



XXXI SCAR Delegates Meeting
Buenos Aires, Argentina, 9-11 August 2010

Agenda Item: 7.2
Person Responsible: M. Sparrow

SCAR and IASC Partnership

Executive Summary

Title: SCAR and IASC Partnership

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Relevant URLs or references to other reports: IP 08

Introduction/ Background: SCAR and IASC have had a formal partnership since Hobart (2006). This has led to close interactions between the Secretariats and Executive Committees and between certain of the science groups on both sides. It has underpinned the development of a progressively more bipolar approach to cryospheric and climate sciences, to the benefit of the two science communities. At this stage it is important to recognise that the two organisations will work together on certain aspects of the IPY legacy (see IP08).

Important Issues or Factors: Previously ICSU's IGBP and ESSP programmes have not included inputs from SCAR and IASC and ICSU lacked a mechanism apart from the IPY for hearing the polar 'voice'. However, closer cooperation with ICSU is improving this process. Currently ICSU provides the only avenue at present for polar science input from SCAR and IASC into the IPCC.

Recommendations/Actions and Justification: Delegates are invited (i) to note the significant progress made over the past 4 years, (ii) to recommend continuance of this strong relationship, pointing to specific additional interactions for the future if these can be identified in addition to what is currently taking place, (iii) to cement the proposed joint sponsorship of ISMASS and possibly of IPICS, (iv) to encourage SCAR to work with IASC to ensure effective polar representation at ICSU General Assemblies, (v) to ensure to the extent possible that SCAR and IASC are invited to contribute to ICSU's major cross-disciplinary programmes, and (vii) to ensure that the polar voice is heard at IPCC meetings.

Expected Benefits/Outcomes: Development of a bipolar front in science, education and outreach focusing on areas where both organizations can most effectively benefit from a partnership approach will be beneficial to both SCAR and IASC.

Partners: IASC, but also ICSU and the ICSU unions

Budget Implications: Costs of attendance of Secretariat representative at annual IASC Council and ASSW meetings. Contribution to attendance of one or more SCAR representatives at relevant IPCC meetings. Continuance of BipAG.

SCAR and IASC Partnership

Background to the Partnership

The SCAR Executive Committee (EXCOM) meeting in Brest, France (11-15 July 2003), recognized the importance of the Arctic Science Summit Weeks and the interest of having a formal SCAR representation at such meetings, and decided to approach IASC with regards to this matter, with a reciprocal invitation to IASC to be represented at SCAR meetings.

At the next SCAR EXCOM meeting (Bremerhaven, 21 January 2004) it was proposed to develop an outline document for a programme on the cryosphere and the polar regions including potential links with IASC. A first meeting to take these links forward was held between the SCAR Executive Director and IASC Executive Secretary in the margins of the IPY Joint Committee Meeting (JC-1) in Paris in March 2005. A draft agreement between SCAR and IASC was discussed at the SCAR EXCOM in Sofia, Bulgaria (11-13 July 2005), where the idea of creating a partnership with IASC was approved, and EXCOM encouraged participation of an IASC representative in the SCAR Open Science Conference and Delegates Meeting in Hobart in 2006.

Discussions between SCAR and IASC were developed with a view to improving collaboration in areas of common interest, holding a joint SCAR-IASC forum in association with SCAR's proposed 2008 meeting in St Petersburg, and developing links in the context of the IPY. Given that both bodies have polar interests, and both are associated closely with ICSU (SCAR as one of ICSU's Interdisciplinary Bodies, and IASC as an International Scientific Associate of ICSU), there were strong grounds for supposing that a closer linkage between the two organisations should bring benefits to both parties, not least in an exchange of views and experience on important scientific topics. A SCAR and IASC Letter of Agreement (www.scar.org/about/partnerships/iasc) was duly signed in July 2006. SCAR and IASC agreed to combine their efforts in selected fields and activities (to be decided by mutual agreement) so as to raise the level of impact of both organizations in terms of making scientific advances and of advising policy makers (for example of the likelihood and likely effects of climate change), as well as to avoid duplication. The development of the IPY was an important driver for the two organisations coming together.

