

The International Council for Science

ISSN 1998-0337

# SCAR **bulletin**

No. 173 SEPTEMBER 2009

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## **SCAR Executive Committee (EXCOM) Meeting**

**Punta Arenas, Chile, 5-7 August 2009**



Published by the

**SCIENTIFIC COMMITTEE ON ANTARCTIC RESEARCH**

at the

**Scott Polar Research Institute, Cambridge, United Kingdom**

## **SCAR Executive Committee (EXCOM) Meeting**

### **Punta Arenas, Chile, 5-7 August 2009**

*WP refers to Working Papers; IP refers to Information papers; WPs and IPs are available from the Secretariat.*

**Attendees:** Mahlon C Kennicutt II (President), Sergio Marensi, Antonio Meloni, Ad Huiskes (Vice-Presidents), Alessandro Capra (Chief Officer SSG-GS), Maurizio Candidi (Chief Officer SSG-PS), Peter Convey (SSG-LS representative), Steven Chown (Chief Officer SC-ATS), Helen Campbell (SCADM representative), Colin Summerhayes (SCAR Executive Director), Michael Sparrow (SCAR Executive Officer and SCAGI representative),

**Observers:** Leon Bravo (Chilean SCAR Committee), Marcelo Gonzalez (INACH), Francisco Herve (University of Chile)

**Apologies:** Rasik Ravindra (Vice President), Chris Rapley (Past President), Kathleen Conlan (SSG-LS), Kim Finney (SCADM) and Henk Brolsma (SCAGI).

#### **Appendices:**

1. Contact details for attendees (page 32)
2. List of Documents (page 35)
3. Terms of Reference for Expert Group on Protected Area Management Plans (page 38)
4. List of acronyms (page 39)

#### **Opening formalities**

The President welcomed the meeting attendees and thanked INACH, and its Director, José Retamales, for hosting the meeting. The location, Punta Arenas, was dictated by the location of the annual COMNAP meeting, it being the custom for EXCOM to meet in association with the COMNAP meeting in the years between SCAR biennial meetings, so as to facilitate discussions between the SCAR and COMNAP EXCOMs.

The President explained that the focus for the current SCAR EXCOM Meeting was to launch an inclusive consultative strategic planning process needed to develop the SCAR strategic plan for 2011-2017. The strategic plan will set out the framework for future decision-making within SCAR.

**Action 1: President and Secretariat to draft a Note to Delegates from the President setting out the strategic planning process, which can then be circulated to the whole SCAR community.**

## 1. Adoption of the Agenda

The final Agenda (WP01), Annotated Agenda (WP02) and Timetable (WP03) were adopted, noting that certain items (item 11, Finance; item 7.1, Fellowships; and item 9.3, Secretariat Wages and Conditions) would be moved to a closed session. The Executive Director noted that discussions on the International Polar Year (IPY) would not be taken as a separate agenda item. Instead, IPY legacy issues would be considered under the appropriate agenda items. He also reminded attendees that several additional items had been recently submitted for the consideration of the meeting so were not in the published list of documents, namely:

- (i) a proposal for a Social Sciences Action Group;
- (ii) a document outlining draft Open Science Conference (OSC) themes and sessions;
- (iii) a draft Code of Conduct for Sub-glacial Lake Exploration;
- (iv) draft Terms of Reference and a Chief Officers' Duty Statement for the Standing Committee on the Antarctic Treaty System (SC-ATS);
- (v) a request from Kathy Conlan (SSG-LS) for discussion of SCAR's carbon footprint.

It was agreed that members of EXCOM would act as rapporteurs, one for each morning or afternoon session.

## 2. The SCAR Performance Review 2009 (WP05)

The President gave an overview of the SCAR Performance Review carried out in early 2009 and chaired by Phil Smith. The review outcome was both positive and constructive. There were 27 key recommendations, mostly aimed at fine-tuning SCAR's mode of operating and trying to ensure that the momentum achieved since the last review (in 2000) is not lost. The recommendations will inform the development of the next strategic plan and all are being given careful consideration. The Review noted that the Open Science Conferences have been great success, but they have meant that SCAR is now in a near continuous mode of conference planning and that hosting OSCs is a major commitment for Members. There is also the question as to whether SCAR now has too many meetings, given that we have biology, geology and glaciology symposia every four years as well as the OSCs,

In response to particular recommendations, EXCOM agreed:

- (i) that there is a need for the Standing Scientific Groups (SSGs) to operate more strategically. This is addressed under agenda item 3.
- (ii) that SCAR should assist early career scientists to understand how best to prepare papers for publication in high impact journals. This could be done in association with APECS, perhaps via a workshop in association with the OSC.
- (iii) that in relation to recommendations 17 and 18 (e.g. on data and information management) it doesn't matter how well we coordinate internationally, efforts will fail if individual Members are not organised in

such a way as to contribute to data exchange; it is our task to show Members the benefits so as to encourage their participation.

The following actions emerged from the discussion (these are additional to the 27 recommendations, which will be listed under SCAR's combined actions and transferred to the Implementation Plan):

**Action 2: (i) EXCOM to arrange for a keynote paper on scientific frontiers and emerging issues for the Delegates meeting (not just for Delegates Committee for Scientific Affairs). (ii) EXCOM and Secretariat to consult widely to find a keynote speaker for 2010.**

**Action 3: EXCOM needs to develop a 10-year strategic plan for meetings and outreach activities, taking into consideration the workload on the Secretariat and the SCAR budget.**

**Action 4: Secretariat to inform SSGs about which are the high impact ISI journals, and SSG COs to encourage publication in them and the Secretariat is to identify commonly utilized journals that are not ISI registered and encourage them to do so when appropriate (i.e., not appropriate for regional journal which may be non-English).**

**Action 5: Secretariat to discuss with APECS the possibility of holding a workshop on preparing papers for publication.**

**Action 6: Secretariat to draft letter for President to thank SPRI for hosting SCAR Secretariat.**

### **3. Science**

#### **3.1 Report of the Cross Linkages Workshop, Modena, Feb 5-6, 2009 (WP06)**

Alessandro Capra, chairman of the Cross-Linkages Meeting in Modena (5-6 February, 2009) presented a brief report on the highlights of the meeting. The primary objectives of the meeting were:

- to encourage the development of cross-discipline research within SCAR;
- to develop concrete actions that would lead to a closer working relationships between SCAR's Scientific Research Programmes (SRPs) and the Standing Scientific Groups (SSGs) including investigating ways to improve these interactions.

EXCOM agreed that the Cross-linkages process has helped SCAR to develop a significant number of interdisciplinary activities that tie the three disciplinary SSGs more closely together and promote interdisciplinary research activities.

**Action 7: Secretariat to incorporate the cross-linkages list of actions into the SCAR Combined Actions List (along with recommendations from the Performance Review and from the President's paper on how to improve SCAR meetings).**

### **3.2 Report of the Chief Officers' Meeting, Punta Arenas, August 4, 2009 (WP07)**

Steven Chown reviewed the main recommendations that came out of the Chief Officers' meeting held the day prior to the EXCOM meeting. These meetings provide a valuable forum in which to explore ongoing and new issues prior to the formal EXCOM meeting. Among things not specifically addressed later in the EXCOM report, COs agreed that:

- (i) If COs were to have job descriptions, SRP leaders should have them too;
- (ii) A joint SSG plenary during SCAR's business week was less valuable than having tailored presentations to SSGs on matters of joint interest (the President noted that tailored presentations were not the norm, that there were items that transcended individual SSGs, and that presentations tailored to each SSG would require better preparation on the part of presenters to be effective);
- (iii) SRPs should report to SCAR through the appropriate SSG;
- (iv) Clear communication to SSGs is required for their contribution to the new strategic plan (this could be achieved via "Note from the President");
- (v) If SSGs wished to present new SRPs for inclusion in the new strategy they would have to do so at XXXI SCAR in 2010;
- (vi) SSGs are an essential component of the SCAR structure, for promoting scientific collaboration, developing scientific research programmes, and providing advice to external parties;
- (vii) It might be advisable to invite SSG COs and SRP leaders to the EXCOM Strategic planning meeting to be held in Cambridge;
- (viii) COs should review all of their past Recommendations to SCAR prior to the XXXI meeting, to remove those that had lapsed.

Several actions arising out of the discussion on this agenda item are reported under the appropriate agenda item later in this report.

**Action 8: Steven Chown to supply Secretariat with (i) revised COs meeting Agenda for SCAR EXCOM web page and (ii) COs meeting report for SCAR web site.**

### **3.3 SCAR Standing Scientific Groups: Highlights, Progress and Plans.**

#### **3.3.1 SSG on Geosciences (SSG-GS)**

Alessandro Capra noted that in order to improve the efficiency of operation of SSG-GS the three officers (Chief Officer, Deputy and Secretary) now have identified responsibilities (e.g. Deputy, Phil O'Brien, for strategy; Secretary, Mike Hambrey for finance). The immediate focus of SSG-GS was on developing plans for the following activities:

- (i) the Antarctic Climate Evolution (ACE) SRP meeting on 7-11 September, 2009

- (ii) the AGU Fall meeting in San Francisco, 2009;
- (iii) the XXXI SCAR meeting and OSC in Buenos Aires (August 2010);
- (iv) the 11<sup>th</sup> SCAR International Symposium on Antarctic Earth Sciences (ISAES) (2011, in Edinburgh)

**Action 9: SSG-GS and SSG-PS to ensure that there is an appropriate mix of earth and atmospheric scientists in the meeting of the Action Group on GPS for weather and space forecasting in Rome in September 2009.**

### **3.3.2 SSG on Life Sciences (SSG-LS)**

Pete Convey reported that the SCAR Biology Conference in Sapporo in July 2009 went very well, with 255 attendees from 26 countries. In particular he noted that about 40% of the presentations were given by students or Early Career Scientists, whose attendance was helped by subsidies. Details of the meeting can be found at [www.scarbiologysymposium2009.jp/index.html](http://www.scarbiologysymposium2009.jp/index.html). In the margins of the Conference the new Birds and Marine Mammals Group (BAMM) had held a successful meeting, which the SCAR President attended. The group now seems to be working well under its new Chair Mark Hindell (Australia).

