Report by the CEP Observer to the XXXVII SCAR Delegates’ Meeting

(Report by France)

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Summary

The XXXVII Meeting of Delegates of the Scientific Committee on Antarctic Research (SCAR) was held 5-7 September 2022, in a hybrid format; in presential in Goa, India, a visio-hub in Leuven, Belgium attended by three Parties and the rest of the attendees online. This paper presents some aspects of the meeting that may be of relevance to the work of the CEP.

Introduction

At CEP XXIV, the Committee nominated the CEP Representative from France to act as the CEP Observer at the XXXVII SCAR Delegates Meeting held 5-7 September 2022, in a hybrid format; in presential in Goa, India, a visio-hub in Leuven, Belgium attended by three Parties and the rest of the attendees online. The SCAR Delegates Meeting was attended by Delegates from 46 members countries and 9 Union Members, and representatives of the SCAR Subsidiary Groups. The documents presented and discussed during the meeting and the final meeting report are available from the SCAR website (see: <https://www.scar.org/general-scar-news/xxxvii-delegates-report/>).

The SCAR Delegates Meeting was chaired by its President, Yeadong Kim.

During this meeting, no new countries joined SCAR as Full Members, but one new country joined as Associate Member (Luxembourg). The SCAR has now 46 member countries. Three scenarios for an increase in the registration costs of Parties to SCAR were proposed to the Delegates to account for the inflation that weighs on SCAR budget.

Marcelo Leppe (Chile) and Burcu Ozsoy (Türkiye) were elected new vice-presidents for Administration and Capacity Building, respectively for 4 years. They will accompany Jefferson Cardia Simões (Brazil) and Deneb Karentz (USA) who currently act as vice-presidents for Finance and Science, respectively.

Prof Steven L Chown was awarded Honorary SCAR membership in recognition of the numerous roles he held in SCAR such as being its President from 2016-2021 and representing SCAR at the Antarctic Treaty Consultative Meetings, providing scientific advice on a broad range of environmental and science policy matters.

Aspects of the meeting of particular relevance to the CEP

**New Scientific Research Programmes**

SCAR currently houses three Research Programmes that have been running since 2020. The potential programmes are all directed towards overarching issues and areas of concern for policy and management, and the needs of the CEP and the Antarctic Treaty system in general has been highlighted as a rational for these programmes:

* Integrated Conservation Planning for Antarctica and the Southern Ocean (**Ant-ICON**) which will aim to answer fundamental science questions (as identified by the SCAR Horizon Scan), relating to the conservation and management of Antarctica and the Southern Ocean and focus on research to drive and inform international decision-making and policy change. The SRP will focus on four research themes, broadly covering: i) integrated forecasting of future change to support conservation planning; ii) environmental sustainability of human activities in Antarctica; iii) Antarctic conservation in a global context; and iv) socio-ecological approaches to conservation planning. The Chief Officers of Ant-ICON are Mercedes Santos (Argentina) and Daniela Liggett (New Zealand).
* Near-term Variability and Prediction of the Antarctic Climate System (**AntClimnow**) which will aim to investigate prediction of near-term conditions in the Antarctic climate system on timescales of years to multiple decades. These time scales are highly relevant across multiple disciplines and to a range of key stakeholders whilst aligning strongly with scientific priorities identified as part of the SCAR Horizon Scan. The joint Chief Officers of AntClimnow are Tom Bracegirdle (UK) and Ilana Wainer (Brazil).
* INStabilities & Thresholds in ANTarctica (**INSTANT**) which will aim to quantify the Antarctic ice sheet contribution to past and future global sea-level change, from improved understanding of climate, ocean and solid Earth interactions and feedbacks with the ice, so that decision-makers can better anticipate and assess the risk to manage and adapt to sea-level rise and evaluate mitigation pathways. The joint Chief Officers of INSTANT are Tim Naish (New Zealand) and Florence Colleoni (Italy).

A new Proposal Planning Group (PPG) for a new Scientific Research Programme (SRP) has been presented: Antarctic Geospace and ATmosphere reseArch (AGATA). The proposed SRP aims at understanding the coupling of atmospheric layers in polar regions and its response to increased geomagnetic activity, using radio signals from the GNSS or other satellites, and from ground-based radars. The tentative Chief Officers are Lucilla Alfonsi (Italy), Nicolas Bergeot (Belgium).

New programmes will be considered at the next Delegates meeting. The meeting discussed potential programmes which will work to develop full proposals to the 2024 Delegates meeting.

**Scientific Groups**

The current scientific groups reported progress to the meeting and highlighted coming efforts worth noting the establishment of several new Action and Expert groups:

