International Science Council

ISSN 1998-0337



SCAR Executive Committee (EXCOM) Meeting Plovdiv, Bulgaria, 30-31 July 2019



Published by the

SCIENTIFIC COMMITTEE ON ANTARCTIC RESEARCH

at the

Scott Polar Research Institute, Cambridge, United Kingdom

Table of Contents

1. Welcome and goals2
2. Executive Director's (ED) report
3. Arrangements for the meeting
4. Scientific Research Programme (SRP) Rapid Reports 3 Antarctic Climate Change in the 21st Century (AntClim21) 3 State of the Antarctic Ecosystem (Ant-Eco) 3
Antarctic Thresholds – Ecosystem Resilience and Adaptation (AnT-ERA)
Solid Earth Response and influence on Cryospheric Evolution (SERCE)
5. Programme Planning Group (PPG) Progress 4 Integrated Science to Inform Antarctic and Southern Ocean Conservation (Ant-ICON) 4 Near-term Variability and Prediction of the Antarctic Climate System (AntClimNow) 5 Antarctic Change and Contribution to Sea Level (ACCSL) 5 General PPG Discussion and outcomes of PPG Workshop 5
6. Hobart 2020 Overview, Goals and Sustainability5
7. Science Group Rapid Reports 6 Geosciences Group 6 Life Sciences 7 Physical Sciences Group 7 General SG discussion 7
8. Standing Committee Rapid Reports 8 Standing Committee on Humanities and Social Sciences (SC-HASS) 8 Standing Committee on Antarctic Data Management (SCADM) 8 Standing Committee on Antarctic Geographic Information (SCAGI) 9 General SC discussion 9
9. Astronomy and Astrophysics from Antarctica (AAA) Expert Group Report9
10. Standing Committee on the Antarctic Treaty System (SCATS) / SCAR and Policy advice. 9 Engagement with the SCAR community. 10 Workload 10 CEP workshop 10 Climate Change Response Working Group (CCRWG) 11 Antarctic Climate Change and the Environment (ACCE) Group 11 Antarctic Environments Portal 11 SCAR/IAATO collaboration on a Systematic Conservation Plan (SCP) 11
11. SCAR Structural review
12. Capacity Building Education and Training (CBET) Report12
13. SCAR Finances
14. Secretariat13
15. Any other business/ Close of Meeting
Appendix: List of Acronyms

SCAR Executive Committee Meeting

Plovdiv, Bulgaria 30th -31st July 2019

Attendees:

Steven Chown (President), Jefferson Simões, Gary Wilson, Catherine Ritz, M. Ravichandran (Vice-Presidents), Jesús Galindo (Chief Officer, GeoSciences), Yan Ropert-Coudert (Chief Officer, Life Sciences), Anton Van de Putte (Chief Officer, SCADM), Daniela Liggett (Joint Chief Officer, SC-HASS), Aleks Terauds (Chief Officer, SCATS; Joint Chief Officer, Ant-ICON PPG), Tom Bracegirdle (Chief Officer, AntClim21; Joint Chief Officer, Ant-ICON PPG), Pippa Whitehouse (Joint Chief Officer, SERCE), Julian Gutt (Chief Officer, AnT-ERA), Tim Naish (Joint Chief Officer, PAIS; Chief Officer, AIDSL PPG), Tony Travouillon (Chief Officer, AAA), Mercedes Santos (Joint Chief Officer, Ant-ICON PPG), Chandrika Nath (SCAR Executive Director), Eoghan Griffin (SCAR Executive Officer),

Apologies:

David Bromwich (Chief Officer, Physical Sciences; Joint Chief Officer, AntClimNOW PPG), Adrian Fox and Jean-Yves Pirlot (Joint Chief Officers, SCAGI), Huw Griffiths and Jan Strugnell (Joint Chief Officers, ANTECO), Matt King (Joint Chief Officer, SERCE), Laura De Santis (Joint Chief Officer, PAIS)

Meeting papers are held in the SCAR Library and may be accessed at: <u>https://www.scar.org/library/scar-meeting-papers/scar-excom-2019-plovdiv-bulgaria/</u>

1. Welcome and goals

The SCAR President, Steven Chown, welcomed the attendees and opened the meeting. Apologies were noted from those unable to attend and their contributions were noted.

2. Executive Director's (ED) report

The Executive Director, Dr Chandrika Nath, reported on recent activities and progress. She outlined that the ED's role is to support SCAR in delivering excellence in science and scientific advice, managing the Secretariat, and supporting and being part of the Executive Committee (ExCom). Some core themes for future work include sustainability, resilience and widening participation.