### **3.3.3 SSG on Physical Sciences (SSG-PS)**

Maurizio Candidi summarised progress with SSG-PS. Among other things, recent activities included:

- (i) an ICSU-funded summer school on ice sheet modelling that was organised by SCAR's Expert Group on Ice sheet mass balance and sea level (ISMASS), and which was taking place in Portland, Oregon, from August 3-14, 2009. It was jointly funded by ICSU, SCAR, IASC, IACS, WCRP and NSF.
- (ii) a meeting of the International Programme in Ice Core Science (IPICS) in Corvallis, Oregon, from July 6-7, 2009, which reviewed progress with the four major IPICS ice drilling programmes. There may be a major IPICS symposium in 2012.
- (iii) the SCAR/SCOR Expert Group on Oceanography meets in Venice in September 2009 to discuss finalising the plan for a Southern Ocean Observing System (SOOS) and implementation of the plan itself. The current chair of the Expert Group (Steve Rintoul) has raised the possibility of hosting a Secretariat for SOOS Implementation at CSIRO Hobart.
- (iv) an extensive report on the status of research on Persistent Organic Pollutants (POPs) in Antarctica had been produced by the Action Group on Environmental Contamination in Antarctica (ECA) for the Antarctic Treaty Consultative Meeting (ATCM) in Baltimore in April.

**Action 10: SSG-PS Chief Officer to talk to ECA group about (i) possible future research on POPs to address gaps identified in their POPs report, and (ii) the connection between ECA and PACT [Polar Atmospheric Chemistry at the Tropopause].**

Some of SCAR's climate interests are managed through the Expert Group on Prediction of Changes in Physical and Biological Environment. EXCOM agreed that

one topic of considerable interest in the climate realm is the development and inter-comparison of high resolution, limited area climate models, perhaps jointly with CliC and others. There was also some discussion of the extent to which AGCS needs an upper atmosphere dimension. EXCOM considered that SCAR needs an overarching programme dealing with climate (which could be a topic for the new strategy).

**Action 11: Secretariat to ask AGCS to develop a proposal for EXCOM as to how SCAR should handle its climate initiatives in the future (e.g. for climate change science and climate science status reports).**

The SCAR Antarctic Weather Forecasting Handbook is now available online. It was noted that National Operators use this handbook, so it ought to be useful to COMNAP. EXCOM asked if the SCAR Operational Meteorology group that developed the Handbook is linked to COMNAP, and whether the Group needs a higher profile.

**Action 12: Secretariat make sure COMNAP is aware of the SCAR Antarctic Weather Forecasting Handbook and explore if this is an opportunity for a joint SCAR/COMNAP activity.**

### **3.3.4 IPY legacy – observing systems (SOOS, CryOS, PAntOS) (WP08)**

*The Executive Director led a discussion on observing systems. EXCOM noted that the PAntOS Action Group had not been active since the workshop it organised at XXX SCAR in July 2008. Conceivably some other mechanism than PAntOS is needed to address the question of what observing systems are now operating in the Antarctic, what the gaps are, and if there will be benefits to SCAR from improved coordination. COMNAP and CEP have also expressed interest in understanding more about Antarctic Observing Systems.*

**Action 13: A small group (Capra, Campbell, Summerhayes, Sparrow, Marensi) to recommend to EXCOM a mechanism for how to obtain information about the range of scientific observing systems in the Antarctic, and the geographic gaps and gaps in variables that may need filling, so as to provide Delegates with recommendations about how Antarctic observing systems may be improved for the benefit of scientific understanding.**

Once this action has been completed EXCOM will review the future of the PAntOS Expert Group.

### **3.3.5 SSG Strategic vision (WP09a, 09b, 09c).**

As part of the development of a new strategic approach for the future, the SSG Chief Officers were each asked to develop a ‘mission statement’ using the same approach that IASC (International Arctic Science Committee) used in defining its new structure and direction earlier this year. EXCOM noted some generic commonalities, and some specific differences between the three ‘statements of purpose’, and asked the COs to collectively review them.

**Action 14: SSG COs to merge their three statements of purpose, highlighting (i) generic elements, and (ii) SSG-specific statements, and to provide the revisions to the Secretariat.**

A discussion ensued on the respective roles of the SSGs and the SRPs. SRPs are designed to enable SCAR to focus resources on work that is timely, relevant and at the leading edge. The SSGs are core on-going components of SCAR and are responsible for development and management of Action Groups, Expert Groups, Scientific Research Programme Planning Groups (SRPPGs) and Scientific Research Programmes (SRPs). Although SRPs have independent budgets, reports on progress and plans of SRPs should nevertheless go to EXCOM and Delegates through the SSGs. This process will assure that SSGs take ownership of SRPs, interact with them on a regular basis, use the opportunity to plan future initiatives, and comment on the progress and quality of SRP performance for the Delegates.

**Action 15: In future, reports on progress and plans of SRPs should go to EXCOM and Delegates through the SSGs, not independently.**

### **3.3.6 Functioning and leadership of SSGs (WP10)**

EXCOM approved the President's proposed 40 recommendations (WP10) on how to improve the ways in which SSGs function, so as to deliver greater efficiency and effectiveness in the future. These are designed to streamline business meetings, maximise the utilisation of time, encourage strategic thinking, focus on scientific outputs rather than administrative details, produce streamlined and standardised reports, and engender excitement at the Delegates meeting about SCAR's work and mission. EXCOM agreed there should be no overlap of SSG meetings with meetings of their subsidiary groups (see agenda item 10.3). While EXCOM agreed that COs of SSGs might meet over breakfast to discuss items of common interest prior to each day's business meetings, they did not agree that a joint plenary SSG meeting was required. That caveat accepted, EXCOM agreed the following action:-

**Action 16: Secretariat and COs should implement the recommendations for the management of SSG meetings set out in Working Paper 10.**

### **3.3.7 Job descriptions for Chief Officers (WP11)**

EXCOM approved the recommendations made in Working Paper 11 (subject to the approval of the Delegates meeting) as to what should be expected of the Chief Officers of all SCAR's major subsidiary groups (SSGs, SCADM and SCAGI and SC-ATS and the SRPs), to make it clear to candidates for office what is expected of them, and what is expected of their host country. Candidates for leadership positions must be willing and able to provide the time and resource commitments needed to ensure the successful operation of the groups or not stand for office.

**Action 17: Secretariat to revise Working Paper 11a to incorporate text relevant to SRP Leaders (especially to modify point xiv).**

**Action 18: COs to feed back to Secretariat suggestions for improvements to the proposed template for SSG reports.**

## **3.4 SCAR Scientific Research Programmes and Programme Planning Groups: Highlights, Progress and Plans**

### **3.4.1 Antarctic Climate Evolution (ACE)**

Alessandro Capra reported on recent progress with ACE. The outgoing co-chairmen, Martin Siegert (UK) and Rob Dunbar (USA) have been replaced by Carlota Escutia

(Spain) and Rob De Conto (USA). Much of the effort this year is devoted to planning the first ACE Symposium, which takes place in Granada (Spain) on September 7-11, 2009 (<http://www.acegranada2009.com/>). As reported at the Cross Linkages meeting in Modena (February 5-6, 2009), there have been exciting recent developments, including: the IPY Antarctica's Gamburtsev Provinces Programme (AGAP) to investigate the under-ice Gamburtsev Mountains, which will provide extensive new radio echo-sounding coverage of the ice sheet; plans for ANDRILL to drill in various places; plans for the Integrated Ocean Drilling Programme (IODP) expedition to the Wilkes Land coast (now postponed). Several new publications have appeared recently, and ACE work featured prominently in the January 09 issue of PAGES News. There are plans to apply for a Chapman or a Gordon Conference on polar paleoclimate records. Links are well established with ANDRILL, IGBP-PAGES, SCADM, SALE, AGCS, EBA, AGAP, IPICS and several major IPY programmes (BIPOMAC, Plates and Gates etc).

### **3.4.2 Antarctica and the Global Climate System (AGCS)**

Maurizio Candidi reported on progress with AGCS, noting that AGCS has a new chairman, Antonio Naveira-Garbató (UK), who replaces John Turner (UK). Databases have been developed for SCAR's Met-READER, Ocean-READER, and Ice-READER databases. Tony Worby of SCAR's Antarctic Sea ice Processes and Climate (ASPeCt) programme (part of AGCS), has published a recent paper on sea ice in the *Journal of Geophysical Research*. ASPeCt has developed a major sea ice database [<http://data.aad.gov.au/aadc/seaice/>], and held a major workshop on sea ice processes in April 2009. A major synthesis workshop was held in Maine in September 2008 to review high-resolution past climate data from short ice cores collected by ITASE (International Trans Antarctic Scientific Expedition – another part of AGCS). AGCS has several key targets, among them quantifying Southern Ocean circulation, heat and freshwater fluxes, and investigating tropical-polar connections. There remains a need to develop a key fields database containing monthly and seasonal fields of quantities such as surface pressure, wind speed, ocean currents etc. In support of these endeavours, AGCS co-sponsored a Southern Ocean Physical Oceanography and Cryosphere Linkages (SOPHOCLES) meeting in Montreal in July 2009. John Turner for AGCS contributed to the 4<sup>th</sup> Malaysian international seminar on the Antarctic in April 2009, along with biologists from EBA (Pete Convey) and CAML (Michael Stoddart). The main activity of the AGCS has been the development of the Antarctic Climate Change and the Environment (ACCE) review that will be a southern equivalent of the Arctic Climate Impact Assessment published in 2005, and which is being compiled with assistance from ACE and EBA. The first part (State of the Antarctic and Southern Ocean Climate System) was published in January 2009 in *Reviews of Geophysics*. Part II is due out in *Antarctic Science* in late 2009, and includes the biology. The executive summary of the ACCE book was presented as an Information Paper to the ATCM in Baltimore in April. The whole ACCE document (a book of around 400 pages) will be published probably in September. The ATCM ACCE paper will be presented to the UN Framework Convention on Climate Change conference in December 2009 by the ATCM Chair. The ACCE book will be made available at that same meeting. We plan also to produce a 'glossy' distillation of the executive summary, for policy makers, at some point. PDFs of the individual chapters will be downloadable from the SCAR web site.

**Action 19: Secretariat to check with John Turner about the proposal to submit an article to Nature to disseminate the ACCE document.**

### **3.4.3 Evolution and Biodiversity in the Antarctic (EBA)**

Pete Convey reported on progress with EBA. There have been a number of workshops including the MERGE polar biology session at the Banff microbiology conference [July 2008] and a latitudinal gradients workshop in Cambridge [May 2008], from which a major review manuscript is being developed. EXCOM noted that the Marine Biodiversity Information Network (MarBIN) is operating very successfully. Funding is still somewhat uncertain, though additional funds have been donated by Germany, Australia and the TOTAL Foundation. EXCOM discussed how to further develop the SCAR terrestrial database kindly hosted by the Australian Antarctic Division (AAD). EXCOM noted the huge contribution made by AAD, and in particular by Dave Watts, to this activity. From the SCAR perspective it is necessary to ensure that the database is consistent with GBIF standards, and that opportunities for direct feedback from EBA scientists to the database managers are provided.

