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**Report from the
SCAR Delegation to XXXIII ATCM,
Punta del Este, Uruguay, May 3-14th, 2010**



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Summary

SCAR's contributions to the XXXIII Antarctic Treaty Consultative Meeting (ATCM) were positively received. Several SCAR submissions were praised by many of the Parties. The Antarctic Climate Change and the Environment (ACCE) report was seen as critical to the success of the Antarctic Treaty Meeting of Experts (ATME) on Climate Change and annual updates on climate change were welcomed as essential for the ongoing deliberations of the Committee for Environmental Protection (CEP) and the ATCM. Climate will be a separate agenda item for the CEP and the Antarctic Treaty Parties look to SCAR for science leadership as climate is seen as relevant to most CEP agenda items. A Resolution on the SCAR ACCE Report (Resolution 4 – see Appendix 1) and a Decision (Decision 5 – see Appendix 2) were adopted welcoming the report and associated updates and encouraging the dissemination of the findings of the ACCE report to relevant national and international bodies. SCAR noted it has already extensively distributed the report and will continue to widely communicate its conclusions. Many parties were interested in progress with the Southern Ocean Observing System (which was presented both at CEP and at the ATCM). SCAR will provide a final version of the plan for the XXXIV ATCM in Buenos Aires.

The introduction of the non-native species papers were lauded as setting the stage for future directions on this issue by the Parties. There is a plan to develop a guide of best practices and it will draw extensively on information provided by SCAR and the IPY Aliens project for directions. Results of the IPY Aliens project will continue to be reported by SCAR at future ATCMs as they become available. It was noted that "introduction of non-indigenous species" was a preferred terminology.

The application of biodiversity data to the bioregionalization efforts by New Zealand was seen as a major development in moving toward a more regularized approach to selection of Antarctic Specially Protected Areas (ASPAs) and conservation in general. SCAR will work with New Zealand and other interested Parties on advancing this as a framework for conservation efforts. The CEP acknowledged that the lack of baseline Antarctic biodiversity information was a critical data gap in recognizing non-indigenous species and called on all Parties to address this deficit in knowledge.

The 2011 SCAR “a review of conservation practice for Antarctica in the 21st century” workshop was seen as an important next step in conservation efforts and participation by Parties was encouraged. CCAMLR's Marine Protected Areas (MPAs) are progressing and SCAR participation in these activities was encouraged. The point was made that terrestrial and marine concepts in this area will need to be harmonized to ensure continuity in the designation of protected areas in Antarctica and the Southern Ocean. In the future these two protective measures will need to interface in a seamless manner. SCAR should contribute to the MPA discussions (the invitation to the CCAMLR workshop in South Africa in July 2010) to ensure a common basis for protection across all of Antarctica.

The Parties welcomed the SCAR contribution on bioprospecting. SCAR's survey and literature review revealed the extent of current bioprospecting and the potential

for future biotechnology based on Antarctic organisms. Dr. Gerday's lecture was well received by Parties and many requested copies of the presentation. Bioprospecting will remain on the ATCM agenda, however no follow-up ICG was formed. SCAR awaits development of the next steps in regard to this agenda item.

Requests for follow-on work were moderate and SCAR's advisory workload seems to be less demanding than in recent years. This development is welcomed as it allows SCAR to more closely align its work with CEP/ATCM needs and bring a balance between ATCM requests for advice and SCAR initiatives. SCAR plans to utilize this opportunity to become increasingly proactive in advising the CEP on relevant issues in addition to responding to requests for advice.

1. Introduction

The XXXIII Antarctic Treaty Consultative Meeting (ATCM) took place in Punta del Este, Uruguay at the Hotel Conrad Convention Centre from the 3rd to 14th of May 2010.

The SCAR Delegation consisted of M C Kennicutt II, M D Sparrow, R. Badhe and C. Gerday, who presented the SCAR lecture. The SCATS Chair, S Chown sent his regrets for being unable to attend. SCAR VPs R Ravindra and S Marensi were also present.