The meeting noted the importance of the Secretariat in ensuring there was institutional memory. Internal processes within SCAR are complicated and the Secretariat is working to make internal guidance documents, using the website as a core repository for guidance. ExCom, through the President and Vice President for Administration (VP Admin), are working on expectations and guidelines for Chief Officers (COs), with the aim of helping new members of the SCAR community to get involved if they are interested in volunteering for SCAR leadership roles but don't know how to start, or what is involved.

Note: The ED was thanked for great work over the last year.

3. Arrangements for the meeting

The timetable and agenda for the meeting were adopted.

4. Scientific Research Programme (SRP) Rapid Reports

Antarctic Climate Change in the 21st Century (AntClim21)

The meeting noted the report from the AntClim21 SRP (<u>Paper 3</u>), and Tom Bracegirdle presented an overview of AntClim21 activities and achievements, including collaborations, workshops, papers, and plans for final products.

The question was raised of what form written documents on final outcomes would take and whether would this be individual or coordinated between SRPs.

Response from Excom: SRPs will collaborate on outreach and communication together to reinforce the message. Community effort will show the 'task force' that SCAR provides, therefore having more impact and helping synthesise the core messages.

State of the Antarctic Ecosystem (Ant-Eco)

The meeting noted the report from the Ant-Eco SRP (<u>Paper 4</u>). Chief Officers Jan Strugnell and Huw Griffiths were unable to attend so Yan Ropert-Coudert presented an overview of Ant-Eco activities on their behalf, which included workshops, meetings, contributions to the Antarctic Environments Portal and planned finalisation activities.

Antarctic Thresholds – Ecosystem Resilience and Adaptation (AnT-ERA)

The meeting noted the report from the AnT-ERA SRP (<u>Paper 5</u>) and Julian Gutt presented an overview of AnT-ERA activities, including courses, workshops, papers and contributions to other initiatives.

Past Antarctic Ice Sheet Dynamics (PAIS)

The meeting noted the report from the PAIS SRP (<u>Paper 6</u>) and Tim Naish presented an overview of PAIS activities, including meetings, planned publications and final outputs.

PAIS has been cooperating with a paleo-climate record group, PRAMSO (Paleoclimate Records from the Antarctic Margin and Southern Ocean). The group coordinates geological drilling around the Southern Ocean and has been very successful, including at least four expeditions drilling around the margins of West Antarctica. PAIS would like SCAR to host the PRAMSO group. It was agreed that the PRAMSO group is a valuable resource, generating data for big programmes and its work will support ACCSL. It should sit as an Action Group with its own budget line.

Decision: The PRAMSO Group was approved by ExCom as an Action Group under Physical Sciences.

Solid Earth Response and influence on Cryospheric Evolution (SERCE)

The meeting noted the report from the SERCE SRP (<u>Paper 7</u>) and Pippa Whitehouse presented an overview of SERCE activities, including a training school, workshops, conference sessions and publications.

A cross-disciplinary geothermal heat flux group came out of the 2018 OSC and met at XIII ISAES. The group is planning a white paper that will feed into developing the next research programmes, particularly Antarctic Change and Contribution to Sea Level (ACCSL, formerly known as AIDSL - Antarctic Ice Dynamics and Sea Level Change).

SERCE asked to carry over funds to September 2020 in order to co-host a workshop with the PALSEA group on solid earth deformation and ice sheet evolution.

Decision: SERCE can use their budget to co-sponsor a meeting in September after the official end of the SRP.

General SRP discussion

A discussion on cross-cutting issues for the existing SRPs followed. For the final products, written material should be brief, in plain language and focused on outputs and achievements, particularly benefits to and training of ECRs. There will be a poster display on the SRPs throughout the 2020 OSC, Delegates Meeting and COMNAP AGM.

Action: Secretariat to produce a template for SRP final reports. Should include:

- What were the outcomes?
- What were the benefits to the community?
- What were the benefits to the broader decision-making community?

Action: CBET Committee to assist with identification of opportunities in Education and Outreach with respect to final products, to ensure no excessive additional burden is placed on SRP leadership.

Groups have accumulated large amounts of information, some of which will not appear in the final reports but should be kept – some on the SCAR website (although each group's section will be condensed into a single page) and some could be archived offline.

Action: SC-HASS to advise on best practice on what happens to information / data / resources that groups or SRPs don't include in their final reports.

