



# **SCAR Scientific Research Programme**

## **External Performance Review**



### **Introduction**

As agreed by the Delegates in 2004, all of SCAR's Scientific Research Programmes (SRPs) are to be reviewed internally every two years and externally every four years in order to ensure that SCAR is obtaining good value for its investment and that results are emerging at an appropriate rate.

The SRP Astronomy and Astrophysics from Antarctica (AAA) was externally reviewed in 2014. The following are due for review in 2016:

- Antarctic Climate Change in the 21<sup>st</sup> Century (AntClim21)
- Antarctic Thresholds - Ecosystem Resilience and Adaptation (AnT-ERA)
- Past Antarctic Ice Sheet Dynamics (PAIS)
- Solid Earth Responses and influences on Cryospheric Evolution (SERCE)
- State of the Antarctic Ecosystem (AntEco)

SCAR recognizes that the success of SRPs depends primarily on science carried out, funded and peer-reviewed within national and international programmes, and there is no wish to duplicate the scientific review process of national activities. SCAR adds value to national efforts by facilitating international collaboration and communication that might not otherwise occur. An assessment of the extent to which that value has been added through such collaboration is the objective of the review process, providing a basis for prioritizing the many competing demands on SCAR's limited resources. If an SRP is judged to be deficient in its performance, SCAR will recommend changes to improve performance, or it may redirect funds to other more deserving activities. SRPs are also to be of a finite duration (6 to 8 years) allowing for the renewal and reinvigoration of the SCAR scientific portfolio on a regular basis. Reviews and assessments are used to encourage this replenishment.

The external review process is not meant to be unduly burdensome and should be proportional to the funds provided by SCAR to the SRPs. SRP leaders report biennially to meetings of the Standing Scientific Groups (SSG) and the SCAR Delegates. In the intervening years SRPs report to the Chief Officers of their SSGs who then report to the SCAR Executive Committee. Where feasible, SRP leaders should personally report to the SCAR Delegates. However, it is recognized that time and resources may not allow this in all the cases, so the relevant Chief Officer of the SSGs can present the SRP reports on behalf of the SRPs if necessary.

For the external review, an independent external review group will comment on the reports of SRPs under review. The reviews and annual reports will be made available to the Delegates by June 2016. Delegates are then asked to review the reviews and to provide comments and rankings for continued support by 15 July 2016. The Delegates' comments will be shared with the SRPs in late July. SRPs are then asked to address any concerns and given an opportunity for constructive discussion to be held as part of the Delegates' meeting.

## The Form of the Annual Report for the Review

The report from the SRP should be no more than 5-6 A4 pages long (excluding appendices and references, single spaced, 11pt Arial font). It should list the rationale for the programme, the major tasks, updates to the original science plan (if applicable), and the time frame and progress against tasks with explanations for delays. The report must include a list of the members of the Steering Committee (including term, position held, gender, and country) and any changes since the last report. A list of all members and country should also be shared with the SCAR Secretariat and will be made available to reviewers upon request. The report must provide the following basic information:

<p><b>1. Introduction ~ 1/2 page.</b></p> <p>Outline the overarching objectives and structure of the SRP (refer to appendices if further details are required). Discuss reasons and implementation of potential changes to the initial science plan.</p>
<p><b>2. Deliverables and Milestones ~ 4-5 pages.</b></p> <ul style="list-style-type: none"> <li>I. Up to five key achievements</li> <li>II. Primary publications in peer-reviewed journals (use appendices if necessary)</li> <li>III. Major reports, including linkages to major SCAR activities (e.g. advice to the Treaty or IPCC)</li> <li>IV. Other reports and grey literature</li> <li>V. Workshops and other key meetings organized and activities associated to major SCAR meetings (Open Science Conferences, International Symposia on Biology, Earth Sciences, etc.)</li> <li>VI. Capacity building and education outreach activities; detail any difficulties encountered</li> <li>VII. New data and/or meta-data (including plans for archiving)</li> <li>VIII. Communication activities (eg website contents and stats, social media stats, brochures, speaking engagements, etc.) and how these contribute to the promotion of SCAR and its mission.</li> <li>IX. Linkages to other SCAR groups, international programmes and other activities</li> <li>X. Expenditure on project activities and plans for unspent funds</li> </ul>
<p><b>3. Future Plans ~ 1/2 page.</b></p> <p>Outline the major objectives of the SRP over the next period referring to the Implementation plan, changes to the science plan or appendices if necessary.</p>
<p><b>4. Appendices (including members of the Steering Committee) and References</b></p>

## **The Review Process**

The report from the SRPs will be due by 28 February 2016.

The report will then be sent to three external reviewers, selected by EXCOM, with requests for review returned by 15 April 2016. During this time, the SCAR Standing Committee on Antarctic Data Management (SCADM) will also review data plans of the SRPs.

External reviewers should not be directly involved in the programme under review but should be knowledgeable about the demands of science in the Antarctic region. SSG and SRP leaders will be asked for suggestions on reviewers, with the final reviewers invited being selected by the SSG leaders.

Reviewers will evaluate the report based on the criteria in Annex 1. They will be asked to comment on the extent to which the SRP has met the Terms of Reference given in Annex 2.

