



Description of the Polar Research Process

Summary

The Polar Research Process (PRP) will become a regular, recurring process within the Swedish Polar Research Secretariat's support at the programme level. The purpose of the support at the programme level is for the secretariat to be able to plan and offer participation in larger and more complex field operations, based on the needs of the Swedish research community. Previously, roadmaps for Swedish polar research have been developed, which have been based on individual researchers' applications (DNR 2013-057; DNR 2010-084). Unlike the previous roadmaps, the PRP means that field operations are tied to large-scale themes that are developed by several researchers together and in collaboration with the Swedish Polar Research Secretariat. The purpose of these themes is to increase the scope and interest in Swedish polar research, to attract collaboration across disciplinary boundaries and to increase the availability and use of field data. To further increase the utilization of Swedish polar research, a synthesis report with a clear link between research and society will be prepared at the end of the process. In addition to the support via the PRP, it should be mentioned that researchers, as before, will also be able to apply for operational support at project level whose scope corresponds to the need for an individual researcher or research group's project.

The seven steps of the Polar Research Process

The PRP is conducted in seven steps (Figure 1). It should be emphasized that the PRP intends to be an important tool for the secretariat in terms of long-term and transparent planning of application-based support, management of polar research infrastructure and being able to serve the research community well in advance. Experience has shown, for example, that the most successful and productive expeditions have been precisely those that at an early stage had a defined research theme and a good planning horizon.



Figure 1: The Polar Research Process – the Swedish Polar Research Secretariat's operational support at the programme level



Development of thematic proposals (step 1)

The PRP begins with a call for thematic proposals. Swedish researchers are asked via open calls to submit short descriptions of research themes that can be further developed together with other researchers during one or more workshops. Unlike applications for operational support at the project level, themes within the PRP must be broader and include greater opportunities for several researchers and research disciplines to collaborate – both fieldwork- and non-fieldwork-based research, in both natural sciences and social sciences. Individual project applications under a theme will be submitted later in the process during step 3. A successful thematic proposal thus does not automatically mean that the submitter themselves will participate, but researchers must also apply for and be granted that their project will be included in a given theme.

Following a call where researchers are asked to submit thematic proposals, the Swedish Polar Research Secretariat organizes open workshops on research themes in which both national and international researchers, research funders and other stakeholders can participate. The intention is to present and discuss through the thematic proposals that have been received, develop them, and find collaboration opportunities between different stakeholders and disciplines. The aim is for the secretariat to have a new call for thematic proposals every two to three years.

Prioritization of research themes (step 2)

After the workshops, the thematic proposals are ranked by an appointed expert group. This group is nominated by research funders and the Swedish Polar Research Secretariat. The group may consist of both international and national researchers who assess its scientific content, as well as the secretariat's staff who have the opportunity to assess feasibility within the framework of available infrastructure and when it is most favourable in time to implement various research themes.

Several themes can run in parallel or in sequence, depending on the resources required. The following general criteria apply to the assessment of themes:

- that research questions within thematic proposals are well described and are on a par with the international research front in the field
- a theme should have collaboration between both fieldwork-based and non-fieldwork-based projects
- fieldwork-based research must be conducted in the polar regions and with the infrastructure that the Swedish Polar Research Secretariat can provide
- external analysis and timing – have an impact on when in time a theme is best suited for implementation, for example, due to other countries' planning and in major national and international initiatives



- utilization in the form of a proposal for a thematic synthesis report aimed at decision-makers, where the relevance for society is clearly stated.

Once the expert group has announced its recommendations, the secretariat decides on a tentative timetable for future themes which is also published.

Call for application within prioritized research themes (step 3)

Once the themes and timetable have been decided, the Swedish Polar Research Secretariat will issue an open call to researchers who can apply for support at the project level for projects that fit into a current theme. The call includes both operational support at the project level and support to a minor extent (SIMO), which consists of limited logistical/operational support for polar research. The call takes place via the Swedish Polar Research Secretariat's website and is communicated via newsletters and social media.

Execution of successful applications (step 4 – 4.1 and 4.2)

The selection of projects takes place in two steps. First, in step 4.1, all applications are assessed according to scientific excellence, relevance to the research theme, feasibility, opportunity to contribute to the synthesis report and the need for the secretariat's operational support. Successful projects are included in the planning and receive a letter of support from the Swedish Polar Research Secretariat, which can be used for applications for funding from research funders. The fact that a project is included in the planning does not guarantee that it will take part in step 5, expedition. Research funding for projects that have been included in planning must go through research funders and through their regular calls.

After a project has been granted research funding, the Swedish Polar Research Secretariat decides on which projects that can be adopted for implementation within the given research theme, step 4.2. Only projects with secured research funding will be accepted.

Expedition – fieldwork-based and non-fieldwork-based projects within the research theme (steps 5 and 6)

The Swedish Polar Research Secretariat invites to a joint workshop for all participants who have been granted projects within a theme. The intention is, among other things, to create a plan for the collaboration between the individual research projects in the form of exchange of data, planning of synthesis report and possible multidisciplinary articles.

The workshop serves partly as an introduction to various projects and their input values to the research theme, as well as a basis for the creation of a so-called Scope of Work (SoW) for the expedition-based research.



After the joint introductory workshop, the individual research projects in stages 5 and 6 are carried out with the ultimate goal of producing scientific articles, for which the researchers themselves are responsible.

Research to Policy – synthesis report (step 7)

The PRP ends with a thematic synthesis report that in a summarised and multidisciplinary way describes what the results from the research can mean for society. The report focuses on scientific issues and results from steps 5 and 6. The primary target group of the synthesis report is decision-makers.

The Swedish Polar Research Secretariat takes the editorial role, assists with documentation, finances the main authors and arranges the activities that are necessary for the writing process. The goal is to get the report out within a year and a half after the expedition's data collection in the field.