COOPERATION WITH OTHER ORGANISATIONS

9.1 The Scientific Committee was chaired during this section by Dr Bizikov, Vice-Chair of the Scientific Committee.

Cooperation with the Antarctic Treaty System

Report of the Joint SC-CAMLR–CEP Workshop

9.2 On behalf of the Joint Steering Committee, the CEP Observer (Dr Gilbert) introduced SC-CAMLR-XXVIII/6, the report of the Joint SC-CAMLR–CEP Workshop, held in Baltimore, USA (3 and 4 April 2009). The Workshop was convened by Drs Bizikov, Frenot, Gilbert and Watters (paragraph 1.9(i)).

9.3 The Scientific Committee recalled the terms of reference of the Joint Workshop (contained in SC-CAMLR-XXVIII/6) and noted that the discussions were focused on the following six topics:

- key objectives, priorities and challenges for the CEP and SC-CAMLR
- climate change and the Antarctic marine environment
- biodiversity and non-native species in the Antarctic marine environment
- Antarctic species requiring special protection
- spatial marine management and protected areas
- ecosystem and environmental monitoring.

9.4 As a first meeting between the two committees, Dr Gilbert noted that the Joint Workshop had been most successful in achieving its objectives. Dr Gilbert summarised the following outcomes from the discussions:

(i) on climate change, the Joint Workshop recognised the significance of a changing Antarctic climate to the respective management interests of the two committees and made several recommendations with regard to ongoing cooperation on the matter. In this regard, the CEP Observer drew the Scientific Committee's attention to the ATME on Climate Change planned to be held in Norway (6 to 9 April 2010) (ATCM Decision 1 (2009) refers), and suggested that SC-CAMLR may wish to give consideration as to its involvement in that Meeting of Experts;

(ii) on non-native species, the Joint Workshop had recommended that the CEP take the lead on the matter keeping the Scientific Committee informed of progress;

(iii) on species requiring special protection, the Joint Workshop recognised the common interest of the two committees in the conservation status of seals, penguins and seabirds south of 60°S termed 'overlap species' by the Joint Workshop. The Joint Workshop made a number of observations and recommendations on the importance of sharing data and information on the status and trends of such overlap species as well as on management actions that may be taken by the respective bodies;

(iv) on spatial marine management, the Joint Workshop recommended that the Scientific Committee would generally take the lead in addressing the issue with the CEP continuing to examine options for using protected and managed area provisions of the Environmental Protocol as appropriate. Dr Gilbert noted in this regard that on the recommendation of the Joint Workshop, the CEP had considered, and subsequently endorsed, the 11 priority marine areas of the Southern Ocean that had been identified by the Scientific Committee as being worthy of primary attention for spatial management action;

(v) on ecosystem monitoring, the Joint Workshop had recognised the need for further cooperation to ensure monitoring effort is harmonised to the extent possible and that this matter might form the basis of a future joint meeting between the two committees.

9.5 Dr Gilbert noted that the Joint Workshop report had been considered by the CEP at its 12th meeting and that the CEP had welcomed the report, endorsed the recommendations and commended the report to the Scientific Committee. In doing so, the CEP had stressed the importance of maintaining momentum on the issues identified by the Joint Workshop.

9.6 As Convener of WG-EMM, Dr Watters thanked the CEP Observer for introducing the Joint Workshop report and noted that WG-EMM had also considered the report and endorsed the recommendations it contained. With reference to the ATME on Climate Change (paragraph 9.4(i)), Dr Watters suggested that improved ways need to be found for coordinating intersessional meetings between CCAMLR and the ATCM in order to facilitate attendance at those meetings.

9.7 The Scientific Committee thanked those involved in organising what was a very successful and productive workshop and agreed that recommendations from the workshop be considered by the Scientific Committee under the relevant agenda items and that consideration also be given to ensuring that momentum is maintained in cooperating with the CEP, including the consideration of when future meetings might occur.

