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**Report of the XXXVII SCAR Delegates' Meeting**  
**held in Goa, India and online**  
**5-7 September 2022**



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## XXXVII SCAR Delegates' Meeting Report

The XXXVII SCAR Delegates' Meeting was held in Goa, India and online, making it the first Delegates' Meeting to be held in hybrid format. The Directors, Executive Officer, Delegates from 15 members and some observers attended in person (marked \* in the list below). Belgium, France and the UK met at a regional hub in Belgium, supported by SCAR's Project Officer (marked \*\*). All other participants attended individually online.

The meeting took place over three days, with two sessions of three hours on each day. The 6<sup>th</sup> session was set aside as an overflow session in case business was not concluded by the end of session 5.

### Registrations for the meeting:

**Directors:** Yeadong Kim\* (President; Delegate, Korea), Deneb Karentz\* (Vice President for Science; Delegate, USA), M. Ravichandran\* (Vice President for Capacity Building, Education and Training; Delegate, India), Jefferson Simões\* (Vice President for Finance; Delegate, Brazil), Steven Chown (Immediate Past President).

**Full Members:** Walter Mac Cormack and Viviana Alder (Argentina), Nerilie Abram and Nicole Webster (Australia), Frank Pattyn\*\* and Anton Van de Putte\*\* (Belgium), Eduardo Secchi\* (Brazil), Christo Pimpirev and Lyubomir Kenderov\* (Bulgaria), Ian Hogg\* and Thomas James (Canada), Marcelo Leppe\* and Marcelo González\* (Chile), Bo Sun and Yong Wang (China), Daniel Nývlt (Czech Republic), Ashley Casierra\* and Mónica Riofrío (Ecuador), Jyri Näränen and Eija Asmi (Finland), Yan Ropert-Coudert\*\* (France and CEP), Catherine Ritz (France), Monika Rhein and Karsten Gohl (Germany), Thamban Meloth\* (India), Giovanni Macelloni\* and Giorgio Budillon\* (Italy), Takuji Nakamura\* and Yoshifumi Nogi (Japan), Sung-Ho Kang (Korea), Azizan Abu Samah\* and Salleh Mohd Nor\* (Malaysia), Dick van de Kroef (Netherlands), Gary Wilson\* and Nancy Bertler (New Zealand), Ole Arve Misund\* (Norway), Manuel Soares and Cinthya Bello (Perú), Robert Bialik (Poland), Adelino Canário and Pedro Miguel Guerreiro (Portugal), Aleksandr Makarov\* and Irina Repina\* (Russia), Bettine van Vuuren and Tracy Klarenbeek (South Africa), Carlota Escutia and Jesús Galindo (Spain), Ulf Jonsell (Sweden), Gabriela Schaeppman-Strub (Switzerland), Burcu Özsoy\* and Atilla Yilmaz\* (Türkiye), Andrii Fedchuk (Ukraine), Jane Francis\*\* (UK and COMNAP), Mike Bentley\*\* (UK), Allan Weatherwax\* (USA), Martín Etcheverry and Ana Laura Machado (Uruguay).

**Union Members:** Tony Travouillon (IAU and AAA), Allan Ashworth (INQUA), Andres Barbosa (IUBS), Ian Allison (IUGG), Terry Wilson\* (IUGS), Rai Kookana (IUPAC), Giorgiana De Franceschi (URSI).

**Associate Members:** Birgit Sattler (Austria), Sergey Kakareka (Belarus), Danna Rodríguez (Colombia), Rene Forsberg (Denmark), Hossein Farjami (Iran), Pablo Lepe (Mexico), Céline Le Bohec (Monaco), Saira Ishaq (Pakistan), Cristina Purcarea (Romania), Voranop Viyakarn (Thailand).

**Honorary Members:** Jerónimo López-Martínez

**Secretariat:** Chandrika Nath (Executive Director), Eoghan Griffin\* (Executive Officer), Johanna Grabow\*\* (Project Officer), Rosemary Nash (Administrative Officer).

**SCAR Subsidiary Groups:** Tom Bracegirdle (AntClimNow SRP), Mercedes Santos (Ant-ICON SRP), Tim Naish (INSTANT SRP), Naresh Pant\* (Geosciences Group),

*Ian McDonald (Life Sciences Group), David Bromwich (Physical Sciences Group), Susie Grant (SC-ATS), Peder Roberts (SC-HASS), Johnathan Kool (SC-ADM), Li Fei (SC-AGI), Peter Fretwell (Bedmap3), Alyce Hancock (SOOS and SCOR), Nadine Johnston (ICED), Keith Reid (Antarctic Environments Portal).*

**Observers from member countries:** *Natalia Jaramilla Machuca (Colombia), Rahul Mohan\*, Mirza Javed Beg\*, Avinash Kumar\* and Rohit Shrivastava\* (India), Sebin Lee\* and Jihoon Jeong (Korea), Carlo Krieger (Luxembourg), Mohd Nasaruddin Abd. Rahman (Malaysia), Susana Lizano (Mexico), Waseem Haider (Pakistan), Pablo Londoño (Peru).*

**Observers from partner organisations:** *Sarah Strand (APECS), Albert Lluberas and Rodolfo Sanchez (ATS), Steve Parker (CCAMLR), Renuka Badhe\* (EPB), Amanda Lynnes (IAATO), Andrew Mackintosh (IACS), Gerlis Fugmann, Henry Burgess and Larry Hinzmann (IASC), Hans-Otto Pörtner and Katja Mintenbeck (IPCC WG II), Melody Burkins and Salvatore Arico (ISC), Marie-France Loutre (PAGES), Olivier Wenden (FPA2), Neil Arnold (SPRI), Mike Sparrow (WCRP / WMO).*

SCAR Delegates' Meeting papers are available through the SCAR Library:  
<https://www.scar.org/scar-library/papers/xxxvii-scar-delegates-2022-go-a-india-1/>.

## Session 1: Monday 5 September (10.30-13.30 IST)

### 1. Opening of the Meeting

#### 1.1 Welcome and roll call

The SCAR President, Yeandong Kim, opened the meeting. He welcomed all participants, whether attending in person or online, and held a roll call of members. He invited the local hosts to say a few words and the chair of the Local Organising Committee, Vice President for Capacity Building, M Ravichandran, welcomed everyone to Goa and also welcomed those attending the meeting online.

The President reminded everyone that SCAR is an apolitical organisation and that decisions are made through consensus among SCAR members.

#### Extension to deadline for Vice Presidential elections

The Executive Director (ED), Chandrika Nath, reminded delegates that two Vice Presidents would step down at the close of the meeting. As only one nomination had been received by the deadline, the ED proposed that the nominee, Marcelo Leppe (Chile), should be declared elected to the first vacant Vice President (VP) position. There were no objections and he was duly elected.

The ED announced that nominations for the second vacant position were invited up until midnight Indian time and the candidates would be announced in session 3 on Tuesday 6 September, with a 12-hour voting window opening the same day at the end of session 4.

#### 1.2 Adoption of the Agenda and Timetable (papers 1-3)

Delegates were asked to review the agenda and propose revisions and / or additions. New Zealand suggested allowing extra time to hear from the Standing

Committee on the Antarctic Treaty System (SC-ATS). They were also keen to see how the Science Groups might assist towards the Strategic Plan. Lastly, they suggested that the Strategic Plan discussion may need longer than the 45 minutes allocated. The President noted their comments and suggested the timetable for the following day might be amended slightly but proposed approving the agenda and timetable as they stood. There were no objections so the agenda and timetable were approved.

## 4. Science

### 4.1 Scientific Research Programmes (SRPs)

The VP for Science, Deneb Karentz, briefly introduced the agenda item.

#### 4.1.1 Near-term Variability and Prediction of the Antarctic Climate System (AntClimNow) ([paper 8](#))

The AntClimNow Co-Chief Officer, Tom Bracegirdle, presented progress and future plans. Work is being done to promote the development of, and access to, data sets on the Antarctic climate system, and on monitoring and communicating Antarctic climate indicators. The group is developing a strong community of researchers, with 80 full members from 21 countries. Monthly science talks are held and support is provided for ECR attendance at conferences. The group has a very successful Instagram page run by Co-Chief Officer, Ilana Wainer.

IUGS asked about the proposal for annual updates on science relevant to AntClimNow. The CO confirmed that the idea was to adjust the implementation plan annually to keep up with advances in the science, similar to the annual ACCE updates.

New Zealand asked about the impacts of climate change on operations, particularly the use of sea ice as a platform, runway or ice wharf. The CO confirmed that the programme is working with Ant-ICON on response to change and how information might be fed back to national programmes.

Malaysia asked about tropical Antarctic teleconnections and communications with the IPCC and other bodies. The CO confirmed that AntClimNow is working with the SCAR Action Group TATE. On communications with other bodies, the CO agreed that the group is always looking for opportunities to communicate their science better and SCAR is the ideal platform for facilitating these linkages.

#### 4.1.2 Integrated Science to Inform Antarctic and Southern Ocean Conservation (Ant-ICON) ([paper 9](#))

The Ant-ICON Co-Chief Officer, Mercedes Santos, presented progress and future plans. Aleks Terauds stepped down as Co-Chief Officer and Daniela Liggett has taken over the role. Community engagement meetings and various workshops have been held, including a monthly seminar series on research. Communication is through social media and a mailing list with more than 200 members. The programme is working closely with SC-ATS, particularly on a fellowship scheme to mentor two fellows per year to present a paper to the CEP and CCAMLR meetings respectively.

The Delegates approved the appointment of Daniela Liggett as the new Co-Chief Officer.

There were suggestions from Malaysia and Switzerland about Ant-ICON making connections and communicating with international bodies working in similar fields, for example CBD (Convention on Biological Diversity) and IPBES (Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services). The CO confirmed that Ant-ICON is currently consolidating relationships with Antarctic stakeholders.

