

**REPORT ON PUTTING INTO EFFECT
THE RECOMMENDATIONS OF THE SCAR REVIEW 2000**

**The 20 recommendations from the 2000 Review of SCAR are numbered below.
The actions taken against each recommendation are given in italics.**

1. SCAR'S mission remains valid and SCAR continues to play an important role in fostering and coordinating science in Antarctica and in advising the Antarctic Treaty System and other organizations concerned with the Antarctic and Southern Ocean, but SCAR must take **a more active and assertive leadership position in all matters related to science in Antarctica.**

SCAR has developed the biennial SCAR Open Science Conference, the first of which took place in Bremen, July 2004, the second in Hobart, July 2006.

SCAR is playing a prominent role in the development of plans and projects for the International Polar Year 2007-2008.

SCAR has developed a number of partnerships with other (global) research organisations having Antarctic or Southern Ocean interests, so as to ensure that SCAR can benefit from the global dimension on the one hand, and provide advice on the role of Antarctic in the global system on the other hand.

Representatives of SCAR's partner organisations are invited to attend the 2006 Delegates meeting.

SCAR has developed a Strategic Plan (2004-2010) to set out its role and priorities and to indicate how these are to be achieved so that it can establish and maintain the active and assertive leadership role called for in the review. The Plan will be the product of consultation with Delegates, Secretariat, Executive, and Science Groups.

SCAR's new Scientific Research Programmes provide scientific leadership in 5 key areas: modern climate; climate change; evolution and biodiversity; sub-glacial lakes; and sun-Earth interactions.

SCAR's programmes are all aware of the need to publish their work in top quality journals, or in books and so on, and are using opportunities to do so.

2. SCAR should update its mission in four areas by:
 - i. Increasing emphasis on the **scientific capacity** of all national groups working in Antarctica and on outreach to younger scientists;

As part of the Strategic Plan SCAR is calling for the creation of an ad hoc Capacity Building and Education Group to devise and cost a comprehensive Capacity Building and Education Plan for the organisation, to include consideration of outreach to younger scientists. The SCAR web site now has a page on Education and Training that provides links to Members educational and training activities (more links are needed from Members).
 - ii. Taking a **more proactive stance with the Antarctic Treaty System** in providing the highest level independent advice on scientific aspects of issues affecting the governance and management of Antarctica and the Southern Ocean;

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SCAR has increased its efforts to actively bring to the attention of the ATCM issues emerging from greater scientific understanding that should be brought to the attention of policy makers. In this Forum, as an Observer, SCAR has the privilege of being able to table both Working Papers and Information Papers. SCAR provided the ATCM with 5 Information Papers in 2004; with 3 Information papers and 2 Working Papers in 2005; and with 6 Information papers and 4 Working Papers in 2006, thus increasing its influence. In addition, since 2003 SCAR has been providing the ATCM with an annual SCAR Lecture on key topics of interest, followed by a SCAR Reception. The Lectures have been very well received and are now seen as a highlight of the ATCM.

- iii. Taking a **more proactive position in the analysis of the impact of global change** on the Antarctic region and in the contribution of science in Antarctica to the overall understanding of global change;

The 'new' vision of SCAR is: "to contribute to the peaceful and environmentally sound exploration of the Antarctic region through scientific research and international cooperation to ensure that the full potential of scientific research is used to understand the nature of the region and its processes, the role of Antarctica in the Earth System, and the effect of global and human change on Antarctica, and to exploit the unique location of Antarctica for the scientific study of space weather, Sun-Earth interactions and astronomy."

SCAR's mission has been redefined as: "To be the leading edge independent organisation for facilitating and coordinating scientific research in Antarctica, and identifying issues emerging from greater scientific understanding that should be brought to the attention of policy makers".

SCAR's primary objective has been redefined as: "to initiate, develop, and coordinate leading edge international scientific activity in the Antarctic region, and on the role of the Antarctic region in the Earth system"

Four of SCAR's 5 new Scientific Research Programmes are directed at addressing global change.

SCAR is proposing to study the published scientific evidence, and model data, relating to climate variability and change as the basis for an assessment of the role of Antarctica in global change and of the effect of global change on Antarctica.

- iv. Increasing **the dissemination of knowledge about Antarctica** and about SCAR and its activities to scientists, national leaders, and the public.

SCAR has published a Communications Strategy defining how it will improve dissemination of information. The new SCAR web site was launched in time for the SCAR Open Science Conference in 2004. Keynote speeches from the Conference were published as a Special issue of the Journal "Antarctic Science" in December 2005. Articles about SCAR have been published in EOS. Hits on the SCAR web site increased from around 16000/month in January 2004 to around 120,000/month in early 2006.

3. **SCAR delegates** – at the delegate level – **must become more actively engaged in the management of SCAR** at SCAR meetings and also intersessionally.