EXCOM noted that the next 4-yearly SCAR Biology Symposium would coincide with the winding up of EBA in 2013. EXCOM also noted that each of the five EBA work packages is about same size as the other four SCAR SRPs, which makes EBA extremely large and unwieldy. There is the potential in future for EBA to be replaced by one or more, more focused SRPs with some biological activities being developed as Action or Expert Groups.

**Action 20: President to write to AAD to thank them for Dave Watts' efforts towards managing the SCAR terrestrial database.**

### **3.4.4 Interhemispheric Conjugacy Effects in Solar-Terrestrial and Aeronomy Research (ICESTAR)**

Maurizio Candidi reported on progress with ICESTAR. The chief new developments are that ICESTAR has proposed a session on interhemispheric similarities and asymmetries in geospace phenomena for the AGU Fall meeting in 2009 and that the ICESTAR community has recently published a paper in Nature on "Asymmetric auroral intensities in the Earth's northern and southern hemispheres". The paper reports observations that clearly contradict the common assumption that aurora in both hemispheres are mirror images of one another: intense spots are seen at dawn in the Northern summer Hemisphere, and at dusk in the Southern winter Hemisphere. The asymmetry is interpreted in terms of inter-hemispheric currents related to seasons, which have been predicted but hitherto had not been seen.

**Action 21: Maurizio Candidi to provide a draft item for the SCAR Newsletter on the ICESTAR Nature paper.**

### **3.4.5 Subglacial Antarctic Lake Environments (SALE)**

The President reported on progress with SALE. The 5th SALE meeting was held in Brussels on 10-11 June 2009 and the full report is available on the SALE website. Major recent developments include the following:

- (i) three major subglacial drilling and sampling programmes are now funded (Vostok, by Russia; Ellsworth, by the UK and USA; and the

Whillans Ice Stream, by the USA). Vostok entry is predicted for the 2011-2012 field season, following previous drilling difficulties. Ellsworth (near Patriot Hills) entry is predicted for 2012, as is the work on Whillans.

- (ii) SALE reviewed a draft code of conduct on subglacial drilling that was developed by a special Action Group chaired by Warwick Vincent.
- (iii) The SALE web site is being relocated following the exit of the SCAR President from SALE.
- (iv) There will be an AGU Chapman Conference on SALE from 15-17 March, 2010, in Baltimore. An AGU Monograph will result, and will be available at the Fall AGU in 2010.

EXCOM congratulated the SALE team on keeping the SALE concept alive to the extent that total funding for SALE-type programmes is now US\$25-30 million.

**Action 22: Secretariat/President consult with COMNAP, EXCOM, SSG COs and SC-ATS on the code of conduct for sub-glacial exploration, by year-end**

### **3.4.6 Astronomy and Astrophysics from Antarctica (AAA)**

Maurizio Candidi reported on progress with AAA. The planning group met on May 11, 2009, in Frascati, and formed four working groups including an Arctic element. EXCOM stressed the need to link to SCADM and to make data available. The next meeting will be in Rio de Janeiro (7 August, 2009) in the margins of the XXVII General Assembly of the International Astronomical Union, which has a special session on Astronomy in Antarctica.

**Action 23: AAA SRP to link to SCADM to ensure that AAA data is available for exchange.**

### **3.4.7 Solid Earth Responses and influences on Cryospheric Evolution (SERCE)**

Alessandro Capra reported on the Solid Earth Responses and influences on Cryosphere Evolution SRP (SERCE). SERCE focuses on observing and modelling interactions between the solid Earth and the cryosphere, and is based on the POLENET-IPY programme. Progress with POLENET will be discussed at the Fall AGU meeting in 2009. There is a link between the interests of SERCE and the ISMASS programme of SSG-PS. The full scientific description for the SERCE SRP will be submitted to the Delegates at XXXI SCAR.

### **3.4.8 Strategic thinking on SRPs and the renewal of SCAR scientific portfolio, in the context of strategic planning of future science directions and balance (WP29)**

This item was subsumed into the final discussion of strategic planning delivered by the President at the end of the meeting.

## **4. Data & Information: Highlights, Progress and Plans**

### **4.1 SCADM: Highlights, Strategic Plan, and IPY legacy (WP12)**

Helen Campbell reported on progress and plans of the Standing Committee on Antarctic Data Management (SCADM), highlighting the recently revised SCAR Data and Information Management Strategy (WP12). The strategy is intended to add value to SCAR's and Members' data and information management efforts through operation of a coherent and integrated data and information management system capable of supporting interdisciplinary Antarctic science. Recommendations are grouped under five main headings: (i) Policy, Leadership, Coordination and Governance; (ii) Cultural Change and Incentives; (iii) Leveraging Resources and Systems; (iv) Standards and Interoperability; and (v) Outreach and Guidance.

The strategy proposes that SCAR interacts with and fully utilises all existing networks and resources, to ensure that maximum use is made of them. The Strategy also calls for data management planning within all SCAR groups. A cultural change is needed to encourage data sharing. The Strategy suggests development of data citation systems to reward scientists for data management; SCAR could consider this issue in partnership with SCOR, which is already moving in this direction.

Vital to taking the strategy forward is to persuade national operators to second people to work on implementation (e.g. alongside Kim Finney at AAD). The strategy also recommends continual review of SCADM membership to ensure that the membership is representative of those who are actively contributing to the system. The strategy calls for a close working relationship between SCADM and SCAGI, as is being promoted at their joint workshop in Amsterdam in September 2009. In the more distant future, SCAR should consider the possibility of a merger of SCADM and SCAGI. The strategy calls for the adoption of community-based standards. For example, MarBIN adopted global standards for ocean data, enabling their data to be easily shared internationally; in addition they are adopting geospatial standards recommended by SCAGI, enabling easy visualisation of scientific data against SCAGI topographic products without the need, for example, to change formats in moving from MarBIN to SCAGI. A key principle of the strategy is not to reinvent what already exists, but to capitalise on what has been achieved within SCAR and international data communities.

The need for the strategy was recognised by the Delegates at XXVIII SCAR and is in the SCAR Strategic Plan for 2004-2010. EXCOM congratulated Kim Finney and her team on having done an excellent job in developing the document. Leveraging assets and developing partnerships will be a great help. The strategy places us very appropriately in the global development of data and information management, and will be useful for the scientific community. DIM is not an "add on" but fundamental to science. There is no question that data are valuable, not least in their potential to answer hitherto unasked questions, but also for establishing long term trends. There is a need to educate managers about why it is important to keep data.

EXCOM endorsed the Data and Information Management Strategy on behalf of Delegates. It was recognised that there is a need to agree on the draft SCAR Data Policy (attached as an appendix to the strategy document), and a paper on the proposed policy will be put to the Delegates.

**Action 24: SCADM with SC-ATS consultation should prepare a data and information management paper for the 2010 Antarctic Treaty Consultative Meeting to promote widespread adoption of the new strategy.**

**Action 25: SCADM to present the Data Policy (the current annex to the Strategy document) to Delegates, as a paper, for approval.**

**Action 26: Secretariat to re-activate the secondment policy for work on implementation of the strategy – this person will likely be from one of the ten active National Antarctic Data Centres (NADCs), so the request should be focused on them, with a job description provided by SCADM.**

In approving that action, EXCOM recognised that while many Members had National Antarctic Data Centres (NADCs), few had significant numbers of staff.

EXCOM agreed that it would be useful to use an ongoing SCAR activity as a pilot to show how the strategy would work and what the scientific benefits of implementation are.

**Action 27: Executive Officer to work with SCADM to use SOOS as an example of how the data and information strategy produces benefits.**

**Action 28: Encourage national members to adopt and use the new data and information management strategy (e.g. via Note from the President).**

#### **4.2 SCAGI: Highlights, review of proposals for changes and enhancements (WP13)**

The Executive Officer presented this topic on behalf of SCAGI. A major task this year has been the transfer of the SCAR Gazetteer from Italy to AAD. SCAGI's membership has risen to 25, which is an important development thanks mainly to the work of the SCAGI Chief Officer, Henk Broksma. The next meeting will be held jointly with SCADM in Amsterdam (7-11 September 2009).

There are several outstanding issues for which solutions are required:

- (i) hosting of the web site. The web site is rather large and complex, and now needs to be hosted somewhere other than the University of Freiburg – a volunteer institution is needed;
- (ii) greater commitment is needed from Members to share SCAGI-related data;
- (iii) SCAGI needs to work more closely with COMNAP on GISs and topography surveys – possibly through some appropriately designed pilot project(s);
- (iv) the GIS for King George Island (KGI) needs also to be moved from the server at Freiburg University so as to make it more useful for the KGI community. Again, a volunteer institution is being sought.

EXCOM recognised that SCAGI has demonstrated significant progress since its migration from an Expert Group to a Standing Committee. EXCOM welcomed these developments, endorsed plans to reorganise the web site and solve the KGI GIS problem, and applauded the developing close cooperation with SCADM.

**Action 29: Secretariat and SCAGI to find volunteer institutions to take on the KGI GIS and the SCAGI web site, possibly via a Circular Letter; SCAR to thank AAD for hosting the Gazetteer and Italy for its development work on the Gazetteer.**

#### **4.3 SCAR Products (IP01)**

The Executive Director presented this topic, drawing attention to the SCAR Products listed in IP01. In discussion, EXCOM agreed that SCAR should not be seen as a service organisation, and in the future SCAR Products will be referred to rather than SCAR Services. The SCAR Products need to be made more visible as they are not only of use to SCAR scientists but also to other organisations such as COMNAP and the ATS.