#### **4.1.3 INStabilities and Thresholds in ANTArctica (INSTANT) ([paper 10](#))**

The INSTANT Co-Chief Officer, Tim Naish, presented progress and future plans. A recent [EOS article on 'the uncertain future of Antarctica's melting ice'](#) explains INSTANT's objectives, details who is involved and how to join. Other achievements include inputs to the IPCC and SCAR's ACCE report, attendance at COP26, and participation in the UN Ocean Conference and other international conferences. INSTANT is working with other groups and programmes, both inside and outside SCAR, and has a community of around 300 members, with 30% being early-career. Plans are underway for an INSTANT meeting, to be held next year in Trieste.

The UK congratulated INSTANT and highlighted that a key role of SCAR programmes is to bring together the international community to tackle critical questions with real impact.

The VP for Science encouraged Delegates and the wider community to sign up for SRP mailing lists and to check each group's social media to stay informed about their activities.

The SRP reports were noted and no changes were required to future plans. Delegates were impressed with the achievements of all the SRPs so far.

## **4.2 Science Groups (SGs)**

The VP for Science briefly introduced the agenda item and noted that reports would require approval from the Delegates.

### **4.2.1 Geosciences Group (GSG) ([paper 11](#))**

The GSG Deputy Chief Officer, Naresh Pant, presented progress and future plans. He highlighted changes in leadership and the ending and forming of action and expert groups. The Action Group on Geological Heritage and Geo-conservation has completed its original task and requested to become an Expert Group (EG-GEOCON), and a new action group on improving paleoclimate research in the Southern Ocean (ICEPRO) was proposed. The Chief Officer, Jesús Galindo, and Deputy CO will continue in office for a second term, and Laura De Santis was elected as Secretary.

Belgium stated that some authors were failing to acknowledge the contribution of SCAR in their papers and the Deputy CO said that this would be corrected.

IUGS asked about groups that are not very active but have large allocations of budget and wondered whether this was appropriate. The Deputy CO suggested that this was mostly down to the pandemic as, pre-pandemic, most of the budget was being spent. Progress is not always equal as some groups, ADMAP for example, need a longer time frame to allow for collaboration between many countries. IUGS suggested rewarding groups who are active with more budget and reducing the budget for inactive groups.



The UK said they share the concerns raised by the IUGS on the continuation of funding for inactive groups and asked whether decisions on funding would go to the Finance Committee or be decided by the Delegates. The VP for Finance said that funding would be analysed at the next day's Finance Meeting so the group's report could be approved without the finances, which would be considered separately.

The report was approved by the Delegates, but it was agreed the distribution of funds between the sub-groups would be decided later.

**Decision:** *Geosciences Group report, including the elected officers, was approved.*

**Action:** *Science groups should ensure appropriate acknowledgements are made in publications based on the work of SCAR groups (SG Chief Officers and subsidiary group chairs).*

**Action:** *Finance Committee to consider allocation of funding for inactive groups (Finance Committee / VP for Finance)*

**Action:** *Letters to be sent to newly-formed groups to confirm their approval by Delegates (President, assisted by the Secretariat).*

#### 4.2.2 Life Sciences Group (LSG) ([paper 12](#))

The LSG Secretary and Chief-Officer-elect, Ian McDonald, presented progress and future plans. He reported briefly on the LS Business Meeting and presented recommendations, including changes in leadership and progress on subsidiary groups. Four groups have reached the end of their terms but have requested extensions due to the pandemic: ImPACT for one year, Plastic-AG for two years, EG-ABI asked for a six-year renewal and the Krill Group has requested to become an expert group. All of these requests were given unanimous approval by the LS national representatives.

LS leadership came to the end of their terms and a new leadership was elected: Ian McDonald as Chief Officer, Natalie Pattyn as Deputy Chief Officer and Byron Adams as Secretary. The LS Meeting asked for a change to the Rules of Procedure for SCAR Subsidiary Bodies that the Deputy Chief Officer would be from the Joint Expert Group on Human Biology and Medicine (JEGHBM), if a nominee is available. This would formalise the understanding made when the Science Groups were established to give JEGHBM a permanent voice within SCAR. Chile supported the proposal for an amendment to the rules by emphasising the importance of the Human Biology and Medicine group, which was key for the development of new COVID protocols in many countries, particularly the gateway cities. This change was subsequently agreed under 'Other Business' at the end of the meeting (agenda item 15).

The SCAR Biology Symposium will be held next year in New Zealand and there has been some interest in hosting the 2027 symposium. Finally, it was reported that at the Business meeting, there was some indication of a Programme Planning Group (PPG) being developed in the Life Science community in the next couple of years.

The Life Sciences report was approved by the Delegates.

**Decision:** *Life Sciences Group report, including the elected officers, was approved.*

#### 4.2.3 Physical Sciences Group (PSG) ([paper 13](#) and [paper 26](#))

The PSG Chief Officer, David Bromwich, presented progress and future plans. He reported briefly on the PS Business Meeting and presented recommendations, including changes in leadership and a proposed PPG. He outlined the wide range of activities covered by PSG through its subsidiary groups, all of which were active prior

to 2020 but activities have been impacted by the pandemic. He highlighted the Year of Polar Prediction in the Southern Hemisphere (YOPP-SH), an activity co-sponsored by SCAR, and an ISMASS workshop with more than 80 participants including considerable ECR participation. He introduced the proposed PPG, Antarctic Geospace and ATmosphere reseArch (AGATA), which aims to monitor, investigate and better understand the physics of the polar atmosphere, with a particular focus on the Antarctic but with a bipolar perspective. The programme would provide a focus for groups not currently represented within PSG.

The CO and Secretary had come to the end of their second terms so were not eligible for re-election. Takuji Nakamura was elected as Chief Officer and Wojciech Miloch as Secretary, with Adriana Gulisano continuing for a second term as Deputy Chief Officer.

All action groups were reviewed and active groups were recommended for a four-year extension and less-active groups for two years, with differential distribution of funds according to activity levels.

New Zealand recommended expanding membership of AGATA to include relevant researchers from New Zealand working in this area. The CO agreed to pass the suggestion on to the AGATA leadership.

The Physical Sciences report was approved.

**Decision:** *Physical Sciences Group report, including the elected officers, was approved.*

**Decision:** *Antarctic Geospace and ATmosphere reseArch (AGATA) Programme Planning Group was approved.*

**Action:** *Letter to be sent to AGATA to confirm its approval as a PPG by Delegates (President, assisted by the Secretariat).*

### 4.3 Other Science Programmes and Topics

The VP for Science briefly introduced the agenda item.

#### 4.3.1 Astronomy & Astrophysics from Antarctica (AAA) Expert Group ([paper 14](#))

The AAA group leader, Tony Travouillon, presented progress and future plans. AAA includes a broad range of scientists from different types of projects who, unlike most Antarctic researchers, are using Antarctica as a platform for observing space, near-Earth and atmosphere. The continent has had a major impact on how we look at the sky from projects such as IceCube (neutrinos), the Event Horizon Telescope Collaboration (black hole discovery) and exoplanet detection and characterisation (Beta Pictoris). In terms of budget, some money has been used to fund an ECR fellowship. The AAA annual conference was held remotely in 2021 and AAA were present at this year's IAU General Assembly. Efforts are being made to grow a larger group within SCAR and to increase the representation of women.

There were no questions or comments and the AAA report was accepted by Delegates.

The COMNAP representative made a wider general comment about SCAR's communication with its community during the pandemic. She suggested that as SCAR has an ambition to reduce its carbon footprint, it needs to find ways of staying in touch with its membership across the world, and could learn from COMNAP which

stayed in contact with its members very effectively through the pandemic, holding frequent online meetings, well-organised across time zones and across topics. The VP for Science agreed this needs to be thought about more.

**Action:** SCAR to look at how COMNAP organises its online meetings (Directors and the Secretariat).

The first session of the meeting ended.

## Session 2: Monday 5 September (15.30-18.30 IST)

The President held a roll call of voting members to establish a quorum.

### 2. Members (CLOSED)

#### 2.2 Honorary Membership – Steven L. Chown, past President

The President proposed that the immediate Past-President, Steven L Chown, be awarded Honorary Membership of SCAR, in recognition of his many years of service to the organisation. The President presented a brief bio sketch.

Delegates were asked to consider the proposal and unanimously approved. Past-President Steven Chown was invited to join the meeting and his Honorary Membership was announced.

**Decision:** Delegates unanimously supported the awarding of Honorary SCAR membership to Prof Steven L Chown, immediate Past President.

#### 2.3 Current members, potential new members, and the status of membership fee arrears ([paper 6](#))

The VP for Finance reported that the payment of national contributions was being maintained, despite the pandemic. He warned that, as a result of international sanctions, a substantial amount of funding now cannot be received through the international banking system. He also reported that SCAR is looking for new members among those with a direct interest in Antarctic science.

### 2.1 Applications for Membership

#### 2.1.1 Luxembourg - application for Associate Membership ([paper 4](#))

The representative from Luxembourg, Carlo Krieger, presented Luxembourg's application for Associate Membership of SCAR, then left the breakout room.

There was general support for the application. Carlo Krieger was readmitted to the meeting and Luxembourg was welcomed as an Associate Member of SCAR.

**Decision:** Delegates approved the application of Luxembourg to become an Associate Member of SCAR.

**Action:** Luxembourg to be formally recognised by letter as an Associate Member of SCAR (President, assisted by the Secretariat).

### **3. Officers (CLOSED)**

#### **3.2 Election of Finance Committee ad hoc members**

The Executive Officer (EO) described the responsibility and make-up of the Standing Committee on Finance. Two ad hoc members to the committee were nominated for the term of the meeting, Azizan Abu Samah (Malaysia) and Ole Arve Misund (Norway).

### **6. SCAR and Policy Advice**

The President briefly introduced the agenda item.