Decision: Resources will be found to support SRPs making TED-style presentations at Hobart, including arranging practice sessions.

5. Programme Planning Group (PPG) Progress

Integrated Science to Inform Antarctic and Southern Ocean Conservation (Ant-ICON)

The meeting noted the report from the Ant-ICON PPG (<u>Paper 10</u>) and Aleks Terauds presented an overview of Ant-ICON and its activities, including its aims, broad membership, multidisciplinary approach and research focus. The Geological Heritage and Geoconservation Action Group is important to Ant-ICON so links with the action group are part of the process.

Near-term Variability and Prediction of the Antarctic Climate System (AntClimNow)

The meeting noted the report from the AntClimNow PPG (<u>Paper 9</u>) and Tom Bracegirdle presented an overview of AntClimNow, including its aims and objectives, cross-disciplinary expertise and potential connections with other initiatives.

AntClimNow could link with other initiatives in activities such as continuing the legacy datasets from the Year of Polar Prediction (YoPP); considering how extreme events in the Southern Hemisphere are connected to Antarctica; and joining up with the special observing period planned for the Southern Ocean and Antarctica, potentially asking for data collection.

Action: AntClimNow to provide SCADM with a list of data that will be collected through their work and relevant projects like the Year of Polar Prediction.

Antarctic Change and Contribution to Sea Level (ACCSL)

The meeting noted the report from the ACCSL PPG (<u>Paper 8</u>) (the group was formerly known as AIDSL, and the name subsequently changed to INSTANT – INStabilities & Thresholds in ANTarctica). Tim Naish presented an overview of ACCSL activities, including its aims, focus, broad multidisciplinary approach, and potential partnerships and co-operations.

General PPG Discussion and outcomes of PPG Workshop

The PPG workshop discussion revealed opportunities for clear synergies between the PPGs – they address their own areas but are tied across each other very well too.

General Point on new PPGs: They will follow the standard timetable so that new programmes can be proposed at Hobart in 2020 and then be approved in India in 2022. Fundraising to support extra SRPs is a duty for ExCom, the intention being to continue funding them at the same rate as for the initial SRPs so additional funding could be targeted.

Action: Secretariat to inform all Group leaders that further PPGs can be proposed at the Hobart Delegates meeting in 2020, but that relevant SG Chief Officers and ExCom need to be informed of plans well in advance.

6. Hobart 2020 Overview, Goals and Sustainability

SCAR Vice President for Science (VP Science), Catherine Ritz, reported on preparations for the SCAR meetings in Hobart in 2020 (Paper 11). The process of finalising the OSC sessions was proceeding well, and details of plenary and mini-symposia topics and speakers were also progressing. TED-style presentations from the finishing SRPs are planned and AAA, which finished last year, would be included.

There were questions and a general discussion.

Action: Secretariat to email the community asking for suggestions of names and institutions for keynote and mini-symposia leads and topics, to be sent directly to the VP Science, copying the ED.

Action: Anyone with experience of or links to people with experience of giving TEDstyle talks to contact VP Science in relation to SRP TED-style talks at Hobart. It was agreed that finding space and time for a short round up session at the end of each OSC day would provide an opportunity to discuss particular topics that had emerged through the day.

Decision: Meeting space will be provided in parallel with the poster sessions at the end of each day to enable people to have spin off meetings if something comes up last minute.

Decision: To provide video reportage on a daily basis, using end of day plenary round-ups to display footage, with ISOC to investigate provision details and GDPR implications.

Data will be given prominence at the OSC, with a permanent space for practical hands-on demonstrations and interactions around databases. There will be a session on emerging technologies, which could include data transmission, and convenors should be encouraged to include topical data in their sessions.

Action: Secretariat to send a message to all group chairs notifying them that SCADM will be available to discuss data management at the OSC.

IASC had asked about having some common sessions but keeping in mind that Hobart will not be another "Polar" meeting. Some sessions lend themselves to involvement from IASC, for example polar climate / global climate. Convenors can work out what is most relevant in their fields, without an explicit link to IASC.

Action: The ED and VP Science to draft an answer to IASC on bi-polar sessions.

There are plans for a mini-symposium jointly with COMNAP on emerging Antarctic conservation challenges, which would cover many topics, not just logistics.

Decision and Action: SCAR President will work with the COMNAP ES on the detail of the joint mini-symposium.

Decision: Communicating the work of SRPs at Hobart – Static display on SRPs to be kept up throughout the OSC. SRPs can provide posters, and include digital elements like videos if enough notice is provided. Language should be kept plain or explanations provided if the use of specific technical language is necessary.