9.8 The Scientific Committee endorsed the recommendations of the Joint SC-CAMLR–CEP Workshop report.

9.9 The Scientific Committee recommended that the Chairs of the respective committees should liaise during the intersessional period in order to consider and suggest to their respective committees:

- options for making progress on the various recommendations from the Joint Workshop;
- options for further joint meetings and workshops, and possible timing of such meetings;
- how to improve coordination on other intersessional meetings and workshops that may be of common interest;
- in doing so, take into account the recommendations from the CCAMLR Performance Review Panel on how to improve coordination with the Antarctic Treaty System.

CEP

9.10 Dr Gilbert drew the Scientific Committee's attention to SC-CAMLR-XXVIII/BG/16 that contained the CEP's annual report to the Scientific Committee. Dr Gilbert noted that the report had been shortened this year to focus only on the topics of common interest that had been recommended by the Joint Workshop.

9.11 The Scientific Committee thanked the CEP Observer for the annual CEP report and agreed that its format provided a useful means for exchanging information on the topics of common interest.

Boundary of the IMO's Antarctic Special Area

9.12 Dr Watters introduced the proposal in CCAMLR-XXVIII/32, describing an initiative to extend the boundary of the International Maritime Organization's Antarctic Special Area northward to the boundary of the CAMLR Convention Area.

9.13 The Scientific Committee recognised that the aim of the proposal in CCAMLR-XXVIII/32 was to extend the protection of the Antarctic marine ecosystem to a boundary that reflected the boundary of that ecosystem and that this was consistent with its custom and practice in defining other such boundaries.

SCAR

9.14 The SCAR Observer (Prof. M. Hindell) introduced CCAMLR-XXVIII/BG/34, noting that there have been a large number of activities conducted by, or involving, SCAR that relate directly to CCAMLR or are of potential interest to CCAMLR. Prof. Hindell summarised the activities of particular interest to CCAMLR.

9.15 The major Life Sciences projects, and SCAR Action Groups and Expert Groups of direct relevance to CCAMLR, and which also provide opportunities for direct collaboration between SCAR and CCAMLR, are CAML, SO-CPR and its Expert Group, SCAR-MarBIN and the new Expert Group on Birds and Marine Mammals (EG-BAMM).

CAML activities

9.16 CAML is both a major IPY initiative and a key SCAR activity. Its objectives are to develop a robust benchmark of the distribution and abundance of marine biodiversity in Antarctic waters, against which future change in the marine environment can be assessed.

9.17 CAML has completed its major fieldwork. Eighteen vessels were involved. These ranged from voyages fully dedicated to CAML or had major CAML-related components through to other IPY project voyages that will provide data to CAML.

9.18 The Census research voyages during the IPY have provided a comprehensive inventory of marine species: over 6 000 verified species of animals at each pole and

251 species that occur at both poles. At the molecular level, DNA sequences are showing differences in some species that were previously thought to be the same. The analyses showed a close connection between the species and their physical environment at various spatial scales.

SCAR-MarBIN

9.19 SCAR-MarBIN compiles and manages existing and new information generated by CAML on Antarctic marine biodiversity by coordinating, supporting, completing and optimising database networking. SCAR-MarBIN is the Antarctic Regional Node of the Ocean Biogeographic Information System (OBIS: www.iobis.org), and also contributes to the Global Biodiversity Information Facility (GBIF).

9.20 SCAR-MarBIN continues to develop its Register of Antarctic Marine Species (RAMS), which is a fully operable, browsable/searchable online list of Antarctic marine species, and is maintained by a board of taxonomic editors. SCAR-MarBIN also offers the possibility to visualise through a WebGIS and to download baseline data on the occurrence and abundance of marine organisms.

9.21 SCAR-MarBIN is the foundation for CAML's assessment of Antarctic marine life. It will be a powerful information tool, which will provide a baseline reference for establishing a State of the Antarctic Environment, and predicting the future of marine communities around Antarctica, which are currently, or may in the future be, challenged by global change. SCAR-MarBIN will continue to prove useful in the development of monitoring and conservation strategies, in particular facilitating the designation of CAML Legacy Sites. It will also serve as an important biodiversity component of the Southern Ocean Observing System (SOOS) (see paragraph 9.23).