#### **6.1 Antarctic Treaty Secretariat Report ([paper 22](#))**

The ATS Executive Secretary, Albert Lluberas, provided a brief update on ATCM XLIV in Berlin, the activities of the Committee on Environmental Protection (CEP) and other activities. In relation to climate change and the environment, the CEP stressed the need to maintain dialogue between SCAR and the ATS Subsidiary Group on Climate Change Response, and the importance of communicating the ACCE report to the wider global community. Discussions on Environmental Impact Assessments and on emperor penguin status would be continued intersessionally. The value of the Antarctic Environments Portal information summaries was highlighted. Delegates were invited to share information on key science issues, scientific cooperation and facilities through the science priorities section of the ATS website. ATCM XLV in Helsinki will look to consider the implementation of ACCE recommendations and SCAR was again invited to present a lecture on relevant issues.

Australia asked a broad question about whether there is a role for SCAR to play around diversity issues within the ATCM. New Zealand raised the issue of long-term monitoring of datasets and the challenges of maintaining them and asked whether Treaty parties valued these. The ATS Secretary could not reply in the name of Parties but agreed that long-term monitoring is important.

#### **6.2 Standing Committee on the Antarctic Treaty System (SC-ATS) ([paper 23](#))**

The SC-ATS Chief Officer, Susie Grant, summarised SC-ATS activities and future plans. Advice is developed in consultation with SCAR experts and groups, and SC-ATS members co-represent SCAR at meetings of ATS bodies (ATCM, CEP and CCAMLR). She gave details of SCAR papers presented to the Antarctic Treaty System over the past two years, which are listed in the SC-ATS report, and she thanked all the authors and reviewers. The major SC-ATS contribution this year was the ACCE Decadal Update, led by Steven Chown. SCAR has been invited to give a presentation on the ACCE update at the opening plenary session of the 2022 CCAMLR meeting. Delegates were invited to recognise the high regard in which SCAR's contributions to ATS bodies are held.

New Zealand asked about the proposed one-day session to be held at ATCM XLV discussing climate change and the ACCE recommendations. The CO confirmed that SCAR would be involved in planning the session.

The UK said that, over recent years, SCAR has made a really strong contribution to Treaty discussions. They stressed the importance of the science community producing information that is rigorous and clear. The CO agreed about the need to be rigorous and added that SCAR's strength, in addition to providing objective advice, is the breadth of information it draws on to provide that advice.

New Zealand agreed and wondered what else the community could do to support SC-ATS and support its integration of research into the policy process. The CO said that all three SRPs are represented on the SC-ATS committee and opportunities to engage would be shared with all SCAR groups, letting them know the priorities and work plans of the CEP and CCAMLR. Opportunities for dialogue with the community would be explored, including a series of possible webinars.

The UK raised the point that it is also important to hear from Treaty parties about what is important to them at a national level. The CO agreed it was important to try to translate science needs into something that funding providers can understand, in order to guide decisions on funding priorities.

The Past President agreed there had been some exceptionally useful dialogues between policy makers and scientists supported by particular countries with an interest in a given area. There is an increasing need for both contributions and support, both direct and indirect, particularly as SC-ATS is a small committee with a huge workload.

**Action:** SC-ATS to explore opportunities for dialogue with the SCAR community.

### **Extended discussion on SGs**

As the business of the session was concluded with 30 minutes to spare, the President suggested using the time to continue the discussion on the Science Groups from session 1. The VP for Science was invited to chair the discussion.

New Zealand observed that the SGs have become primarily the keepers of action and expert groups and are not widely engaged in strategic development in support of SCAR and its Strategic Plan.

IUGS agreed that the strength of SCAR is the grass-roots science coming from groups and new science might be encouraged by asking the SGs how they can best contribute to strategic issues.

France agreed there was a need for an alternative view on how the disciplinary groups could contribute to SCAR's vision and strategy. They suggested setting up an overarching scrutiny group, above the disciplinary groups, to assist the SGs in finding a strategic view.

Spain suggested that the SGs are a place where emerging issues not covered by the Strategic Plan or the SRPs can be developed. Reviews of what is there are good but the door should be left open for emerging issues. New Zealand agreed that this should be a two-way arrangement, with SGs developing a strategic direction to feed into the next Strategic Plan. Malaysia and India suggested that some ideas can be too Antarctic-centric and that SCAR should look more at how the Antarctic influences and connects to the rest of the planet.

The VP for Science thanked everyone for their comments and said these could be discussed by the Executive Committee. She added that all of the Science Groups were involved in the sub-committees for the Strategic Plan so their input was considered and included in the recommendations.

**Action:** *Executive Committee to consider ways that the work of the Science Groups can be more closely linked to SCAR's strategic goals (ExCom).*

The second session of the meeting ended.

## **Session 3: Tuesday 6 September (10.30-13.30 IST)**

The President held a roll call of voting members to establish a quorum. He also acknowledged the many observers present, listed their organisations and thanked them for their participation.

### **4. Science (continued)**

The VP for Science briefly introduced the agenda item.

#### **4.3.2 Bedmap3 Action Group ([paper 15](#))**

The Bedmap3 chair, Peter Fretwell, presented progress and future plans. He gave a quick background on Bedmap, including the two previous versions (published in 2000 and 2013), both supported by SCAR. Bedmap3 fills in most of the data gaps from the previous versions, making a more complete grid of surface thickness and topography available to the community. Additionally, all the data is being standardised according to FAIR principles and will be available on a web portal similar to that of the Antarctic Digital Database. The group hopes to have the published map and other products by April 2023.

IUGG asked about data beneath the ice shelves and the chair said they would probably take the IBCSO (International Bathymetric Chart of the Southern Ocean) data.

#### **4.3.3 Southern Ocean Observing System (SOOS) ([paper 16](#))**

The SOOS Executive Officer, Alyce Hancock, presented progress and future plans. In 2021, SOOS marked 10 years since its launch with an online celebration. Publications, reports, newsletters, video presentations and webinar series have been released, and a new data policy produced, based on SCAR's. Despite pandemic restrictions, SOOS held 37 events online and was represented at a number of international meetings, conferences and workshops, including holding side events at COP26 and the 2022 UN Oceans Conference. The major achievement has been the development, approval and release of the new Science and Implementation Plan which will focus SOOS activities to 2025. The two SOOS products, SOOS Map (interactive map of datasets) and Due South (database of Southern Ocean expeditions), have been updated and new interfaces launched. The first SOOS Symposium will be held in August 2023. SCAR was thanked for its ongoing support along with SCOR, and the support of SOOS's international project sponsors was acknowledged.

Renuka Badhe (observer from the EPB) expressed support. The EPB hosts the Due South database and is pleased to be in partnership with SOOS.

#### **4.3.4 UN Decade of Ocean Science ([paper 17](#))**

The convener of the Southern Ocean Task Force, Anton Van de Putte, gave a brief update on SCAR's involvement in the UN Decade of Ocean Science for Sustainable Development. The UN Decade started in 2021 and will run until 2030. The goal is to look at transformative ocean science solutions for sustainable development, connecting people and our oceans. He outlined the seven desired outcomes of the Ocean Decade. He stressed that the Southern Ocean is very much connected with the rest of the world. The Antarctic and Southern Ocean community needs to translate its observations and findings so the global community can understand how changes in this region impact everyone. He outlined the development of the Southern Ocean Action Plan by the Task Force, led by SCAR, and stressed the importance of improving dialogue at the science-policy interface and ensuring a diverse range of voices. It is hoped that under SCAR's leadership a regional programme for the Southern Ocean will be developed, to coordinate with other Ocean Decade activities and feed into the IPY.

Renuka Badhe (EPB) thanked SCAR for taking the lead and hoped it would continue to lead as the Decade progresses. The VP for Science confirmed that SCAR would continue coordinating the Southern Ocean effort and would continue the process of applying for regional status.

#### **4.3.5 Integrating Climate and Ecosystem Dynamics in the Southern Ocean (ICED) ([paper 18](#))**

The ICED Programme Manager, Nadine Johnston, presented progress and future plans. ICED is a regional programme of Future Earth's IMBeR project, and co-sponsored by SCAR. Its work is focused on three research challenges: understanding Southern Ocean ecosystems, improving projections of future change, and informing conservation and sustainable management. A major highlight has been MEASO (Marine Ecosystem Assessment for the Southern Ocean), a core activity of ICED involving over 200 scientists from 19 countries, which has assessed the status of Southern Ocean ecosystems and produced a synthesis of climate change impacts for policy makers. ICED contributed to the latest IPCC report AR6 and, with SCAR support, jointly led a side event with SOOS at COP26. ICED has also been part of the Southern Ocean Task Force, which led a session at the UN Ocean Conference in June. Also highlighted was the 2021 Antarctic Krill Modelling Workshop, jointly organised with the SCAR Krill Action Group (SKAG) and led by ECRs. SCAR was thanked for its support.

## **5. Standing Committees**

The President briefly introduced the agenda item.

### **5.1 Standing Committee on the Humanities and Social Sciences (SC-HASS) ([paper 19](#))**

The SC-HASS Co-Chief Officer, Peder Roberts, presented progress and future plans. The group has a current membership of around 250 researchers. Cornelia Lüdecke has retired and Elizabeth Leane and Daniela Liggett plan to step down so it is proposed that he and Hanne Nielsen will take over the leadership roles. The Steering Committee is also undergoing some change and the overall leadership has a good cross section of geography and disciplines. New Rules of Procedure and Terms of Reference have been drawn up in consultation with the SCAR Executive.

The 2021 biennial SC-HASS conference was hosted by Kobe University, Japan, and held in hybrid format with a record number of 327 participants. The major activity over the past two years was the COVID-19 study and report. New Rules of Procedure have been developed for hosting conferences, which have increased in size. SC-HASS members have prominent roles in Ant-ICON and are involved with INSTANT. SC-HASS sponsors four action groups detailed on its website (<https://www.scar.org/science/hass/humanities/>). The 2023 SC-HASS Conference, “Antarctica for a Greater Good”, will be held in Lisbon, Portugal, and will be mainly in-person.

The President said he was glad to see that SC-HASS had become such an important part of SCAR and was pleased by the range of activities. Malaysia asked about including countries with a non-western value system in the AGIVA action group. The CO agreed that he would bring this issue to the attention of the AGIVA leadership.