2. SCAR Input

SCAR provided four Working Papers and seven Information Papers:

Working Papers (WP)

- WP002: Biological prospecting in the Antarctic region: a conservative overview of current research
- WP003: Biodiversity-based Evaluation of the Environmental Domains Analysis
- WP004: Preliminary Results from the International Polar Year Programme: Aliens in Antarctica
- WP006: Current knowledge for reducing risks posed by terrestrial non-native species: towards an evidence-based approach

Information Papers (IP)

- IP003: The SCAR Lecture - Psychrophiles: a challenge for life
- IP010: Annual Report for 2009 of SCAR to the International Council for Science (ICSU)
- IP028: The Association of Polar Early Career Scientists (APECS): Shaping the Future of Polar Research
- IP046: Antarctic Climate Change and the Environment – An Update
- IP047: Census of Antarctic Marine Life (CAML)
- IP050: The Southern Ocean Observing System (SOOS)
- IP066: SCAR Data and Information Strategy (DIMS)

The papers are available from the SCAR web site:

(<http://www.scar.org/treaty/atcmxxxiii/>)

3. Committee on Environmental Protection XIII

The full report of the CEP meeting is available from <http://www.ats.aq>. In this report only those items directly relevant to SCAR are presented.

3.1 International Polar Year (CEP agenda item 5)

The Executive Director, Mike Sparrow, presented the Information Paper on the Southern Ocean Observing System (SOOS) (IP46). He clarified that the draft SOOS plan will be circulated to interested parties, observers and experts for comment before being finalised.

SCAR agreed to submit the full Southern Ocean Observing System plan at the next CEP meeting.

SCAR voiced support for a Working Paper presented by Uruguay (WP11 – Forwarding of Hydrographic Data Collected during IPY). SCAR noted that it has several Recommendations for its members to do the same in terms of collection and submission of hydrographic and bathymetric data. SCAR agreed with the comments that several Parties made that this needs to be expanded to include data outside of the IPY. Resolution 2 (2010) was adopted in support of this (see Appendix 3). The discussion was continued in the ATCM (see Section 4.4).

3.2 Draft Comprehensive Environmental Evaluations and other Environmental Impact Assessment matters (CEP agenda item 6)

The SCAR President responded to a question about the SCAR Code of Conduct (CoC) for Subglacial lakes. He commented that environmental stewardship has always been a high priority for SCAR. Within SCAR there is a history of producing CoCs by SCAR Members for SCAR Members. They are provided as guidelines only, though SCAR strongly encourages its members to follow these guidelines in their activities as best practice. The CoC for subglacial lakes has been reviewed by SCAR Members and National Operators through COMNAP and will be put forward for consideration by the SCAR Delegates in August 2010. It was also noted that subglacial aquatic environments are considered to be those regions beneath thick ice sheets where the physical conditions allow for liquid water to exist and that this usually entails an overburden of several kilometres of ice. A more generalized usage of this term has led to description of any sub-ice environments as subglacial, but SCAR supports the more narrowly defined use of the term.

SCAR agreed to submit the Code of Conduct for Subglacial Aquatic Environments (if approved).

3.3 Protected Area Management Plans (CEP agenda 7a)

The SCAR Executive Director attended a lunchtime meeting of the Intercessional Contact Group on Management Plans, noting that SCAR has agreed to form an Expert Group on Protected Area Management Plans. There will be a meeting of the ATCM group immediately prior to the ATCM XXXIV (to be held in Buenos Aires) in Montevideo and SCAR will select an attendee.

3.4 Other Annex V matters (CEP agenda item 7f)

The SCAR Working Paper on the Biodiversity-based Evaluation of the Environmental Domains Analysis (WP 3) was presented by the Executive Director. This was seen as a major step forward in adopting a more regularized approach to selection of Antarctic Specially Protected Areas (ASPAs) and conservation in general. SCAR will work with New Zealand and other interested Parties on how to advance this agenda item. The CEP recognized the lack of baseline biodiversity information as critical and called on all Parties to address this deficit in knowledge.

3.5 Quarantine and non-native species (CEP agenda item 8a)

The Executive Director presented the Working Papers ‘Preliminary Results from the International Polar Year Programme: Aliens in Antarctica’ (WP4) and ‘Current knowledge for reducing risks posed by terrestrial non-native species: towards an evidence-based approach’ (WP6). SCAR reminded the Parties of the Oslo Aliens in Antarctica session. Yves Frenot (the incoming CEP chair) will report to the next CEP on the outcomes of this session. COMNAP reminded the Parties of the joint COMNAP/SCAR workshop on Aliens being held in Buenos Aires prior to the SCAR Open Science Conference.

The Executive Director indicated that SCAR would continue to participate in the ICG for Non-native Species. SCAR supported the work carried out by the UK and others on Non-native species (for example, WP14 ‘Intra-regional transfer of species in Terrestrial Antarctica’).