Decision: A series of options on the abstract submission form will allow people the option of submitting speed-talk abstracts as well as main talks.

Decision: Timing of OSC parallel sessions to be 'normal' (i.e. 12-minute presentation, 3-minute discussion, 15-minute discussion at end of session) and keep to a set pattern, allowing people to move between them. 'Speed' sessions to be organised at alternative times, if there is interest from the community.

7. Science Group Rapid Reports

Geosciences Group

The meeting noted the report from the GeoSciences Group (<u>Paper 12</u>) and Jesús Galindo presented an overview of GSG activities, including XIII ISAES in Incheon, Korea, which took place just prior to the ExCom meeting. The activities of the Action Group on Geological Heritage and Geoconservation were underlined, including its draft Code of Conduct on Geosciences Field Research (submitted to the CEP in 2019) and a Methodology for the Identification of Antarctic Geological Heritage.

Succession planning – the current officers could be re-elected in Hobart. They represent different regions and disciplines but gender diversity is a serious issue.

Life Sciences

The meeting noted the report from the Life Sciences Group (<u>Paper 13</u>) and Yan Ropert-Coudert presented an overview of LSG activities, including workshops and meetings of its groups, and cooperation with other organisations.

LSG is considering what happens to groups ending in 2020 (e.g. ISSA and Remote Sensing) and what they want to do next. It was pointed out that Action Groups come to an end by default. If they pose a different question, they could create a new group but there is no natural progression.

LSG leadership will stand down in 2020 and succession planning is underway to increase diversity. The Secretary of the Human Biology and Medicine group (JEGHBM) could take on a role in LSG (Deputy/Secretary).

Physical Sciences Group

The meeting noted the report from the Physical Sciences Group (<u>Paper 14</u>). Chief Officer David Bromwich was unable to attend so Tom Bracegirdle presented an overview of PSG activities on his behalf, including sub-group activity. PSG includes nine Action Groups and eight Expert Groups, and budgets are very stretched. Termination of dormant groups will be recommended to the SCAR Delegates in Hobart 2020.

Action: PS Group to inform ExCom which groups are ending in 2020.

In addition to the next planned SRP AntClimNow, potentially there is another PPG called RESOURCE in preparation for proposal in 2020.

Emphasis should be given to the activities of remote sensing groups such as the Earth Observation and Remote Sensing Action Groups. The Antarctic Treaty System has a strong interest in earth observations and the next SCAR Lecture could be on the increased use of earth observations across the SGs and across all research areas.

Action: SG leaders to get updates from Remote Sensing and Earth Observation groups.

The Chief Officer and Secretary will complete their second terms at Hobart 2020 and must be replaced. Candidates are being sought.

General SG discussion

A general discussion followed on guidance for SG leaders and the underrepresentation of women across the SGs, particularly Geosciences (only six on the list of representatives to GSG).

Action: ExCom, with Secretariat support, to work with National Committees to improve the gender balance in their representatives to the SGs, with the goal of diversifying SG leadership.

Action: SCAR Communications and Information Officer (CIO) to gather testimonials on the benefits of being group leaders.

Decision: Although SCAR's operating language is English and it doesn't have the resources to work in multiple languages, SCAR recognises that there are language barriers to parts of the community understanding how SCAR works. Important, static documents like the Rules of Procedure could be translated into the languages of member countries.

Action: Secretariat, with ExCom support, to identify options for translating static documents, such as the Rules of Procedure, into other languages.

8. Standing Committee Rapid Reports

Standing Committee on Humanities and Social Sciences (SC-HASS)

The meeting noted the report from SC-HASS (<u>Paper 17</u>) and Daniela Liggett presented an overview of SC-HASS activities, including the HASS conference held in April, three newly-established Action Groups, and leadership transition. SC-HASS Terms of Reference are being drafted.

A discussion about SC-HASS followed. The new Action Groups need to be formally approved and should feature on the website. Information from the HASS website is currently being integrated into the SCAR website with assistance from the Secretariat.

Action: Secretariat and SC-HASS leadership to add basic details of SC-HASS Action Groups to the SCAR website.