The SC-HASS change in leadership was approved by Delegates, as was the report, with one small modification from Chile which the CO agreed to make.

**Decision:** *The SC-HASS report, including the elected officers, was approved with one minor modification.*

**Action:** *SC-HASS to amend their report and resubmit to the Secretariat, for posting with the other papers (SC-HASS CO and Secretariat).*

## **5.2 Standing Committee on Antarctic Data Management (SC-ADM) (paper 20)**

The SC-ADM Chief Officer, Johnathan Kool reported on progress and future plans. He started by acknowledging the work of the joint Deputy Chief Officers, Frank Nitsche and Helen Peat. A key outcome for the group has been the development of new polar data management principles, in conjunction with the Arctic data community and SOOS, which led to a revised version of [SCAR's Data Policy](#). This was an extended effort, with many people involved over a long period, with the resulting Policy being taken up by a number of organisations. As part of the 2021 Polar Data Forum week, ECR research was supported through a SC-ADM prize for work embodying the FAIR principles. Looking forward, there are plans to host a polar vessel data management workshop, and efforts to deliver data through the Antarctic Metadata Directory (AMD) are continuing. There is strong engagement among SC-ADM members, with the group holding monthly meetings.

There were no comments and the report was approved.

**Decision:** *The SC-ADM report was approved.*

## **5.3 Standing Committee on Antarctic Geographic Information (SC-AGI) (paper 21)**

The SC-AGI Chief Officer, Li Fei, reported on activities, progress and meetings, including a change in leadership. The most important publication was the International Principles and Procedures for Antarctic Place Names, published as [SCAR Report 41](#). There were also updates to the Composite Gazetteer of Antarctica and the SCAR Map Catalogue. New maps are also being added to the Air Operations Planning map series. National members have developed WebGIS applications and products for general use. There has been a leadership change. Following the retirement of former Co-Chief Officer, Paul Morin, Louise Ireland from the British Antarctic Survey has been elected as the new Co-Chief Officer and the first female leader of SC-AGI. Regarding budget, part of the funds will be used for



the SC-AGI annual meeting, particularly in supporting the attendance of ECRs and researchers from countries with developing programmes.

Italy asked about overlap with Bedmap and SOOS and whether these activities are connected. The CO was unable to hear the question due to a technical issue. Belgium commented that there is overlap and there should be clear engagement with SC-ADM on any discussions linked to data and data standards.

There were no more comments and the report was approved.

**Decision:** *The SC-AGI report, including the elected officer, was approved.*

**Action:** *SC-AGI leadership to consider overlaps with groups such as Bedmap and SOOS, and there should be coordination between SC-ADM and SC-AGI on data (SC-AGI and SC-ADM leadership, assisted by Secretariat).*

## 6. SCAR and Policy Advice (continued)

### 6.3 The Antarctic Environments Portal (AEP) ([paper 24](#))

The ED gave some background on the structure and function of the AEP, including the Portal website. She acknowledged the financial support of four parties (New Zealand, UK, Netherlands and Australia) and in-kind support for translations into French and Spanish. Dr Keith Reid took over the role of AEP Editor in December 2021 when Dr Neil Gilbert stood down. Dr Gilbert was thanked for his considerable efforts in developing the Portal. Since SCAR took over hosting the Portal, eight new information summaries and eight infographics have been published. The Portal continues to be appreciated by the CEP. The Portal Management Board is working on a five-year business plan, in line with SCAR's Strategic Plan, which will include soliciting further funds from Treaty Parties. She asked Delegates to acknowledge the value of the AEP and support the Management Board's efforts to sustain SCAR's hosting of the Portal over the longer term.

Keith Reid gave a brief update from an editorial perspective. A review of all Information Summaries has been completed showing which are still relevant, which need minor updates and which need to be replaced. New Information Summaries on ocean warming and Antarctic krill are about to go online, and the first draft of a summary on the recovery of whales in the Antarctic has been received. A vibrant science community is contributing to the Portal. He thanked Neil Gilbert for his advice and help during the transition between editors and thanked the ED and PO for their support.

Türkiye expressed thanks and said that the Portal is useful for creating a link between science and policy.

Australia asked about the Portal's reach and any plans to address information gaps. In terms of reach, the ED confirmed there are about 600 users every month, which rose by about 60% during the recent ATCM, and the business plan will include a detailed communications strategy to target a wider audience. The AEP Editor suggested that assessing reach is difficult but positive feedback received from the target audience would indicate they are being reached.

The VP for Finance agreed it is important to have funding for this kind of activity but, up until now, it has been funded externally and SCAR's funds are limited. The ED stressed that there is no specific request of the Delegates for funding at this stage. Other sources of funding will be investigated first, particularly going back to the Treaty parties in 2023, which is when the current funding runs out, though there may

be a need for some bridge funding from SCAR contingency funds to get through to the 2024 Delegates' Meeting.

The President asked Delegates to approve the report without any budgetary implications. The report was approved.

**Decision:** *Delegates approved the report on the AEP and supported SCAR's continued efforts to find sustainable options for hosting the Portal over the longer term.*

#### **6.4 Advice to other bodies ([paper 25](#))**

The EO reported on SCAR's provision of scientific advice to bodies other than the ATS, including the UNFCCC, COP meetings and other activities. SCAR was well represented at COP26, notably through the new SRPs. SCAR held an official Side Event on the Antarctic influence on sea level rise and also participated in the International Cryosphere Climate Initiative's Cryosphere Pavilion. The ICCI have been valued partners since 2013 and SCAR is discussing COP27 participation with them.

The EO highlighted that there is a possibility of SCAR applying to the IPCC for official observer status; previously, SCAR has made use of the ISC's observer status in order to participate. Many SCAR groups have had strong input into IPCC assessment reports and there is now an opportunity for SCAR to engage more actively through official observer status.

The second Antarctic Parliamentarians Assembly was held online and SCAR Past President, Steven Chown, gave a key talk on Antarctic climate change.

Switzerland asked about SCAR's involvement in biodiversity ecosystems, who is coordinating and particularly about SCAR's involvement in IPBES. The EO said he had no direct experience but would investigate.

Norway offered full support for engaging with other bodies and asked whether finances were limiting what SCAR could do. The EO said that the budgets are small but SCAR groups could also contribute their own funds where relevant to their purpose. SCAR's key role is to make sure opportunities for engagement are provided.

**Action:** *Secretariat to identify a lead contact for SCAR to maintain closer coordination with IPBES (Secretariat).*

## **7. Partnerships**

### **7.1 SCAR Partnerships, MoUs and other agreements ([paper 27](#))**

The ED reported on partnerships, MoUs and other agreements, and future plans for SCAR partnerships. SCAR has nine formal agreements with external organisations, none of which is due for renewal before the next Delegates' Meeting. We are working with many partners on projects reported elsewhere in the meeting, for example the next International Polar Year and the UN Ocean Decade. She thanked partner organisations who had submitted updates highlighting progress of relevance to SCAR Delegates.

There were no comments or questions.

### **7.2 Prince Albert II of Monaco Foundation (FPA2) ([paper 28](#))**

The VP for Finance reported on the FPA2 Symposium, part of the Foundation's Polar Initiative, which he attended in February along with some of SCAR's most distinguished scientists. The Polar Initiative is a four-year programme, with SCAR and IASC enlisted as partners. A second symposium is planned for 2024 and there will be further opportunities for projects with a polar focus to impact on policy change and conservation actions. The Foundation is sponsoring an additional SCAR fellowship, the Prince Albert II Fellowship, to be awarded in the biodiversity and climate change areas. He thanked the Foundation for the initiative.

The Norwegian Delegate had attended the symposium and found it successful, with very good presentations, and the connection between the Arctic and Antarctic was well made. Norway fully supported continuing engagement with the Foundation and developing the relationship further.

There were no further comments.

### **7.3 International Polar Year (IPY) 2032-33 ([paper 29](#))**

The ED gave a brief background on the proposal for the next IPY. An interim planning group has been set up, initiated by Arctic groups but involving wider partners such as SCAR, APECS, the WMO and EPB. SCAR ran a community survey to judge interest in the formulation of an IPY in 2032-2033. The majority of respondents felt that 2032 was not too soon to hold the next IPY and that SCAR should assume a leadership role in the planning. The planning group had met twice in 2021 but further meetings were put on hold pending a decision from SCAR Delegates about SCAR's participation. There is a proposal for a potential joint Polar Conference to be held in 2030, which could provide an opportunity to report progress on activities building up to the IPY.

Delegates were requested to consider whether SCAR should support the plans for a future IPY and to advise on what role SCAR should play. If approved, Delegates might endorse the creation of a planning committee within SCAR to take plans forward.

Larry Hinzmann spoke on behalf of IASC. He stressed that there is no formal organisation yet and ideas are still in the early stages. SCAR is a critical partner as the Antarctic research community must be engaged from the start. An IPY in 2032 would be 25 years after the successful fourth IPY and many believe we cannot wait 50 years for the next. It should be a bottom-up movement that includes many voices and diverse perspectives. There will be a need to build engagement and support within the community and, importantly, with funding agencies, as much of what happened in the previous IPY was dependent on who could find funding support. There was widespread support from Delegates for a future IPY. Several Delegates further remarked that an IPY within 25 years (rather than 50) is necessary because of the speed with which changes are taking place in the polar regions. However, Delegates agreed that 2032 would be too late to *initiate* new research – the research needs to be done now, not in 10 years' time. Planning should start as soon as possible so that the IPY can be the focus for results rather than the initiation of new research. It was further highlighted that coordination between the key actors from an early stage would be vital to the IPY's success. Switzerland felt that 2030 was too late for a joint polar conference. Malaysia highlighted that sharing of data from the IPY was crucial and that data from the last IPY had not been made widely accessible.

The VP for Science agreed and supported the general view that waiting 10 years to solicit funding would be a big mistake. She also highlighted that she had attended the two preliminary meetings for the IPY and said that the majority of groups represented were not science groups so asked IASC to speak about the mix between science and indigenous groups. She concluded that as there was clearly momentum building for an IPY, it is vital that SCAR be involved.