**Action 30: (i) SCADM to arrange to work with managers of SCAR products to assess their viability for incorporating them into the implementation plan of the data and information management strategy; (ii) Secretariat to list the Products on SSG pages and Antarctic Information pages on the web site and to profile each of them on the web site from time to time as an advertisement for the benefit of the wider community.**

**Action 31: Secretariat ask the PI of each SCAR Product to produce a short description paragraph for inclusion and highlighting on the SCAR website.**

**Action 32: SCADM to consider if a review of SCAR Products is required and if so how this should be done.**

#### **4.4 IPY legacy for data and information management and exchange; ramifications and discussions**

Helen Campbell presented this topic, explaining how the IPY Data Management system worked. In response to the development of the IPY Data Management System some countries increased their efforts at data and information management and exchange, but many did not. The IPY did not have an overarching detailed strategy like the SCAR data and information management strategy, though they did have a data policy focused on encouraging data sharing. Even so, much of the IPY data is not yet available. The approach delivered good results for those who chose to take part, but could not be expected to succeed where project PIs were unwilling to participate. One major achievement was the realisation through IPY that ICSU's system of World Data Centres (WDCs) (set up 50 years earlier during the IGY) was now inadequate; this, in part, encouraged the ICSU review of the WDC system as the basis for reorganisation. The impetus of IPY also led ICSU's data committee (CODATA) to develop the concept of having a Polar Information Commons (PIC), through which to consider how to take forward polar data management and coordination. The Chair of SCADM is a member of ICSU's PIC. SCAR's data and information management strategy now provides a detailed roadmap as to what to do with Antarctic data; this strategy can now be used to help guide the PIC's activities for ICSU. EXCOM noted and approved these developments.

#### **4.5 Next steps in strategic thinking on data and information management in the broader context (e.g. the Antarctic Treaty System)**

This item was considered to have been covered by the discussions under previous headings.

### **5. Science and Data Partnerships: Highlights, Progress and Plans**

In the interests of time the Executive Director provided only a very brief report on this item. The linkages listed below developed because SCAR recognised that it needed to work in partnership with those global agencies that have strong regional interests in Antarctica, to ensure that the entire community acts in concert in addressing major scientific issues. This concept was embraced in the SCAR Strategic Plan (2006-2010).

#### **5.1 ICSU**

An item of concern to EXCOM was that Polar Science does not normally feature on the agenda of the ICSU General Assembly, and is unlikely to do so after IPY.

**Action 33: Executive Director and President with IASC counterparts to write to ICSU proposing that SCAR and IASC regularly update ICSU on IPY legacy and other polar issues.**

#### **5.2 SCOR**

SCAR has close relations with ICSU's Scientific Committee on Oceanic Research (SCOR), which is a co-sponsor of the SCAR/SCOR Oceanography Expert Group, through which it is helping to develop the plan for SOOS (see item 3.3.4, above).

#### **5.3 IASC (including BipAG)**

Referring to IP02, the Executive Director noted that SCAR has close links with IASC that began with SCAR and IASC signing a Letter of Agreement in 2006. A Bipolar Action Group (BipAG) was formed to advise the SCAR and IASC executives on (i) possible joint developments, and (ii) how to manage the IPY legacy. BipAG first met in the margins of XXX SCAR in St Petersburg and reported to the Delegates in Moscow. It is meeting again (in Oslo) in October 2009; Chris Rapley is the EXCOM member on BipAG. EXCOM noted that strong political support for the IPY legacy was manifest at the Antarctic Treaty Meeting in the USA this year, through a Ministerial Declaration on the subject (in Washington) and a Resolution of the Antarctic Treaty Consultative Meeting (ATCM).

To cement the relationship between SCAR and IASC a senior representative of IASC attends SCAR Delegates meetings, and the SCAR President and Executive Director attend the annual Arctic Science Summit Week when feasible. Volker Rachold, the IASC Executive Secretary is invited to attend SCAR Cross-Linkages Workshops (and usually does by telephone link). The SCAR and IASC Secretariats are in frequent contact, not least because both are represented ex-officio on the IPY Joint Committee,

both are co-sponsoring the 2<sup>nd</sup> IPY Conference (Oslo, June 2010), and both co-sponsor the Association of Polar Early Career Scientists (APECS).

EXCOM noted that APECS had been invited to join BipAG as an observer. They further noted that BipAG was originally set up to have a limited duration, and suggested that we need to look again at the terms of reference of this group and to decide jointly with IASC how BipAG should be reviewed.

**Action 34: Executive Director and IASC Executive Secretary to review the effectiveness of BipAG and to suggest to Delegates in 2010 a plan for proceeding in the future.**

EXCOM noted that SCAR and IASC have both signed a partnership agreement with the International Permafrost Association (which co-sponsors SCAR's permafrost group), and with the International Association of Cryosphere Sciences – IACS – which is a component of ICSU's International Union of Geodesy and Geophysics (IUGG).

#### **5.4 WCRP**

EXCOM noted that we have a Memorandum of Understanding with the World Climate Research programme (WCRP), under which we co-sponsor the WCRP's Climate and Cryosphere (CliC) programme as well as the International Programme for Antarctic Buoys and the Southern Ocean Implementation Panel. Under this agreement the WCRP is considered to be a co-sponsor of SCAR's AGCS, ITASE and ASPeCt programmes. Together, SCAR and WCRP produced the plans for the Cryosphere Observing System, which are now part of the Global Earth Observing System of Systems (GEOSS), and also co-sponsor the design plan for a Southern Ocean Observing System (SOOS). The agreement with WCRP was augmented at XXX SCAR by an agreement that IASC would also co-sponsor CliC.

#### **5.5 IPICS**

Along with IGBP's PAGES programme SCAR co-sponsors the International Partnerships in Ice Core Sciences (IPICS), which is now an Expert Group under Physical Sciences. The work of this group is closely related to the work of ACE.

#### **5.6 SCOSTEP**

Maurizio Candidi reminded EXCOM that he is the SCAR representative to ICSU's Scientific Committee on Solar Terrestrial Physics (SCOSTEP). He announced that SCOSTEP is launching its CAWSES-II quadrennial research programme on Solar Terrestrial Physics; this happens at a time when a new, apparently extremely unusual, solar cycle is starting. The major SCOSTEP scientific conference will be held in July 2010 (see <http://www.iap-kborn.de/SCOSTEP2010> for more information).

#### **5.7 IPCC**

Delegates had requested that SCAR explore the possibility of becoming an observer to the meetings of the Intergovernmental Panel on Climate Change (IPCC), especially the science group (Working Group I). The Executive Director had explored this

possibility and persuaded ICSU that SCAR should avail itself of the observership to IPCC held by ICSU.

### **5.8 CODATA**

As mentioned under agenda item 4.4, SCAR is also now involved with ICSU's CODATA committee through our membership of the Polar Information Commons.

### **5.9 Engaging Union Members**

EXCOM discussed the role of the Unions in SCAR, in particular noting that efforts had been made to interact with the Unions with an interest in Southern Ocean and Antarctic biology. It was noted that relationships with ICSU unions work best when there is a contact within the Union with a personal interest in SCAR-related matters (e.g. the late George Knox, a past President of SCAR and a delegate of the International Union of Biological Sciences, IUBS). EXCOM agreed that SCAR should do what it could to ensure that the Union Members (who have voting rights) interact with SCAR as fully as possible.

**Action 35: Invite Christoph Scheidegger (Secretary of IUBS) to attend Delegates meeting as replacement for George Knox.**

## **6. Antarctic Treaty Organisations: Strategies, Progress and Plans**

### **6.1 Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) (IP03)**

Steven Chown reported that the SCAR observer to CCAMLR, Graham Hosie, of AAD, had attended the XXVII CCAMLR meeting in October 2008. Graham's report on that meeting was available as IP03. The relationship between SCAR and CCAMLR is improving, but there is more to do – for example to engage CCAMLR from the beginning in the next review of ACCE (CCAMLR was invited to comment on the developing ACCE draft but declined to do so because of lack of time). We need to define more clearly in strategic terms our expectations of the relationship between SCAR and CCAMLR. Now is not the best time to do that, because the present Executive Secretary of CCAMLR (Denzil Miller) will soon be retiring, and Graham Hosie has resigned as SCAR representative to CCAMLR, owing to the pressure of his new duties at AAD. We need to consider carefully the timing of possible future discussions between SCAR and CCAMLR on how we can best relate to them in a way that is more mutually beneficial than at present. Our CAML and MarBIN programmes are particularly well regarded in CCAMLR.

**Action 36: Secretariat to propose to CCAMLR that we have a joint action group to consider a discussion on how interrelations between the two groups can be improved (as was done with the CEP) once the new SCAR and CCAMLR Executive Directors are in place.**

Mark Hindell, the new Chief Officer of the SCAR Birds and Marine Mammals (BAMM) Expert Group has agreed to replace Graham Hosie and will represent SCAR

at the XXVIII CCAMLR meeting in October 2009. Information available to EXCOM suggests that one of the Argentinian representatives to CCAMLR (Viviana Alder) and one of the US representatives (Mike Goebel) may assist Mark.

**Action 37: (i) Secretariat to formally invite Mark Hindell, Viviana Alder and Mike Goebel to represent SCAR at the XXVIII CCAMLR meeting. (ii) Secretariat to write to formally thanking Graham Hosie for all his efforts as CCAMLR representative.**

**Action 38: Secretariat to inform CCAMLR that we no longer have an Antarctic Pack Ice Seals (APIS) group.**

**Action 39: President to attend a future CCAMLR meeting (possibly in 2010).**

## **6.2 ATCM/CEP Baltimore, April 2009, and Uruguay 2010 – planning priorities (WP14) (IP04)**

Steven Chown reported that SCAR submitted nine Information Papers and one Working Paper (IPY) to the ATCM/CEP in Baltimore. All were well-received. Relations between SCAR and the Antarctic Treaty Consultative Meeting (ATCM) and its Committee on Environmental Protection (CEP) have greatly improved, following the work of the Action Group on ‘SCAR and the Antarctic Treaty System in the 21<sup>st</sup> Century’ (AG-SATC), which met in May 2008, and the paper on SCAR developed on the basis of the AG-SATC meeting report and presented as an Information Paper to ATCM/CEP in Baltimore in April 2009. SCAR’s presentations have been widely welcomed at the past three ATCM/CEP meetings. The SCAR report on Persistent Organic Pollutants (POPs) is being edited for publication and will be sent by the Treaty Parties to the POPs Convention office in Stockholm. The Parties will also send the SCAR report on Antarctic Climate Change and the Environment to the Chairman of the UN Framework Convention on Climate Change (UNFCCC) ahead of the climate conference in Copenhagen in December.