Comment from ExCom: SCAR depends greatly on the exploration and challenge that HASS brings, as natural science cannot ignore the human aspect. With growing attacks on science and rational behaviour, there is a need for a better understanding of human behaviour for the future of Antarctic science. Some natural science-social science interaction is happening already (for example at the CEP workshop in June). HASS spans a set of work and disciplines almost broader than the other three Science Groups combined. It is worth reflecting on this diverse forum of scholarly activity, especially in relation to the ISC imperative. SCAR is one of the very few bodies that span the full range of disciplines and the ISC is interested to see SCAR being equitable across all research areas. HASS could potentially become a fourth Science Group, and this would be part of the Structural Review proposals to be presented by ExCom to the Delegates at the 2020 meetings in Hobart.

Standing Committee on Antarctic Data Management (SCADM)

The meeting noted the report from SCADM (<u>Paper 15</u>) and Anton Van de Putte presented an overview of SCADM activities, including progress on updating SCAR's Data Policy, concerns over the hosting of the Antarctic Master Directory (AMD), and the work of POLDER, the joint committee of SCADM and the Arctic Data Committee (ADC).

A general discussion followed. Concerns about whether NASA's GCMD (Global Change Master Directory) might stop hosting the AMD were expressed since contributions to the AMD from the community have been encouraged and smaller countries without national data centres are purely using the GCMD.

Action: SCADM to write a clear statement on what the future of data management might hold, including changes to GCMD, and what action, if any, they recommend.

SCADM is working to make access to Antarctic data fair, exchanging meta-data at the national level. It also aims to increase its representation in SCAR Science groups and SRPs.

Decision: The new SCADM leadership was approved.

Note: Thanks were conveyed to the SCADM group for its very important work. There is also a need to have the conversation more broadly with COMNAP.

Standing Committee on Antarctic Geographic Information (SCAGI)

The meeting noted the report from SCAGI (<u>Paper 16</u>), which included an update on the group's June 2019 meeting. Apologies for absence from the SCAGI joint Chief Officers, Adrian Fox and Jean-Yves Pirlot, were noted.

The President also noted that SCAGI have informed the Executive of a forthcoming guidance document relating to place naming and the CGA (Composite Gazetteer of Antarctica). The SCAR President highlighted the need to ensure the Gazetteer and SCAR's involvement in place naming remains apolitical.

Action: To convey thanks to SCAGI for all their hard work. They do a huge amount for the community and serve SCAR very well.

General SC discussion

Decision: Standing Committees do not need to prepare proposals for Hobart regarding the structural review as the report will be presented by ExCom, although Delegates may have questions for specific SCs afterwards.

9. Astronomy and Astrophysics from Antarctica (AAA) Expert Group Rapid Report

The meeting noted the report from AAA (Paper 18) and Tony Travouillon presented an overview of AAA activities, including their 5th workshop held in June 2019, development of a new website, changes in Antarctic astronomy, and issues of gender balance and national participation in the group.

A general discussion followed. It was confirmed that there is a home in AAA for space weather researchers as part of the Geospace community, which covers everything being observed above the earth. The community was advised to explore its reasons for wanting to become a Science Group before it considers asking the Delegates again.

Antarctica is important for astronomy, both in its specific role (neutrino detection specifically needs ice) and in being an essential part of a wider network, where a wide geographical spread helps to make the baseline as long as possible.

Decision: The Astronomy community needs to communicate its needs and SCAR will try to meet those needs, while avoiding excessive expansion from an organisational standpoint.

Decision: AAA will be included in the SRP TED-style talks at Hobart, despite having finished earlier than the other programmes.

Note: Thanks to AAA were expressed, with a request to pass on thanks to the community.

10. Standing Committee on the Antarctic Treaty System (SCATS) / SCAR and Policy advice

The meeting noted the report from SCATS (<u>Paper 19</u>) and Aleks Terauds presented an overview of SCATS activities, including the CEP workshop on systematic conservation planning, participation in CCAMLR and CEP/ATCM meetings, the development of Codes of Conduct for geological activities and the use of animals, and a major update on anthropogenic noise.

This is the final year for the current SCATS CO, who expressed thanks to ExCom for their encouragement to continue to this point. Succession planning is being given serious thought.

Comment: Thanks were expressed for the work of the SCATS CO.

Engagement with the SCAR community

A discussion followed on engagement with the SCAR community. More targeted community input is very good for SCATS and progress is being made slowly.

Comment: At the joint plenary of the SGs during the OSC, it would be useful to have short piece of information to the wider group about SCATS and its role.