Expert Group on Birds and Marine Mammals

9.22 SCAR's Expert Groups on Seals and Birds have been merged to become the Expert Group on Birds and Marine Mammals, under the leadership of Prof. Hindell. The group met in July 2009, at the 10th SCAR Biology Conference in Sapporo, Japan, and identified some long-term research objectives. The most relevant of these is the compilation of all existing bird and mammal tracking data. These data will form the basis of multi-species 'hot-spot' analysis as well as a gap analysis to indicate species and regions where future tracking efforts should be focused. A long-term objective will be to build on this retrospective analysis to launch a new Southern Ocean predator community study.

Southern Ocean Observing System

9.23 The SCAR/SCOR Oceanography Expert Group is developing a scientific design plan for a Southern Ocean Observing System (SOOS) covering the physics, chemistry and biology of the system. A SOOS meeting was held during XXX SCAR in July 2008, and another was

held at the time of writing of this report (26 September 2009, in Venice, Italy). Before the end of 2009, a version of the plan will be made available to the wider community for comment before being finalised. Input will be actively sought from CCAMLR.

9.24 Inputs from AGCS, ACCE and SOOS were fed into the Southern Ocean Sentinel workshop held in Hobart, Australia (20 to 24 April 2009). It is intended that outputs from the Sentinel program will feed into the SOOS when it is in place. SOOS will make a direct contribution to the Global Ocean Observing System (GOOS) and through that to the Global Earth Observing System of Systems (GEOSS).

9.25 In conclusion, Prof. Hindell identified that SCAR is seeking to enhance its engagement with CCAMLR, and would gratefully receive suggestions on ways to facilitate this. For example, the formation of EG-BAMM was to a large degree intended to provide data for WG-EMM and the MPA subgroup.

9.26 The Scientific Committee welcomed the report from Prof. Hindell and welcomed the desire for SCAR to forge closer links with CCAMLR. In particular, the Scientific Committee noted the potential for productive linkages between the SCAR EG-BAMM and WG-EMM-STAPP, especially noting the plans for SCAR to develop a tracking database of birds and mammals in the Convention Area.

Reports of observers from other international organisations

ASOC

9.27 Dr R. Werner (ASOC Observer) drew attention to the papers tabled by ASOC (CCAMLR-XXVIII/BG/27, BG/28, BG/30 and BG/33).

9.28 With regard to Antarctic krill, CCAMLR-XXVIII/BG/27 referenced ASOC's concerns for discussion at this year's meeting on the management of this fishery, and particularly interim protective measures and the need to improve monitoring of krill predators. Other priorities for further action include systematic scientific observer coverage, and concerns over uncertainty on krill removals as a result of problems with data reporting and krill escape mortality. CCAMLR-XXVIII/BG/27 focused on what ASOC regards a particularly urgent call, which is the adoption of interim protective measures for predators in Subareas 48.1, 48.2 and 48.3. In particular, the most recent report of WG-EMM showed that the trigger levels in place for the krill fishery are not sufficiently precautionary to achieve the objectives of the Convention. It is therefore evident that the time has come for this Committee to make a clear recommendation to the Commission aimed at reducing the risks for predators as a result of krill fishing. The last WG-EMM meeting considered that an interim subdivision of the trigger level between subareas would be a pragmatic approach until SSMU allocations are in place. ASOC supported this approach and hoped that the Scientific Committee can agree on such a recommendation. ASOC also thought that additional measures should be adopted this year to limit concentration of fishing in coastal areas, following a similar rationale to that applied in Subarea 48.6.

9.29 With regard to MPAs, in CCAMLR-XXVIII/BG/30 ASOC noted that CCAMLR is faced with a three-year challenge to meet the WSSD commitments on the implementation of a representative system of MPAs and marine reserves by 2012. In order to meet this challenge,

expansion and intensification of efforts are needed, as highlighted by the key recommendations in the CCAMLR Performance Review Panel Report. This can be achieved if Members commit the required scientific and management expertise, and funding, and apply their efforts against a well-designed work plan. The UK's proposal for marine protection in Subarea 48.2 is valuable step in the right direction. ASOC hoped that the Scientific Committee can provide a clear recommendation to the Commission to endorse this proposal. In addition, this initiative should be matched by other Members' efforts in the coming three years across and beyond all 11 areas prioritised for marine spatial protection and management.

