Establishing a monitoring programme to assess changes in vegetation at two Antarctic Specially Protected Areas*, which reported on simple and fast techniques using GIS analysis for monitoring vegetation changes at fine scales in protected areas, noting that GIS analysis techniques provided a simple and fast method for monitoring of such changes, and which could be expanded to other protected areas. New Zealand noted that this method could assist in monitoring climate change effects on Antarctic species' distribution and abundance, in accordance with ATME (2010) Recommendations 24 and 27.
- (237) A number of Members commended New Zealand's use of GIS monitoring techniques as an important method for monitoring the impacts of climate change that had a broad applicability to sites across Antarctica, and looked forward to being informed of future developments.

- (238) China, the United States, and the United Kingdom noted that consistency was important when utilising remote sensing and GIS techniques in measuring biological diversity in the Antarctic, and that they would share New Zealand's method with their scientists. China offered to share information on its development of a network of wireless sensors for remote monitoring of flora and fauna. Australia stated that it had a long-term vegetation monitoring vegetation study at ASPA 135, near Casey Station, which could contribute to to a continent-wide network of sites.
- (239) In light of the positive response to using GIS techniques in protected areas, Russia referred to its recommendation to make monitoring compulsory when revising management plans of ASPAs, ASMAs, and HSMs (in WP 35). Other Members expressed the view that compulsory monitoring was inappropriate, because some sites were too sensitive or remote.
- (240) The Committee:
- i. Acknowledged the potential use of GIS techniques as a method for monitoring changes in species distribution and abundance at fine scales, which could be coupled with remote sensing technologies for monitoring changes at macro scales for both species and the environment;
 - ii. Agreed to establish a network of sites for monitoring species distribution and abundance, with priority afforded to ASPAs designated for their flora and/or fauna diversity and abundance, where monitoring can occur during the management plan review process; and
 - iii. Recognised the value of applying consistent monitoring methodologies at ASPAs so that changes in species diversity and abundance can be compared continent wide to obtain a more comprehensive understanding of climate change effects in Antarctica.
- (241) Chile introduced WP 55, *New records of the Presence of Human Associated Microorganisms in the Antarctic Marine Environment*, informing the Committee of new scientific information on the presence of human associated microorganisms from sewage treatment plant discharges in the Antarctic. Chile referred to research projects which reported the presence of a new case of extended spectrum β -lactamase in the Antarctic Peninsula region and the existence of *E. coli* resistant to antibiotics.

- (242) In response to a query from Argentina, Chile confirmed that it may undertake future research into whether human associated microorganisms impacting on Antarctic biodiversity might be brought by other agents.
- (243) A number of Members advised that they were also undertaking research relating to the impact of human associated microorganisms from waste water discharge, including the United States, which would report in the future on research concerning seasonal discharge monitoring at McMurdo Station in relation to the number of personnel fluctuation.
- (244) The Committee agreed that Members should strengthen their precautionary monitoring of microbial activity in areas near sewage treatment plant discharges, and noted that COMNAP would consider the possibility of reviewing relevant information and guidelines concerning waste water management at its July 2012 Annual General Meeting.
- (245) SCAR presented IP 2, *The Southern Ocean Observing System (SOOS)*, which provided an update on progress with the design and implementation of SOOS, a joint initiative of SCAR and the Scientific Committee on Oceanic Research, which had been launched in August 2011.
- (246) The Committee expressed its strong support for the programme, noting that it would generate fundamental data to aid understanding of the Southern Ocean, its associated ecosystems relationship with other oceans, and its role in climate change. Several Members indicated their willingness to participate, including Australia, which is supporting the SOOS office in Hobart, and the Russian Federation, whose first stage of a research project to collate data from a large number of sources across all oceans could have synergies with SOOS. India extended an invitation to national programmes to join its annual Southern Ocean Expeditions in the Indian Ocean sector.
- (247) The Committee expressed its strong appreciation for the high quality and extremely valuable work of SCAR, and noted its interest in forthcoming results from the SOOS.
- (248) SCAR presented IP 40 rev.1, *SCAR Products available to support the deliberations of the ATCM*, prepared in response to a request from CEP XIV, and noted that details of the products can be found at www.scar.org/researchgroups/productsandservices/.

- (249) Argentina noted that it regularly used these valuable resources and urged other Members to do so. Norway highlighted that this was an excellent example of the type of information and tools that might be available via the proposed Antarctic Environments Portal. The United Kingdom reaffirmed its commitment to serve as a coordinating body for three of the eleven products listed.
- (250) The United States welcomed SCAR's increased involvement in recent years in topics central to the work of the CEP and congratulated SCAR for the high quality of the material produced in response to requests for advice from the CEP.
- (251) Chile introduced IP 76, *Antarctic Environmental Monitoring Centre* which presented part of the activities developed by the monitoring project of the Chilean Antarctic Programme.
- (252) ASOC presented IP 53, *Antarctic Treaty System Follow-up to Vessel Incidents in Antarctic Waters*, which was concerned with shortcomings in the current vessel incident reporting. Welcoming the information, the Committee noted that the paper would be discussed further under ATCM Agenda Item 10.

Item 10: Inspection Reports

- (253) The Russian Federation and the United States presented IP 47, *United States-Russian Federation Report of Inspection*, which provided information on observations and conclusions of joint inspections at Scott Base (New Zealand), Concordia Station (France and Italy), and Mario Zucchelli Station (Italy). This was the first inspection ever undertaken by the Russian Federation Antarctic Programme, and the first joint inspection for the United States. The inspection team appreciated the warm welcomed from station staff, particularly because the process required staff to drop their normal tasks at short notice in order to facilitate the inspection.
- (254) The Committee thanked the Russian Federation and the United States for the high quality report, and noted that the inspection mechanism was vital in underpinning the practical application of the Environmental Protocol.
- (255) While France and Italy were delighted that Concordia Station was noted as an exemplary model for water treatment measures and for joint management collaboration, they noted their surprise at comments on disparity of salaries between French and Italian support staff, which they considered not relevant

to the application of the Environmental Protocol. In response, the United States remarked that in inspecting the efficiency of operations at jointly operated stations, the issue of salary disparity between national programmes had been raised as a point which caused some tensions.

- (256) In response to report comments concerning the implementation of the Environmental Protocol, Italy informed that it was one of the few Parties that had ratified Annex VI, demonstrating its great interest in conservation of Antarctic environmental values. In effect since the beginning of Italian activities in 1986, environmental issues were addressed. Prevention and adequate personnel selection and training were the key tools that helped Italy to be compliant with the requirements set in the Protocol. Italy recognised that a legal difficulty existed and informed the Parties that a working group would be established to reach a satisfactory solution, stressing the fact that, as outlined in the inspection report, compliance was provided.
- (257) Concerning the activities in Concordia Station and the questions about EPICA borehole, Italy informed that this borehole is still of high scientific interest and was object of a CEE. The information about the drop of drilling fluid level in the report was incorrect and was a problem in the measurement. The actual level didn't change since the beginning
- (258) If needed, Italy could implement, in cooperation with France a monitoring programme. Italy stressed that this issue is likely to concern all the other national Antarctic programmes that are running or ran in the past drilling activities, so a common management procedure could be found.
- (259) Speaking in his position as Chairman of the EPICA Project, Prof. Dr. Heinz Miller of Germany clarified that Concordia Station was finished after the completion of the EPICA project, and that the drilling project started in 1995, before the Environmental Protocol entered into force. Therefore, there had been no legal requirement to complete a CEE or EIA. France had, however, completed an EIA, which included the intention to keep the Dome C borehole open for a number of years beyond the completion of the project to facilitate further research of ice sheets. Measurements were taken every two years, and the borehole was accessible to the international community. The fluid used in the Dome C borehole was not kerosene, but the non-toxic and biodegradable solvent EXXOL-D40, and was the same fluid used in the second EPICA borehole in Dronning Maud Land, which had had a CEE considered by the CEP. Freon was also used in the boreholes as it was the

only product available at the time which would allow for drilling down to great depths.

- (260) New Zealand thanked the Russian Federation and the United States for inspecting Scott Base, and noted that it would take full account of the report.
- (261) ASOC noted that while the inspection had shown the three stations were very efficient and well run, it had also raised some general issues relating to the ageing of facilities and the long-term effects of scientific projects, thus highlighting the need for long-term monitoring of the impacts of all station activities.
- (262) The United Kingdom warmly welcomed inspections of its Antarctic research stations by other Parties.
- (263) Australian delegate Mr Ewan McIvor, reflecting on his recent visit to Scott Base, congratulated New Zealand for the broad range of environmental initiatives in place, including the wind farm and waste management and waste water treatment practices, and a significant scientific focus on questions of direct relevance to the Committee.
- (264) ASOC presented IP 59, *Review of the Implementation of the Environmental Protocol: Inspections by Parties (Article 14)*, prepared jointly with UNEP, which focused on the scope of inspections carried out by Parties under Article 14 of the Environmental Protocol. The analysis reported an overall increase in the number of official inspections and inspected facilities and sites since the Environmental Protocol came into force, while non-active research stations, other land sites, and tourist ships, sites and onsite activities had received few inspections. New Zealand noted the usefulness of such overviews, and encouraged Parties to refer to the analysis when planning future inspections.
- (265) Japan and Australia encouraged inspected Parties to report back on measures they had taken in response to recommendations in inspection reports, and in this respect commended India's BP 22, *Measures Adopted at Maitri Station on the Recommendations of Recent Visit of Japanese Inspection Team*.
- (266) Belgium emphasised the importance of the inspection mechanism for assessing compliance with the Environmental Protocol, and expressed its willingness to participate in an inspection in the future.