Note: SCAR has only one vehicle of communication to the Treaty and wider community, and that is SCATS. Article 10.2 enables SCAR to speak directly to Treaty parties and also act as an advisor to the parties. The top-down element of SCATS is there to ensure we give consistent, authoritative advice to the Treaty, particularly the consultative parties and CEP. It is extremely important to ensure our community talks to the representatives through SCATS. We have to give good advice but also make it clear these are fields that update quickly and could change by the next meeting. SCAR provides advice that allows decisions to be made but has to avoid being an arbitrator in any particular issue, and it is not always obvious when SCAR is being drawn into arbitration.

Decision: It is important to ensure that the SCAR community talks to the Antarctic Treaty System through SCATS, enabling SCAR to provide consistent, authoritative advice to the Treaty.

Workload

The problem of workload was discussed, including the possibility of appointing an ECR intern to assist with foundational work. An intern programme could possibly be run through CBET.

Decision: On the question of a SCATS intern to support foundational work, ExCom will look at wrapping it into the existing CBET budget for Secondment, or finding external funding streams.

Action: ExCom to discuss the creation of a mandatory role in CBET around the intern issue, and look for potential funding options.

CEP workshop

The CEP workshop on systematic conservation planning, held just prior to the Treaty meeting in Prague, looked at area protection for the Antarctic. A number of recommendations came out of the workshop and SCAR now has a strong mandate from Antarctic Treaty parties to continue with this work.

Note: Thanks were expressed to the SCATS CO for organising the workshop and reaching out to the community to make it inclusive.

Note: Thanks were expressed to Alice Oates, the Secretariat's CIO, for her administrative work around managing the workshop website and registration.

Climate Change Response Working Group (CCRWG)

About three years ago, the CCRWG undertook an exercise to map SCAR research to CEP requirements, creating a useful product appreciated by the CEP. It is also useful in terms of understanding the research the CEP is looking for.

Action: SCATS CO to write a brief for PPGs to assist them in considering policy questions from the start of the proposed SRP programmes, following on from SCATS work on mapping CEP goals to SCAR's research priorities.

Antarctic Climate Change and the Environment (ACCE) Group

Research in this field moves too fast to have a major update only every ten years, but the workload is high and the time commitment considerable. There will be a leadership change of the ACCE group next year and volunteers have already come forward, but more members of the community may need to get involved.

It could be beneficial to start a two-yearly review of particular areas, not a comprehensive, exhaustive report. Different areas could be the focus in each review, plus key areas updated each time, beginning with next year's product.

Action: SCAR to aim for a two-yearly update to the ACCE report, starting 2020 as a major update was already planned. ExCom to discuss further with Chief Officers.

Note: If the community advises this cannot be done properly in time for next year, SCATS needs to know and, if necessary, the product could be delivered the following year. The parties appreciate what SCAR is doing now in terms of understanding emerging issues.

Antarctic Environments Portal

SCAR will take over hosting the Portal around the end of the year and decisions need to be made about its format and maintenance. Expected outputs will need to be scaled back due to constraints on time and budget. The long-term plan is for the Parties to support the Portal.

SCAR/IAATO collaboration on a Systematic Conservation Plan (SCP) for the Antarctic Peninsula

SCAR was asked by IAATO to help develop an evidence-based plan for managing sites, with the condition that SCAR must be supported and any products produced must be open to the whole community. A two-year programme started this year, with the research being carried out by Monash University. The end point of the programme is to develop a tool that advises on responding to changing circumstances and supports IAATO's season planning.

11. SCAR Structural review

The VP for Administration (VP Admin), Gary Wilson, introduced a presentation on the community feedback from the Structural Review survey carried out earlier in the year.

Initial analysis revealed the importance of SCAR meetings in terms of providing value to the Antarctic research community. The role of SCAR national committees was discussed and it was suggested to provide a set of recommendations on what their role is and how they could expand their activities (e.g. translating key SCAR

documents into other languages), perhaps using positive case studies to provide guidance on what has worked well in some committees.

Representation within the Science Groups (SGs) was discussed with a view to increasing participation through removing restrictions, both structural and perceived, and amending the internal SCAR rules accordingly. A single national representative would have voting rights at meetings but delegations could be as large as desired and all elements of the Science Group meetings would be open.

It was also suggested that there be a single home for data within SCAR.

Action: Secretariat, with ExCom support, to draft a change to the Rules of Procedure to allow anyone to attend business meetings, instead of allowing just four national representatives. *Note:* there should still be a single voting member.

Action: Structural review to recommend that ExCom, via the VP Admin, has a greater role in overseeing how well SCAR groups are working.

Action: Structural review to recommend that the Rules of Procedure should be modified to make the language more inclusive.