9.30 With regard to MPAs in the Ross Sea (CCAMLR-XXVIII/BG/28), already identified by CCAMLR as a priority for protection, ASOC noted that, according to a recent study (Halpern et al., 2008), this area is the least damaged shelf sea on the planet. Unlike most of the world's oceans, the Ross Sea still retains its top predators and as such it constitutes a unique 'living laboratory'. Designation of the Ross Sea as a marine reserve would enable scientists to continue studying the ecosystem and the impacts of climate change unconfused by the effects of fishing.

9.31 With regard to climate change (CCAMLR-XXVIII/BG/33), ASOC noted that it is well known to the Scientific Committee that climate-related changes to Southern Ocean ecosystems are accelerating, with adverse impacts on species and ecosystem dynamics. Predicted future reductions in sea-ice overall will lead to major alterations in the distribution and abundance of Antarctic marine species. In meeting its obligations for ecosystem-based management of Antarctic fisheries, CCAMLR needs to develop tools and methodologies that take into account the cumulative impacts of fishing and climate change.

9.32 ASOC encouraged the Scientific Committee to intensify its efforts to provide the Commission with advice for sound management decisions aimed at reducing non-climate stresses. This should include: establishing a series of MPAs of ecologically significant size to increase the resilience of the ecosystem to cope with the stresses of climate change; applying further precaution in the establishment of maximum catch limits, especially in those areas where it is known that ocean climate is changing rapidly (such as in Areas 48 and 88); and using flexible, adaptive approaches through improved ecosystem monitoring and the integration of monitoring indices and management rules.

9.33 As a final remark, ASOC highlighted the importance of the work of this Committee for the achievement of CCAMLR objectives. Science is one of CCAMLR's fundamental pillars and as such it needs to be constantly nurtured and considered. In this context, ASOC welcomed the calls made by several Members to improve the work of the Scientific Committee and its working groups. In particular, ASOC encouraged all CCAMLR Members to increase the participation of qualified scientists in CCAMLR working groups so as to ensure that working group recommendations represent the best scientific advice and that, as such, it is accepted by Members.

Reports of representatives at meetings of other international organisations

Tuna RFMOs

9.34 In considering the discussion of CCAMLR-XXVIII/BG/10 in the report of WG-IMAF (Annex 7, paragraphs 11.10 to 11.12), the Scientific Committee noted that many of the organisations that were invited to be observers to its meeting are RFMOs listed in Appendix 1 of CCAMLR Resolution 22/XXV and recalled that it had endorsed Annex 7, paragraph 11.12, encouraging CCAMLR Members that also attend these RFMOs to engage in internal communications to give better effect to CCAMLR Resolution 22/XXV in those RFMOs.

9.35 The Scientific Committee recalled that the Secretariat had provided briefing materials to CCAMLR observers to these RFMOs on issues relating to the incidental mortality of seabirds associated with fishing and noted that these same materials are available to all CCAMLR Members and may be useful as they prepare for these other RFMO meetings where seabird by-catch issues are on the agenda.

International Observer Conference

9.36 The Scientific Committee noted the consideration of electronic data capture methods for use by observers in the report of the attendance of the Scientific Observer Data Analyst at the 6th International Fisheries Observer and Monitoring Conference (SC-CAMLR-XXVIII/BG/6) and suggested that this might be considered by ad hoc TASO in respect of the request from WG-IMAF for advice on such procedures (Annex 7, paragraph 7.17).

IWC

9.37 The 61st Meeting of the SC-IWC was held in Funchal, Madeira, Portugal, from 31 May to 12 June 2009. Japan took 680 minke whales and one fin whale in its whaling under a special scientific permit. Catches of 1 926 large whales were reported to the IWC in 2008. The SOWER cruise 2008/09 was conducted in Whaling Area IV from 105° to 115°E. The abundance estimate for minke whales was 4 887 whales (CV = 0.2). Some stocks of southern hemisphere humpback whales have increased to 80–90% of their initial size. A second workshop on climate change and its effect on cetaceans was held at the University of Siena, Italy, from 21 to 25 February 2009. Results of the workshop underlined the need for close international and multidisciplinary collaboration efforts and the SC-IWC recommended that collaborative work with other relevant bodies (e.g. CCAMLR, SO-GLOBEC) continues and is expanded. The Southern Ocean Research Partnership (SORP) took place in Sydney, Australia, from 23 to 26 March 2009, where IWC members (and others) were invited to discuss and direct the initiative that was first proposed in the IWC. SORP is an integrated, collaborative, non-lethal whale research consortium that aims to maximise conservation outcomes of Southern Ocean whales through an understanding of the status, health, dynamics and environmental linkages of their populations and the threats they face.