The Introduction of the non-native species papers were highly praised and assists in setting the stage for future directions on this issue by the Parties. There is a plan to develop a guide of best practices and it will utilize information provided by SCAR and the IPY Aliens project.

3.6 Other Annex II matters (CEP agenda item 8c)

The CEP noted SCAR’s Information Paper on the Census of Antarctic Marine Life (CAML) (IP47).

3.7 Climate Change (CEP Agenda item 9a)

The SCAR Executive Director gave a special lunch-time presentation to the Delegates on the Antarctic Climate Change and the Environment Report (ACCE) and the ACCE Update Information Paper (IP46).

Several Parties requested that the presentation be made available on the SCAR website, and SCAR agreed to do so.

SCAR received praise from the Delegates for the ACCE report, which was seen as an essential contribution to the Antarctic Treaty Meeting of Experts held on the 6-9th of April (SCAR representatives attended – see http://www.ats.aq/devAS/ats_meetings_meeting.aspx?lang=e&id=75). The discussion on Climate Change matters was continued during the ATCM (see Section 4.5).

SCAR agreed to continue to provide annual updates to the ACCE report.

3.8 Other Environmental Monitoring and Reporting Issues (CEP agenda item 9b)

The CEP noted the Information Paper submitted by SCAR on the SCAR Data and Information Strategy (IP66)

SCAR noted a previous commitment to provide a paper on the SCAR data products of relevance to the work of the CEP.

SCAR agreed to provide a paper on SCAR Products of use to the CEP for the next CEP meeting.

3.9 Other Items

In the margins of the CEP meeting, SCAR held a variety of meetings with partner organizations and Parties. SCAR and CCAMLR discussed areas of future cooperation, in particular with regards to Capacity Building initiatives to lay the groundwork for a possible joint Action Group. During the meeting CCAMLR officially invited SCAR to attend a meeting in South Africa that will include discussion of Marine Protected Areas on the 26th July – Aug 3rd.

Building on the SCAR/COMNAP Action Group meeting held in Baltimore on March the 13th, SCAR and COMNAP held two meetings to discuss Capacity Building issues and how better to coordinate their input to the Antarctic Treaty Meetings.

The SCAR delegation also met with the Local Organising Committee of the SCAR Open Science Conference, Delegates and Business Meetings to discuss progress with the organization of these meetings.

The CEP agreed that Rasik Ravindra would also attend the SCAR Delegates meeting as the official CEP representative. R Ravindra will provide a presentation to the SCAR Delegates on the work of the CEP.

4. Antarctic Treaty Consultative Meeting (ATCM XXXIII)

4.1 SCAR Annual Report 2009 (ATCM agenda item 4)

The SCAR President presented a comprehensive report (IP 10) on SCAR's activities in the inter-sessional period. The President covered topics such as the release of the ACCE report, SCAR's next strategic plan (2011-2016) and changes in the SCAR Secretariat. He noted that the first Martha Muse Prize for Science and Policy in Antarctica was awarded to Dr Steven Chown. He recalled that SCAR's next Open Science Conference would be held in Buenos Aires from the 3-6 August 2010. He noted that Monaco had applied for Associate Membership of SCAR, which will be considered at the SCAR Delegates Meeting.

4.2 The SCAR Lecture

Professor Charles Gerday gave the SCAR Lecture on 'Psychrophiles: a challenge for life'. SCAR has made the slides available on the SCAR website. Dr. Gerday's lecture was well received by Parties and many requested copies of the presentation. It complemented SCAR's paper on Bioprospecting (Section 4.3).

4.3 Bioprospecting (ATCM agenda 14)

The SCAR President presented a report on ‘Biological prospecting in the Antarctic region: a conservative overview of current research’ (WP2). The Parties welcomed the SCAR contribution on bioprospecting. SCAR's survey and literature review revealed the extent of current bioprospecting and the potential for future biotechnology based on Antarctic organisms. Bioprospecting will remain on the ATCM agenda, however no follow-up ICG was formed. SCAR awaits development of the next steps in regard to this agenda item.

4.4 The International Polar Year (ATCM agenda 10)

Uruguay presented its paper on forwarding of hydrographic data. They mentioned that SCAR had emphasized the importance of forwarding hydrographic data, not only for operational but also for scientific purposes. Resolution 2 (2010) was discussed and adopted in support of this (see Appendix 3).

During the discussions, Germany mentioned the importance of the SCAR IBCSO project in terms of bringing together the bathymetric data for mapping purposes in the Southern Ocean region.