Larry Hinzmann (IASC) said that indigenous engagement in the Arctic region is critically important and indigenous groups can give input to the science and show priority areas.

There were no further comments or questions.

Delegates endorsed the recommendation in the report for a small group to join the IPY Steering Committee to represent SCAR's interests.

**Decision:** *Delegates endorsed SCAR's creation of an internal committee to coordinate SCAR's input into the wider discussions on a future IPY. They highlighted the importance of moving forward at an early stage and using the decade as an opportunity to present results rather than initiate new research.*

**Action:** *IPY Planning Committee to be formed (Directors, assisted by the Secretariat).*

## 9. Communications

### 9.1 SCAR Communication Activities

This item was delayed until session 5 due to the IPY discussion overrunning.

## 3. SCAR Officers – Vice-Presidential Election (CLOSED)

In accordance with the SCAR Rules of Procedure, Observers were asked to leave the room for agenda item 4, and a breakout room was established for Delegates attending online.

### 3.1 Notification of election of Vice-President

The ED announced the names of the two candidates for the remaining Vice-President position. She briefly reviewed SCAR election procedures and reminded Delegates that the voting platform would open for 12 hours after the fourth session ended at 18:30 IST (13:00 UTC).

The third session of the meeting ended.

## Session 4: Tuesday 6 September (15.30-18.30 IST)

The President held a roll call of voting members to establish a quorum.

## **8. Capacity Building, Education and Training (CBET)**

The VP for CBET, M Ravichandran, briefly outlined progress over all activities: early-career Fellowships, Visiting Scholars, SCAR Medals, the EDI group and work with other partners. Support activities for applicants across capacity-building schemes were reviewed. Work continues with APECS to develop support webinars in other languages, and with PEI, APECS and IASC on the Polar Resource Book. An intern programme is being considered for the Science Groups and SC-ATS.

The EDI Action Group was set up from an open call. The group has been looking at diversity in leadership positions and in applications to award schemes, including undertaking a revision and simplification of the nomination procedure for SCAR Medals.

Future plans for CBET include looking at SRP-specific fellowships and developing an expert lecture series. He requested Delegates to consider making additional voluntary contributions or in-kind support for the Fellowship and Visiting Scholar schemes.

### **8.1 Fellowship Programme ([paper 30](#))**

The EO reported on the 2021 and 2022 Fellowship programmes. In 2021, five Fellowships were awarded from SCAR and an additional two were kindly funded by COMNAP. Applications had halved in 2020 due to the pandemic, so flexibility about dates and the nature of visits was introduced, allowing partially-online or fully-online fellowships. Funds have been carried forward as Fellows have delayed their travel until it is feasible. The pandemic is still having an impact so SCAR continues to work flexibly with Fellows. Applications are increasing steadily with 38 received this year. Language-specific webinars have been really important for expanding applications, and the EO gratefully acknowledged the work of APECS in this regard. Extra funding from FPA2 allows the award of an additional fellowship for the next four years. Diversity information across applications will be shared along with the results.

### **8.2 Visiting Scholars Programme ([paper 31](#))**

The EO moved on to report on the Visiting Scholar scheme. Many of the same issues outlined above have affected this scheme so SCAR has again enabled flexibility. Three scholarships were awarded last year, partly from the reallocation of travel funds. A change in emphasis and the introduction of a simplified, one-page application process has led to the number of nominations increasing and the gender balance becoming much closer to parity. This year's scheme closes at the end of September. The EO stressed that any additional funding received from members goes directly to funding awards.

### **8.3 Other CBET programmes and topics ([paper 32](#))**

The EO spoke about SCAR Medals. This year, the medal nomination process was amended to encourage a broader and more diverse range of nominations. It has now become a two-stage process, with the initial nomination being just a single page that went to review and produced a short list of three nominees for each category. The EDI Action Group and CBET Committee were both instrumental in developing the new process. Feedback from nominators and reviewers will be used to continue improving the process.

#### **8.4 Proposed Internship Programme ([paper 32](#))**

The EO introduced the proposed Interns Programme to support the Science Groups, with funds already included in the forward budgets for 2023 and 2024. Individuals would work closely with the leadership of the Science Groups and SC-ATS, for example to support communications with ECRs about what the groups are doing, and provide any further support needed by the group leaders. A description of roles has been drafted but this scheme needs to be developed in consultation with SG leadership. Active discussions will be held with the SGs to see how they want to implement the scheme and make it most effective.

The UK expressed support for the idea of internships and nurturing the next generation of leaders but they questioned why the scheme is focused on the SGs rather than the SRPs, which are SCAR's flagship activities. The EO responded that the SRPs are already doing a good job of including ECRs and that they have larger budgets than the SGs. The SRPs could be included at a later stage if the programme was felt to be effective.

#### **8.5 Action Group on Equality, Diversity, and Inclusion (EDI) ([paper 33](#))**

The EO next moved onto reporting on the EDI Action Group, including the leadership, organisational structure, progress, and future plans. In 2020, a scoping group had been formed to look at EDI issues in SCAR, and this provided an initial task list. An open call went out for members and, from that, a senior leadership team was formed (Chief Officer, Deputy and Secretary), along with a Leadership Steering Group to assist in the work. At the 2021 Delegates' Meeting, the group was approved as an action group. Information that SCAR already holds on diversity has been analysed, and results and advice are already feeding into how SCAR works. The recent OSC registration process collected demographic data. A budget has been allocated to the group but the Secretariat is also providing additional support; the EO thanked Morgan Seag and Inga Beck who have assisted the Secretariat in supporting the EDI group this year. The EDI AG has representatives on the ISC's Standing Committee on Gender Equality in Science (SCGES) and has some co-membership with the SOOS EDI group.

Belgium said the EDI Group is doing great work but asked whether harassment had been considered. The EO reported that this is currently under consideration and would involve working closely with COMNAP. A number of Delegates stressed the importance of sharing existing knowledge and not starting from scratch. The EO agreed that the group will look at existing principles from national programmes and international organisations to develop codes of conduct and best practice.

Chile suggested that some guidance would be useful for organising the next OSC and Renuka Badhe (EPB, and a member of the EDI Steering Group) confirmed that the group is already looking at developing a set of recommendations for SCAR meetings, which would be available in time for the 2024 meetings.

Malaysia suggested engaging with regional groups such as AFOPS and the Latin-American federation. The ED responded that we have an MoU with AFoPS, and are looking to work with RAPAL in Latin America, hoping to strengthen partnerships, and EDI would be one of the issues discussed.

Delegates expressed support for the EDI Group reporting directly to Delegates in future.

**Decision:** Delegates approved the CBET and EDI group reports.

**Action:** The EDI group to report directly to SCAR Delegates at biennial meetings (EDI group leadership, assisted by the Secretariat).

**Action:** Members are requested to consider making additional voluntary contributions or in-kind support to the Fellowship and Visiting Scholar schemes (Delegates and National Committees, coordinated by the Secretariat).

## 10. Meetings

### 10.1 Major Meetings Coordination ([paper 35](#))

The President presented a plan for the coordination of SCAR's portfolio of meetings and enhanced utilisation of e-meetings, with the intent of returning the schedule of meetings to the past sequencing that was interrupted by the global pandemic. With the 2020 Delegates' Meeting delayed until 2021, the elections of Directors were delayed. Additionally, the Biology Symposium was delayed from 2021 to 2023. The President proposed that he and the VPs elected for a four-year term in 2021 would resign in 2024, enabling elections to be back on schedule. The Earth Sciences Symposium that should have been held in 2023 will be moved to 2025, restoring the symposium sequence. He suggested that all meetings going forward would be hybrid, and the Business Meetings, OSC and Delegates' Meeting would be held together to help justify the travel for in-person attendees.

Australia welcomed the use of hybrid meetings and recommended SCAR taking the lead on this, particularly with the Strategic Plan's emphasis on reducing SCAR's carbon footprint.

Chile suggested it is very difficult to predict the cost of a hybrid meeting when it's impossible to know how many will attend in person and how many online. They pointed out how difficult it is to have effective networking in online meetings and that, after six years without in-person meetings, there is something of a disconnect.

South Africa felt SCAR has no choice but to offer hybrid meetings. From South Africa, it is a long flight to anywhere. If the OSC and associated meetings are all held in person, there is some justification in travelling, but a four-day journey for a two-day meeting cannot be justified. They suggested that regional satellites like the European Hub could be a good way forward. South Africa would support the hybrid model going forward but fully recognises the difficulty around planning for such a meeting.

Norway said they were prepared to follow advice and develop the 2026 OSC and Delegates' Meeting as hybrid. They are suggesting to COMNAP that they may want to meet at the same time.

New Zealand suggested that online meetings should become the method of choice because of the carbon footprint, while recognising the organisational challenges outlined by Chile.

The UK commented that physical meetings are important for creativity and brainstorming. Online is currently a very transactional experience. Having the OSC and other meetings in person, along with the Delegates' Meeting, makes travel justifiable, but they need to all be in one place, and the hybrid option must be available for those who cannot travel. They appreciated Chile's challenges and suggested SCAR could take the risk out of planning, possibly by reconsidering how to charge and cover costs.

India agreed that in-person meetings were important for networking and creativity and that travel could be justified if the OSC and Delegates' Meeting are held together.

Switzerland suggested that the costs of technical support for a fully-hybrid meeting are always underestimated so fees will be needed for online participation.

Italy felt there were pros and cons on both sides and suggested alternating in-person and online meetings so they happen every four years and that the Delegates and Business Meetings should be in the same place and at the same time as the OSC to justify the travel.

The President pointed out that 2022 was an exceptional case as the OSC and Business Meetings were online, so there was a month's break before the Delegates' Meeting to give the SGs more time to prepare their reports. But in future, all meetings would be held together sequentially.

The UK commented that they were more concerned by the carbon footprint of smaller groups holding international meetings than by the OSC and Delegates' Meeting which is a major international meeting bringing the community together. The OSC should be the primary meeting that everyone attends in person, and other meetings should be held virtually to save carbon.

