# CALL 2019-R

# Open call to researchers in Sweden to apply for funding for Space Research, including Earth Observation Research

Before applying, applicants should carefully read the following three instruction documents:

- Research calls in spring 2019
- This document, specific to this call
- Technical guide 2019

# 2019-R Research Funding

Open call to researchers in Sweden to apply for funding for Space Research, including Earth Observation Research

## Deadlines<sup>1</sup>

Digital version: 2019 May 15, 17:00<sup>2</sup> Paper version: 2019 May 15, 17:00<sup>3</sup>

<sup>1</sup>Two submissions are mandatory, both a digital submission and a paper version with original signatures. See Technical Guidelines for details.

<sup>2</sup>Maximum size of attached PDF document: 5 megabyte

<sup>3</sup>Swedish postal stamp of the preceding working day is sufficient.

#### NEWS

Please note the following changes compared to last year:

• New rules apply concerning **letters of support** (see the cover sheet for Enclosure 2).

#### **PURPOSE OF THE CALL**

The application shall concern, in a concrete way, work related to scientific measurements on space-borne platforms like satellites, planetary probes, International Space Station (ISS), sounding rockets and high-altitude balloons. It can also be preparations for future scientific measurements in space or calibration/validation of science data from space.

This call is limited to projects that will give meaningful results within a research grant of maximum 3 years and to requests for dedicates support to PhD positions (4 years). For international space projects requiring long-term SNSA commitments, or proposals of expansions of such commitments, or career support, we refer to other calls. Applicants who are uncertain where a project proposal belongs, are advised to contact SNSA staff.

Special emphasis is placed on projects where the applying researchers have been or are instrumental in preparing for the realisation of a space mission. More specifically, it is an advantage for applicants who have made efforts in a consortium of scientists, have developed hardware for the payload or have contributed software of importance for the success of a space mission. SNSA also promotes utilization of space infrastructure to which Sweden has contributed, such as national missions, Copernicus, ESA Science missions, sounding rockets, ISS, etc.

Educational activities are not covered by the current call.

#### CONTENTS OF A RESEARCH APPLICATION

#### **Application forms**

A proposal must contain the following set of forms:

- Form A (Overview)
- Form B (Administrative information, with signatures on paper version)
- Form C (Abstracts)
- Form D (Other sources of funding)
- Form E (Staff overview)
- Form F1-F4 (Sought amounts)

#### Enclosures

A set of PDF Cover Sheet is provided for each type of enclosure that can be appended to the proposal:

- 1. Description of the Research Programme (mandatory)
- 2. Specification of Costs (mandatory) and Letters of Support
- 3. Progress Report
- 4. Curricula Vitae (mandatory)
- 5. Specification of Ph.D. student position

The cover sheet must be the first page of each enclosed enclosure. These sheets specify rules for the contents of each enclosure.

#### Letters of support

Letters of support may only be appended to Enclosure 2 and only in accordance with the rules on its cover sheet.

#### SUPPORT TO SALARIES

#### General staff costs

You may include any type of staff costs essential to the needs of the proposed research project, including secondment/"friköp"), Research Fellows, PostDocs, PhD students, Research Engineers, etc. All staff costs must be justified in Enclosure 2 (roles, amount of expected work, extent in time). In general, such staff costs will be judged by SNSA as cost items for the project. Any resulting grant contract will be set up to suit the research project, without regard to issues such as the length of staff positions (maximum 3 years) and what the employees do beyond the fraction of time supported by SNSA.

#### PhD Position (Doktorandtjänst)

SNSA promotes a healthy recruitment of new students to PhD fellowships, especially in academic environments that provides excellent education and training of the student and in research groups that have an excellent future research potential. If a PhD student would be a good resource in your proposed research project and if you feel the previous sentence applies to your research group, then you may consider seeking a dedicated support of a PhD position (4 years). This is done by submitting Enclosure 5 to your research proposal (in addition to filling in the normal data for the PhD student on Form E, Forms F1-F4, and Enclosure 2).

It is important that Enclosure 5 includes a clear and credible plan for the thesis work, including a detailed description of the anticipated research project, that makes it probable that the PhD student will finish his/her thesis within the scope of the project and within four years of full-time efforts. A PhD student salary grant is normally guaranteed for a maximum of 4 years (100% of full time can be sought), but the allocated funds may be used during 5 years, provided the receiving institution contributes 20% per year for five years. The Ph.D. student position shall normally be applied for as an open position and (for successful applications) be advertised at least nationally or in accordance to local university rules. The application must contain the CV of the proposed tutor, including specification of tutoring and teaching experience. If the application for a doctoral position concerns an already identified person, his/her CV shall also be appended and the principal applicant must give the reasons for the focussing on that person. Enclosure 5 shall describe the plan and milestones for the Ph.D. studies, the research tasks under the responsibility of the Ph.D. student, and list the expected results and output of his or her research. In addition, the supervisors and their commitment shall be clearly described.

SNSA plans to award up to four new grants per year (depending on the economic situation) that are specifically tailored for PhD fellowships ("doktorandtjänster"). The exact number in a year will depend on budgetary constraints and the excellence of the proposals. In cases where SNSA does not grant a sought support of a PhD fellowship with a tailored PhD grant, SNSA may instead decide on a normal project grant of shorter duration which may include part of the sought PhD costs as general staff contribution to the proposed research project.

### **CRITERIA FOR EVALUATION**

The following criteria are considered by SNSA in the evaluation process (in no particular order, except the first bullet is most important):

- The scientific excellence and importance of the project, internationally, nationally and for society, including both pure science and applied science aspects.
- The project aim, goals, implementation and project plan.
- Strong research environment, competitiveness and international standing of the group.
- Motivation for and need of space experiments or observations in or from space, or (for technology research) the potential for future space application.
- The degree to which the applicants have been instrumental in the realisation of a space mission to be utilized.
- The extent to which the project utilizes space infrastructure which Sweden has contributed to, such as national missions, Copernicus, ESA Science missions, sounding rockets, ISS, etc.
- The novelty of the project and its potential to renew, develop and promote future national and international research efforts in using space-based or high-altitude equipment.
- The scientific and technological prospects for the group to successfully execute the project.
- Realistic and well-motivated cost estimates.
- The potential of the project whilst maintaining high scientific quality to increase the number of women active in research.

For dedicated PhD grants SNSA also assesses the suitability of the proposed PhD project and the supervision plan.

The final research programme of SNSA will be based on the above criteria, combined with boundary conditions such as budgetary constraints, strategic and policy considerations, gender aspects, and the long-term evolution of the research programme.