Under the Letter of Agreement, SCAR and IASC agreed:

- (i) to invite each other to attend the meetings of their major bodies (SCAR Delegates' Meeting and IASC Council). [*Done routinely*]
- (ii) to encourage appropriate linkages between the relevant existing SCAR and IASC scientific projects. [*Continually ongoing – especially via AGCS, ACE and ISMASS*]
- (iii) to encourage their scientific communities to develop joint bipolar projects and approaches in appropriate fields. [*The prospect of ISMASS and IPICS becoming jointly sponsored bipolar groups is being actively explored*]
- (iv) to work together in arranging workshops, conferences, and reports on topics of mutual scientific interest. [*success with bipolar high latitude climate meetings, ISMASS St Petersburg workshop 2008 and ISMASS summer school 2009*]
- (v) to exchange ideas on best practices in data and information management. [*Ongoing*]
- (vi) to exchange newsletters and advertise each other's newsletters and web sites on their own web sites. [*Done routinely*]
- (vii) to develop combined approaches to communicating with the wider community on the significance of polar research to the solution of societal issues, including their respective experience in giving advice to the Arctic Council and Antarctic Treaty Consultative Meeting. [*Done routinely*]
- (viii) to manage particular aspects of the IPY legacy through discussions between the EXCOMs of both organizations. [*new initiative*]

Since then, SCAR has regularly attended IASC Council meetings and Arctic Science Summit Weeks, and IASC has attended SCAR EXCOM and Delegates meetings as well as participating in meetings of SCAR's Cross-Linkages Group.

Key developments during the IPY era

In January 2008, SCAR and IASC created a joint Bipolar Action Group (BipAG), charged with advising SCAR and IASC management bodies on further possible linkages, and on how to develop and manage the IPY Legacy (see WP 22 and below). SCAR and IASC began to co-sponsor the biennial High Latitude Climate meetings that take place every 2 years or so (the first jointly sponsored workshop was held in Seattle, USA, October 2007). SCAR and IASC also co-sponsored an ice-sheet modelling workshop in St Petersburg (July 2008), and with funding from ICSU and NSF subsequently co-sponsored its follow up, an ice sheet modelling summer school (Portland Oregon, August 2009).

From July 2008, SCAR and IASC both co-sponsored with WCRP the Climate and Cryosphere programme (CliC) and from July 2008 they also co-signed a Letter of Agreement with the new International Association of Cryospheric Sciences (IACS). In March 2009, they co-signed a Letter of Agreement with the International Permafrost Association (IPA) - part of the International Union of Geological Sciences. These agreements bind together the 5 main polar bodies of ICSU.

IASC continues developing a Sustained Arctic Observing Network (SAON). Both organisations are encouraging the development of the ocean observing systems called for by the IPY (an international Arctic Ocean Observing System (iAOOS) and a Southern Ocean Observing System (SOOS).

SCAR and IASC worked closely together as members (*ex officio*) of the IPY Joint Committee during the IPY-JC era (2005–2010) (see IP 08). The two organizations jointly sponsored the Open Science Conference in St Petersburg, Russia (8-11 July 2008), which was adopted and co-sponsored by ICSU and WMO as the 1st IPY conference. The full program and the summary report of the meeting are available on the SCAR web site. SCAR and IASC continue to work together as co-sponsors (with others) of the 2nd IPY science conference (Oslo, June 2010), and have begun to work in a similar fashion in relation to the 3rd IPY conference (Montreal, 2012).

As a contribution to the development of a data and information management policy for the IPY, the Chief Officer of SCAR's Data and Information Management Committee, Taco de Bruin, served as Co-Chair of the IPY Data Subcommittee. Independently, in 2004 SCAR had recognised the need to develop a Data and Information Management Strategy for the Antarctic, seeing this as an essential first step to managing the IPY data legacy in the southern hemisphere. The strategy was approved by SCAR Delegates at their meeting in St Petersburg (2008) and an Implementation Plan is now being developed along with a Data Policy (IP4b). SCAR is advising IASC on the development of these approaches to data and information management, to enable both organisations to contribute to managing the IPY data legacy.