Regarding future SCAR submissions to ATCM/CEP, it is clear that not much is known about terrestrial biodiversity, making it difficult to know which species are alien and which are not. SCAR is investigating this topic so as to provide the basis for rational conservation planning. There is some doubt about the current value of Antarctic Specially Protected Areas (ASPAs) for environmental protection, since ASPAs have been developed on an ad hoc basis in the absence of overarching biodiversity data. SCAR’s advice will help to rationalise the process of systematic conservation management. This could be done in association with a Treaty Party. Papers for the next ATCM/CEP meeting will include a comprehensive review, jointly with COMNAP, on the results of the IPY Aliens (invasive species) project. Advice on bioprospecting is called for; national committees need to be asked for further data, as the first call received few responses. New items include consideration of Marine Protected Areas (MPAs), where SCAR’s involvement is modest as consideration of MPAs is being driven by CCAMLR. SCAR will contribute to the Intersessional Contact Group on non-native species. Climate change updates will be provided by the ACCE editorial group. SCAR will also participate as an observer in the ATCM/CEP Expert Group meeting on climate change, which takes place in Norway in April 2010. As noted in Action 24, above, SCAR will provide ATCM with a report on the data and information management strategy, to be developed in consultation with SCADM. SCAR will also provide ATCM papers describing the plans for SOOS and APECS. In

addition, to improve provision of advice on the scientific content of management plans, EXCOM approved the formation of an Expert Group to take on this task (*see details in Appendix 3*).

**Action 40: SSGs/SC-ATS/Secretariat (i) to form an Expert Group on Protected Area Management Plans (EG-PAMP) within the SSG for Life Sciences; (ii) to include the EG-PAMP plan as an annex to the EXCOM report.**

EXCOM endorsed a new subject – a review of conservation practice for Antarctica in the 21<sup>st</sup> century. A comprehensive integrated document is needed in partnership with COMNAP, IUCN and other interested parties and with the advice of national parks people. A meeting should be held in 2010 or 2011 to produce a ‘book/report’ on this topic; the meeting could be assisted by South Africa’s national parks people and others specialising in conservation issues.

EXCOM complimented SC-ATS on all their hard work and applauded the improved interactions with the ATCM and CEP.

### **6.3 COMNAP Interactions**

The President reported on SCAR’s interactions with COMNAP. The SCAR paper on the Future of Antarctic Science that he presented to the COMNAP Plenary was well received, as was the SCAR paper on opportunities for scientific partnerships on King George Island, presented by Sergio Marensi. This was the first time SCAR had been invited to present papers to COMNAP and reflected COMNAP’s growing interest in expanding its support for science within the context of the current COMNAP reorganisation. Nevertheless, COMNAP is in the process of redefining itself, making it difficult to progress the two organizations’ relationship at this time. Recognising the need to take a strategic view of the relationship, the joint meeting of the SCAR and COMNAP EXCOMs on August 6 agreed to continue ongoing collaborations, especially in relation to meeting the needs of Treaty Parties, but that it would be helpful to create a joint Action Group to consider how best to strategically develop the SCAR-COMNAP partnership for the future, with the object of reporting to the SCAR Delegates at XXXI SCAR.

**Action 41: Secretariat to work with COMNAP on a plan for a joint Action Group on SCAR/COMNAP strategic directions.**

EXCOM also noted that the practice of our meeting alongside COMNAP in years between biennial SCAR meetings was proving to be expensive in terms of travel costs, especially since the joint meetings between the EXCOMs was so short. Much of the business transacted during that short period could more effectively be carried out by e-mail, with the joint meetings reduced to one at the time of the biennial SCAR meetings. It might be preferable (in terms of cost) for EXCOM meetings between SCAR biennial years to be held at the Secretariat in Cambridge or jointly with other partner organizations such as the IASC Arctic Science Summit Week. This will be considered by the joint Action Group.

**Action 42: Secretariat and EXCOM to explore the possibility of moving to Cambridge the EXCOM meetings between SCAR biennial meetings or using them to strategically meet with other partner organizations.**

#### **6.4 Other interactions (e.g. Advisory Committee on Albatrosses and Petrels - ACAP)**

**Action 43: SSG-LS in consultation with the Birds and Marine Mammals Expert Group to appoint someone from BAMM to attend annual main ACAP meeting.**

#### **6.5 Putting the “S” (System) back into SC-ATS**

The President led a general discussion on this topic, noting that over the last year and a half we have been focused on improving relations with the CEP. To improve coordination across the board within the Treaty system it is timely to consider relations with COMNAP and CCAMLR (as spelled out above). COMNAP have noticed that most of the policy-making papers for the ATCM/CEP are in fact for CEP, not for ATCM; this may need to be addressed by both SCAR and COMNAP.

### **7. Capacity Building, Education and Training: Progress and Plan - update on inter-sessional activities**

#### **7.1 Fellowship Programme (WP15)**

The Executive Officer reported that we had received a record 32 applications from 19 countries. Additional funding contributions from Italy and India received for 2009-2010 will allow the fellowship programme to be expanded. The Fellowship Review Committee rated and ranked the candidates. Scores for the top six candidates were extremely close (essentially identical within the bounds of statistical error). EXCOM approve the recommendations of the Fellowship Review Committee regarding the four Fellows for 2009-2010, who are from India, South Africa, Italy and Uruguay.

**Action 44: Executive Officer (i) to contact the successful fellowship applicants regarding the extent to which they can tolerate cuts in the fellowship budget, and (ii) to obtain a detailed budget from Uruguay.**

The International Polar Foundation (IPF), which funded one SCAR fellow under the IPY 6<sup>th</sup> Continent Initiative (6CI) in 2008, is considering whether or not to fund another fellow in 2009 under the 6CI initiative.

#### **7.2 The CBET Committee, and Future Plans for CBET (WP16)**

The Executive Officer reported that SCAR now works closely with the Association for Polar Early Career Scientists (APECS), which is a dynamic (SCAR and IASC) partner organisation that is doing much to develop the next generation of polar scientists, but with its own funds (including some small financial assistance from SCAR and IASC). APECS may be invited to send observers to Delegates, SSG and SRP meetings (and a representative to BipAG) at no cost to SCAR as the APECS observers/representatives should be local.

EXCOM endorsed the following actions, but did not approve the allocation of funds to buy further copies of the French DVD:

**Action 45:** COs will be encouraged to use a portion of unused SSG and SRP funds to fund early career scientist attendance at the Open Science Conference in Buenos Aires in 2010.

**Action 46:** Secretariat and the Capacity Building-Education-Training (CBET) Committee to initiate a Visiting Scholar Programme, starting with US\$4k seed money, seeking matching funds, and looking to find an external donor(s).

**Action 47:** Rasik Ravindra and Secretariat to review the membership of the CBET Committee and suggest revisions for EXCOM approval.

**Action 48:** Secretariat to consider the need to produce a SCAR climate poster for display at the UNFCCC COP-15 climate conference in Copenhagen in December.

### **7.3 Administration of Martha Muse Prize**

The Executive Officer reported on progress and plans for this award by the Tinker Foundation, which will be made annually for at least five years, and which will be administered by the SCAR Secretariat. The Prize Selection Committee has been formed and will meet in Washington DC on 18-19 November to review candidates in the first round. EXCOM agreed this is an exciting development for SCAR.

### **7.4 Strategic discussion of IPY Legacy**

EXCOM agreed that working closely with APECS would help to develop the education legacy of IPY. EXCOM thanked the Executive Officer for continuing development of the CBET programme, recognising that further development and investment (much of it from external sources) was now needed. The Development Committee would be expected to help find those funds.

## **8. Outreach and Communication: Progress and Plans**

### **8.1 History Group (IP05)**

Toni Meloni introduced this item, drawing attention to progress of the four SCAR history workshops. The 2<sup>nd</sup> SCAR history workshop report is now on line on the INACH web site. A 5<sup>th</sup> workshop is now planned for the Antarctic Treaty Summit in Washington DC in December 2009. EXCOM noted and approved progress and plans.

### **8.2 Website, Routine Publications, Brochure, Poster, National Interactions etc (IP06)**

Toni Meloni introduced this item. EXCOM noted progress, especially the dramatic increase in hits on the web site (averaging 130,000 hits/month in 2008, compared with 94,000 for 2007). EXCOM agreed a web site revision is needed to make it yet more attractive to a wider audience and more interactive (with discussion forums, blogs etc). SCAR will have to use a commercial server; US\$3.5-5k is needed to do the work, along with ongoing server rental costs of around US\$100-500/year.

**Action 49: Secretariat to develop a plan and budget for upgrading the web site, to solicit advice from the SCAR community as to content, and to consider how this may link to the concept of in-house management of OSCs and other meetings.**

Bearing in mind the costs of travel, SCAR should consider making more use of telephone and on-line conferencing via free software such as Skype.

EXCOM noted that the projected costs for printing the SCAR 50<sup>th</sup> Anniversary Volume had decreased by US\$14,000, but that the saving had been offset by the anticipated costs of printing the Antarctic Climate Change and the Environment volume (c. US\$10,000).

### **8.3 SCAR popular publications**

Ad Huiskes reported on discussions on this topic. SCAR has a good portal for education web sites, which capitalises on the work that others have done to showcase Antarctic science. Under the circumstances there is little benefit to be gained by SCAR in investing in a new production line of similar generalised publications.

**Action 50: Secretariat to improve the education portal and call again for Members to submit URLs for educational Antarctic science pages in different languages.**

### **8.4 Strategic discussions of outreach and communication**

Aside from the activities mentioned above, EXCOM noted that SCAR does not have the personnel or resources to inherit the complete IPY Education and Outreach Committee effort, which was supported by a full time staff member in the IPY project office and by an IPY education and outreach committee. Nevertheless, as mentioned above, SCAR is now doing much more in the area of education and outreach, notably by enhancing the education and outreach sections of the web site and through co-sponsoring APECS.

### **8.5 Communication with Delegates and National Committees**

Communications from SCAR to national committees and delegates have improved significantly with the development of the monthly topical “Notes from the President” and with the production of newsletters by SCAR, AGCS, EBA APECS and so on. National Committees are more cooperative now in submitting to SCAR their annual reports on progress, which appear on the SCAR web site.