* Geosciences Group (GSG: <https://www.scar.org/science/gsg/home/>):
  + The secretary of the Group has changed with Marcelo Leppe (Chile) stepping down and being replaced by Laura de Santis (Italy).
  + The Geological Heritage and Geoconservation Action Group has completed its term and is now closed. It was endorsed to transition to an Expert Group (GEOCON: Geological Heritage and Geoconservation).
  + Two new Action Groups were endorsed: **ICEPRO** “An International Collaboration Effort for Improving Paleoclimate Research in the Southern Ocean”, which aims to improve our understanding of past ocean-ice-earth interactions by linking modern observations and paleo-records by facilitating transnational collaborations on(paleo)environmental studies in the Southern Ocean; and **RINGS** “Ice sheet margin” will clarify the current knowledge gaps at the ice-sheet margin and assess the impacts of new data filling these knowledge gaps, and will develop a set of protocols to systematically collect, analyze, and share comprehensive airborne geophysical data).
  + The Geosciences Group reiterate the need to collect bathymetric and other geophysical data on the way to and from Antarctica to share the data with all nations to improve the Southern Ocean bathymetry map and geophysical dataset.
* Life Sciences Group (LSG: <https://www.scar.org/science/lsg/home/>):
  + Following the departure of Chief Officer Yan Ropert-Coudert (France) and deputy Chief Officer Marc Shepanek (USA), a new leadership team was elected during the business meeting and endorsed by the Delegates: Ian McDonald (Chief Officer - New Zealand), Natalie Pattyn (Deputy CO - Belgium/JEGHBM) and Byron Adams (Secretary - USA).
  + A number of groups have obtained extensions from the Delegates: Extension for 6 years of the expert group **EG-ABI** “Antarctic Biodiversity Informatics”, which aims to foster the application and development of computationally-driven biodiversity science and information processing in the SCAR community; Extension for 2 years of action group **PLASTICS** “Plastic in Polar Environments”, which examine the presence, origin and biological effects of macro-, micro- and nanoplastics, quantify the scale of the problem and propose solutions for minimising the environmental risk and impacts on Polar ecosystems; Extension for 1 year of action group **ImPACT** “Input pathways of persistent organic pollutants to Antarctica”, which aims to serve both the Global Monitoring Plan of the Stockholm Convention on Persistent Organic Pollutants, as well as the Madrid Protocol.
  + SKAG aims to be the prime conduit between CCAMLR and the wider krill science community to provide a forum to set research directions and promote collaboration to improve understanding of krill biology and ecology, and to assist in providing critical scientific information that matters the krill fishery management. The Delegates endorsed its request to become an expert group (now referred to as SKEG).
* Physical Sciences Group (PSG: (<https://www.scar.org/science/psg/home/>):
  + David Bromwich (CO, USA) and Steven Colwell (secretary, UK) have completed their terms of office and are no longer eligible for re-election. New CO is Tajiki Nakamura (Japan) and new secretary is Wojciech Miloch (Norway). Adriana Gulisano (Deputy CO, Argentina) stays in office.
  + Covid-19 substantially and negatively impacted the activities of all Action Groups (AGs) and Expert Groups (EGs) in 2020-2022. Action groups typically have a lifetime to 2-4 year and can be renewed once. The impact of the pandemic has meant that fieldwork could not be carried out but also the switch to remote working has meant that people have not had much time to commit to the work of the action groups due to other commitments. Consequently all action groups were extended for at least 2 years, RINGS, AntArchitecture and EOAG being extended for 4 years.

SCAR is furthermore undertaking a review of the current structure of SCAR and its subsidiary bodies, led initially by the Vice-President for Administration, Gary Wilson. The development of new SCAR groups and activities will be subject to the outcome of this review, which may alter aspects of SCAR’s rules for subsidiary bodies. Discussions are still on-going.

Please note that the presentations from the 10th SCAR Open Science Conference earlier this year are now available from the SCAR YouTube channel. You can see an overview of all videos [here](https://www.youtube.com/channel/UCBsAOdMA0ClC9jcFCTCa1zQ/videos).

**SCAR Standing Committee on the Antarctic Treaty System (SC-ATS)**

Dr. Susie Grants reported on the progress and plans of the SC-ATS, including interactions with the Treaty and the CEP. Relevant achievements and plans to note are:

* Contribution to SCAR, especially to the updates on current understanding and future projections of climate change, including the major Antarctic Climate Change and the Environment Decadal Synopsis report; advice on special protection and conservation status of the emperor penguin, establishment of an Environmental Code of Conduct for Geosciences Field Research Activities, development of closer links between SC-ATS and the Antarctic Environments Portal, and a mini- Symposium jointly convened by Ant-ICON and SC-ATS on “How SCAR informs and guides Antarctic policy and conservation” during the SCAR Open Science Conference.

*Planned deliveries and commitments relevant to the CEP*

* SC-ATS will engage with Ant-ICON, AntClimnow and INSTANT on the strategic development of inputs to the Antarctic Treaty System, given the focus of these Scientific Research Programs on policy-relevant science, and high- priority topics for the Antarctic Treaty System.
* SC-ATS will further develop a Fellowship to allow the participation of early-career researchers in policy meetings (ATCM and CCAMLR), in collaboration with Ant-ICON and other SCAR groups as appropriate
* Forthcoming Information and advice specifically requested by the ATCM and CEP on i) climate change, ii) non-native species, iii) tourism, iv) designation of the emperor penguin as a Specially Protected Species, v) Environmental Impact Assessment, v) chemical contamination, vi) Important Bird Areas, vii) seismic activities.
* Invitation to contribute a lecture on scientific issues relevant to ATCM XLV (2023).

SCAR Delegates approved the further development of the Antarctic Environments Portal and note that the Antarctic Environments Portal will require additional funds in 2023 and the subsequent years to account for the costs of the editor’s salary, as well as for the maintenance of the website and the translations of articles into the four languages of the Treaty.

Next meeting

Next SCAR Delegates’ Meetings will all be in a hybrid format, the next one being held in Pucón, Chile, in 2024.