4.5 Climate (ATCM agenda 13)

Russia presented Working Paper 60 “current tendencies of climate changes based on data of Russian studies in the Antarctic”. They thanked SCAR for the ACCE report and its update, though suggested several areas where improvements could be made in future updates.

SCAR thanked Russia for its paper, noting that they made several important points in their paper (such as the importance of including more permafrost studies and improved modeling studies). SCAR clarified that the link between the ozone hole and the increase in the winds circulating Antarctica (and therefore isolating the continent from much of the effects of global warming) is well established by several studies, for example Thompson and Solomon 2002 (Science).

With regards to procedures for obtaining input to the ACCE report or future updates, SCAR clarified that the ACCE report was based on peer-reviewed literature and input to the report from other countries was obtained through the SCAR delegates. SCAR is currently discussing how to proceed with regards to a possible future major update (Russia's suggestion was for the next update to be in 10 years).

SCAR emphasized that they would look forward to working with Russia and other Parties on future updates to the ACCE.

Argentina raised the point (also raised by Russia) about the inclusion of peer-reviewed papers not written in English. SCAR iterated that it would be useful to have such information available for future updates.

Sweden raised points about how best to disseminate information with regards to the ACCE report and how to give it a higher profile. New Zealand and Sweden (with input from SCAR) drafted a Resolution (Resolution 4 – see Appendix 1) as well as a Decision (Decision 5 – see Appendix 2) to send letters to UNFCCC, IPCC, WMO and IMO on the importance of the ACCE report.

With regards to IP46 (ACCE Update) SCAR noted that regular updates to the ACCE report will be provided. SCAR actively seeks wide input from SCAR Members and all other interested parties.

The SCAR Executive Director presented IP50 on the SOOS plan. The SOOS presents a community view of the need for, relevance of and feasibility of a sustained observing system in the Southern Ocean which has direct relevance to both climate and ecosystem studies. The SOOS plan is currently being finalized. The plan will be made available for comment by interested parties before a final version of the plan is adopted. SCAR has agreed to provide the final plan for the next ATCM meeting.

There was some discussion as to whether Ocean Acidification should be a separate topic in future meetings.

4.5 Education issues (ATCM agenda item 15)

The SCAR Executive Director showed the new APECS Polar Brochure (co-sponsored by SCAR, IASC and others) and presented the paper: “The Association of Polar Early Career Scientists (APECS): Shaping the Future of Polar Research” (IP28). The Executive Director encouraged Parties to interact with this group. He noted that APECS has Memoranda of Understanding with both SCAR and our northern counterparts IASC (International Arctic Science Committee).

4.6 Antarctic Fuel Spills (ATCM agenda item 9)

During the discussion on Antarctic fuel spills the SCAR Executive Director reminded Parties that SCAR has an Action Group of oceanographers, ecologists and other specialists to respond to requests from the Antarctic Treaty Secretariat and/or Antarctic Treaty Parties for assistance or advice. The UK and others welcomed this reminder.

4.7 Other matters

During discussions in the Legal and Institutional group, SCAR and COMNAP were asked to respond to text in a draft Resolution that required SCAR/COMNAP to “...submit a report detailing the scientific and technical issues relating to measures aiming to repair or remediate damaged or destroyed components of the environment...”. The COMNAP Executive Secretary and SCAR Executive Director officially declined the request, citing that the text did not follow the previous paragraphs it referred to from ATCM 31 and that more defined scientific questions were needed in order for a proper response. It was agreed that the resolution would be reworded and the request first be made to the CEP. SCAR indicated that it would be receptive to providing scientific advice on these difficult issues when they are better defined by the Parties and the CEP has considered the issues involved. Natural resource damage assessment and the efficacy of remediation methods will involve expertise beyond the usual remit of SCAR and as such will take careful planning and the participation by other expert advisers to fully respond.

4.8 Next CEP/ATCM

The next CEP/ATCM will be held in Buenos Aires, Argentina, June 20 to July 1 2011. It was also noted that from 2012 the meetings would be shortened from 2 weeks to 8 days.

