



Selection and Evaluation of Scientific Research Programmes

February 2019

Scientific Research Programmes (SRPs) are transformative scientific initiatives that address compelling issues and emerging frontiers in Antarctic or Southern Ocean science of regional and global importance. SRPs are SCAR's highest level of investment in science. SRPs advance scientific questions that are expected to require sustained efforts by international teams of scientists and researchers for six to eight years. SRPs are developed and proposed by Programme Planning Groups (PPGs) fostered by one or more Scientific Groups (SGs). A PPG develops a proposal for an SRP based on wide consultation with the community.

SCAR can only financially support a finite number of SRPs. All SRP proposals are subject to an extensive and rigorous evaluation and selection process to ensure the highest quality. The selection process is managed by the Secretariat in consultation with the Executive Committee with final approval by the Delegates.

To ensure a transparent, objective, and equitable evaluation and selection process, all SRP proposal submissions must follow the instructions below.

1. The Programme Planning Group

The SRPs will be developed and proposed by **Programme Planning Groups** (PPGs) fostered by one or more of SCAR's **Scientific Groups**.

Before a PPG is established, the fostering body or bodies will submit a title and brief (1-2 page) outline of the proposed **Scientific Research Programme** (SRP), plus a suggested chief officer and initial core membership for the PPG, for consideration by **the SCAR executive**. Outline bids are required 6 weeks before the meeting of the relevant review body. The Executive will review these bids, decide on priorities, and agree which ones to approve for further development. They will inform the SCAR Delegates of their decisions. In the years of SCAR Delegates meetings, the Executive may elect to request PPG bids to be presented to Delegates for their perspectives. For those bids approved, a **Programme Planning Group (PPG)** will be established and the level of any SCAR funding needed to support the work of the PPG will be set.

The PPG will first produce a Science and Implementation Plan for the proposed SRP. The plan should follow the structure and provide the information outlined below in section 2. The plan will be subject to a review and selection process managed by the SCAR Executive with the support of the SCAR Secretariat and set out in section 3.



2. Content and structure of the Science and Implementation Plan for a proposed SCAR Scientific Research Programme.

The Science and Implementation Plan is prepared by the Science Programme Planning Group for the activity. The plan should ideally be no longer than 15 pages in total (including diagrams, and at no smaller than 12 pt. font, except for references which may be in 10 pt. font).

Title Page (1 page)

1. Name of the proposed SRP
2. Name(s) of the lead proponent(s) (including affiliations and contact information)
3. Sponsoring SSG(s)
4. Summary of the duration and budget request (in US\$ per year)
5. Abstract (250 words or less)

Proposal details (maximum of 10 pages of text)

(percentages below refer to adjudication significance)

- a) Introduction - scientific objectives and statement of task (including contributions to SCAR's Strategic Plan) [10%]
- b) Scientific approach and rationale (including synergies with other SCAR programmes and products) [30%]
- c) Experimental section and methodologies [15%]
- d) Management and reporting (including a Scientific Steering Committee) [10%]
- e) Milestones, outcomes, outputs¹, and benefits (including metrics of performance) [15%]
- f) Data management plan [10%]
- g) Capacity building, education and training plan [10%]
- h) References

Supporting information (2 pages)

- i. Short biosketch and homepage URL for proposed Chief Officer(s) and lead investigator(s)
- ii. Justification for SCAR sponsorship (why does SCAR support add value?)
- iii. International involvement and partnerships
- iv. Budget justification (other potential sources of funds)
- v. Other information (information useful to evaluators)

¹ Note that where possible the outreach activities and associated outputs from the SRP should be produced in collaboration with the other SRPs; joint outreach activities and outputs are encouraged



3. Selection of Scientific Research Programmes

The timeline for the submission of proposals in 2020 is shown in the table below.

Deadline	Action	Notes
-6 weeks before July 2019 executive committee meeting	PPG submits draft science and implementation plan to SCAR Secretariat. Secretariat in consultation with SCAR ExCom, seeks review as appropriate.	At this stage the draft plan should focus on scientific aspects of the proposal rather than implementation aspects.
July 2019 executive committee meeting	One-day workshop for chief officers of PPGs	
	PPG presents draft plan to SCAR Executive committee and receives feedback	
-23 weeks before 2020 Delegates meeting	PPG submits a 'letter of intent' to the SCAR Secretariat declaring the intention to submit a proposal to the 2020 Delegates' Meeting. PPG identifies a minimum of 6 external reviewers for consideration by EXCOM.	
-12 weeks (minimum)	Final proposals submitted to the SCAR Secretariat. Secretariat seeks external evaluations of the plan in consultation with the SCAR Executive Committee. Proposals are forwarded to SCAR Delegates for consideration. Proposals are also circulated to COMNAP for information and informal comments.	