- (267) Noting its offer at CEP XIV to provide updates to subsequent meetings, the Russian Federation informed the CEP of progress made in response to inspections of Molodezhnaya Station, Druzhnaya IV Station, Soyuz Station, Leningradskaya Station and Vostok Station carried out by Australia in 2010 and 2011, and reconfirmed its strong commitment to the Environmental Protocol.
- (268) The Russian Federation explained that Molodezhnaya Station was the largest Soviet-era station in Antarctica, and that in 1996 it had been converted to a seasonal station where scientific work and environmental protection measures were carried out annually. The Russian Federation had conducted a review in 2010, which considered the future of its national programme through to 2020, and this had concluded Molodezhnaya Station would become an active site in 2014. This meant that from 2014, environmental protection activities would increase.
- (269) Regarding the Druzhnaya IV Station, the Russian Federation informed the Committee that it was a summer station, which had existed for twenty years, and environmental issues had accumulated during this time. The Russian Federation was in the process of addressing concerns and planned to bring in additional equipment to accelerate clean-up activities.
- (270) The Russian Federation acknowledged environmental issues at Soyuz and Leningradskaya stations, which it planned to address in cooperation with Members. Soyuz Station had been temporarily unoccupied and had suffered wind damage, but would now be re-established. The Russian Federation expressed dismay that Leningradskaya Station had been damaged by unauthorised visits.
- (271) Noting concerns about Vostok Station, the Russian Federation informed the CEP that modernisation plans would commence shortly.
- (272) In response, Australia reiterated its thanks to the Russian Federation for its cooperation and warm welcome during the inspections, and welcomed the information on the considerable efforts made by the Russian Federation following the inspections, despite the challenges posed by the Antarctic environment.

Item 11: Cooperation with other Organisations

- (273) SCAR presented IP 1, *The Scientific Committee on Antarctic Research (SCAR) Annual Report 2011/12*.

- (274) COMNAP presented IP 3, *The Annual Report for 2011 of the Council of Managers of National Antarctic Programmes*.
- (275) CCAMLR presented IP 28, *Report by the SC-CAMLR Observer to the Fifteenth Meeting of the Committee for Environmental Protection*, which provided an update of discussions in recent CCAMLR forums on the five issues of common interest to the CEP and SC-CAMLR. These were identified in 2009 at the joint CEP/SC-CAMLR workshop as: a) climate change and the Antarctic marine environment, b) biodiversity and non-native species in the Antarctic marine environment, c) Antarctic species requiring special protection, d) spatial marine management and protected areas, and e) ecosystem and environmental monitoring.
- (276) CCAMLR also drew the Committee's attention to recent technical workshops on the development of representative systems of MPAs, and forthcoming CCAMLR meetings. He further noted progress on capacity building, with the recent awarding of the first Scientific Scholarship, designed to assist early career scientists to participate in the work of the CCAMLR Scientific Committee and its working groups, and the launch of the collaborative Antarctic and Southern Ocean Internship scheme, which aimed to provide students with an opportunity to gain experience in the work of a multilateral management and conservation organisation.
- (277) In light of the relevance of such reports to a range of Committee agenda items, New Zealand and the United States suggested that in future, SCAR, COMNAP and CCAMLR could be invited to present their reports earlier in the Committee meeting.
- (278) The Committee welcomed the reports from SCAR, COMNAP and CCAMLR and agreed to put the agenda item 'cooperation with other organisations' on the first day of its meeting agenda next year, given that many of the issues reported were relevant across the committee's agenda.
- (279) Dr Polly Penhale, United States, was nominated as CEP Observer to SC-CAMLR-XXXI, Hobart, Australia, 22-26 October, 2012.
- (280) Ms Verónica Vallejos, Chile, was nominated as CEP Observer to XXXII SCAR Delegates Meeting, Portland, Oregon, 13-25 July 2012

Item 12: Repair and Remediation of Environmental damage

- (281) Australia introduced WP 21, *An Antarctic Clean-Up Manual*, jointly prepared with the United Kingdom, and referred to the supporting information in IP 6. The draft Clean-Up Manual contained guidance to assist Parties to address their obligations under Annex III to the Environmental Protocol to clean up past waste disposal sites on land and abandoned work sites of past activities, and could be regularly updated based on the knowledge and experience of Members and Observers (as is done for the Non-Native Species Manual).
- (282) Australia noted that, while many Members had reported to CEP meetings on clean-up activities, there was no central and readily accessible guidance to assist Parties with further efforts to clean-up past waste disposal sites and facilities no longer in use.
- (283) Several Members, commenting on their own National Antarctic Programmes' experiences with station clean-ups, welcomed the stimulating papers and expressed their willingness to share lessons learned. Topics that could be useful discussion points during the further development of the draft manual included specific terminology and targets with respect to risk-based management, options for remediation techniques, and the possibility of recycling materials recovered from abandoned sites.
- (284) Italy noted that the definition of "clean-up" provided in WP 21 seemed not to include types of accidental contamination other than fuel spill. Italy noted that in other regions risk assessment and environmental quality targets were based on potential impacts on human health.
- (285) Italy reminded the Committee that ecotoxicological aspects related to such clean-up activity and their potential impact on human health should be considered.
- (286) The United States agreed that the evaluation of associated risks is important and also reminded the Committee that recycling should also be considered in any clean-up operations.
- (287) A number of Members considered that the manual prepared by Australia was ready for adoption at this meeting and The Committee reiterated that repair and remediation was of utmost importance.

- (288) ASOC thanked Australia and the UK for WP 21 noting that an environmental clean-up manual would help make clean ups more effective and lead to greater compatibility of standards across different Antarctic programmes.
- (289) The Committee decided to continue to develop the draft Clean-Up Manual through informal discussion during the intersessional period and to produce an updated document, incorporating comments and suggestions from Members, Observers and Experts, to CEP XVI. The United States noted that, in the interim, Members could use the draft manual when planning and undertaking repair and remediation work.
- (290) Australia introduced WP 26, *Examples to illustrate key environmental issues related to the practicality of repair or remediation of environmental damage*, which provided a minor update to a similar submission to ATCM XXXIV (WP 28), addressing ATCM Decision 4 (2010), and referred to supporting information in IP 25. Reflecting on the request from the ATCM for advice on this issue, and the fact that the CEP had made the issue one of the highest priorities in its Five-Year Work Plan, Australia presented eight points for consideration in the CEP's response to the ATCM.
- (291) The Committee thanked Australia for its work and for the examples provided in IP 25, and encouraged Members to continue to share their experiences with repair and remediation.
- (292) Italy emphasised that, considering the particular sensitivity of the Antarctic environment, it would be a challenge defining acceptable risk levels specific to the Antarctic environment.
- (293) In response to Italy's suggestion that other *in situ* remediation technologies were available such as In situ Chemical Oxidation, Australia agreed that *in situ* methods offered various environmental and cost benefits and that other technologies could also be appropriate in addition to the examples of repair and remediation provided in WP 21 and BP 11.
- (294) Members agreed that the eight points in WP 26 could be drawn on to guide Members' work, and provided a good starting point for discussion during the intersessional period.

- (295) The Committee agreed that an ICG would be a suitable means of advancing its consideration of Decision 4 (2010), with a view to presenting its initial advice to ATCM XXXVI.
- (296) The Committee welcomed the offer by Dr Neil Gilbert, New Zealand, to convene the group and agreed the following Terms of Reference:
- Drawing on ATCM XXXV/WP 26 *Environmental issues related to the practicality of repair and remediation of environmental damage* (Australia) and, as appropriate, other papers submitted to CEP XV on the subject of repair and remediation of environmental damage:
 - prepare a draft response to Decision 4 (2010), in which the ATCM requested the CEP to ‘consider environmental issues related to the practicality of repair and remediation of environmental damage in the circumstances in Antarctica;
 - where appropriate, seek to identify and present examples to help illustrate matters raised in the draft advice; and
 - report to CEP XVI on the outcomes of this work.
- (297) COMNAP introduced WP 62, *Repair or Remediation of Environmental Damage: COMNAP report on its experience*, which summarised the learning outcomes from the 2006 Waste Management in Antarctica Workshop hosted by COMNAP, and reminded the CEP of examples of national programmes clean-up efforts.
- (298) COMNAP underlined the important role of recycling and reuse of materials, and encouraged Members to consider possible uses by other national programmes of discarded materials.
- (299) In connection with an operation carried out by personnel of Belgrano II Station (77°52’S and 34°37’W), Argentina informed the Committee that the incident occurred due to the incorrect interpretation of operational procedures for waste management. It noted that it had already made plans for the recovery of the drums during the next Antarctic summer season.
- (300) ASOC introduced IP 57, *Repair or Remediation of Environmental Damage*, which reviewed key issues associated with the repair or remediation of environmental damage, and concluded that overall there was a general

understanding of what constitutes environmental damage in Antarctica, which includes past activities, ongoing activities, proposed activities and incidents and accidents. ASOC stressed that repair and remediation of environmental damage was a requirement of the Protocol and should be carried out to the maximum extent possible (with assessment and monitoring of damage, suitable recording and reporting as a minimum), while taking into consideration the potential adverse environmental effects. ASOC further noted that the points raised by Australia in WP 28 at ATCM XXXIV covered the most important aspects of repair and remediation of environmental damage.

(301) The Chair thanked ASOC for its contribution to this topic, and noted that the Committee would welcome ASOC's contribution to any further work on this issue.

(302) Other papers submitted under this Item were:

- BP 11, *Clean-up Techniques for Antarctica* (Australia)
- BP 12, *Clean-up of a fuel spill near Lake Dingle, Vestfold Hills* (Australia)
- BP 13, *Development of environmental quality standards for the management of contaminated sites in Antarctica* (Australia)
- BP 14, *Assessment, monitoring and remediation of old Antarctic waste disposal sites: the Thala Valley example at Casey station* (Australia)
- BP 38, *Removal of scrap from Presidente Eduardo Frei Montalva Station, King George Island* (Chile)

Item 13: General Matters

(303) COMNAP presented IP 32, *Survey of National Antarctic Programmes on Oil Spill Contingency Planning*, which included the results of a survey undertaken during the 2011/12 intersessional period, to update a survey carried out in 1996. While most Antarctic stations had oil spill contingency plans in place, many of these had not been updated in recent years. COMNAP noted that this issue would be addressed at their forthcoming meeting in July 2012.