New Zealand agreed and suggested there are agencies that could help SCAR map its carbon footprint quite accurately and help work out how to reduce it.

**Decision:** All major future physical meetings (e.g. SCAR OSC, Business and Delegates' Meetings) to be hybrid.

**Action:** SCAR Executive to examine further ways to manage carbon footprint of SCAR meetings whilst ensuring physical interaction is maintained. (Directors, assisted by the Secretariat).

## 10.2 Report on SCAR 2022 Online Open Science Conference ([paper 36](#))

The SCAR Project Officer (PO), Johanna Grabow, gave an overview of the 10<sup>th</sup> SCAR Open Science Conference, hosted by India's National Centre for Polar and Ocean Research (NCPOR) with the theme "Antarctica in a Changing World". It was due to be held in person in Hyderabad but continuing uncertainty around Covid-19 and an effort to minimise carbon footprint led to the decision to hold it online. There were 69 events in total, including plenary lectures, mini symposia, parallel sessions, workshops and satellite meetings. 945 abstracts were submitted and there were 2726 registered participants. To maximise accessibility, registration was free and open to all and presentations were spread across different time zones. There was a dedicated conference website, and extensive use of social media among groups. The Secretariat is currently analysing demographic information to help inform future work to maximise inclusivity. She expressed the Secretariat's thanks to the ISOC and LOC for all their work.

There were no comments or questions.

## 10.3 Plans for future biennial meetings

### 10.3.1 Plans for 2024 OSC and XXXVIII SCAR Meetings in Pucón, Chile (oral report)

The Chilean delegate, Marcelo Leppe, showed a short promotional video and presented plans for the 2024 SCAR meetings. With the only previous Latin-



American OSC being held in Argentina back in 2010, he stressed the importance for Latin-American ECRs of the conference being held in that region. The OSC and Business Meetings will be held in Pucón, which has the facilities for a conference of this size, with the Delegates' Meeting held in Punta Arenas. Both venues are well connected to Santiago with frequent flights.

Argentina expressed their support for Chile as host of the 2024 SCAR meetings and said Argentina would be hosting the 2024 COMNAP meeting in coordination with the SCAR meetings.

### 10.3.2 Plans for 2026 OSC and XXXIX SCAR Meetings in Oslo, Norway ([paper 38](#))

The Norwegian delegate, Ole Arve Misund, presented plans for the 2026 SCAR meetings. This will be the first time the meetings have been held in Norway, a founder member of SCAR. The meetings will be held in the capital city of Oslo which has many polar connections, including Amundsen's house and the Fram museum. The venue has not been finally decided but the proposal is for the OSC to be held at the Oslo Kongressenter, with the Delegates' Meeting at the nearby Radisson Plaza Hotel. The tentative dates are mid-August.

Now the planning group is developing agreements with venues, setting up a LOC and looking at a financial plan, all of which will be presented in Chile in two years' time. They will find the money to cover the costs of a hybrid meeting. They hope to have their new icebreaker moored in Oslo harbour.

There were no comments or questions.

### 10.3.3 Bid from Bulgaria to host 2028 SCAR Meetings ([paper 39](#))

The Bulgarian Alternate Delegate, Lyubomir Kenderov, presented Bulgaria's bid to host the 2028 OSC and XL SCAR meetings in the city of Sofia. 2028 is Bulgaria's 40<sup>th</sup> year in Antarctica, with 30 national Antarctic campaigns. It became a SCAR member in 1995, followed by full membership in 2006. Bulgaria has successfully organised COMNAP meetings in 2005 (Sofia) and 2019 (Plovdiv) and the ATCM in 2015. The Mayor of Sofia supports the bid to host the meetings in the city. The proposed venue will be the National Palace of Culture.

The President thanked Bulgaria for their generous offer to host. There were no questions and the bid to host was accepted.

**Decision:** 2028 OSC and XL SCAR Meetings will be hosted by Bulgaria in Sofia.

### 10.3.4 Plans for Future Open Science Conferences

The President introduced the proposal to hold a joint polar meeting in 2030, based on discussions with IASC. This would be two years before the proposed IPY and would be useful in the lead-up to the peak of IPY activities in 2032-33. There are no bids yet to host 2030 but a member country that also has membership of IASC would be a preferred candidate.

The President of IASC, Henry Burgess, thanked him and said IASC is very keen to support this initiative. The joint 2018 meeting in Davos was a strong collaborative event and another joint conference would be an opportunity for further cooperation, building on the recently-renewed LoA between IASC and SCAR. There would be a joint decision process on the host for that meeting. He suggested using Arctic Science Summit Weeks and Open Science Conferences from 2024 to build strong

polar-focused topics to foster engagement between both poles. This would create research partnerships to feed into the IPY process.

Switzerland wondered, considering the time lines, whether 2026 could be a joint conference where plans are made for IPY activities. Norway agreed they could consider it.

The ISC representative, Melody Burkins, said the International Committee on Arctic Research Planning, meeting in Colorado in 2025, would also feed into IPY discussions.

Delegates accepted the recommendation for SCAR and IASC to hold a joint polar meeting in the run-up to the start of the fifth IPY, probably in 2030.

**Action:** SCAR to work with IASC to determine a process for identifying the location and timing of the next joint Polar Meeting (Directors and the Secretariat).

## 10.4 Plans for future symposia

### 10.4.1 Plans for XIII Biology Symposium 2023 ([paper 40](#))

Craig Cary, chair of the Local Organising Committee, presented an overview of plans for the XIII Biology Symposium 2023. After two false starts, the 2023 Biology Symposium will be held in the gateway city of Christchurch, in the brand-new events centre at Te Pae. It will be the first in-person SCAR meeting in three years. The Te Pae facility is set up to hold hybrid meetings.

The LOC has been formed with representatives of all biological disciplines, ECRs and even some Maori who are passionate about Antarctica. The conference organisers are experienced in running hybrid meetings, and the symposium will combine great science with sustainability and a cultural experience. There will be four days of science meetings, interspersed with excursions and field trips, with side meetings and workshops to be held at the University of Canterbury on the weekends before and after. The LOC is aiming to raise \$80,000 to support ECR travel. The ISOC has not yet been established but the website will be available soon.

The President thanked Craig Cary for a good presentation.

### 10.4.2 Plans for XIV International Symposium on Antarctic Earth Sciences (ISAES) 2025

Chile confirmed they have offered to host XIV ISAES in Punta Arenas in 2025, after a gap of six years since the last ISAES. The meeting has the support of the Chilean Ministry of Foreign Affairs, the government and various institutes and universities. It will be held on 21-25 July at the Punta Arenas Convention Centre in hybrid format. They expect around 300 participants from at least 32 countries.

The Geosciences Deputy Chief Officer, Naresh Pant, confirmed that the two previous Symposia had attracted around 400 participants. He thanked Chile for confirming that they will host.

### 10.4.3 FPA2 Polar Science and Policy Symposium

The EO reported on plans for the second Polar Science and Policy Symposium organised by the Prince Albert II of Monaco Foundation, following the successful first meeting in Monaco earlier this year (reported in agenda item 7.2). This is part of the Polar Initiative, signed with FPA2 together with IASC and the Oceanographic Institute of Monaco. SCAR will work with the Foundation through the Polar Initiative to plan

the focus of the second symposium and to build momentum. SCAR also worked with them on the UN Ocean Conference in Lisbon earlier this year.

Olivier Wenden, Vice-President of the Foundation extended greetings from His Serene Highness Prince Albert II of Monaco, who appreciated all efforts made by SCAR and the other partners to make the 2022 symposium such a success. The Foundation is fully supportive of the Polar Initiative's ongoing efforts to hold the Symposium every other year and to launch a programme of worldwide campaigning actions. It will also provide grants to support the work of ECRs and researchers from the least-developed countries. He thanked the Secretariat and looked forward to working together on the follow-up symposium in 2024.

The EO thanked him and expressed appreciation for all the work the Foundation has done on developing activities in such a short time.

The UK commented that the meeting in Monaco was very successful, well-focused and a good forum for discussion about climate change. They would welcome another meeting in two years' time.

#### 10.4.4 SOOS Symposium 2023

The SOOS Executive Officer, Alyce Hancock, reported on plans for the inaugural SOOS Symposium, to be held in Hobart on 14-18 August 2023, centred around the theme "*The Southern Ocean in a Changing World*". The Symposium will be structured around plenary presentations, panel discussions and parallel sessions, along with side meetings and workshops. A number of sponsors are already on board and the call for sessions was released today.

There were no comments or questions.

### 11. SCAR Strategic Plan 2023-28 ([paper 42](#))

The President introduced the draft Strategic Plan 2023-2028 and described the process undertaken to develop the document. The Strategic Plan Committee was diverse and representative of SCAR leadership, members, partners and other stakeholders. Delegates were consulted through a SWOT analysis. Sub-committees, chaired by VPs, met and drafted sections based on the existing plan and any emerging issues. The complete plan was posted for open comment before final review by a committee of Past Presidents.

The vision for the plan is to create a legacy of Antarctic science and knowledge to help identify a path to a sustainable future for the planet. Seven objectives will fulfil this: (i) promote SCAR leadership in science; (ii) provide independent scientific advice to the Antarctic Treaty System and other bodies; (iii) encourage and facilitate FAIR data; (iv) enhance and expand research capacity in member countries; (v) increase and improve public awareness and understanding of Antarctica; (vi) ensure EDI principles; and (vii) encourage carbon footprint reduction. A focus of the plan is the climate crisis.

The President asked for questions and comments.

There was a range of comments on the draft. It was generally felt that the content of the draft was good but that it would benefit from further fine tuning to ensure that the key messages stand out. Some Delegates commented that a more succinct document is needed in order to have something that funders, governments and other stakeholders would be able to absorb more easily. The President suggested the Oversight Committee will compose a small group to revise the draft and, based on

that, decide whether implementation would need to be delayed. New Zealand suggested the refined version would need the approval of Delegates so a short online session could be convened later to approve it.