-6 weeks	External and Delegate Evaluations due to the Secretariat. Evaluations are distributed to the Delegates, SGs, Standing Committees, and PPG.	
-2 weeks	Deadline for written comments from SCAR Delegates on proposals	
-1 week	Proponents present proposals to the SG plenary and provide responses to evaluations.	
-1 week	SGs and SCs provide proposal evaluations in reports to the Delegates	
0 weeks	Final proposals to the SCAR Delegates followed by decision	

External reviews by experts will be solicited. The SGs and Standing Committees will evaluate SRP proposals and report their evaluations to the ExCom for transmission to the Delegates. The Delegates will be given the opportunity to consider and comment on proposals prior to the Delegates' Meeting. Proponents will be provided evaluation comments and afforded an opportunity to respond to comments during the biennial meetings' presentations.

The Delegates will be provided with the proposals, all evaluations, and responses to evaluations as available. SSG leadership (or proponents) will present their programs to the Delegates and answer questions followed by approval or rejection of proposals by the Delegates.

Evaluation criteria

• Scientific merit and quality + rationale for SCAR involvement (sections a and b)

- Does the SRP address fundamental scientific objectives that will produce transformative results?
- How will the SRP advance knowledge in keeping with global priorities, leading questions in the field of study, and SCAR's strategic plan?



- How does this SRP topic compare with other important research in the polar regions?
 - Is innovative and high quality science proposed that builds on previous knowledge in the field?
 - Is SCAR's support for the SRP critical to the success of the research?
 - Will frontiers in science be advanced at the conclusion of the SRP?
 - Will the SRP enhance and/or improve the profile and global relevance of SCAR science?
 - Does the SRP materially contribute to SCAR's [Strategic Plan](#)?
 - Does the SRP strengthen SCAR's scientific portfolio?
 - Does the SRP fill a gap in SCAR's scientific activities?
- **Soundness of the approach, likelihood of success and impact (section c and d)**
- How likely is success in addressing the scientific objectives?
 - Are there significant barriers to success not recognized by the proponents?
 - Is the SRP feasible from an operational and technical viewpoint?
 - Do the data/observations exist to support the program objectives?
 - How significant and practical are the proposed interdisciplinary elements?
 - Is there significant activity or proposed activity in this area by National Antarctic Programs that will ensure the success of the program?
 - Is there adequate leverage of SCAR funds with other sources of funding?
 - Are the management and reporting mechanisms practical and proportionate?
- **Scientific outcomes – including international partnerships (section e)**
- Are plans to communicate SRP outcomes to a wider audience sufficient?
 - Will scientific outcomes support scientific advice to policy and decision makers?
 - International Involvement and Partnerships
 - Does the SRP involve, or have the potential to involve, multiple SCAR nations and/or nations beyond SCAR?
 - Are there significant links to relevant international programmes external to SCAR?
 - Is a substantial community involved in and likely to benefit from the program's outcomes?
- **Data Management Plan (section f)**
- Does the plan adequately address issues of data archiving and access?
 - Are data management plans sufficient to ensure preservation of data and wide availability?
 - Does the plan support the [SCAR Data and Information Management Strategy](#)?
 - Is there a direct link to SCADM?
 - Are SCAR products utilized when relevant?



• **Capacity Building, Education and Training Plan (section g)**

- Does the proposal adequately address issues of capacity building, education and training?
- Does the program support the SCAR CBET Plan?
- Are nations with less well developed Antarctic Programmes likely to participate and contribute?
- Are Early Career scientists likely to participate?

Evaluation Classification

Based on the above criteria, evaluators are asked to classify each proposal into one of the three categories:

- A. **THE SRP SHOULD BE APPROVED**- Excellent science in terms of quality, importance and timeliness with a good "fit" to SCAR's Strategic Plan. Data management, CBET, and outreach plans are in place and likely to succeed. The SRP will raise SCAR's international profile and be an important addition to the SCAR science portfolio. The SRP as described is feasible and is likely to enhance international and interdisciplinary connections and partnerships. The SRP also has the potential to deliver policy-relevant science (where appropriate). There may be some minor revisions or clarifications needed (communicated to the proponents), but the SRP is ready to proceed.
- B. **THE SRP SHOULD BE CONDITIONALLY APPROVED** - Excellent science in terms of quality, importance and timeliness with a good "fit" to SCAR's Strategic Plan. Data management, CBET, and outreach plans are in place and likely to succeed. BUT there are some improvements that have been suggested by evaluators that must be addressed. SCAR Delegates or the next SCAR Executive Committee meeting, whichever comes first, should be provided with a revised proposal for re-evaluation. The SRP is fundable, but is not ready to proceed in its present form.
- C. **THE SRP SHOULD NOT BE APPROVED**-The plan does not meet the standards required to justify SCAR's support or endorsement. The SRP needs significant revision based on the evaluations before resubmission. A resubmission will be subjected to the entire evaluation and selection process. The SRP is not fundable in its present form.

Because SCAR can only financially support a limited number of SRPs, evaluators will also be asked their opinion as to whether the proposed program rises to the level of a SCAR SRP (from the perspective of scientific objectives, scope, community served, participation, and impact). Could the same results be realized through alternative mechanisms (e.g., Action Group, Expert Group) Additional written comments from



evaluators are valued and encouraged as they will greatly assist proponents in responding to any perceived deficiencies in the proposals.