- (304) The Committee thanked COMNAP for the survey and urged Parties to continue improving their contingency plans within the framework of their National Antarctic Programmes.

Item 14: Election Officers

- (305) The Committee elected Dr Yves Frenot from France for a second two-year term as CEP Chair and congratulated Dr Frenot for his reappointment to the role.
- (306) The Committee elected Ms Birgit Njaastad from Norway as Vice-Chair and congratulated Ms Njaastad for her appointment to the role.
- (307) The Committee thanked Ewan McIvor from Australia for serving as Vice-Chair for two terms and for convening the SGMP.

Item 15: Preparation for the Next Meeting

- (308) The Committee adopted the Provisional Agenda for CEP XVI (Appendix 2).

Item 16: Adoption of the Report

- (309) The Committee adopted its Report.

Item 17: Closing of the Meeting

- (310) The Chair closed the Meeting on Friday 15th June 2012.

Annex 1

CEP XV Agenda and Summary of Documents

1. OPENING OF THE MEETING	
SP 1 rev. 1	<i>ATCM XXXV AND CEP XV AGENDA AND SCHEDULE</i>
SP 15	<i>CEP XV SUMMARY OF PAPERS</i>
2. ADOPTION OF THE AGENDA	
3. STRATEGIC DISCUSSION ON THE FUTURE WORK OF THE CEP	
WP 57 New Zealand, Australia & SCAR	<i>ANTARCTIC ENVIRONMENTS PORTAL</i> . This paper reports on the development of an online Antarctic Environments Portal, which aims to be the primary source of information on Antarctic environments, as an efficient means to strengthen the link between Antarctic science and policy, enhance the CEP's advisory role to the ATCM, facilitate SCAR's advisory role to the ATCM and CEP and assist in communicating information on Antarctic environments to the public.
4. OPERATION OF THE CEP	
SP 10 Secretariat	<i>REPORT OF THE INFORMAL CONTACT GROUP ON THE IMPROVEMENT OF THE EIES AND OTHER INFORMATION EXCHANGE MATTERS</i> . This document contains a report of the ICG on the improvement of the Electronic Information Exchange System convened by the Secretariat, a report on other improvements and on the current usage of the EIES, and unresolved questions concerning the EIES and the Information Exchange requirements which the Secretariat would like to address to the Meeting.
5. CLIMATE CHANGE IMPLICATIONS FOR THE ENVIRONMENT: STRATEGIC APPROACH	
WP 33 Unite Kingdom & Norway	<i>RACER1 - 'RAPID ASSESSMENT OF CIRCUM-ARCTIC ECOSYSTEM RESILIENCE': A TOOL FROM THE ARCTIC TO ASSESS ECOSYSTEM RESILIENCE AND AREAS OF CONSERVATION IMPORTANCE, AND ITS POSSIBLE APPLICATION TO ANTARCTICA</i> . Following a recommendation of the ATME on Climate Change, this paper introduces WWF's Rapid Assessment of Circum-Arctic Ecosystem Resilience (RACER), a new tool that is being used in the Arctic to identify and mapping places of conservation importance on the basis of ecosystem resilience, and recommends that work be carried out to test the RACER methodology on a trial area in Antarctica to assess its applicability.

SP 8 Secretariat	<i>ACTIONS TAKEN BY THE CEP AND THE ATCM ON THE ATME RECOMMENDATIONS ON CLIMATE CHANGE.</i> This paper presents an update of actions taken by the ATCM and the CEP on the 30 Recommendations on climate Change agreed at the ATME on Climate Change in 2009.
IP 31 COMNAP	<i>BEST PRACTICE FOR ENERGY MANAGEMENT – GUIDANCE AND RECOMMENDATIONS.</i> In this IP COMNAP presents the results of a survey of National Antarctic Programmes on the status of implementation of the 2007 COMNAP guidelines for best practices on energy management, as recommended by Rec. 4 of the ATME on Climate Change.
IP 44 SCAR	<i>COMMUNICATING THE SCIENCE OF CLIMATE CHANGE.</i> This paper reports on SCAR's climate communications work, with a focus on the elements that need to be considered in the communication of Antarctic climate change science.
IP 45 SCAR	<i>ANTARCTIC CLIMATE CHANGE AND THE ENVIRONMENT: AN UPDATE.</i> This paper is the third update report to the ATCM since the publication of the SCAR Antarctic Climate Change and the Environment (ACCE) report (Turner <i>et al.</i> , 2009).
IP 58 rev. 1 ASOC, Australia & UK	<i>EARTH HOUR ANTARCTICA (2013).</i> In keeping with the objectives of WWF's global Earth Hour initiative, ASOC, Australia and the United Kingdom propose a coordinated continent-wide switch off of all non-essential lights at Antarctic research stations for Earth Hour on 30 March 2013, within all operational and safety constraints.
BP 17 New Zealand	<i>ENERGY EFFICIENCY AND CARBON REDUCTION INITIATIVES.</i> This paper provides background information on New Zealand's work on energy efficiency and efforts to reduce the carbon footprint of activities in Antarctica, consistent with the recommendations agreed at the ATME on Climate Change.
6. ENVIRONMENTAL IMPACT ASSESSMENT	
a) Draft Comprehensive Environmental Evaluations	
b) Other EIA Matters	
WP 22 New Zealand	<i>ENVIRONMENTAL ASPECTS AND IMPACTS OF TOURISM AND NON-GOVERNMENTAL ACTIVITIES IN ANTARCTICA.</i> This paper presents the key findings and recommendations of the CEP Tourism Study led by New Zealand. It invites the Committee to consider options for forwarding the draft study (presented in IP33) to ATCM XXXV, or to further develop the study ahead of CEP XVI.

IP 33 New Zealand	<i>ENVIRONMENTAL ASPECTS AND IMPACTS OF TOURISM AND NON-GOVERNMENTAL ACTIVITIES IN ANTARCTICA.</i> This paper presents the study on the environmental aspects and impacts of tourism and non-governmental activities in Antarctica and supporting tables and data (see WP 22).
WP 34 Russia	<i>TECHNOLOGY FOR INVESTIGATING THE WATER LAYER OF SUBGLACIAL LAKE VOSTOK THROUGH THE ICE BOREHOLE 5G AT THE RUSSIAN ANTARCTIC VOSTOK STATION.</i> This paper informs on the methodology and operational steps to be put in place to undertake investigations of water stratum of Lake Vostok, which may commence as early as the 2014-15 season.
WP 53 Brazil	<i>COMANDANTE FERRAZ STATION: PROPOSED PLAN FOR THE DEMOLITION AND CONSTRUCTION OF ANTARCTIC EMERGENCY MODULES.</i> This paper outlines Brazil's plan for the construction and operation of Antarctic Emergency Modules (at the same location as the Comandante Ferraz Station). Furthermore, it proposes a plan for the demolition and removal of the main building, which was destroyed by a fire.
SP 6 rev.1 Secretariat	<i>ANNUAL LIST OF INITIAL ENVIRONMENTAL EVALUATIONS (IEE) AND COMPREHENSIVE ENVIRONMENTAL EVALUATIONS (CEE) PREPARED BETWEEN APRIL 1ST 2011 AND MARCH 31ST 2012.</i> The Secretariat will report on the list of IEEs and CEEs for the most recent reporting period.
IP 23 Republic of Korea	<i>FINAL COMPREHENSIVE ENVIRONMENTAL EVALUATION (CEE) FOR THE PROPOSED CONSTRUCTION AND OPERATION OF THE JANG BOGO STATION, TERRA NOVA BAY, ANTARCTICA.</i> This paper provides information on the Final CEE, including a summary of the responses to significant comments raised by CEP in relation to the Draft CEE and other major improvements and modifications from the Draft CEE.
IP 30 United Kingdom	<i>THE FINAL COMPREHENSIVE ENVIRONMENTAL EVALUATION (CEE) FOR THE PROPOSED EXPLORATION OF SUBGLACIAL LAKE ELLSWORTH, ANTARCTICA.</i> This paper notes that the Final CEE prepared by the United Kingdom, addresses comments on the Draft CEE received by the CEP, Parties and experts. A full version of the Final CEE is attached to the paper.
IP 41 Italy	<i>STARTING A FEASIBILITY STUDY FOR THE REALIZATION OF A GRAVEL RUNWAY NEAR MARIO ZUCHELLI STATION.</i> Italy informs that this year it is starting a study aimed to assess the technical, economical and environmental feasibility of a gravel runway in the vicinity of Mario Zucchelli Station. The paper reports that this runway would be an important facility which could also be helpful in supporting other National Antarctic Programmes in the area.