**Action:** ExCom to set up a small group to refine the draft Strategic Plan in response to comments from Delegates at the meeting (ExCom)

The fourth session of the meeting ended.

## Session 5: Wednesday 7 September (10.30-13.30 IST)

The President held a roll call of voting members to establish a quorum.

### 3. SCAR Officers – Vice-Presidential Election (CLOSED)

#### 3.1 Results of election for Vice President

The ED announced that Burcu Özsoy (Türkiye) had been elected to the remaining Vice-Presidential position.

### 12. Business (CLOSED)

#### 12.1 Amendment to Rules of Procedure for SCAR Subsidiary Bodies ([paper 43](#))

The ED introduced the draft amendment to the Rules of Procedure for SCAR Subsidiary Bodies, incorporating the SC-HASS Rules of Procedure. There were no objections and the rules were approved.

**Decision:** Rules of Procedure for SC-HASS were approved to be included in updated Rules of Procedure for SCAR Subsidiary Bodies.

#### 12.2 Executive Committee (Directors) Report ([paper 44](#))

The President introduced a report on the activities of the Executive Committee from 2021-2022. Since the last Delegates' Meeting in 2021, ExCom has focused on revitalising activity delayed or cancelled due to the pandemic. During the absence of the Executive Director, the Directors had brought in Dr Mahlon "Chuck" Kennicutt to support the Secretariat on a temporary basis from April 2021 to April 2022. The President thanked Dr Kennicutt for his tremendous help during a challenging time. The ED returned to the office on a part-time basis from May 2022.

The President outlined SCAR's contributions to the ATCM, CEP and CCAMLR, coordinated by the SC-ATS CO. Major activities were the Strategic Plan, setting up the EDI Action Group (through the VP for CBET), and budget sustainability during the pandemic (through the VP for Finance). There were no comments or questions and the report was noted by Delegates.

### **12.3 Secretariat Report ([paper 45](#)) and 9.1 SCAR Communication Activities ([paper 34](#))**

The ED introduced the report on the activities of the Secretariat from 2021-2022 and on communication activities. The Secretariat manages the day-to-day running of SCAR's operations. The Secretariat currently has the equivalent of three full-time staff and the understaffing has created some challenges. The pandemic has added to the Secretariat workload with online events and the need to coordinate the online and physical components of events. The Secretariat is supported on an ad-hoc basis by several interns and post-docs.

The Secretariat supports core SCAR functions – meetings and events, support to SCAR groups, capacity-building schemes, policy advice within and outside the Treaty, managing the Antarctic Environments Portal and maintaining partnerships. Support of governance functions include supporting monthly or bi-monthly ExCom meetings, the Delegates' Meeting, finances, back-office tasks and outreach and communication.

Communication activities are directed internally at the SCAR community and outwardly beyond. Engagement with SCAR's communication channels, such as the website, newsletter and social media, is growing over time. A science communications intern is taken on in the northern summer to work with the Project Office (PO) on ad-hoc projects. Key projects led by the PO over the past year include: working with BBC Storyworks on a dynamic article showing the work of PAIS, SERCE and INSTANT; working with John Weller on the SCAR film "Peace and Science" to show the work of SCAR, particularly the three new SRPs; working with Polar Educators International to showcase outreach activities; working with this year's science communications intern to produce a short animation on the main findings of the ACCE update.

The ED expressed thanks to Chuck Kennicutt for stepping in during her absence, and to Alice Oates, Morgan Seag, Inga Beck, Andrea Herbert and Rachel Downey for their invaluable help and support over the past two years.

South Africa expressed appreciation for the work of the Secretariat. For many, the Secretariat is the face of SCAR and they expressed thanks for the way the Secretariat manages and portrays SCAR.

The UK echoed this, having seen closely how the Secretariat managed through the pandemic and the ED's illness. It is a small group who are doing a lot and there is a risk to SCAR if it is not strengthened. SCAR should consider bringing in someone to support the ED and EO at a higher level. At a time when we are using more virtual facilities and increasing our policy work, we should increase staff numbers to ensure a secure future.

Chile reinforced congratulations for the work done, especially during the pandemic, but pointed out that the social media accounts of some national Antarctic programmes have larger numbers of followers than SCAR. They advised obtaining support from national programmes, and perhaps working with programmes' community managers and specialists to increase access to the science being conducted.

The USA agreed with the UK that more resources should be put into staffing the Secretariat. Australia agreed that the Secretariat does a great job and would benefit from increased funding, particularly as SCAR is being asked to provide more policy advice. The VP for Finance should look at a plan as to how that may be supported.

**Action:** *Secretariat to look at coordinating social media feeds with national programmes to increase coverage (Secretariat)*

**Action:** *VP for Finance to look at how support to the Secretariat could be increased (VP for Finance with ExCom).*

### 13. Finance (CLOSED)

The VP for Finance gave some background on the SCAR finances. The last two years had been exceptional due to the pandemic, but we adapted and managed well, protecting our assets, and the situation is slowly returning to normal.

He proposed changing the order of the finance agenda items, beginning with the examination of budgets, then the finance report, and finally discussing the national contribution levels.

The statements have been approved by the auditors and all of the budgets and statements examined and approved by the Finance Committee, which he thanked for its work.

#### 13.3 *Financial Statements for 2020 and 2021 ([paper 48](#) and [paper 49](#))*

The EO also thanked members of the Finance Committee for their work over the past couple of days in looking at and approving the statements and budgets.

The 2020 statement was presented at the Delegates' Meeting in 2021 but had not been audited at that point. It has now been audited and there were no changes.

The 2021 statement has been audited and we are currently in the process of signing off the accounts for this year so it has not yet been submitted to Companies House. There were some surpluses, mainly due to restrictions on travel as a result of the pandemic.

There were no queries and the financial statements for 2020 and 2021 were accepted.

#### 13.4 *Revised Budget for 2022 ([paper 50](#))*

The EO introduced the 2022 budget. The year began with large balances of unspent funds from previous years, particularly on science activities. This reflected the difficulty for groups in spending the budget allocated in 2021, as well as the 30% carry-forward from 2020. Of the \$553,000 available to groups at the start of the year, a balance of \$300,000 is expected to remain unspent at the end of the year. The overall budget was amended, diverting funds from travel to the technical delivery of a hybrid meeting. Salary costs were also adjusted due to the ED's absence and extra Secretariat support. But, even with these changes and extra costs, we expect to be close to a balanced budget for this year.

There were no questions or objections and the 2022 budget was approved.

#### 13.5 *Revised Budget for 2023 ([paper 51](#))*

The EO said the 2023 and 2024 budgets have been prepared in the expectation of moving towards normal functioning involving travel.

The 2023 budget has an opening balance of nearly \$217,000 if all the 2022 funds are spent, so there are likely to be residual funds to bring into 2023. Additional income of \$70,000 is required to balance the budget, and that will be even higher in 2024. The

rest of the 2023 budget is consistent with previous years, including an update to salaries.

New Zealand asked whether potential carry-forward remains tagged to individual project lines or gets put back into the budget, and the reason for the positive balance at the end of the year. The EO said carry forward goes into central funds. Groups are able to make a case to carry funds forward. In terms of the balance, we must maintain a positive balance and have to consider that, potentially, all budgets will be spent. We can make an estimate at this point on how much may be carried forward. On being asked whether there is a plan for where the \$70,000 will come from, the EO confirmed there is.

There were no further questions and the 2023 budget was approved, with conditional approval from New Zealand, pending agreement on proposals to balance budgets using contingency funds, introduced by the VP Finance in section 13.2.

### **13.6 Draft Budget for 2024 (paper 52)**

The EO introduced the 2024 budget, with the same opening balance, presented on the basis of having been balanced. Any carry-forward funds are not known at this stage. \$86,251 is needed to balance the budget, higher than 2023 as salaries have increased in line with expectations. The rest of the budget is as we would project for any year with an OSC. This budget will be revised at the ExCom meeting in 2023.

New Zealand asked about provision for new SRPs and PPGs. The EO said that a PPG line was included which would cover the newly approved AGATA. If more PPGs were proposed, then the budget would have to be revised.

Australia recalled that, on the first day of the meeting, Science Group reports were approved but not the budgets. Perhaps some thought might be given on ways of incentivising the work of the SGs – for example, by providing material for the AEP. The EO said that the Finance Committee had considered this issue. Carry-forwards will be tied to how SGs function.

Switzerland questioned how travel funds will be spent in the future with meetings becoming hybrid. Reserves need to be justified: for example, in Switzerland it is allowable to keep enough for a year of staff salaries, but not much beyond that. Based on these current budgets, it would be difficult to justify an increase in Switzerland's contribution in the coming years. They also suggested that the Secretariat budget should be increased to allow for extra staff. The EO explained that the reserves figure is an emergency fund and is not used for normal ongoing expenditure.

Canada asked where the budgeting would come from if an additional SRP was approved. The EO said that would have to be decided by the Delegates. Overall spending on SRPs is roughly the same as it was when we had more SRPs. It was felt it would be better to have fewer but better-funded SRPs so this would have to be reassessed if additional SRPs needed to be added. All funding is worked out within the national contributions we receive.

Belgium asked whether unspent money from groups that are not functioning would stay with the SG or move elsewhere. The EO said unspent funds at the end of every two-year cycle are retained by SCAR and used at ExCom's discretion. Budget is allocated to the SGs and it is their decision how they divide it between their groups.

IUGS asked whether there should be an analysis of the long-term trends of groups not using funds over several cycles, not just during the pandemic period. The VP for Finance suggested there is a deeper question about the need to re-evaluate the

structure of SGs and their organisation, which is something for Delegates and ExCom to examine in the future. The VP for Science suggested a good way forward is for her to contact the SGs and develop with them a way to review performance and make more informed decisions about how money is allocated.

There were no further questions or objections and the 2024 budget was approved.