The Delegates Committee on Scientific Affairs reviewed the SCAR Scientific Research Programme proposals and provided feedback in advance to the Delegates meeting in 2004. Delegates were consulted on the development of the Strategic Plan, the Communications Plan and the Capacity Building Plan. [See also recommendation 18]. Delegates were involved in suggesting candidates for the annual SCAR Fellowship (more so in 2006 than beforehand).

Delegates should arrange for SCAR's overall performance to be reviewed at around 8 year intervals.

4. Four **delegate-level committees** should be established, each chaired by a SCAR vice president, with the following portfolios: Scientific Affairs, Outreach and Education, Scientific Liaison, and Internal Affairs

It was decided only to elect only two Delegate Committee: one for Scientific Affairs and one for Outreach and Administration, the latter covering the Standing Committees on the Antarctic Treaty System and on Finance, and also Data and Information Management (through JCADM).

It is intended that the Outreach and Administration Committee should also handle Capacity Building (Education and Training) and Communications, and possibly Geographical Information.

5. **SCAR Vice Presidents should have titles corresponding to their portfolios**, e.g., Vice President for Scientific Affairs.

Two Vice Presidents currently have titles corresponding to portfolios: (i) for Scientific Affairs, and (ii) for Finance. It is proposed that two others take responsibility for (iii) Capacity Building (Education and Training), and (iv) Communications. However, it is also recommended that these portfolios may be rotated between members of the Executive Committee from time to time. The President will take responsibility for interaction s with the ATS.

6. The SCAR Executive Committee should be retained. In addition to processing business that comes before it presently, the **Executive Committee should act intersessionally** on advice or recommendations of the Delegate Committees or refer such recommendations to SCAR's next plenary session.

The Executive Committee meets one/year, with an occasional ad hoc extra meeting. Its activities are carried out inter-sessionally through e-mail consultations. Greater effectiveness is being achieved through the participation of the Chief Officers of Standing Scientific Groups and the Antarctic Treaty System Standing Committee in Executive Committee meetings.

7. All **SCAR officers are encouraged to seek a greater level of support at their home institutions** through a greater level of in-kind and other administrative assistance, but **SCAR should also increase its budget** for these purposes.

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Most of the support for the activities of SCAR Officers, including President, Vice Presidents and Chief Officers, comes from their home institutions – with the notable exception of the Executive Meetings between SCAR biennial meetings.

Delegates meeting in Bremen in 2004 agreed that in order for SCAR to be able to carry out effectively the full range of activities required of it in response to the additional activities imposed by acceptance of the recommendations of the Review, an increase in the annual subscription was needed. This took effect in January 2006.

8. **The past president of SCAR should serve ex-officio for one but no more than two years** instead of serving a four-year term ex-officio.

The revised Constitution calls for a 2-year term for the past President.

9. While the scientific-level structure of working groups and groups of specialists has served SCAR effectively in the past, this **structure should be replaced by a system of operating groups that can respond quickly and flexibly to emerging scientific opportunities** in Antarctica and to changing demands on SCAR.

SCAR has created a new system of Standing Scientific Groups, within which Action Groups can be created for activities of short duration (2-4 years), Expert Groups for activities of moderate duration (4-6 years), and Scientific Research Programmes for activities of long duration (up to 10 years).

Standing Scientific Groups are encouraged to work together to develop Scientific Research Programmes at the boundaries between the disciplines. A cross-linkages workshop was held in November 2005 to help to develop links between the SRPs. Further dialogue will take place in Hobart in 2006.

Each scientific activity should be reviewed at intervals of around 5 years.

10. SCAR must adopt practices that create a **timely circulation of documents and reports and must plan a meeting schedule that improves its ability to make informed decisions.**

Reports for the Delegates meeting are circulated by being posted on the Members Page of the SCAR web site at least 3-4 weeks in advance.

Reports of meetings are circulated by the same means within one month of the meeting.

To allow Standing Scientific Groups time to develop their plans, and Delegates time to reflect on them, it was decided in 2002 that SCAR's scientific meeting should be separated from the Delegates meeting by a period of 8 weeks. This model was tried in Germany in 2004 and will be tried again in Russia in 2008. However, recognising that the cost to Members was thereby increased, the old model of having the Delegates meet after the SCAR Science Week has been adopted for Hobart in 2006.

Now that Chief Officers of SSGs have delegated responsibility for a fixed budget that they can use for a range of activities, and that there is also a fixed budget for SRP leaders, there is much less need for time for extensive debate on the budgetary requests of the science community.

Furthermore, now that all of the meeting papers are available electronically on the SCAR web site one month in advance of the Delegates meeting, and that the Delegates meeting is separated from the SSG meetings by the SCAR Open Science Conference, giving time for SSG reports to be written and distributed, there would seem to be less reason for widely separating the Science and Delegates meetings in time in the future.

11. The Delegate Committee on Internal Affairs must give immediate attention and high priority to the **increased efficiency and effectiveness of internal communications in SCAR.**

Internal communications have improved greatly through greater use of e-mail, especially group e-mailings, and improvements to the central SCAR web site and its satellites for the different Standing Scientific Groups.