The Secretariat continues working to visit all national committees. The Executive Director visited Malaysia, China, Korea and Japan in 2005, and Spain in 2006, giving talks on SCAR. National Committees were contacted also during the biennial SCAR meetings in Germany (2004), Australia (2006), and Russia (2008), and during EXCOM meetings in Bulgaria (2005), and the USA (2007). The President visited the national committee of Uruguay in early 2009, as well as visiting various national operators’ bases on KGI including Korea, China, Russia, and Chile. Chilean scientists attended as observers at the 2009 EXCOM meeting and this practice will be continued. After the meeting the President, Executive Director and Executive Officer would meet with Argentinian representatives in Buenos Aires. Following this, the

Executive Officer would visit the national committees of Peru and Ecuador, where he would deliver a talk in Spanish on SCAR; he plans to visit the national committee of Brazil in November. The President also visited Belgium, Korea and Japan in 2009.

## **9. Organisation and Management: Progress and Plans**

### **9.1 SCAR Medals procedure for 2009**

Toni Meloni introduced this topic. EXCOM agreed there is a need for greater dissemination of information about the SCAR medals, as a means of elevating their profile, as discussed in WP17. SCAR receives special rates as a Charity for advertising SCAR Medals in Polar Record, Antarctic Science and other journals. The medals can also be advertised in the first circular for the OSC, and on the front page of the new OSC website. As well as medals, SCAR provides individuals with high profile attention through their nomination to give the Weyprecht Lecture at the OSC, providing Certificates of Appreciation for long and meritorious service, and Honorary Membership (usually for past presidents). At OSCs, awards for best paper/poster need to be made a regular activity. For the next OSC there is a proposal from the Antarctic Science Journal to financially sponsor a special lecture from an Early Career scientist. SCAR also administers the Martha T. Muse Award (described earlier).

**Action 51: Secretariat to examine the Muse Award process to see how the SCAR award process can be made more rigorous, and attract more candidates.**

**Action 52: Secretariat will notify David Walton of the approval for an Antarctic Science Journal lecture at the 2010 OSC and devise a selection process.**

**Action 53: COs should (i) consider awarding certificates to individuals coming to the ends of their official terms as officers within SCAR, where exceptional service has been involved, and (ii) ask their groups to think of suitable nominees for the SCAR medals.**

**Action 54: The Awards Committee to vet all nominations for awards (aside from best paper/poster, nominations for which come from the OSC process).**

### **9.2 Revised Rules of Procedure (RoPs) for Subsidiary Groups (WP18)**

The Executive Director reminded EXCOM that it had been asked by the Delegates at XXVIII SCAR to finalise and approve the RoPs for Subsidiary Groups. These had subsequently been modified to take into account the changes required by the transformation of SCAR into a Company and Charity under UK law. In addition it had been felt necessary to add or revise terms of reference and other details regarding the operation of three Standing Committees - SCADM, SCAGI and SC-ATS. EXCOM noted that there was an inconsistency in the manner in which Chief Officers were appointed, and agreed that all Chief Officers of subsidiary bodies should be elected by their committees, the nominations then being subject to the approval of the Delegates. Subject to completion of Action 54, EXCOM adopted the Rules of Procedure for Subsidiary Bodies.

**Action 55: Secretariat (i) to revise Rules of Procedure for Subsidiary Bodies by including further revised conditions (a) for SC-ATS, and (b) for election (rather than appointment) of officers of both SCAGI and SCADM; (ii) to**

**submit the revised Rules of Procedure for Subsidiary Bodies for the final approval of the Delegates in 2010; (iii) to post these revised rules on the Constitution web page.**

### **9.3 SCAR's Legal and Charity Status – further developments (includes staff conditions, etc) (WP19)**

Ad Huiskes introduced the topic. EXCOM endorsed the new staff conditions, which have been adjusted to be more in line with those of Cambridge University. These are to take effect immediately, subject to the final approval of the Delegates. EXCOM thanked Ad Huiskes for his efforts to bring this complex matter to completion.

### **9.4 Response to concerns expressed by Delegates in Moscow about SCAR's status as a Charity**

The President reminded EXCOM that we were required by ICSU to obtain independent legal status. At XXX SCAR, South American delegates had raised some questions about the process, and these have been and are being addressed by the President.

**Action 56: A paper addressing concerns about the process of SCAR becoming a company and charity will be brought to the Delegates at XXXI SCAR.**

### **9.5 Recruitment of Executive Director**

This item was introduced by the President, and the bulk of the discussion was held in closed session. The 17 applications are now being considered by EXCOM, which is operating as the appointments committee. There is a shortlist of five candidates; references have been sought; and candidates have been asked to provide additional information where appropriate. The candidates will be reassessed based on these new inputs, with the intent of completing a final review by August 15. EXCOM hopes to make a final offer before the end of October, and to have a candidate in post by 1 January 2010.

### **9.6 Plans for Strategic Plan 2011-2017**

The discussion to identify what key points should be addressed in the new version of the Strategic Plan was moved to the end of the meeting.

### **9.7 Secretariat Activity Report and Plans (IP07)**

EXCOM recognised that the overall work programme is driven by the action plans from the EXCOM, Delegates and other key meetings. EXCOM was content with the Secretariat's practice of (i) using the combined list of actions from previous administrative meetings as the basis for the Implementation Plan, which is updated after each EXCOM and Delegates meeting, and which specifies clearly who is to do what and in what time frame; (ii) sending to EXCOM every couple of months a review of work plans for the next couple of months, and (iii) providing detailed reports on progress by means of quarterly reports posted on the SCAR web site.

## **9.8 Efficiency of Administrative Structures**

EXCOM did not identify any administrative structures or procedures that were not working satisfactorily. However, discussions under item 10.6 identified possible new software systems from which SCAR could benefit.

## **10. Major Meetings**

### **10.1 Lessons from XXX SCAR, St Petersburg and Moscow (2008) (WP20)**

EXCOM considered that the XXX SCAR meeting and St Petersburg OSC had been successful overall, but that some problems had arisen from which useful lessons could be learned. It was recognised that combining the efforts of SCAR, IASC and IPY in the St Petersburg OSC had led to some diffusing of effort; this was unlikely to recur now that the IPY was over. Lessons included:

- (i) the need to keep costs down. The demands of the OSC organisation are such that, in Hobart (2006) and St Petersburg (2008), commercial (profit-making) conference organising companies were used (but see agenda item 10.6). This resulted in significant expense being borne by the registration fees. Even so, EXCOM noted that while some of the costs (especially hotel, and airport transfers) were high in Russia, registration fees were similar at other meetings (e.g. AGU).
- (ii) running an OSC requires the renting of large spaces, usually available only from hotels. The number of countries who could host such large meetings may be low.
- (iii) wherever possible we should aim to hold all OSC sessions on the same site - split venues (as in Hobart and St Petersburg) made flow between sessions problematic.
- (iv) in future, fewer parallel oral sessions should be scheduled, which could be achieved by assigning more abstracts to posters.
- (v) poster sessions need to be better organized in general to add value. Space needs to be available for large poster sessions, which should stay up in the evenings and be the focus of social events and refreshments.
- (vi) the Executive Director noted that having a posters session with beer, as practiced at the 10<sup>th</sup> ISAES meeting and AGU, had proved an excellent attractant to posters.
- (vii) SCAR needs a transparent and rigorous process for selecting best papers and posters.
- (viii) in future, keynote lectures will be reduced to half a day of the opening of the OSC. A morning plenary including high level introductions, the medal ceremonies, and the Weyprecht Lecture on Day 1, followed by keynote papers associated with individual sessions on Days 2, 3, etc would attract greater attendance.

**Action 57: Secretariat (i) to work with Scientific Organising Committee to devise a process for selecting best papers/posters; (ii) to solicit suggestions for the**

**Weyprecht Lecture from EXCOM, Chief Officers, and the Scientific Organising Committee; and (iii) to work with the Scientific Organising Committee to ensure that there is a well organized and attended poster session at XXXI SCAR.**

### **10.2 Guidelines for future Delegates meetings (WP21)**

The President reported on this topic, noting the objectives: to maximise substantive discussions at Delegates' meetings; to encourage inclusion; to improve communication so that Delegates are well enough informed to make decisions; to ensure Members "buy-into" an understanding of SCAR decisions; and to ensure that the Delegates' meeting is more strategically oriented and aware of emerging scientific challenges. EXCOM approved the 23 recommendations from WP21, which will be incorporated into the combined action list and Implementation Plan.

**Action 58: Delegates will be asked to approve changes to the usual practices for Delegates meetings so as to improve efficiency and effectiveness.**

### **10.3 Guidelines for SCAR meetings (WP22)**

The Executive Officer noted that the Guidelines for hosting SCAR meetings had been slimmed down and updated. EXCOM approved the revisions. There was a lengthy debate about how to organise the SCAR business meetings, and especially on how to ensure that SSG meetings were fully attended, by banning any parallel meetings by subsidiary groups during their related SSG meetings.

**Action 59: (i) Executive Officer will circulate a room and time plan to Chief Officers (COs) as the basis for planning SSG and subsidiary group meetings for XXXI SCAR; (ii) COs will decide how much time they need for each SSG; (iii) in planning business meetings no overlaps will be allowed by any Action Group, Expert Group or Scientific Research Project group with the time set aside for its related SSG meetings.**

### **10.4 Progress with XXXI SCAR, Buenos Aires (2010)**

Sergio Marensi reported on progress with the meeting scheduled for July 30-August 11, 2010. The theme for the 2010 OSC is "Antarctica – Witness to the Past and Guide to the Future" (3-6 August). A Local Organising Committee has been formed under the leadership of Mariano Memolli, and an International Scientific Organising Committee is being co-chaired by John Priscu (USA) and Carlota Escutia (Spain). The local hosts are attempting to keep costs low to control registration fees. Funds are secure. Discussions will continue Monday 10 August in Buenos Aires between the local hosts and the SCAR team (President, Executive Director and Executive Officer), when the SCAR team will visit the Panamericano Hotel to inspect the facilities for the 2010 meeting (these were already visited by the President in March 2009 and conditionally approved).

EXCOM examined the draft programme of themes and sessions submitted just before the EXCOM meeting by the Co-Chairs of the Scientific Organising Committee. EXCOM agreed that good progress had been made despite considerable time pressure on the Organising Committee. The four themes look suitably interdisciplinary, and

there is a good slate of session topic suggestions. EXCOM recognised that this was a first draft and that there is still a way to go in examining the sessions in relation to the themes to encourage session submitters to take a broader approach that provides more integration across disciplines. Further iteration is needed, and convenors have to be appointed. EXCOM noted that there seemed to be some areas where sessions were concentrated and some areas where there were gaps. The EBA people in Punta Arenas agreed they would collectively submit suggestions soon. The President, EXCOM and Chief Officers are all keen to work with the Scientific Organising Committee to develop a comprehensive programme.