**Action:** *VP for Science to contact SGs and develop with them a process for reviewing the performance of subsidiary groups (VP for Science, assisted by the Secretariat).*

### 13.2 Finance Report ([paper 47](#))

The VP for Finance explained the plan to deal with the surplus in budgets and how to support groups to spend or return their funds for reallocation. One difficult situation is that international economic sanctions make it impossible for us to receive national contributions from some members, which may soon amount to \$100,000.

SCAR's current financial situation looks good because the pandemic reduced spending. The budget for staff salaries was estimated when the UK inflation rate was 1-2% but it is now nearer to 10%. There has been an increase in staff costs with the Communications Officer/Project Officer role, which is essential in a modern organisation. Another area of increased expenditure will be in providing advice to the Antarctic Treaty System. In the near future, we will need to decide whether SCAR is going to contribute to the running of the Antarctic Environments Portal. The AEP has external funding for the next 12 months but after that we have to decide how to proceed.

The investment portfolio was set up in 2016, kept apart from the rest of SCAR's funds but there in case of a worldwide crisis. Constantly kept under review, it is a long-term investment which fluctuates occasionally but is essentially growing.

Canada wondered how quickly the funds could be accessed if needed in an emergency. The EO explained the portfolio is diversified with most funds available within one month and no penalties for early redemption. Funds are ethically and sustainably invested with a low tolerance for risk.

The VP for Finance showed a summary of finances to December 2021, showing artificially high balances due to the inability to spend money during the pandemic.

Looking at total expenditure 2012-2022 (graph from [paper 46](#)), budgets were more or less balanced but, from 2022, we will be spending more than we receive from national contributions. The budgets for 2023 and 2024 show a shortfall but, at the end of this year, we should be left with some funds to re-allocate. The proposal, examined by the Finance Committee, is to use the financial surplus for the next two years in the following way. All subsidiary group allocations must be spent by the end of 2022. Up to 30% may be carried forward with a justification of how it will be spent. Any carry-forward for SGs will be contingent on the closure of inactive groups. The surplus from the pandemic will be used to balance the budgets for 2023 and 2024. It is expected that, after two years, the surplus money will have been fully used.

Delegates approved the proposal on how to spend the surplus.

**Decision:** *Surplus funds from the pandemic period will be used to balance the budgets in 2023 and 2024.*



### **13.1 National Contribution Levels ([paper 46](#))**

The VP for Finance introduced proposals for increasing national contributions from 2024 onwards, outlined in paper 46.

Delegates recognised the necessity of an increase in order to cover future costs and be resilient to future financial pressures. They supported a system where increases were regularly reviewed, with a four-year review period being the most popular, rather than automatic increases in fees. Several Delegates reiterated that the proposal would need to be passed by their National Committees and, in addition, would require governmental approval. Delegates suggested that the new Strategic Plan should be used to support the argument for an increase in fees. The VP for Finance noted that the proposal was for conditional approval at the meeting, allowing time for Delegates to discuss with their National Committees and beyond, as appropriate.

The VP for Finance proposed an increase of 20% to be implemented from 2024 onwards, subject to approval. SCAR will send a letter to Delegates and National Committees explaining the proposal and its justification. Delegates agreed that the Strategic Plan needs to be shared at the same time as the proposal to increase fees.

There were no objections so the proposal was approved.

**Decision:** *Letters to Delegates and National Committees on a fee increase will be delayed until the refined Strategic Plan is available.*

## **15. Other Business**

### **15.1 Any Other Business**

The President proposed a brief moment to show appreciation to all those who give excellent service to SCAR. He shared a list of recipients of Certificates of Appreciation and showed a sample certificate.

The President invited the VP for Science to lead a discussion on the request from the Life Sciences Group to amend their Rules of Procedure. The VP for Science said this was to formalise something that has been routine policy for at least two decades, that is for the Deputy Chief Officer of the Life Sciences group to be a member of the Joint Expert Group on Human Biology and Medicine (JEGHBM), a joint group with COMNAP. There was no opposition so the amendment was passed.

**Decision:** *The section on Science Groups in the Rules of Procedure for SCAR Subsidiary Bodies to be amended to include "The Deputy Chief Officer of the Life Sciences group will be a member of JEGHBM, if nominee available".*

## **16. Actions Arising**

### **16.1 Summary of Action Items from the meeting**

The Executive Director briefly summarised the decisions and actions arising from the 2022 meeting.

## **17. Closure of the Meeting**

The President invited Rahul Mohan from the Local Organising Committee to say a few words of thanks to the people behind the scenes in India. The President thanked the Secretariat and Michael Cousins of Congress Rental for their hard work. He welcomed the new members of ExCom, Marcelo Leppe and Burcu Özsoy. He thanked everyone who participated online, particularly those in difficult time zones. The ED thanked the Secretariat, the Directors and the captioners, who had worked tirelessly.

The President announced the closure of the meeting.

Overflow session 6 was not needed.

**Appendix: List of Acronyms**

AAA	Astronomy and Astrophysics from Antarctica
ACCE	Antarctic Climate Change and the Environment
ADMAP	Antarctic Digital Magnetic Anomaly Project
AEP	Antarctic Environments Portal
AFoPS	Asian Forum for Polar Sciences
AG	Action Group
AGATA	Antarctic Geospace and ATmosphere reseArch (Programme Planning Group)
AGIVA	Action Group on Intrinsic Values in Antarctica
AMD	Antarctic Metadata Directory
AntClim <sup>now</sup>	Near-term Variability and Prediction of the Antarctic Climate System
Ant-ICON	Integrated Science to Inform Antarctic and Southern Ocean Conservation (originally named Integrated Conservation Planning for Antarctica and the Southern Ocean)
APECS	Association of Polar Early Career Scientists
AR6	Sixth Assessment Report (IPCC)
ATCM	Antarctic Treaty Consultative Meeting
ATS	Antarctic Treaty Secretariat
Bedmap	Antarctic Bedrock Mapping
CBD	Convention on Biological Diversity
CBET	Capacity Building, Education and Training
CCAMLR	Commission for the Conservation of Antarctic Marine Living Resources
CEP	Committee for Environmental Protection (Antarctic Treaty)
CO	Chief Officer
COMNAP	Council of Managers of National Antarctic Programs
COP	Conference of Parties (UNFCCC)
COVID-19	Coronavirus disease, emerged in 2019 and caused a global pandemic
DueSouth	Database of Upcoming Expeditions to the Southern Ocean
ECR	Early-career researcher
ED	Executive Director
EDI	Equality, Diversity and Inclusion
EG	Expert Group
EG-ABI	Expert Group on Antarctic Biodiversity Informatics
EG-GEOCON	Expert Group on Geological Heritage and Geoconservation
EO	Executive Officer
EPB	European Polar Board
ExCom	Executive Committee
FAIR	Data principles of Findable, Accessible, Interoperable, and Reusable
FPA2	Fondation Prince Albert II de Monaco
GSG	Geosciences Group
IAATO	International Association of Antarctica Tour Operators
IACS	International Association of Cryospheric Sciences

IASC	International Arctic Science Committee
IAU	International Astronomical Union
IBCSO	International Bathymetric Chart of the Southern Ocean
ICCI	International Cryosphere Climate Initiative
IceCube	the South Pole Neutrino Observatory
ICED	Integrating Climate and Ecosystem Dynamics
ICEPRO	International Collaboration Effort for Improving Paleoclimate Research in the Southern Ocean (Action Group)
IMBeR	Integrated Marine Biosphere Research
ImPACT	Input Pathways of persistent organic pollutants to AntarCTica
INQUA	International Union for Quaternary Research
INSTANT	INStabilities & Thresholds in ANTArctica (formerly AISSL, then AIDSL)
IPBES	Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services
IPCC	Intergovernmental Panel on Climate Change
IPY	International Polar Year
ISC	International Science Council
ISMSS	Ice Sheet Mass Balance and Sea Level
ISOC	International Scientific Organising Committee
IST	India Standard Time
IUBS	International Union of Biological Sciences
IUGG	International Union of Geodesy and Geophysics
IUGS	International Union of Geological Sciences
IUPAC	International Union of Pure and Applied Chemistry
JEGHBM	Joint Expert Group on Human Biology and Medicine (with COMNAP)
LoA	Letter of Agreement
LOC	Local Organising Committee
LS	Life Sciences
LSG	Life Sciences Group
MEASO	Marine Ecosystem Assessment for the Southern Ocean
MoU	Memorandum of Understanding
OSC	Open Science Conference
PAGES	Past Global Changes
PEI	Polar Educators International
Plastic-AG	Plastic in Polar Environments Action Group
PO	Project Officer
PPG	Programme Planning Group
PSG	Physical Sciences Group
RAPAL	Reunión de Administradores de Programas Antárticos Latinoamericanos (Administrative Network of Latin American Programmes in Antarctica)
SC-ADM	Standing Committee on Antarctic Data Management
SC-AGI	Standing Committee on Antarctic Geographic Information
SCAR	Scientific Committee on Antarctic Research
SC-ATS	Standing Committee on the Antarctic Treaty System

SC-Finance	Standing Committee on Finance
SCGES	Standing Committee on Gender Equality in Science of the International Science Council
SC-HASS	Standing Committee on Humanities and Social Sciences
SCOR	Scientific Committee on Oceanic Research
SG	Science Group
SGCCR	Subsidiary Group on Climate Change Response (Antarctic Treaty System)
SKAG	SCAR Krill Action Group
SOOS	Southern Ocean Observing System
SPRI	Scott Polar Research Institute
SRP	Scientific Research Programme
TATE	Tropical Antarctic Teleconnections (Action Group)
UN	United Nations
UN Decade	UN Decade of Ocean Science for Sustainable Development
UNFCCC	United National Framework Convention on Climate Change
URSI	Union Radio Scientifique International / International Union of Radio Science
VP	Vice President
WCRP	World Climate Research Programme
WebGIS	Geographic information systems using the world-wide web for interactivity
WG	Working Group
WMO	World Meteorological Organisation
YOPP-SH	Year of Polar Prediction in the Southern Hemisphere