Action: Secretariat to remind National Committees that they need to have a national data manager.

Decision: There is science communication expertise within SC-HASS but it is relevant to the broader community and there should be a pan-SCAR group on this. The appropriate form for this group will be discussed at the 2020 Delegates Meeting.

Decision: To improve Science Group Business Meeting attendance, the business of the three Science Groups should be transacted in plenary for the first half of the day to cover joint matters.

12. Capacity Building Education and Training (CBET) Report

The Vice President for Capacity Building, Education and Training (VP CBET), M. Ravichandran, introduced the CBET activities detailed in the associated paper (Paper 22), including updates on the Fellowship and Visiting Scholar schemes, work on the Polar Resource book, and new ideas for future development.

A general discussion followed with a series of suggestions being made, including linking talks by eminent researchers to topics in the Antarctic Environments Portal and creating webinars for ECRs with the aid of groups. A capacity development programme for policy experience was suggested, funding an early-to-mid career individual to be part of the SCAR delegation to Treaty meetings to learn how the Antarctic Treaty System operates.

Action: SCAR community to be encouraged to send suggestions for future capacity building activities to VP CBET.

The call for SCAR Medal nominations will be made through CBET next year. There is a need for diversity in nominations as awards have been very male so far, which frames perceptions and even nominators are put off by the list of previous winners.

Action: ExCom and the Secretariat to consider potential nominees for SCAR medals, and get the message out that SCAR is actively seeking a diverse range of candidates.

Note: Thanks were expressed to VP CBET and to the CBET Committee for the work they have done and continue to do.

13. SCAR Finances

The Financial Statement for 2018 (<u>Paper 24</u>), and Budgets for 2019 (<u>Paper 25</u>), 2020 (<u>Paper 26</u>) and 2021 (<u>Paper 27</u>) were received and explained.

It is likely that national contributions will need to be increased in 2024 but costs will be kept as low as possible. The topic could be raised in 2022, but this will be for the next ExCom to decide.

The ED has been very successful in renewing the agreement with the Scott Polar Research Institute (SPRI) for hosting the Secretariat, and has secured a longer agreement than previously.

Note: The ED was thanked for negotiating the hosting agreement.

Action: All budgets and financial statements were accepted.

Note: Thanks were expressed to VP Finance and the Executive Officer for their efforts.

14. Secretariat

The ED provided an overview of the activities at the Secretariat (Paper 28).

There has been a major focus on teambuilding and being cohesive as a unit as it is important to work well as a team. This is still a work in progress but much has been achieved.

An internal review / audit was carried out by Marvellous Minds, including discussions with the Secretariat, and the President and VP Finance representing ExCom. The overall audit report was very positive but areas of ongoing work include Continuing Professional Development, the staff appraisal system, staff recognition, and staff health and wellbeing. Work to build on the internal audit will continue.

The new CIO position is half communications, half information, prioritising communications within SCAR and around the SCAR community, although the general public is of interest too (<u>Paper 29</u>). New tasks over the next year will be taking on the AEP and helping with final products for the SRPs.

Over the next year, the OSC will take up much Secretariat resource, as will the Portal. Time will also be given to thinking about environmental sustainability, diversity and inclusion, and fundraising.

Note: Thanks were expressed to all the Secretariat staff for their efforts.

15. Any other business/ Close of Meeting

Action: The Secretariat to inform BEDMAP 3 that they can use the SCAR logo.

The President thanked the group for making their time available to SCAR, and asked them to take back to their organisations an acknowledgement from SCAR that institutions also contribute to individuals' participation in SCAR.

The meeting closed.