**Action 60: OSC scientific organising committee to work with committee members, President, EXCOM and COs on the issue of integration across disciplines.**

### **10.5 Plans for Portland, 2012**

The President reported that the planning process was proceeding to hold the XXXII SCAR meeting in Portland, Oregon (13-25 July, 2012).

### **10.6 A system for in house management of major meetings (WP23)**

The Executive Director reported on further progress in the development of plans to share management of SCAR meetings from within the Secretariat so as to keep costs of meetings down. The International Glaciological Society (IGS) now has a professional computerised scheme that enables (i) database and accounts management; (ii) meetings management; (iii) registration payments by individuals; and (iv) abstract submission and management. These elements are all available for purchase at reasonable cost, aside from the abstract scheme, which has been devised by and is available from the Scott Polar Research Institute. The SCAR Secretariat has investigated this scheme, with the help of the IGS. EXCOM agreed that the Secretariat should continue to develop these plans with a view to their implementation in time for the 2012 meeting.

**Action 61: Secretariat to investigate in more detail the costs of setting up an in-house system for business and conference management.**

## **11. Finance**

### **11.1 Financial Statements for 2007/2008 (WP24a and 24b)**

EXCOM approved the presentation of the financial statements in a form aligned with the functions and mission of the organisation, and the continued push for transparency in financial reporting.

### **11.2 Secretariat Compensation Scheme (WP19 continued)**

EXCOM approved the new compensation scheme (salary scales, pensions etc), along with the changes to staff conditions addressed under agenda item 9.3, consistent with UK law.

### **11.3 The SCAR Reserve policy (WP27)**

EXCOM approved the policy on the Reserve, which covers routine meetings and admin costs for a full year, plus 10%. This fund should not be routinely used for other purposes, but Delegates may approve accessing these funds for special purposes. The Contingency Fund comprises the funds left at year-end after committed funds and the Reserve have been taken into account. These may be used for one-off expenses or investments, with EXCOM approval. The Carry-Forward includes unspent funds from previous years from scientific activities, from SC-ATS, and set aside for the 50<sup>th</sup> anniversary volume. EXCOM noted that Delegates prefer to see no carry forwards at the end of each biennium, unless there is a compelling justification. Without such justification these funds are transferred to the Contingency Fund to cover unfunded requests.

### **11.4 Budgets for 2009 and 2010 (WPs25a and 25b)**

The budgetary position is strong for 2009. Accepting the revisions proposed by the Executive Officer and the V-P for Finance leaves the 2009 budget US\$11k positive (i.e. the contingency fund is projected to increase by US\$11k at year-end). The contingency fund is to be used for revisions to the 2010 budget. In 2010 there is a high likelihood of additional income from the CAML management fee and that Secretariat costs will be reduced by about US\$15k/year upon appointment of the new Executive Director.

EXCOM approved the proposed revisions for 2009 and 2010. Approved revisions to the 2009 budget include:

- (i) increase funding by US\$2k each for SSGs and SRPs;
- (ii) provide an additional US\$7k to SCADM for data plan implementation;
- (iii) cover expenses of cross linkages and performance review meetings;
- (iv) anticipate spend of US\$12k for Executive Director recruitment;
- (v) US\$10k allocated for printing the ACCE document.

Approved revisions to the 2010 budget include:

- (i) SCADM data implementation US\$5k;
- (ii) increase of US\$5k for SC-ATS to cover EG-PAMP;
- (iii) SCAR visiting scholar scheme, US\$4k;
- (iv) CBET meeting funds US\$2k;
- (v) SCAR Strategy meeting, US\$15k;
- (vi) costs associated with hire of new Executive Director, US\$20k;
- (vii) redesign of web site, US\$5k;
- (viii) in-house OSC management, US\$10k;
- (ix) Social Science Action Group, US\$6k (to be reviewed);
- (x) CCAMLR representation, US\$3k;
- (xi) secondment, US\$5k;

(xii) Action Group on SCAR/COMNAP interaction, US\$4k.

**Action 62: The contingency of 2008/9 should be transferred to 2010 to balance the budget.**

**Action 63: SCADM to review its budget request for 2010.**

**Action 64: Defer social science Action Group request until the 2010 budget position is clear (by year end 2009).**

### **11.5 Under-spending by SSGs (WP26)**

EXCOM discussed the problem of the continuing year-on-year under spend by SSGs, a practice that extends back in time to well before the SCAR reorganisation. In the case of the SSGs, much of the problem arises because requests by subsidiary bodies for future funding made at SSG meetings are commonly notional and may never come about in practice. In the past, the problem was compounded by Chief Officers sticking rigidly to what is a notional plan. It has now been recognised that the SSG COs should have more freedom in reallocating funds in a manner similar to that practiced by the SRPs. SSGs are block-funded and COs can allocate these funds at their discretion based on discussions and agreement with SSG membership. COs must report how monies were spent but are responsible for managing their budgets to greatest effect. EXCOM accepts that it is reasonable to conserve funds to fund expensive activities in coming years. However, requests for funds are being denied so it is important that unspent funds be used to meet these additional needs.

**Action 65: Committee COs and SRP leaders must manage their budgets in such a way as to reallocate unspent funds; they should review allocations every six months as a basis for this reallocation.**

**Action 66: Unspent SSG funds will not be carried forward beyond two years, without specific and compelling justifications.**

### **11.6 Membership of SCAR (IP08)**

The Executive Officer reported that SCAR now has 35 national members. Examination of the distribution of Treaty Parties and Non-Consultative Parties suggests we could have seven further possible members (Austria, Colombia, Czech Republic, Estonia, Greece, Hungary, Monaco). The President has written to Monaco. Discussions have already been held at various times with all of the others.

**Action 67: Secretariat to draft letter for President addressed to the academies in seven selected countries regarding the possibility of them joining SCAR.**

### **11.7 Implementing SCAR's Financial Strategy (WP27)**

EXCOM noted that fees were last increased at the beginning of 2006. The 30% increase was then eroded over time by the change in the £/\$ exchange rate (salaries are paid in pounds and the pound increased in strength against the dollar). External income offset that decline, but these are one-time revenues of limited duration. Other external sources of funds are relatively small. Financial projections show that full funding of SCAR activities would lead to a deficit in 2011, which would grow in

2012 and beyond, necessitating a reduction in spending unless membership fees are increased.

A Development Committee should be assembled to advise SCAR on potential sources of external funds. The prospects of finding large sources of external income are limited, and most external income arrives tied to specific projects (like CAML), which does not defray other SCAR expenses and is usually connected with additional work for the Secretariat.

A careful evaluation of SCAR finances is needed to justify increasing fees. In 2008, the Delegates agreed in principle that fees needed to be raised in 2010. Since 2008, the exchange rate improved temporarily in SCAR's favour reversing the rise in the £/\$ exchange rate. It should also be noted that ICSU and SCOR annually raise dues by the "Cost-of Living (CoL)". SCAR members have been unable to agree on an annual CoL increase in the past. Regardless of other factors, increased costs year-on-year erode the buying capacity of organizational funds resulting in the need for regular increases in fees to maintain spending power. Note that if fees are increased in 2011 or 2012 it will have been five and six years, respectively, since fees have been increased. The fee increase in 2006 was the first increase in ten years.

**Action 68: Secretariat to carefully review future financial projections as the basis for EXCOM deciding whether or not to request in January 2010 an increase in subscriptions for 2011, or to request in January 2011 an increase in subscriptions for 2012.**

EXCOM approved the proposed terms of reference for the Development Council as follows:

- to review the potential sources of funding for scientific research in the Antarctic;
- to advise EXCOM on preferred avenues and mechanisms for soliciting external funds, identifying specific prospects where feasible;
- to develop strategies to cultivate and expand SCAR's donor base of support;
- to act as advocates for and proponents of SCAR's scientific activities.

**Action 69: Secretariat and EXCOM to establish a Development Council**

### **11.8 SCAR Ethics Policy (WP28)**

EXCOM endorsed the revised Ethics Policy, acknowledging that EXCOM is responsible for taking the final decisions on applications of the policy, for the approval of the Delegates. All donations should further SCAR's mission, and details should be published in the SCAR annual reports and accounts.

**Action 70: Secretariat and EXCOM to review the procedures for accepting donations, including a risk assessment procedure, and seek Delegate approval.**

### **11.9 Improvements in reporting of finances at Delegates meeting**

EXCOM agreed that the short, simplified financial summaries and budgets accompanied by graphic displays, would be presented to Delegates, with budgets tied to SCAR's missions to clarify financial matters for Delegates.

## **12. Review of Progress Against Actions**

EXCOM was pleased to note that the 90% of the actions on the Secretariat's combined action list had been completed, and that most of those not yet done were ongoing.

## **13. Any other Business – ALL**

### **13.1 Proposal for a Social Science Action Group**

Discussion of the proposal for a Social Science Action Group was postponed until details of the 2010 budget (e.g. the CAML Management Fee) are confirmed.

### **13.2 Code of Conduct for Subglacial Research**

The action on this new item was dealt with under agenda item 3.4.5

### **13.3 SCAR's Carbon Footprint**

Kathy Conlan had opened the question of whether or not SCAR should calculate its carbon footprint as the basis for deciding how to minimise it. The following action was agreed as a result:

**Action 71: Executive Officer to work with EXCOM to produce a paper on SCAR's Carbon Footprint, for the Delegates meeting.**

### **13.4 Review of Strategic Developments**

The President ended the meeting with a review of strategic developments for consideration for the next version of the Strategic Plan. Many of the foundations are in place (data strategy, finance strategy, communications strategy, CBET strategy); several reviews have taken place (SCADM, SCAR, SRPs); strategic discussions have taken place or are planned with partners (ATCM/CEP; COMNAP; CCAMLR); the IPY legacies are developing (education and outreach, data and information management, and observing systems); in-house conference management is being investigated, along with purchase of improved administrative systems; the next two OSCs are being planned; and an EXCOM/COs retreat is planned in the December-January time frame to review strategic developments required to launch the new strategy in 2011. All of the elements are in place to effectively develop the next SCAR Strategic Plan and the proposed retreat will define the process and lay out a timeline to ensure that all stakeholders have ample opportunity and time for input to the process. It is expected that a draft Strategic Plan will be available for initial consideration and comment at the next Delegates meeting in 2010.

**Action 72: Secretariat to schedule an EXCOM/COs strategic planning meeting in the Dec-Jan time frame between academic terms.**

#### **14. Closure of the Meeting**

The meeting closed at 1800, on Friday August 7.