We now plan for the SCAR Secretariat to take over responsibility from the SSGs for managing the satellite web sites for the three SSGs. This will eliminate duplication and add a common corporate image.

The Communications Plan makes it plain that not all improvements are the responsibility of the Secretariat. It is essential that national committees follow the Plan's guidelines in order to circulate SCAR information as widely and effectively at home as the Secretariat does internationally.

12. SCAR must greatly improve its **external communications with other scientific organizations, ATS, national committees or other adhering bodies and the public** so that science in Antarctica and the Southern Ocean and the activities of SCAR are more widely known.

External communications are already improving through the improvements to the SCAR web site (web hits up by a factor of nearly 10).

The Secretariat has expanded the Antarctic Information and Antarctic Treaty pages on the web site, which contain much public information.

SCAR PowerPoint presentations including the SCAR Lectures to the ATCM are now available on the Communications page of the web site.

There are frequent e-mail notices to national committees and delegates, to convey information or to seek consultation.

All of SCAR's scientific partner organisations are given links on the SCAR Partnership web page, and we request reciprocal treatment.

SCAR's main scientific partners are invited to send observers to the SSG and Delegates meetings. At the Delegates meeting in Hobart we expect to see the CEP (of the ATS), CCAMLR, ICSU, IASC, SCOR, and WCRP-CliC. Other scientific partners, including SCOSTEP, IPA, GLOBEC and ICED will participate in the science meetings. ICSU Unions will attend as Delegates.

During the SCAR meeting in Hobart, the SCAR Executive will have its annual meeting with the COMNAP Executive.

SCAR is working with the Partners for an Integrated Global Observing Strategy (space agencies and UN agencies).

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SCAR is proposing to co-sponsor the International Partnership in ice Core Science.

13. SCAR should appoint an ad hoc group of SCAR delegates who do not have English as a first language to make recommendations to SCAR to **maximise the effective use of English as the SCAR language of record and communication.**

To facilitate understanding of the discussions on individual papers during Delegates meetings, the documents are made available in English well in advance of the Delegates' meetings, and at the meetings will be projected, where necessary, through a computer onto a screen.

14. The SCAR **secretariat should be upgraded** to an Executive Office headed by an Executive Director with duties comparable to Executive Directors of similar international scientific organizations.

An Executive Director was appointed in April 2004. The Executive Secretary retired in June 2005, and was replaced by an Executive Officer. These two positions are supported by an Administrative Assistant post which changed from full time to half time in 2006.

15. SCAR must **improve its infrastructure and capability to use information technology** for internal and external communication.

SCAR has greatly improved its web site, communicates almost entirely by e-mail, and makes reports and bulletins available electronically. Secretariat staff make PowerPoint presentations, which are available through the web site. Secretariat staff receive appropriate training in the latest IT techniques (e.g. Photoshop; Pagemaker).

16. A more proactive SCAR Executive Office will require **larger facilities and upgraded support services.**

The Scott Polar Research Institute has provided an additional office for the Executive Director. The Secretariat is using the best available information technology for its task. Full support services are provided free by the Geography Department of Cambridge University. The Executive Officer works from time to time out of the Norsk Polar Institut, which also provides free facilities.

17. SCAR should **expand its financial resources by actively seeking philanthropic funds** for some activities.

Some funds have been received in 2005 and 2006 from the Sloan Foundation.

A Financial Strategy has been developed for consideration by Delegates in 2006, for raising new external funds. The Executive Committee agreed that prior steps involved development and publication of (i) the Strategic Plan, (ii) the statement of SCAR Achievements; and (iii) the brochure (developed jointly with COMNAP).

18. Recognizing that they must weigh many factors in the selection of SCAR delegates, **national Antarctic committees and other bodies adhering to SCAR should appoint delegates with current scientific expertise** in Antarctic research.

To ensure that SCAR gets the best possible scientific advice and leadership the Delegates and Alternate Delegates should be scientists directly involved in Antarctic science.

19. National Antarctic committees and other bodies adhering to SCAR should continue to **give more attention to participation of younger scientists** both in research in Antarctica and in SCAR's scientific operating groups.

This is an ongoing concern for national Antarctic committees.

20. In order to proceed expeditiously with the implementation of the changes recommended in this report, SCAR should **consider waiving appropriate parts of its present Constitution and Rules of Procedure for two years, during which time the new structure will be put in place.** After the structure and procedures evolve, the Constitution and Rules of Procedure should be amended as necessary.

A revised Constitution and Rules of Procedure were approved by the Delegates in October 2004. However, at the request of ICSU, SCAR must acquire effective independent legal status. In the interests of improving its finances it must also become a charity. The papers for converting SCAR into a Company Limited by Guarantee will be considered by the Delegates in 2006. This is the necessary prelude for obtaining charitable status in the UK.