<p>IP 43 India</p>	<p><i>ESTABLISHMENT AND OPERATION OF NEW INDIAN RESEARCH STATION “BHARATI” AT LARSEMANN HILLS.</i> India informs that the second phase of the construction of Bharati Station started in November 2011, and that it was formally made operational on 18 March 2012. This paper describes the second and final phase of construction activities carried out during the austral summer of 2011-12.</p>
<p>IP 74 Russia</p>	<p><i>RESULTS OF RUSSIAN ACTIVITY FOR PENETRATING SUBGLACIAL LAKE VOSTOK IN THE SEASON 2011–12.</i> Russia informs on details of penetrating activity at Lake Vostok during the last summer season and the main results obtained. The paper informs that theoretical suggestions of Russian specialists about the physics of the processes at the drill contact with the lake water layer considered in the CEE process were confirmed in practice.</p>
<p>BP 36 Ecuador</p>	<p><i>SUMMARY OF AN ENVIRONMENTAL AUDIT AT THE ECUADORIAN STATION VICENTE MALDONADO.</i> This paper informs on an environmental assessment process at Maldonado Station during the 2011-12 seasons.</p>
<p>7. AREA PROTECTION AND MANAGEMENT</p>	
<p>a) Management Plans</p>	
<p>i. Draft management plans which had been reviewed by the Subsidiary Group on Management Plans</p>	
<p>WP 14 Australia</p>	<p><i>SUBSIDIARY GROUP ON MANAGEMENT PLANS – REPORT ON 2011/12 INTERSESSIONAL WORK.</i> This paper reports on the work of the SGMP in accordance with the TORs #1 to #3 and recommends that the Committee approve the revised version of ASPA 140 <i>Parts of Deception Island</i> which is attached to this document.</p>
<p>ii. Draft revised management plans which had not been reviewed by the Subsidiary Group on Management Plans</p>	
<p>WP 2 Poland</p>	<p><i>REVISED MANAGEMENT PLAN FOR ANTARCTIC SPECIALLY PROTECTED AREA (ASP) No. 151 LIONS RUMP, KING GEORGE ISLAND, SOUTH SHETLAND ISLANDS.</i> Poland has conducted a review of the management plan for ASPA 151 and has determined that only minor amendments are required. Poland recommends that the CEP approve the revised management plan.</p>
<p>WP 3 Poland</p>	<p><i>REVISED MANAGEMENT PLAN FOR ANTARCTIC SPECIALLY PROTECTED AREA (ASP) No. 128 WESTERN SHORE OF ADMIRALTY BAY, KING GEORGE ISLAND, SOUTH SHETLAND ISLANDS.</i> Poland has conducted a review of the management plan for ASPA 128 and has determined that only minor amendments are required. Poland recommends that the CEP approve the revised management plan.</p>

WP 8 United Kingdom	REVISION OF THE MANAGEMENT PLAN FOR ANTARCTIC SPECIALLY PROTECTED AREA (ASPA) No. 129 ROTHERA POINT, ADELAIDE ISLAND. The UK has undertaken a review of the Management Plan for ASPA 129. It recommends that the CEP ask the SGMP to undertake an intersessional review and to report back to CEP XVI.
WP 9 United Kingdom	REVISION OF THE MANAGEMENT PLAN FOR ANTARCTIC SPECIALLY PROTECTED AREA (ASPA) No. 109 MOE ISLAND, SOUTH ORKNEY ISLANDS. The UK has undertaken a review of the Management Plan for ASPA 109. It recommends that the CEP ask the SGMP to undertake an intersessional review and to report back to CEP XVI.
WP 10 United Kingdom	REVISION OF THE MANAGEMENT PLAN FOR ANTARCTIC SPECIALLY PROTECTED AREA (ASPA) No. 111 SOUTHERN POWELL ISLAND AND ADJACENT ISLANDS, SOUTH ORKNEY ISLANDS. The UK has undertaken a major review of the Management Plan for ASPA 111. It recommends that the CEP ask the SGMP to undertake an intersessional review and to report back to CEP XVI.
WP 11 United Kingdom	REVISION OF THE MANAGEMENT PLAN FOR ANTARCTIC SPECIALLY PROTECTED AREA (ASPA) No. 115 LAGOTELLERIE ISLAND, MARGUERITE BAY, GRAHAM LAND. The United Kingdom has undertaken a major review of the Management Plan for ASPA 115. It recommends that the CEP ask the SGMP to undertake an intersessional review and to report back to CEP XVI.
WP 12 United Kingdom	REVISION OF THE MANAGEMENT PLAN FOR ANTARCTIC SPECIALLY PROTECTED AREA (ASPA) No. 110 LYNCH ISLAND, SOUTH ORKNEY ISLANDS. The UK has undertaken a review of the Management Plan for ASPA 110. It recommends that the CEP ask the SGMP to undertake an intersessional review and to report back to CEP XVI.
WP 42 Argentina, Chile, Norway, Spain, UK & USA	REVIEW OF THE MANAGEMENT PLAN FOR ASMA No. 4: DECEPTION ISLAND. The Deception Island Management Group has conducted its first five-yearly review of the Management Plan for ASMA 4. The Group recommends that the CEP approve the attached revised Management Plans for these Areas.
WP 44 Argentina	REVISED MANAGEMENT PLAN FOR ANTARCTIC SPECIALLY PROTECTED AREA (ASPA) No. 132 POTTER PENINSULA. Argentina has undertaken the review of the Management Plan for ASPA 132. Changes include minor adjustments to the boundaries, a more precise map and an updating in the description of the Area. Argentina asks that the CEP consider the review and decide if the revised version can be adopted at the meeting or if it needs to be considered intersessionally by the SGMP.

<p>WP 52 Argentina & Chile</p>	<p><i>REVIEW OF THE MANAGEMENT PLAN OF ANTARCTIC SPECIALLY PROTECTED AREA (ASP) No. 133 HARMONY POINT.</i> Argentina and Chile have undertaken the review of ASPA 133. Changes include minor adjustments to the boundaries, a more precise map and an updating in the description of the Area. Argentina and Chile ask that the CEP consider the review and decide if the revised version can be adopted at the meeting or if it needs to be considered intersessionally by the SGMP.</p>
<p>WP 54 Chile</p>	<p><i>REVISED MANAGEMENT PLAN FOR ANTARCTIC SPECIALLY PROTECTED AREA (ASP) No. 145 PORT FOSTER, DECEPTION ISLAND, SOUTH SHETLAND ISLANDS.</i> Chile has conducted the first review of the Management Plan for ASPA 145, after the entry into force of Annex V to the Protocol. In view of the extensive modifications proposed to the revised plan, Chile requires of the SGMP a more detailed examination of the revised plan in the intersessional period.</p>
<p>WP 58 Chile</p>	<p><i>MANAGEMENT PLAN FOR ANTARCTIC SPECIALLY PROTECTED AREA (ASP) No. 112 COPPERMINE PENINSULA, ROBERT ISLAND, SOUTH SHETLAND ISLANDS.</i> Chile presents the Management Plan for ASPA 112 according to the format required by Annex V to the Protocol. Chile recommends that the Management Plan be considered by the SGMP during the intersessional period.</p>
<p>WP 60 Chile</p>	<p><i>MANAGEMENT PLAN FOR ANTARCTIC SPECIALLY PROTECTED AREA (ASP) No. 146 SOUTH BAY, DOUMER ISLAND, PALMER ARCHIPELAGO.</i> Chile presents the Management Plan for ASPA 146 according to the format required by Annex V to the Protocol. Chile recommends that the Management Plan be considered by the SGMP during the intersessional period.</p>
<p>WP 61 Chile</p>	<p><i>MANAGEMENT PLAN FOR ANTARCTIC SPECIALLY PROTECTED AREA (ASP) No. 144 'CHILE BAY' (DISCOVERY BAY), GREENWICH ISLAND, SOUTH SHETLAND ISLANDS.</i> Chile presents the Management Plan for ASPA 144 according to the format required by Annex V to the Protocol. Chile recommends that the Management Plan be considered by the SGMP during the intersessional period. (See also WP 42)</p>
<p>iii. New draft management plans for protected/managed areas</p>	
<p>WP 19 New Zealand</p>	<p><i>THE PROPOSED DESIGNATION OF AN ANTARCTIC SPECIALLY PROTECTED AREA FOR HIGH ALTITUDE GEOTHERMAL AREAS OF THE ROSS SEA REGION.</i> New Zealand proposes the designation of a new ASPA comprising all high altitude geothermal areas in the Ross Sea region (at Mount Erebus, Mount Melbourne and Mount Rittmann). The proposal aims to represent a more strategic approach to protecting a rare environment type in Antarctica and to apply consistent measures to protect the highly sensitive and unique species assemblages to the same high standard in a single management plan.</p>

WP 40 Italy & United States	PROPOSAL FOR A NEW ANTARCTIC SPECIALLY PROTECTED AREA AT CAPE WASHINGTON AND SILVERFISH BAY TERRA NOVA BAY, ROSS SEA. Italy and the United States propose the designation of a new ASPA in the northern part of Terra Nova Bay.
WP 41 United States	PROPOSAL FOR A NEW ANTARCTIC SPECIALLY PROTECTED AREA AT TAYLOR GLACIER AND BLOOD FALLS, TAYLOR VALLEY, MCMURDO DRY VALLEYS VICTORIA LAND. The United States proposes the establishment of a new ASPA at Taylor Glacier and Blood Falls to protect the area's unique biological and physical characteristics and high scientific and educational values. Increasing activity on the Taylor Glacier and recent ice-core drilling projects have highlighted the need to protect the Blood Falls environment as these activities have the potential to influence the unique microbial community and chemistry of the feature.
iv. Other matters relating to management plans for protected/managed areas	
WP 14 Australia	SUBSIDIARY GROUP ON MANAGEMENT PLANS – REPORT ON 2011/12 INTERSESSIONAL WORK. This paper reports on the work of the SGMP in accordance with the TORs #4 and #5. The SGMP would welcome advice from the CEP regarding work to develop guidance for establishing ASMA and for preparing and reviewing ASMA management plans. In accordance with the arrangements agreed by ATCM XXXI, the Committee may wish to consider appointing a new SGMP convener to serve in the role on the conclusion of CEP XV.
SP 7 Secretariat	STATUS OF ANTARCTIC SPECIALLY PROTECTED AREA AND ANTARCTIC SPECIALLY MANAGED AREA MANAGEMENT PLANS. This paper presents information on the status of ASPA and ASMA management plans according to the review requirements of Annex V to the Protocol.
IP 24 Republic of Korea	MANAGEMENT REPORT OF NAREBSKI POINT (ASPAs 171) AND ARDLEY ISLAND (ASPAs 150) DURING THE 2011/2012 PERIOD. This paper presents a survey summary on ASPA 171 and its vicinity and ASPA 150 to achieve the objectives and principles of the ASPAs' management plans during the 2011/2012 period.
IP 38 IAATO	ESTABLISHING IAATO SAFETY ADVISORIES. This paper describes IAATO's establishment of a formalised internal Safety Advisory system. The Advisories are intended to enhance safety for operators in the Antarctic, thus ensuring that there is a readily accessible, searchable bank of 'local knowledge' information on both general matters and site-specific advice.