Appendix: List of Acronyms

ACCEAntarctic Climate Change and the EnvironmentACCSLAntarctic Change and Contribution to Sea LevelADCArctic Data CommitteeAEPAntarctic Environments PortalAGAction GroupAGIVAAction Group on Intrinsic Values in AntarcticaAGMAnnual General Meeting
ADCArctic Data CommitteeAEPAntarctic Environments PortalAGAction GroupAGIVAAction Group on Intrinsic Values in Antarctica
AEPAntarctic Environments PortalAGAction GroupAGIVAAction Group on Intrinsic Values in Antarctica
AGAction GroupAGIVAAction Group on Intrinsic Values in Antarctica
AGIVA Action Group on Intrinsic Values in Antarctica
•
AGM Annual General Meeting
AGU American Geophysical Union
AIDSL Antarctic Ice Dynamics and Sea Level Change
AMD Antarctic Master Directory
AntClim ²¹ Antarctic Climate Change in the 21st Century
AntClim ^{now} Near-term Variability and Prediction of the Antarctic Climate System
AntEco State of the Antarctic Ecosystem
AnT-ERA Antarctic Thresholds - Ecosystem Resilience and Adaptation
Ant-ICON Integrated Science to Inform Antarctic and Southern Ocean
Conservation (originally named Integrated Conservation Planning for Antarctica and the Southern Ocean)
ANTOS Antarctic Near-shore and Terrestrial Observing System (Expert Group)
APECS Association of Polar Early Career Scientists
AR6 Assessment Report Six (IPCC)
ATCM Antarctic Treaty Consultative Meeting
ATS Antarctic Treaty System / Antarctic Treaty Secretariat
BEDMAP Antarctic Bedrock Mapping
BEPSII Biogeochemical Exchange Processes at the Sea-Ice Interfaces (Action Group)
CBET Capacity Building, Education and Training
CCAMLR Commission for the Conservation of Antarctic Marine Living Resources
CCRWG Climate Change Response Working Group
CEP Committee for Environmental Protection (Antarctic Treaty)
CGA Composite Gazetteer of Antarctica
CIO Communications and Information Officer
CLIVASH2k Climate variability in Antarctica and Southern Hemisphere in the past 2000 years
CMIP Coupled Model Intercomparison Project
CO Chief Officer
CoC Code of Conduct
COMNAP Council of Managers of National Antarctic Programs
ECR Early-career researcher
ED Executive Director
EG Expert Group
EG-ABI Expert Group on Antarctic Biodiversity Informatics
EG-BAMM Expert Group on Birds and Marine Mammals
ES Executive Secretary
ESA European Space Agency

ExCom	Executive Committee
GCMD	NASA's Global Change Master Directory
GDPR	General Data Protection Regulation (European Union)
GeoMap	Geological Mapping Update of Antarctica (Action Group)
GIA	
	glacial isostatic adjustment
GSG	Geosciences Group
HASS	Humanities and Social Sciences
HR	Human Resources
IAATO	International Association of Antarctica Tour Operators
IASC	International Arctic Science Committee
IAU	International Astronomical Union
IceCube	the South Pole Neutrino Observatory
INSTANT	INStabilities and Thresholds in ANTarctica
IPBES	Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services
IPCC	Intergovernmental Panel on Climate Change
ISAES	International Symposium on Antarctic Earth Sciences
ISC	International Science Council
ISMIP6	Ice Sheet Model Intercomparison Project
ISOC	International Scientific Organising Committee
ISSA	Integrated Science for the Sub-Antarctic
IUCN	International Union for Conservation of Nature
IUGG	International Union of Geodesy and Geophysics
JEGHBM	Joint Expert Group on Human Biology and Medicine (with COMNAP)
LIGO	Laser Interferometer Gravitational-wave Observatory
LSG	Life Sciences Group
MEASO	Marine Ecosystem Assessment of the Southern Ocean
NADC	National Antarctic Data Centre
NASA	US National Aeronautics and Space Administration
NGO	Non-Governmental Organisation
OSC	Open Science Conference
PAGES	Past Global Changes
PAIS	Past Antarctic Ice Sheet dynamics
PALSEA	PALeo-constraints on SEA-level rise
PEI	Polar Educators International
POLAR2018	Joint SCAR-IASC Open Science Conference in 2018
POLDER	Polar Data Discovery Enhancement Research
Potal	Antarctic Environments Portal
PPG	Programme Planning Group
PRAMSO	Palaeoclimate Records from the Antarctic Margin and Southern
	Ocean
PSG	Physical Sciences Group
RAATD	Retrospective Analysis of Antarctic Tracking Data
SC	Standing Committee
SCADM	Standing Committee on Antarctic Data Management
SCAGI	Standing Committee on Antarctic Geographic Information
SCAR	Scientific Committee on Antarctic Research
SCATS	Standing Committee on the Antarctic Treaty System

SC-HASS SCP	Standing Committee on Humanities and Social Sciences Systematic Conservation Plan
SERCE	Solid Earth Response and influence on Cryosphere Evolution
SG	Science Group
SKAG	SCAR Krill Action Group
SOOS	Southern Ocean Observing System
SPRI	Scott Polar Research Institute
SRP	Scientific Research Programme
Treaty	The Antarctic Treaty
UK	United Kingdom
VP	Vice President
WCRP	World Climate Research Programme
WMO	World Meteorological Organisation
YOPP	Year of Polar Prediction