SO GLOBEC

9.38 The third, and final, Open Science Meeting (OSM) for the GLOBEC program was held at the Victoria Conference Centre in Victoria, British Columbia, Canada, from 22 to 26 June 2009. The OSM consisted of seven theme sessions including ecosystem structure and functioning, and ecosystem management and approach. The first two days were devoted to various workshops addressing specific topics. The purpose of this final OSM was to contribute to the synthesis and integration of GLOBEC's activities.

9.39 One of the workshops during the first two days was on 'Krill biology and ecology in the world's oceans'. Thirty-three presentations, including 17 posters, were made which summarised national programs on krill research of Australia, Canada, Chile, China, Germany, Japan, Republic of Korea, Mexico, Peru, UK and the USA. The second day was devoted to discussions surrounding recent developments and issues in krill biology and improving our understanding of how this group fits into the ecosystem.

Future cooperation

9.40 The list of meetings of potential relevance to the Scientific Committee was divided into those meetings of other bodies with which CCAMLR has common interests and science conferences/symposia where the subject material is likely to be of relevance to CCAMLR.

9.41 The Scientific Committee is aware that there are a large number of meetings of potential relevance to its work, including those to which CCAMLR is invited to observe, and requested that where Members are aware of, or attending, such meetings that they notify the Secretariat in order that arrangements can be made to ensure that the Scientific Committee and its working groups are kept informed of current scientific developments relevant to their work.

9.42 The Scientific Committee noted a number of international meetings of relevance to its work and nominated the following observers and representatives:

Meetings of other bodies –

- 12th Session of the IOTC Scientific Committee, 30 November to 4 December 2009, Seychelles – to be advised;
- ATME on Climate Change, 6 to 9 April 2010, Svolvær, Norway – to be advised;
- ACAP Advisory Committee, 13 to 17 April 2010, Mar Del Plata, Argentina – to be advised;
- ICES WGFAST, 27 to 30 April 2010, San Diego, California, USA – to be advised;
- CEP XIII, 3 to 7 May 2010, Punta del Este, Uruguay – Scientific Committee Chair and CCAMLR Science Officer;
- 62nd Annual Meeting of the SC-IWC, 30 May to 11 June 2010, Agadir, Morocco – to be advised;

- Sixth Regular Session of the WCPFC Scientific Committee, 9 to 20 August 2010 (Nukualofa, Tonga) – to be advised;

- 15th Meeting of the CCSBT Scientific Committee, 11 September 2010, Narita, Japan – New Zealand;

- 5th Annual Meeting of the SEAFO Scientific Committee, 4 to 8 October 2010 (venue not yet known) – to be advised;

- Meeting of the ICCAT Standing Committee on Research and Statistics (SCRS), 4 to 8 October 2010, Madrid, Spain – to be advised.

Science conferences and symposia

- Climate Impacts on Oceanic Top Predators (CLIOTOP) mid-term workshop, 8 to 11 February 2010, Paris, France – to be advised.

- Symposium on the Ecosystem and Fisheries of the Kerguelen Plateau, 14 to 16 April 2010, Concarneau, France – Prof. Duhamel.

- International Polar Year Oslo Science Conference (OSC), 8 to 12 June 2010, Oslo, Norway – Mr Iversen.

- 31st Open Conference of SCAR, 30 July to 11 August 2010, Argentina – Dr E. Marschoff (Argentina).

9.43 The Scientific Committee encouraged other representatives to participate, where possible, in these meetings, and report back to the 2010 meeting of the Scientific Committee.