<p>IP 61 Australia, India China, Romania & Russia</p>	<p>REPORT OF THE LARSEMANN HILLS ANTARCTIC SPECIALLY MANAGED AREA (ASMA) MANAGEMENT GROUP. Following the adoption of ASMA the Parties active in the ASMA established a Management Group to oversee the implementation of the Management Plan. This paper gives a brief report on the Management Group’s activities during 2011-12.</p>
<p>IP 66 Brazil</p>	<p>WORKING PLAN PROPOSAL FOR THE REVIEW OF THE ADMIRALTY BAY ANTARCTIC SPECIALLY MANAGED AREA MANAGEMENT PLAN (ASMA No. 1). In this paper Brazil, as coordinator of the ASMA 1 Management Plan for a 5 year period, outlines the proposed working plan for the review of the ASMA 1 Management Plan.</p>
<p>IP 78 United States</p>	<p>AMUNDSEN-SCOTT SOUTH POLE STATION, SOUTH POLE ANTARCTICA SPECIALLY MANAGED AREA (ASMA No. 5) 2012 MANAGEMENT REPORT. This paper summarises the continuing challenges in managing diverse activities in ASMA 5. It discusses the implementation of the newly positioned primary camping area and the secondary (or overflow) camping area and the implementation of a Visitor Centre.</p>
<p>IP 82 Argentina, Chile, Norway, Spain, UK & USA</p>	<p>DECEPTION ISLAND SPECIALLY MANAGED AREA (ASMA) MANAGEMENT GROUP REPORT. This paper summarises the activities undertaken within the Deception ASMA, and the work of the Management Group to fulfil the objectives and principles of ASMA No. 4 Management Plan during the intersessional period 2011-12.</p>
<p>b) Historic Sites and Monuments</p>	
<p>WP 36 Russia</p>	<p>PROPOSAL ON REVISION OF HISTORIC SITES AND MONUMENTS UNDER MANAGEMENT OF THE RUSSIAN FEDERATION. This paper proposes amendments and updates in the description of several HSMs under Russian management.</p>
<p>WP 46 Argentina</p>	<p>FINAL REPORT OF THE INFORMAL DISCUSSIONS ON HISTORIC SITES AND MONUMENTS. This paper presents the final report of informal discussions on Historic Sites and Monuments, led by Argentina during the intersessional periods 2010-2011 and 2011-2012.</p>
<p>WP 56 rev.1 Chile</p>	<p>PROPOSAL FOR MODIFICATION OF HISTORIC SITE No 37. This paper proposes the addition of new structures and elements to HSM 37, a statue erected of Bernardo O’Higgins at O’Higgins Station. Chile proposes to modify the HSM by adding the structures of the old O’Higgins Station, a plaque and a grotto.</p>
<p>IP 14 China</p>	<p>BRIEF INTRODUCTION OF THE MAINTENANCE AND CONSERVATION PROJECT OF No.1 BUILDING AT GREAT WALL STATION. This paper reports on the Maintenance and Conservation Project of No.1 Building at Great Wall Station (HSM 86) planned to be completed during the following two or three years. The Building is expected to be a HSM displaying the history of China’s Antarctic research.</p>

BP 41 New Zealand	<i>ANTARCTIC HERITAGE TRUST CONSERVATION UPDATE.</i> This paper provides information on the Antarctic Heritage Trust's Ross Sea Heritage Restoration Project being undertaken at ASPAs at Ross Island and at Cape Adare, related to the expedition bases built by the <i>Southern Cross</i> Expedition (1898-1900) led by Carsten Borchgrevink; the <i>Discovery</i> Expedition (1901-1904) and the <i>Terra Nova</i> Expedition (1910-1913) both led by Robert Falcon Scott; and the <i>Nimrod</i> Expedition (1907-1909) led by Ernest Shackleton.
c) Site Guidelines	
WP 15 UK , Argentina & USA	<i>SITE GUIDELINES FOR D'HAINAUT ISLAND, MIKKELSEN HARBOUR, TRINITY ISLAND.</i> This document proposes the adoption of site guidelines for D'Hainaut Island because the site is recognised for its historical importance and contains the remains of a whalers' water boat and large pile of whale bones. The site also has important environmental values. The proponents recommend that the CEP submit the site guidelines for adoption by the ATCM.
WP 16 Argentina, France, Ukraine, UK & USA	<i>SITE GUIDELINES FOR PORT CHARCOT, BOOTH ISLAND.</i> This paper proposes the adoption of site guidelines for Port Charcot because the site is recognised for its historical importance and contains the remains of the base used to over-winter by the French Antarctic Expedition, led by Dr. Jean Baptiste Charcot, in 1904. The site also has important environmental values including floral species and the fact that a number of bird species breed in the area and several seal and penguin species use the beach as a resting place.
WP 45 Argentina, Chile, Norway, Spain, UK & USA	<i>SITE GUIDELINES FOR VISITORS, PENDULUM COVE, DECEPTION ISLAND, SOUTH SHETLAND ISLANDS.</i> This paper proposes the adoption of site guidelines which aim to minimise the risk of visitor related pressures at this site of outstanding natural and historic value, as well as to safeguard visitor safety.
WP 59 Ecuador & Spain	<i>REVIEW OF THE SITE VISITOR GUIDELINES FOR AITCHO ISLANDS.</i> This paper proposes a review of the site guidelines for Aitcho Islands, adopted in 2005. Based on monitoring activities during the last years, the paper proposes modifications in the guidelines related to anchorage areas, routes and maps of the current version of the guidelines.
IP 37 IAATO	<i>REPORT ON IAATO OPERATOR USE OF ANTARCTIC PENINSULA LANDING SITES AND ATCM VISITOR SITE GUIDELINES, 2011-2012 SEASON.</i> IAATO reports on the levels of tourism in Antarctica and on the use of site guidelines or National Programme management in sites visited in the proximity of stations.

<p>BP 3 Unites States</p>	<p><i>ANTARCTIC SITE INVENTORY: 1994-2012.</i> This paper provides an update on results of the Antarctic Site Inventory project through February 2012, which has collected biological data and site-descriptive information in the Antarctic Peninsula since 1994.</p>
<p>d) Human footprint and wilderness values</p>	
<p>WP 50 New Zealand & Netherlands</p>	<p><i>CONCEPTS FOR WILDERNESS PROTECTION IN ANTARCTICA USING TOOLS IN THE PROTOCOL.</i> Considering the context of a significantly changing Antarctic environment and increasing human activity in Antarctica, this paper proposes the development of practical guidance material to support the protection of wilderness values when applying the EIA and area protection tools of Annex I and Annex V of the Protocol. (See also IP 60.)</p>
<p>IP 52 ASOC</p>	<p><i>DATA SOURCES FOR MAPPING THE HUMAN FOOTPRINT IN ANTARCTICA.</i> This paper suggests that the compilation of information on human activity in Antarctica from the different information repositories in a common format and in one place, would be a useful step in constructing a model of the human footprint in Antarctica and the Southern Ocean.</p>
<p>IP 60 New Zealand & Netherlands</p>	<p><i>FURTHER INFORMATION ABOUT WILDERNESS PROTECTION IN ANTARCTICA AND USE OF TOOLS IN THE PROTOCOL.</i> Acknowledging the inherent difficulties in the management of wilderness, this Information Paper provides supporting information for the WP on the development of practical guidance material to support the protection of wilderness values when applying the EIA and area protection tools of Annex I and Annex V of the Protocol.</p>
<p>e) Marine Spatial Protection and Management</p>	
<p>IP 34 IUCN</p>	<p><i>USING ASMAs AND ASPAs WHEN NECESSARY TO COMPLEMENT CCAMLR MPAs.</i> IUCN considers that some CCAMLR MPAs may require additional management and protection efforts and that it is therefore important that the ATCM, taking into account the recommendations from C-CAMLR, consider whether there is a possible need or not to establish ASMAs or ASPAs, partly or fully, in the area of a CCAMLR MPA.</p>
<p>IP 50 ASOC</p>	<p><i>ANTARCTIC OCEAN LEGACY: A MARINE RESERVE FOR THE ROSS SEA.</i> This paper summarises a publication y the Antarctic Ocean Alliance (AOA), of which ASOC is a member. The Alliance is calling for the creation of a network of marine protected areas and no-take marine reserves in the Southern Ocean.</p>

IP 51 ASOC	<i>ANTARCTIC OCEAN LEGACY: A VISION FOR CIRCUMPOLAR PROTECTION.</i> This paper summarises the report “Antarctic Ocean Legacy: A Vision for Circumpolar Protection” published by the Antarctic Ocean Alliance (AOA).
IP 54 ASOC	<i>IMPLICATIONS OF ANTARCTIC KRILL FISHING IN ASMA No. 1 - ADMIRALTY BAY.</i> ASOC informs that the 2011 meeting of WG-EMM noted that in 2009/10, the krill fishery operated in ASMA 1. Fishing was not identified or envisaged when the management plan was adopted by the ATCM following its approval by CCAMLR. ASOC offers a series of recommendations in order to prevent similar future events.
IP 68 Ukraine	<i>PROGRESS OF UKRAINE ON DESIGNATION OF BROAD-SCALE MANAGEMENT SYSTEM IN THE VERNADSKY STATION AREA.</i> Given the increasing scientific, logistic and tourist activities around Verdnasky Station and the surrounding islands in recent years, Ukraine is proposing to prepare a broad-scale and comprehensive management system for the area and invites all interested Parties to take part in further discussion on strategic views of environmental protection and possible management for this area.
IP 80 CCAMLR	<i>REPORT OF THE CEP OBSERVER TO THE CCAMLR WORKSHOP ON MARINE PROTECTED AREAS. BREST, FRANCE, 29 AUGUST TO 2 SEPTEMBER 2011.</i> This paper provides a synopsis of those aspects of the workshop of particular relevance to the ongoing collaboration between the CEP and SC-CAMLR. A full version is available online at the CCAMLR website.
f) Other Annex V Matters	
WP 23 rev.1 Australia, New Zealand & SCAR	<i>ANTARCTIC CONSERVATION BIOGEOGRAPHIC REGIONS.</i> This paper presents the results of recent analyses of the relationships between the best available Antarctic terrestrial biodiversity data, the Environmental Domains and other relevant spatial frameworks. The authors recommend that the Committee endorse the ‘Antarctic Conservation Biogeographic Regions’ as a dynamic model for the identification of ASPAs within a systematic environmental-geographic framework, and as a basis for ongoing work to address non-native species risks. A draft Resolution is provided for consideration by the Committee.
WP 35 Russia	<i>PROPOSALS ON PREPARATION OF REVISED MANAGEMENT PLANS OF ANTARCTIC SPECIALLY PROTECTED AND ANTARCTIC SPECIALLY MANAGED AREAS.</i> This paper proposes that, in reviewing ASPA and ASMA management plans in which representatives of living Antarctic nature are designated as the main values to be protected, the proponent Party should submit to the CEP a report with the results of a monitoring programme on the state of those values. A draft Measure is attached to the paper.