Reviewers' comments will be provided to the SRPs upon receipt. SRPs are able to comment on the reviews to correct errors, etc. with comments due to the Secretariat by 1 June 2016. Reviews and comments from the SRP will be posted for Delegates on the SCAR website by 10 June 2016.

The SCAR Delegates will use the external reviews and their own judgment to rate the projects into categories (A, B, C or D - see Annex 3). Comments from Delegates are due to the Secretariat by 15 July 2016 and will subsequently be shared with the SRPs.

SRP leaders will be invited to present their work and comments to revisions at the Delegates Meeting in Kuala Lumpur, Malaysia (29 August 2016). If they are unable to attend the Delegates meeting, another member of the SRP or the SSG Chief Officer responsible can make presentations on their behalf.

The Delegates will decide whether projects should continue, when they should end, to what extent they should continue to be funded, and the level of funding.

If major revisions to the SRP are required, the SRP leaders will be asked to present an action plan for such revisions to the SCAR Executive Committee, within 6 months.

## Annex 1. Evaluation criteria for SCAR Scientific Research Programmes (SRPs)

Reviewers should complete this page, expanding the text boxes where necessary, but to no more than 2-3 A4 pages, including this page.

*Note to reviewers: When reviewing an SRP's capabilities, activities and outputs, please keep in mind that SRPs are managed by volunteers from the SCAR community and that they receive between 20,000 to 25,000 USD per year to facilitate/coordinate the activities that will allow them to fulfil their goals. Please also be aware that your reviews will be shared with the SRP chairs and the SCAR Delegates, and be made public on the SCAR website after September 2016. Your name will be kept confidential, unless you specify otherwise.*

<p><b>Science quality.</b> Recognising that the national/international science on which the research was based has already been peer-reviewed, do the scientific highlights and published papers indicate that the internationally collaborative research stimulated by the programme has produced science that is excellent, good, or fair? (please provide a brief justification for your choice).</p>
<p><b>Science importance/relevance/timeliness.</b> Has the work advanced scientific understanding and been in accordance with the SCAR Strategic Plan (<a href="http://www.scar.org/about/futureplans/">http://www.scar.org/about/futureplans/</a>)? (Yes or no; please provide a brief explanation for your choice). Are there important gaps currently not considered by the SRP? (If yes, please provide a brief description)</p>
<p><b>Data archival and access.</b> Is the programme adequately addressing the issues of data archiving and data access, and are its data accessible to the wider community? (Yes or no; please provide a brief explanation of your choice).</p>
<p><b>Communication activities.</b> Are the communication activities of the SRP contributing to the promotion of SCAR and its mission? (Yes or no; please provide a brief explanation of your choice).</p>
<p><b>Education.</b> Is the work contributing to education about Antarctic science? (Yes or no; please provide a brief explanation of your choice).</p>
<p><b>Building capacity across all SCAR Member countries.</b> Has the programme contributed to building the capacity of countries with less well developed Antarctic programmes and/or early career scientists a lot, modestly, little, or not at all? Keeping in mind that there are various difficulties in this area, e.g. depending on the current interest of science topics in certain countries, please provide a brief explanation of your choice.</p>
<p><b>Value for Money.</b> Considering that SCAR is only able to invest ~20,000-25,000 USD per year in each SRP, do the results indicate excellent/good/fair/poor value for money (please provide a brief justification for your choice)?</p>
<p><b>Terms of Reference.</b> To what extent do you feel the SRP has met the Terms of Reference given in Annex 2.</p>

## **Annex 2. Scientific Research Programme**

### *Terms of Reference*

The Terms of Reference for a SRP will be:

- to oversee and guide the development and execution of the programme's implementation activities, adjusting and optimizing the science and implementation plans in the light of events and progress,
- to actively seek support of the programme's implementation through national and international mechanisms,
- to ensure the delivery of agreed/approved scientific outcomes, including synthesis activities and public/policy outreach,
- to respond to requests for expert advice/support from the SCAR Executive Committee in a timely and effective manner,
- to ensure appropriate exchange and archiving of data generated as a result of the programme,
- to establish scientific liaison and logistical cooperation with other Antarctic activities as appropriate,
- to advise the SCAR Executive Committee and Delegates on progress and on the use of funds.

### *Criteria for Membership of the SRP Steering Committee*

The membership of a SRP Steering Committee will be:

- explicit,
- appointed by the Executive Committee in consultation with the Meeting of Delegates,
- based primarily on internationally recognized scientific expertise fulfilling required mix of skills and experience with geographical and gender mix taken fully into consideration,
- for a 4-year term with the possibility of extension depending on contribution and performance,
- governed by a phased rotation scheme.

### **Annex 3. Delegates' Evaluations of SRPs**

Based on their analysis, and consideration of external reviews if available, Delegates will evaluate the SRPs into the following categories:

- A. The SRP is adding significant value to SCAR's portfolio of activities, and needs no significant revision. Good progress is being made.
- B. The SRP is adding value to SCAR's portfolio of activities. Good progress is being made but there is a need for some minor revisions or clarifications.
- C. The SRP does not appear to be adding significant value to justify SCAR's continued support or endorsement without significant revision.
- D. The SRP does not appear to be adding any value to justify SCAR's continued support or endorsement, and funding should be withdrawn.