Appendix 1: Resolution 4 (2010)

SCAR Antarctic Climate Change and the Environment Report

The Representatives,

Recognising that the Antarctic region offers a unique environment for the study of climate change;

Recalling the Washington Ministerial Declaration on the fiftieth anniversary of the signing of the Antarctic Treaty, in which Ministers from all Antarctic Treaty Consultative Parties noted their concern over the implications of global environmental change, in particular climate change, for the Antarctic environment and dependent and associated ecosystems and confirmed their intention to work together to better understand changes to the Earth's climate and to actively seek ways to address the effects of climate and environmental change on the Antarctic environment and dependent and associated ecosystems;

Welcoming the report on Antarctic Climate Change and the Environment (ACCE) by the Scientific Committee on Antarctic Research (SCAR) as a first step in compiling a comprehensive assessment of scientific information on the climate system in the Antarctic region;

Concerned by the findings of the ACCE report that effects of climate change are already occurring in the Antarctic region;

Recommend that their Governments:

- 1) forward copies of the SCAR ACCE report to their respective departments and agencies engaged in climate change negotiations;
- 2) encourage dissemination of the findings of the SCAR ACCE report and of ongoing Antarctic climate change research to the general public and the media;
- 3) forward copies of the SCAR ACCE report to their national Antarctic science and research bodies, and encourage them to consider fully the findings and recommendations from the report; and
- 4) welcome regular updates by SCAR on Antarctic climate change and its implications.

Appendix 2: Decision 5 (2010)

Letters to UNFCCC, IPCC, WMO and IMO on the SCAR ACCE Report

The Representatives,

Recognising the role of the Antarctic region in global climate processes;

Considering the relevance of SCAR's Antarctic Climate Change and the Environment (ACCE) Report (2009) for the work of other international bodies involved in global climate change science;

Decide:

to ask the Chair of the ATCM to send the attached letter forwarding the SCAR Antarctic Climate Change and the Environment Report to:

- the Executive Secretary of the United Nations Framework Convention on Climate Change (UNFCCC) for conveyance to the President of the Conference of the Parties to the UNFCCC;
- the Executive Secretary of the Intergovernmental Panel on Climate Change Secretariat (IPCC);
- the Secretary General of the World Meteorological Office (WMO); and
- the Secretary General of the International Maritime Organization (IMO).

Appendix 3: Resolution 2 (2010)

The contribution of the IPY to hydrographic knowledge of waters of the Antarctic Treaty area

The Representatives,

Considering the appeal made by the Hydrographic Commission on Antarctica (HCA) of the International Hydrographic Organization (IHO) with respect to improving collection of hydrographic data and charting in the Antarctic region;

Noting the increase in scientific expeditions in the Southern Ocean in the Antarctic Treaty area, as part of the International Polar Year (IPY) 2007 – 2008;

Noting also other relevant charting surveys of the Southern Ocean in the Antarctic Treaty area;

Considering that vessels of the National Antarctic Programmes and others linked to the IPY are being urged to compile, whenever possible, hydrographic and bathymetric data on all Antarctic voyages;

Acknowledging that access to and management of observations and data collected during the IPY is fundamental to ensuring the legacy of the IPY;

Taking into account the fact that new forms of data forwarding have been developed since the publication of Resolution 5 (2008);

Taking into account also Recommendation No. 4 of the Antarctic Treaty Meeting of Experts on Management of Ship-borne Tourism in the Antarctic Treaty Area, which was held in Wellington, New Zealand on 9-11 December 2009, to continue contributing to the information about hydrographic survey and cartography;

Recommend that their Governments:

- 1) Support and promote contacts and liaison between National Antarctic Programmes and national hydrographic offices;
- 2) Endeavour to ensure that hydrographic and bathymetric data collected by the National Antarctic Programmes' ships and others linked with their activity in the Antarctic, be forwarded by the National Antarctic Programmes, or by other means, to the national hydrographic services using the IHO Collection and Rendering of Hydrographic Data Form;
- 3) Encourage National Antarctic Programmes to work with their national hydrographic offices to assist the HCA in producing a full inventory of hydrographic data so that they can be considered for use in the production of international nautical charts under the international charting scheme coordinated by the HCA;
- 4) Promote liaison and cooperation between national hydrographic offices and the HCA to ensure the legacy of the IPY in the field of hydrography, thereby contributing to the improvement of nautical charts and the safety of navigation in waters of the Antarctic Treaty area, which in turn will help safeguard life at sea, protect the Antarctic environment, and further support scientific activities; and

- 5) Continue contributing to the report of hydrographic and bathymetric data, using appropriate instruments of their hydrographic services or offices and the IHO Collection and Rendering of Hydrographic Data Form to ensure a timely production of Antarctic nautical charts.