<p>WP 38 USA & New Zealand</p>	<p>DEVELOPING PROTECTION FOR A GEOTHERMAL AREA; VOLCANIC ICE CAVES AT MOUNT EREBUS, ROSS ISLAND. This paper proposes a strategy to protect the unique environments of geothermal areas of Mount Erebus recommending the interested Parties and SCAR to develop an inventory on ice cave features and a code of conduct and adopt a temporary moratorium on visits to the area.</p>
<p>IP 26 Australia</p>	<p>ANALYSES OF THE ANTARCTIC PROTECTED AREAS SYSTEM USING SPATIAL INFORMATION. Australia has acquired a comprehensive dataset of spatial information representing the boundaries of all ASPAs and ASMAs. This dataset is now freely available, via the Secretariat, for use in accordance with basic terms and conditions. This paper presents examples of how the dataset can assist in assessing and further developing the Antarctic protected areas system as well as support other CEP activities.</p>
<p>IP 49 ASOC</p>	<p>ANNEX V INVIOLATE AND REFERENCE AREAS: CURRENT MANAGEMENT PRACTICES INFORMATION. ASOC considers that the designation of closed and inviolate areas of significant size can make multiple contributions towards meeting the objectives of the Protocol, and that it is a tool already in the toolbox of Antarctic environmental management practices which can be used more widely to complement existing environmental management activities.</p>
<p>8. CONSERVATION OF ANTARCTIC FLORA AND FAUNA</p>	
<p>a) Quarantine and Non-native Species</p>	
<p>WP 5 SCAR</p>	<p>OUTCOMES OF THE INTERNATIONAL POLAR YEAR PROGRAMME: ALIENS IN ANTARCTICA. This paper reports on the findings of the IPY project <i>Aliens in Antarctica</i> related to a spatially explicit, activity-differentiated assessment of the risks of establishment of terrestrial non-native species across Antarctica, both currently and with climate change. SCAR recommends the CEP to include this assessment in further development of strategies to mitigate the risks posed by terrestrial non-native species, to develop a surveillance strategy and to give additional attention to the risks posed by intra-Antarctic transfer of propagules.</p>
<p>WP 6 SCAR</p>	<p>REDUCING THE RISK OF INADVERTENT NON-NATIVE SPECIES INTRODUCTIONS ASSOCIATED WITH FRESH FRUIT AND VEGETABLE IMPORTATION TO ANTARCTICA. SCAR reviews the science concerning the risk of non-native species introductions associated with the importation of fresh fruits and vegetables to the Antarctic region. SCAR recommends that the CEP encourage Parties to implement the recommendations of the COMNAP/SCAR <i>checklists for supply chain managers</i>; and encourages Parties and/or COMNAP to further investigate practical, cost effective methods of reducing the risk of non-native species introductions associated with fresh foods.</p>

WP 25 rev.1 Australia & France	<i>GUIDELINES TO MINIMISE THE RISKS OF NON-NATIVE SPECIES AND DISEASE ASSOCIATED WITH ANTARCTIC HYDROPONICS FACILITIES.</i> This paper presents suggested <i>Guidelines to minimise the risks of non-native species and disease associated with Antarctic hydroponics facilities.</i> Australia and France recommend that the guidelines be included in the CEP Non-native Species Manual for reference, as appropriate, by those using or planning to use hydroponics facilities.
IP 13 Spain, Argentina & United Kingdom	<i>COLONISATION STATUS OF THE NON-NATIVE GRASS POA PRATENSIS AT CIERVA POINT, DANCO COAST, ANTARCTIC PENINSULA.</i> This paper proposes that, given that climate change may increase and following the procedures proposed in the CEP Non-native Species Manual, it would be desirable to eradicate this species, which was accidentally introduced in Cierva Point, Antarctic Peninsula, in 1954.
IP 29 United Kingdom	<i>COLONISATION STATUS OF KNOWN NON-NATIVE SPECIES IN THE ANTARCTIC TERRESTRIAL ENVIRONMENT (UPDATED 2012).</i> This paper updates the information presented to the CEP in 2010 and 2011 on the colonisation status of known non-native species in the Antarctic terrestrial environment. The paper reports that no attempts have been made to eradicate any of the known non-native species in the past year.
BP 1 SCAR	<i>CONTINENT-WIDE RISK ASSESSMENT FOR THE ESTABLISHMENT OF NONINDIGENOUS SPECIES IN ANTARCTICA.</i> This scientific publication presents an evidence-based assessment demonstrating which parts of Antarctica are at growing risk from alien species that may become invasive, and provides the means to mitigate this threat now and into the future as the continent's climate changes.
b) Specially Protected Species	
c) Other Annex II Matters	
IP 20 Germany	<i>EVALUATION OF THE "STRATEGIC ASSESSMENT OF THE RISK POSED TO MARINE MAMMALS BY THE USE OF AIRGUNS IN THE ANTARCTIC TREATY AREA".</i> This paper presents an assessment, undertaken by the Federal Environment Agency of Germany, of the Alfred Wegner Institute's analysis of risks posed to marine mammals by the use of airguns. Germany notes that all aspects of the risk analysis were thoroughly assessed and special emphasis is placed on hazard identification, level of protection and corresponding safety zones for the assets to be protected.
IP 21 SCAR	<i>ANTHROPOGENIC SOUND IN THE SOUTHERN OCEAN: AN UPDATE.</i> This paper forms the basis of a response to a request from CEP XIV, and presents a summary of new information on anthropogenic sound in the Southern Ocean.

<p>IP 35 SCAR, IUCN & New Zealand</p>	<p><i>ANTARCTIC CONSERVATION FOR THE 21ST CENTURY: BACKGROUND, PROGRESS, AND FUTURE DIRECTIONS.</i> Recognizing the need for an integrated, comprehensive and dynamic plan for the conservation of Antarctica and associated and dependent ecosystems, this paper describes developments to date and plans for the further development of an Antarctic Conservation Strategy (ACS).</p>
<p>9. ENVIRONMENTAL MONITORING AND REPORTING</p>	
<p>WP 7 United Kingdom</p>	<p><i>REMOTE SENSING FOR MONITORING ANTARCTIC SPECIALLY PROTECTED AREAS: USE OF MULTISPECTRAL AND HYPERSPECTRAL DATA FOR MONITORING ANTARCTIC VEGETATION.</i> This paper describes the development and application of new remote sensing techniques in Antarctica to monitor vegetation. The UK recommends that the CEP consider further the value and application of the methodology, and encourage future collaboration in the development and application of these techniques for monitoring of ASPAs and the wider environment.</p>
<p>WP 18 Germany</p>	<p><i>PENGUIN MONITORING VIA REMOTE SENSING.</i> Taking into account the calling of ATCM XXXIV to Parties to intensify their efforts in using remote sensing techniques for improved monitoring of environment and climate changes in the Antarctic, and informal discussions at the CEP and on scientific forums on the possibilities of penguin monitoring in the Antarctic based on remote sensing techniques, this paper proposes the establishment of an ICG to discuss this matter intersessionally.</p>
<p>IP 46 Germany</p>	<p><i>PILOT STUDY ON MONITORING CLIMATE-INDUCED CHANGES IN PENGUIN COLONIES IN THE ANTARCTIC USING SATELLITE IMAGES.</i> This paper reports on a feasibility study on penguin monitoring using remote sensing techniques carried out by Germany. (See also WP 18.)</p>
<p>WP 20 New Zealand</p>	<p><i>ESTABLISHING A MONITORING PROGRAMME TO ASSESS CHANGES IN VEGETATION AT TWO ANTARCTIC SPECIALLY PROTECTED AREAS.</i> New Zealand established a monitoring programme at two ASPAs using GIS techniques to monitor changes in vegetation cover. This paper invites the CEP to consider how this method may be used for monitoring climate change effects on Antarctic species distribution and abundance.</p>
<p>WP 55 Chile</p>	<p><i>NEW RECORDS OF THE PRESENCE OF HUMAN ASSOCIATED MICROORGANISMS IN THE ANTARCTIC MARINE ENVIRONMENT.</i> Chile informs on new records of presence of human associated microorganisms in the Antarctic marine environment and suggests that the CEP recommend that COMNAP develop monitor activities to study the presence of these microorganisms in the vicinity of the stations and to evaluate the existing precautions and sewage treatments that the National Programmes have established to avoid the incidental introduction of microorganisms due to human activities in the Antarctic environment.</p>