## Appendix 1

### Contact details for attendees

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## Appendix 2

### *List of Documents*

#### Working Papers

<b>Paper Number</b>	<b>Agenda Item</b>	<b>Title</b>
WP 01	1	Agenda
WP 02	1	Annotated Agenda
WP 03	1	Timetable
WP 04	1	List of documents
WP 05	2	SCAR Performance Review 2009
WP 05(ii)	2	Performance Review Talking Points
WP 06	3.1	Report of Cross-Linkages Meeting, Modena, Feb 5-6
WP 07	3.2	Agenda for Chief Officers' Meeting, Punta Arenas, Aug 4
WP 08	3.3.4	IPY Legacy of Observing Systems
WP 09a	3.3.5	Strategic View SSG-PS
WP 09b	3.3.5	Strategic View SSG-LS
WP 09c	3.3.5	Strategic View SSG-GS
WP 10	3.3.6	Functioning and Leadership of SSGs
WP 11	3.3.6	Job descriptions for Chief Officers
WP 12	4.1	SCAR Data and Information Strategy
WP 13	4.2	Report on SC-AGI
WP 14	6.2	Report on SCAR at the ATCM and CEP
WP 15	7.1	SCAR Fellowship Programme recommendations
WP 16	7.2	CBET Plans
WP 17	9.1	Advertising the SCAR Medals
WP 18	9.2	Revised Rules of Procedure for Subsidiary Groups

WP 19	9.3	Revised Staff Conditions
WP 20	10.1	Report on the St Petersburg Meeting
WP 21	10.2	Guidelines for Future Delegates Meetings
WP 22	10.3	Revised Guidelines for Hosting SCAR Meetings
WP 23	10.6	A System for In-House Management of SCAR Meetings
WP 24a	11.1	Financial statement for 2007
WP 24b	11.1	Financial statement for 2008
WP 25a	11.4	Revised Budget for 2009
WP 25b	11.4	Revised Budget for 2010
WP 26	11.5	Under-spending by SSGs
WP 27	11.7	Implementing SCAR's Financial Strategy
WP 28	11.8	SCAR's Draft Ethics Policy (revised)
WP 29	3.4.8	Strategy for the Development of a Portfolio of SRPs
WP 30	12	Progress against Actions

### Information Papers

<b>Paper Number</b>	<b>Agenda Item</b>	<b>Title</b>
IP 01	4.3	SCAR Products and Services
IP 02	5.3	Links with IASC (BipAG and the IPY legacy)
IP 03	6.1	Report of the Observer to CCAMLR
IP 04	6.2	SCAR in the ATS
IP 05	8.1	Report of SCAR History Group
IP 06	8.2	Secretariat Report on Communications
IP 07	9.7	Secretariat Activity Report
IP 08	11.6	Membership of SCAR
IP 09	10	Keynote Lecture proposal to SCAR

IP 10	6.3	Future Directions in Antarctic Science: Implications for National Programs
IP 11	6.3	King George Island and SCAR Science

## Appendix 3

### ***Terms of Reference for Expert Group on Protected Area Management Plans***

#### **A. Purpose**

The Expert Group on Protected Area Management Plans (EG-PAMP) is a subsidiary group of the SSG-Life Sciences charged with:

- developing and providing independent scientific advice on Management Plans to the Antarctic Treaty System (ATS) via the Standing Committee on the Antarctic Treaty System (SC-ATS), as requested by the Committee for Environmental Protection (CEP) via SC-ATS;
- coordinating the development of this advice across SCAR subsidiary groups;
- participating in ATS Intersessional Contact Groups to provide scientific advice on Management Plans;
- participating in Management Plan meetings of the CEP where this is required for the provision of scientific advice and cannot be done electronically.

#### **B. Membership and Responsibilities**

The EG-PAMP terms of office should be fixed for four years (renewable) for the Chief Officer and deputy. The Expert Group comprises the following members:

**Chief Officer** – Responsible for overall activities of EG-PAMP, reporting to and developing a budget with the CO of the SSG-Life Sciences, interacting with CO SC-ATS and with CEP to provide advice on Management Plans.

**Deputy** – Responsible for assisting Chief Officer with overall activities of EG-PAMP, reporting to and developing a budget with the CO of the SSG-Life Sciences, interacting with CO SC-ATS and with CEP to provide advice on Management Plans.

**Group Members** – Responsible for developing scientific advice on management plans as requested by Chief Officer. Invitation for four year participation, or less, depending on requirements.

#### **C. Procedure**

EG-PAMP will develop scientific advice to the CEP concerning management plans for Antarctic Specially Managed Areas and Antarctic Specially Protected Areas as requested by the CEP via SC-ATS. The budget for these activities is allocated by SC-ATS to the SSG-Life Sciences for management purposes as required. All advice should follow the principles of interaction with the ATS as adopted by SCAR and its subsidiaries. EG-PAMP reports to EXCOM and Delegates through the COs of SSG-Life Sciences and SC-ATS. The Chief Officer of EG-PAMP is responsible for close liaison with the Chief Officer of SC-ATS and with the appropriate CEP officer. These terms of reference and the operation of EG-PAMP are subject to review in keeping with decisions made by the SCAR Executive and Delegates concerning reviews of SCAR subsidiary groups.

## Appendix 4

### *List of Acronyms*

AAA	Astronomy and Astrophysics from Antarctica
AAD	Australian Antarctic Division
ACAP	Advisory Committee on Albatrosses and Petrels
ACCE	Antarctic Climate Change and the Environment
ACE	Antarctic Climate Evolution
AG	Action Group
AGAP	Antarctica's Gamburtsev Provinces Programme
AGCS	Antarctica and the Global Climate System
AG-SATC	Action Group on SCAR and the ATS in the 21st Century
AGU	American Geophysical Union
ANDRILL	Antarctic Geological Drilling Project
APECS	Association for Polar Early Career Scientists
APIS	Antarctic Pack Ice Seals Group
ASPA	Antarctic Specially Protected Areas
ASPeCt	Antarctic Sea ice Processes and Climate
ATCM	Antarctic Treaty Consultative Meeting
ATS	Antarctic Treaty System
BAMM	Birds and Marine Mammals Group
BipAG	Bipolar Action Group
BIPOMAC	Bipolar Climate Machinery
CAML	Census of Antarctic Marine Life
CAWSES	Climate and Weather in the Sun-Earth System
CBET	Capacity Building, Education and Training
CCAMLR	Commission for the Conservation of Antarctic Marine Living Resources
CEP	Committee for Environmental Protection
CGA	Composite Gazetteer of Antarctica
CliC	Climate and Cryosphere programme
CO	Chief Officer
CODATA	Committee on Data for Science and Technology
CoL	Cost of Living
COMNAP	Council of Managers of National Antarctic Programmes

CryOS	Cryosphere Observing System
CSIRO	Commonwealth Scientific and Industrial Research Organisation
EBA	Evolution and Biodiversity in the Antarctic
ECA	Action Group on Environmental Contamination in Antarctica
EG-PAMP	Expert Group on Protected Area Management Plans
EXCOM	Executive Committee
DIM	Data and Information Management
Gazetteer	Composite Gazetteer of Antarctica
GBIF	Global Biodiversity Information Facility
GEOSS	Global Earth Observing System of Systems
GIS	Geographic Information Systems
GPS	Global Positioning System
GS	Geosciences
IACS	International Association of Cryospheric Sciences
IASC	International Arctic Science Committee
ICESTAR	Inter-hemispheric Conjugacy Effects in Solar-Terrestrial and Aeronomy Research
ICSU	International Council for Science
IGBP	International Geosphere–Biosphere Programme
IGS	International Glaciological Society
IGY	International Geophysical Year
INACH	Instituto Antártico Chileno (Chilean Antarctic Institute)
IODP	Integrated Ocean Drilling Programme
IP	Information Paper
IPA	International Permafrost Association
IPCC	Intergovernmental Panel on Climate Change
IPF	International Polar Foundation
IPICS	International Partnerships in Ice Core Science
IPY	International Polar Year
ISAES	International Symposium on Antarctic Earth Sciences
ISI	Institute for Scientific Information
ISMASS	Ice Sheet Mass Balance and Sea Level
ITASE	International Trans Antarctic Scientific Expedition
IUBS	International Union of Biological Sciences
IUCN	International Union for Conservation of Nature

IUGG	International Union of Geodesy and Geophysics
KGI	King George Island
LOC	Local Organising Committee
LS	Life Sciences
MarBIN	Marine Biodiversity Information Network
MERGE	Microbiological and Ecological Responses to Global Environmental Changes in Polar Regions (IPY programme)
MPA	Marine Protected Area
NADC	National Antarctic Data Centre
NSF	National Science Foundation
OSC	Open Science Conference
PACT	Action Group on Polar Atmospheric Chemistry at the Tropopause
PAGES	Past Global Environmental Changes
PAntOS	Action Group on Pan-Antarctic Observations System
PCPBEA	Action Group on Prediction of Changes in the Physical and Biological Environments of the Antarctic
PDFs	Portable Document Format
PI	Principal Investigator
PIC	Polar Information Commons
POLENET	Polar Earth Observing Network
POPs	Persistent Organic Pollutants
PS	Physical Sciences
READER	REference Antarctic Data for Environmental Research
RoP	Rules of Procedure
SALE	Subglacial Antarctic Lake Exploration
SCADM	Standing Committee on Antarctic Data Management
SCAGI	Standing Committee on Antarctic Geographic Information
SCAR	Scientific Committee on Antarctic Research
SC-ATS	Standing Committee on Antarctic Treaty System
SCOR	Scientific Committee on Oceanic Research
SCOSTEP	Scientific Committee on Solar Terrestrial Physics
SERCE	Solid Earth Responses and Influences on Cryospheric Evolution
SOC	Scientific Organising Committee
SOOS	Southern Ocean Observing System
SOPHOCLES	Southern Ocean Physical Oceanography and Cryosphere Linkages
SPRI	Scott Polar Research Institute

SRP	Scientific Research Programme
SRPPG	Scientific Research Programme Planning Group
SSG	Standing Scientific Group
SSG-GS	Standing Scientific Group on Geosciences
SSG-LS	Standing Scientific Group on Life Sciences
SSG-PS	Standing Scientific Group on Physical Sciences
UNFCCC	UN Framework Convention on Climate Change
WCRP	World Climate Research Programme
WDC	World Data Centre
WP	Working Paper