SCAR and IASC jointly co-sponsor and hence provide a natural home for the Association of Polar Early Career Scientists (APECS).

The Joint IASC/SCAR Bipolar Action Group (BipAG)

BipAG was created for two years in January 2008. It met in St Petersburg on July 8, 2008, and in Oslo, on October 15-16, 2009. BipAG had two main terms of reference:

- 1) to advise the SCAR and IASC Executive Committees on the development of instruments such as workshops, programs and networks to address bipolar issues (i.e. the first priority is to see how and where we could work, more closely together).
- 2) to advise the SCAR and IASC Executive Committees on the development of mechanisms to nurture the IPY 2007/2008 legacy, with a special focus on the roles of IASC and SCAR.

The reports of the BipAG meetings are available on SCAR's IASC partnership website (www.scar.org/about/partnerships/iasc/bipag.html). A joint meeting between representatives of the IASC and SCAR Executive Committees was held during the IPY Oslo meeting in 2010. As outlined in IP08 (appendix) this meeting recommended that the IPY legacy issue should be handled at the level of the two

Executive Committees, with the BiPAG (whose lifetime should be extended for a further 2 years) should concentrate on bipolar science issues.

IPY Legacy Developments

As the existing polar coordination structures, SCAR and IASC will take a prominent role in ensuring the IPY legacy (see IP 08). SCAR and IASC have focused on four key aspects of maintaining the IPY Legacy: (i) scientific cooperation; (ii) development of observing systems; (iii) data and information management; (iv) development of early career scientists (the next generation) The polar ocean observing systems (e.g. SOOS and iAOOS) will make complementary contributions in the post-IPY era, and are considered essential operational requirements by WMO.

SCAR's data and information management system will ensure better management and more effective exchange of data and information. As part of the IPY data legacy, ICSU, through a coalition led by CODATA and including SCAR, IASC, IPY IPO, and IUGG, is developing a new approach to data and information management – the Polar Information Commons (PIC). In addition, Kim Finney (new Chief Officer of SCAR's Standing Committee on Data and Information Management – SCADM) is a member of ICSU's Strategic Coordination Committee on Information and Data that looks strategically at data issues across all ICSU-sponsored activities. Her participation should help ensure that SCAR and ICSU's PIC, and broader, linked developments with the emerging ICSU World Data System remain in line. There are sensitivities across national boundaries in the Arctic that do not exist within the Antarctic Treaty area. Thus, so far a similar data management system for the Arctic does not exist. However, together with the Arctic Council and WMO, IASC is developing the Sustaining Arctic Observing Networks initiative (SAON), which includes pan-Arctic data sharing systems.

IASC and SCAR are already co-sponsoring the development of early career scientists through APECS (Association of Polar Early Career Scientists), an offshoot of the IPY.

In addition, SCAR and IASC are working together to ensure a higher profile for the polar science in the post-IPY world. Main examples are as follows:

- (a) SCAR and IASC wish to obtain a higher profile at ICSU General Assemblies, where recently polar matters have only been considered under the heading IPY, which itself will disappear when the ICSU-WMO IPY Joint Committee comes to an end (summer 2010).
- (b) SCAR and IASC have a common interest in having a higher profile within ICSU's global environmental change programmes (Earth System Science Partnership – ESSP, and International Geosphere-Biosphere Program - IGBP), which previously have largely ignored the polar realms. This is currently the subject (among others) of an ICSU consultation. SCAR and IASC do have a high profile within the World Climate Research Programme, of which ICSU is a co-sponsor.
- (c) SCAR and IASC will continue their co-sponsorship of IPY conferences (Oslo, June 2010; and Montreal 2012). After these conferences there will be scope to consider holding another joint SCAR-IASC Open Science Conference in 2014 (or later) if located in the northern hemisphere.
- (d) To ensure closer linkage to the climate community, SCAR and IASC intend to seek representation as observers at IPCC. As a start, SCAR and IASC have obtained permission from ICSU to attend IPCC meetings as part of the ICSU delegation. SCAR has also gained observer status with the UNFCCC, and attended the recent Copenhagen meeting. This may provide leverage to obtaining observer status with IPCC.