IP 2 SCAR	<i>THE SOUTHERN OCEAN OBSERVING SYSTEM (SOOS)</i> . This paper presents an update on progress with the design and implementation of a Southern Ocean Observing System (SOOS) over the last year.
IP 40 rev. 1 SCAR	<i>SCAR PRODUCTS AVAILABLE TO SUPPORT THE DELIBERATIONS OF THE ATCM</i> . Following a request from the CEP, this paper lists the SCAR products which provide scientific information useful to scientists and others, such as meteorological data, biodiversity data in a more easily usable form, and information on bathymetry in the Southern Ocean.
IP 53 ASOC	<i>ANTARCTIC TREATY SYSTEM FOLLOW-UP TO VESSEL INCIDENTS IN ANTARCTIC WATERS</i> . This paper undertakes a preliminary assessment of reporting following a vessel incident. It addresses comprehensiveness of reporting, reporting of impact of the pollution produced from an incident and implementation of lessons learned and recommendations arising. It identifies a number of shortcomings in the current system and recommends that the ATCM and CCAMLR address these as a matter of urgency.
IP 76 Chile	<i>ANTARCTIC ENVIRONMENTAL MONITORING CENTRE</i> . This document presents part of the activities developed by the monitoring project of the Chilean Antarctic Programme, aimed to aid the decision making process with the support of scientific environmental information, to optimise the use of resources and to encourage the creation of specialised technical skills to maintain a continuous monitoring programme.
BP 10 Australia	<i>ASSESSMENT OF ENVIRONMENTAL IMPACTS ARISING FROM SEWAGE DISCHARGE AT DAVIS STATION</i> . This paper informs on a comprehensive study undertaken by Australia to assess the environmental impacts of wastewater disposal into the coastal marine environment at Davis Station.
BP 15 Poland	<i>SUMMARY INFORMATION ON IMPROVEMENTS AND MODERNIZATIONS DONE ON POLISH ANTARCTIC STATION "ARCTOWSKI"</i> . This paper informs on the important changes made at Arctowski Station aimed to reduce the potentially adverse human impacts on the Antarctic environment, to modernise the Station, to reduce energy demand and to improve the safety of its logistical operations.
10. INSPECTION REPORTS	
IP 47 USA & Russia	<i>UNITED STATES-RUSSIAN FEDERATION REPORT OF INSPECTION</i> . The United States and the Russian Federation conducted an inspection under the Antarctic Treaty from 23-28 January 2012. The report attached to this IP describes the observations and conclusions of Joint Antarctic Inspection Team. A summary of overall conclusions is included.

IP 59 UNEP & ASOC	REVIEW OF THE IMPLEMENTATION OF THE MADRID PROTOCOL: INSPECTIONS BY PARTIES (ARTICLE 14). This paper reviews the practice of inspections undertaken by Parties carried out under Article 14 of the Madrid Protocol.
BP 22 India	MEASURES ADOPTED AT MAITRI STATION ON THE RECOMMENDATIONS OF RECENT VISIT OF JAPANESE INSPECTION TEAM. This paper reports on the measures already adopted or being implemented with regard to observations made by a Japanese inspection team in 2010 on improvements in the conditions of some systems at Maitri Station.
11. COOPERATION WITH OTHER ORGANISATIONS	
IP 1 SCAR	THE SCIENTIFIC COMMITTEE ON ANTARCTIC RESEARCH (SCAR) ANNUAL REPORT 2011/12. This paper summarises past SCAR highlights and future meetings of interest to Treaty Parties.
IP 3 COMNAP	THE ANNUAL REPORT FOR 2011 OF THE COUNCIL OF MANAGERS OF NATIONAL ANTARCTIC PROGRAMMES (COMNAP). This document presents COMNAP highlights and achievements as well as products and tools developed in 2011.
IP 28 CCAMLR	REPORT BY THE SC-CAMLR OBSERVER TO THE FIFTEENTH MEETING OF THE COMMITTEE FOR ENVIRONMENTAL PROTECTION. This paper reports on matters of common interest between the SC-CAMLR and the CEP, discussed at the last SC-CAMLR Meeting.
12. REPAIR AND REMEDIATION OF ENVIRONMENTAL DAMAGE	
WP 21 Australia & United Kingdom	AN ANTARCTIC CLEAN-UP MANUAL. This paper proposes that the Committee agree to develop a Clean-Up Manual containing guidance to assist Parties in addressing their obligations under Annex III to clean up past waste disposal sites on land and abandoned work sites of past activities. A draft Resolution and proposed first version of a Clean-Up Manual area attached. The paper further proposes that the Committee encourage interested Members and Observers to develop practical guidelines and supporting resources for inclusion in the Clean-Up Manual.
WP 26 Australia	ENVIRONMENTAL ISSUES RELATED TO THE PRACTICALITY OF REPAIR OR REMEDIATION OF ENVIRONMENTAL DAMAGE. This paper is an update of ATCM XXXIV - WP 28 on environmental issues related to the practicality of repair or remediation of environmental damage, and should be read in conjunction with Australia's IP 25.
IP 25 Australia	EXAMPLES TO ILLUSTRATE KEY ENVIRONMENTAL ISSUES RELATED TO THE PRACTICALITY OF REPAIR OR REMEDIATION OF ENVIRONMENTAL DAMAGE. In support of WP 26 this paper presents examples to illustrate the points that Australia suggests could be considered by the Committee when addressing Decision 4 (2010).

WP 62 COMNAP	REPAIR OR REMEDIATION OF ENVIRONMENTAL DAMAGE: COMNAP REPORT ON ITS EXPERIENCE. COMNAP reports on the results of a Waste Management in Antarctica Workshop organised by its Environmental Experts Group, and provides several examples of remediation activities by various National Antarctic Programmes.
IP 6 Australia	TOPIC SUMMARY: CEP DISCUSSIONS ON CLEAN-UP. This paper supports WP 21 and presents a summary of CEP meeting documents that have addressed the clean-up of waste disposal sites on land, abandoned work sites of Antarctic activities and sites contaminated by fuel spills.
IP 57 ASOC	REPAIR OR REMEDIATION OF ENVIRONMENTAL DAMAGE. This paper reviews some of the key issues associated with the repair or remediation of environmental damage and comments on the various points suggested by Australia in WP 28 at ATCM XXXIV.
BP 11 Australia	CLEAN-UP TECHNIQUES FOR ANTARCTICA. This report relates that the Australian Antarctic programme is developing techniques suitable for the clean-up of contaminated sites in Antarctica and that the results of this work may be beneficial in managing other Antarctic contaminated sites.
BP 12 Australia	CLEAN-UP OF A FUEL SPILL NEAR LAKE DINGLE, VESTFOLD HILLS. This paper relates Australia's experience from a recent fuel spill in the Vestfold Hills and illustrates how environmental risk assessment, following a simple risk-based decision tree, was instrumental in choosing the most appropriate remediation plan.
BP 13 Australia	DEVELOPMENT OF ENVIRONMENTAL QUALITY STANDARDS FOR THE MANAGEMENT OF CONTAMINATED SITES IN ANTARCTICA. In this paper Australia presents information on research to develop environmental quality standards based on the sensitivity of Antarctic species to metals and fuel contaminants.
BP 14 Australia	ASSESSMENT, MONITORING AND REMEDIATION OF OLD ANTARCTIC WASTE DISPOSAL SITES: THE THALA VALLEY EXAMPLE AT CASEY STATION. This paper describes the approach to impact assessment and monitoring that was developed at the Thala Valley waste disposal site at Casey station as an integral part of the clean-up project, to ensure that all obligations under the Protocol were satisfied.
BP 38 Chile	REMOVAL OF SCRAP FROM PRESIDENTE EDUARDO FREI MONTALVA STATION, KING GEORGE ISLAND. This paper reports that during the 2011-12 seasons, an important amount of scrap was removed from the station by Chile in conjunction with the assistance of a private company.

13. GENERAL MATTERS	
IP 32 COMNAP	COMNAP SURVEY OF NATIONAL ANTARCTIC PROGRAMMES ON OIL SPILL CONTINGENCY PLANNING. This paper presents the results of a new COMNAP survey undertaken during the 2011/2012 intersessional period as an update of a survey carried out in 1996 on best practice in the event of an accident or oil spill.
14. ELECTION OF OFFICERS	
15. PREPARATION FOR NEXT MEETING	
16. ADOPTION OF THE REPORT	
17. CLOSING OF THE MEETING	

Appendix 1

CEP Five Year Work Plan

Issue / Environmental Pressure Actions	CEP Priority	Intercessional Period	CEP XVI 2013	Intercessional Period	CEP XVII 2014	Intercessional Period	CEP XVIII 2015	Intercessional Period	CEP XIX 2016	Intercessional Period	CEP XX 2017
<p>Introduction of non-native species</p> <p>Actions:</p> <ol style="list-style-type: none"> 1. Continue developing practical guidelines & resources for all Antarctic operators. 2. Continue advancing recommendations from climate change ATME. 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 introduced hydroponic facilities (refer to WP 25). <p>Anarctic transfer of propagules.</p>	1	<p>Interested Members, experts, NAs's work on monitoring measures.</p> <p>Update the NNS manual with the guidelines for hydroponic facilities and ABCR.</p> <p>Incorporate the map of Antarctica showing the 15 ACBR (refer to recommendation 5 in WP23), and incorporate the guidelines to minimise the risks of non-native species and disease associated with Antarctic hydroponics facilities (refer to WP 25).</p>	<p>Discuss further monitoring measures for inclusion in NNS manual, including a surveillance strategy for areas at high risk of establishment</p>	<p>Interested members, experts, NAs's work on response measures and eradication.</p>	<p>Discuss further response measures for inclusion in NNS manual</p>	<p>Prepare for review of manual-consider informal discussion group</p>	<p>Review non-native species manual</p>				
<p>Tourism and NGO activities</p> <p>Actions:</p> <ol style="list-style-type: none"> 1. Provide advice to ATCM as requested. 2. Advance recommendations from ship-borne tourism ATME. 	1	<p>Dependant on ATCM reaction</p>	<p>Respond to ATCM request.</p>								

Issue / Environmental Pressure/Actions	CEP Priority	Intersessional Period	CEP XVI 2013	Intersessional Period	CEP XVII 2014	Intersessional Period	CEP XVIII 2015	Intersessional Period	CEP XIX 2016	Intersessional Period	CEP XX 2017
Global Pressure: Climate Change Actions: 1. Consider implications of climate change for management of Antarctic environment. 2. Advance recommendations from climate change AIME.	1	Continue to advance recommendations from ATME	Standing agenda item. SCAR provides yearly update	Continue to advance recommendations from ATME	Standing agenda item. SCAR provides update	Continue to advance recommendations from ATME	Standing agenda item. SCAR provides update	Continue to advance recommendations from ATME	Standing agenda item. SCAR provides update	Continue to advance recommendations from ATME	Standing agenda item. SCAR provides update
		SGMP / conducts work as per agreed work plan. Review draft management plans referred by CEP for intersessional review and provide advice to proponents. Work with relevant Parties to ensure progress on review of management plans overdue for five-yearly review.	Consideration of SGMP / report. Review and update SGMP work plan	SGMP / conducts work as per agreed work plan	Consideration of SGMP / report	SGMP / conducts work as per agreed work plan	SGMP / conducts work as per agreed work plan	SGMP / conducts work as per agreed work plan	SGMP / conducts work as per agreed work plan	SGMP / conducts work as per agreed work plan	Consideration of SGMP / report
Marine spatial protection and management Actions: 1. Cooperate with CCAMLR on Southern Ocean bioregionalisation and other common interests and agreed principles. 2. Identify and apply processes for spatial marine protection. Advance recommendations from climate change AIME.	1	Revision and discussion of ASMA 1, and ASFAs with marine component, work progressed in conjunction with SC-CAMLR	Review outcome of CCAMLR MPA decisions and review SC-CAMLR Plan of Work for further coordination	Revision and discussion of ASMA 1, and ASFAs with marine component, work progressed in conjunction with SC-CAMLR	Review outcome of CCAMLR MPA decisions and review SC-CAMLR Plan of Work for further coordination	Review outcome of CCAMLR MPA decisions and review SC-CAMLR Plan of Work for further coordination	Review outcome of CCAMLR MPA decisions and review SC-CAMLR Plan of Work for further coordination	Review outcome of CCAMLR MPA decisions and review SC-CAMLR Plan of Work for further coordination	Review outcome of CCAMLR MPA decisions and review SC-CAMLR Plan of Work for further coordination	Review outcome of CCAMLR MPA decisions and review SC-CAMLR Plan of Work for further coordination	Review outcome of CCAMLR MPA decisions and review SC-CAMLR Plan of Work for further coordination

Issue / Environmental Pressure/Actions	CEP Priority	Intersessional Period	CEP XVI 2013	Intersessional Period	CEP XVII 2014	Intersessional Period	CEP XVIII 2015	Intersessional Period	CEP XIX 2016	Intersessional Period	CEP XX 2017
Operation of the CEP and Strategic Planning Actions: 1. Keep the 5 year 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).	1	ICG to prepare draft advice on Decision 4 (2010). Members prepare further papers. Informal discussion to the ATCM in adopting an informed decision in 2015 on the resumption of negotiations on liability arising from environmental damage. 2. Establish Antarctic-wide inventory of sites or past activity. 3. Consider guidelines for repair and remediation. 4. Prepare manual of clean-up guidance	Standing item Review and revise work plan as appropriate	Standing item Review and revise work plan as appropriate	Standing item Review and revise work plan as appropriate	Standing item Review and revise work plan as appropriate	Standing item Review and revise work plan as appropriate	Standing item Review and revise work plan as appropriate	25th anniversary of Protocol. Review and revise work plan as appropriate		
			Consider ICG Report and, as appropriate, provide advice to the ATCM. As required, establish ICG to respond to further ATCM request Consider revised Clean-up Manual	Consider further request by the ATCM Possible ICG to develop further advice on Decision 4 (2010)	Report to the CEP. Discussion of guidance material to assist Parties assessing and protecting wilderness values.						
Repair or Remediation of Environmental Damage Actions: 1. Develop advice in response to request from ATCM Decision 4 (2010) in order to assist the ATCM in adopting an informed decision in 2015 on the resumption of negotiations on liability arising from environmental damage. 2. Establish Antarctic-wide inventory of sites or past activity. 3. Consider guidelines for repair and remediation. 4. Prepare manual of clean-up guidance	1	Discussion in an informal group by interested Parties, using CEP forum.									
Human footprint / wilderness management Actions: 1. Develop an agreed understanding of the terms "footprint" and "wilderness". 2. Develop methods for improved protection of wilderness under Annexes I and V.	2										

Issue / Environmental Pressure/Actions	CEP Priority	Intercessional Period	CEP XVI 2013	Intercessional Period	CEP XVII 2014	Intercessional Period	CEP XVIII 2015	Intercessional Period	CEP XIX 2016	Intercessional Period	CEP XX 2017
Monitoring and state of the environment reporting Actions: <ol style="list-style-type: none"> 1. Identify key environmental indicators and tools. 2. Establish a process for reporting to the ATCM. 3. Advance recommendations from climate change ATME. 4. COMNAP to review its information from the Waste Management Workshop, as first step. 5. SCAR to support information to COMNAP and CEP. 	2		Report to the CEP as appropriate								
Biodiversity knowledge Actions: <ol style="list-style-type: none"> 1. Maintain awareness of threats to existing biodiversity. 2. Advance recommendations from climate change ATME 	2						Discussion of SCAR update on underwater noise.				
Site specific guidelines for tourist-visited sites Actions: <ol style="list-style-type: none"> 1. Review site specific guidelines as required. 2. Provide advice to ATCM as required. 	2	Further research at Barrientos Island, Atleho Islands, including effects of closure of track across closed area. Parties are encourage to continue the review of site guidelines.	Standing agenda item; Parties to report on their reviews of site guidelines. Report to the CEP with Barrientos Island, Atleho Islands; monitoring results. Consider re-naming this issue as 'Visitor Site Management'.		Standing agenda item; Parties to report on their reviews of site guidelines		Standing agenda item; Parties to report on their reviews of site guidelines		Standing agenda item; Parties to report on their reviews of site guidelines		Standing agenda item; Parties to report on their reviews of site guidelines

Issue / Environmental Pressure/Actions	CEP Priority	Intercessional Period	CEP XVI 2013	Intercessional Period	CEP XVII 2014	Intercessional Period	CEP XVIII 2015	Intercessional Period	CEP XIX 2016	Intercessional Period	CEP XX 2017
Overview of the protected areas system Actions: 1..Apply the Environmental Domains Analysis (EDA) and Antarctic Conservation Biogeographic Regions (ACBR) to enhance the protected areas system. 2..Advance recommendations from climate change ATME. 3.. Maintain and develop Protected Area database.	2	Secretariat to make available the ACBR via Protected Areas Data Base.	Discussion of environmental monitoring for ASPAs and ASMA's.	Secretariate update list of HSMs	Discuss possible implications of an updated gap analysis based on EDA and ACBR.	Secretariate update list of HSMs	Standing item	Secretariate update list of HSMs	Standing item	Secretariate update list of HSMs	Standing item
		Secretariat update list of HSMs. Secretariat to publish the agreed list of the complete information in the list of HSM.	Standing item	Secretariate update list of HSMs	Standing item	Secretariate update list of HSMs	Standing item	Secretariate update list of HSMs	Standing item	Secretariate update list of HSMs	Standing item
Maintain the list of Historic Sites and Monuments Actions: 1.. Maintain the list and consider new proposals as they arise. 2.. Consider strategic issues as necessary.	3	Continue informal discussions to improved EIES and Secretariate put refinements in place.	Secretariat Report	Secretariate update list of HSMs	Secretariate update list of HSMs	Secretariate update list of HSMs	Secretariate update list of HSMs	Secretariate update list of HSMs	Secretariate update list of HSMs	Secretariate update list of HSMs	Secretariate update list of HSMs
Exchange of Information Actions: 1..Assign to the Secretariat. 2.. Monitor and facilitate easy use of the EIES.		Secretariat Report	Secretariate update list of HSMs	Secretariate update list of HSMs	Secretariate update list of HSMs	Secretariate update list of HSMs	Secretariate update list of HSMs	Secretariate update list of HSMs	Secretariate update list of HSMs	Secretariate update list of HSMs	Secretariate update list of HSMs

Issue / Environmental Pressure/Actions	CEP Priority	Intercessional Period	CEP XVI 2013	Intercessional Period	CEP XVII 2014	Intercessional Period	CEP XVIII 2015	Intercessional Period	CEP XIX 2016	Intercessional Period	CEP XX 2017
Implementing and Improving the EIA provisions of Annex 1 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. Keep the EIA Guidelines under review. 4. Consider application of strategic environmental assessment in Antartica. 5. Advance recommendations from climate change ATME 	3	Establish ICG to review draft CEEs as required	Consideration of ICG reports on draft CEE, as required	Establish ICG to review draft CEEs as required	Consideration of ICG reports on draft CEE, as required	Establish ICG to review draft CEEs as required	Consideration of ICG reports on draft CEE, as required	Establish ICG to review draft CEEs as required	Consideration of ICG reports on draft CEE, as required	Establish ICG to review draft CEEs as required	Consideration of ICG reports on draft CEE, as required
Emergency response action and contingency planning Actions: <ol style="list-style-type: none"> 1. Advance recommendations from ship-borne tourism ATME. 	3	Discuss Work	ICG	Discussion	ICG	Discussion	ICG	Final Res to the ATCM			
Inspections (Article 14 of the Protocol) Actions: <ol style="list-style-type: none"> 1. Review inspection reports as required. 	3		Standing item								

Issue / Environmental Pressure/Actions	CEP Priority	Intercessional Period	CEP XVI 2013	Intercessional Period	CEP XVII 2014	Intercessional Period	CEP XVIII 2015	Intercessional Period	CEP XIX 2016	Intercessional Period	CEP XX 2017
Waste	3				COMNAP reviews information from 2006 waste management workshop						
Actions: 1. Develop guidelines for best practice disposal of waste including human waste.											
Energy management	4										
Actions: 1. Develop best-practice guidelines for energy management at stations and bases.											
Outreach and education	4										
Actions: 1. Review current examples and identify opportunities for greater education and outreach. 2. Encourage Members to exchange information regarding information experiences in this area.			Dedicated time for discussion. Members to produce documents for the Meeting.								

Appendix 2

Provisional Agenda for CEP XVI

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: Strategic approach
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. Human footprint and wilderness values
 - e. Marine Spatial Protection and Management
 - f. 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 Next Meeting
16. Adoption of the Report
17. Closing of the Meeting

