

## INSTRUCTIONS TO CALL 2022-N

**Open call to researchers in Sweden to apply for funding and SNSA commitments for participation in international Space Science and Earth Observation space missions**

### SCHEDULE

**Release:** Release in Prisma planned for the period 2022 February 8–11.

**Deadline:** Applications must be submitted no later than **2022 April 20 at 14:00**.

**Decision:** Grant decisions are planned before the end of the year 2022.

### NEWS

Note the following important changes compared to N calls of the previous year:

- This call is not open to requests to cover cost increases on running projects.

### PRISMA

The Prisma system (<https://prisma.research.se/>) is used for applications, feed-back and administration of grants. You must have a personal account in order to apply. More information is provided in Appendix G.

Please note that the Prisma system will automatically prevent registration of your application after the moment of deadline. We therefore **strongly advice** applicants to register applications in good time before the deadline. In this way you get early feed-back from the system on missing information required for registration. The system also allows you to unregister, edit and re-register an application before the deadline. For more information, see:

<https://primasupport.research.se/user-manual/researcher/apply-for-a-grant/register-application.html>

## **PHASES OF SPACE PROJECTS AND SNSA SUPPORT**

The Swedish National Space Agency (SNSA, *Rymdstyrelsen*) wants to facilitate successful involvement of Swedish researchers in international research missions in space. For this purpose, SNSA has a portfolio of support types for the typical phases and activities of such involvement. In this document we refer with numbers to the following five phases:

1. Early discussions, formation of consortia of scientists.
2. Early planning, writing of mission and instrument proposals, early technology development, work in competition with other mission candidates.
3. Design and building of hardware, development of software, detailed planning in preparation of the operational phase.
4. Operation of software and instruments during the operational phase. Calibration and validation of space data, including ground-based measurements of relevance for reliability of Earth Observation data from satellites. Archiving of scientific data.
5. Exploitation of science data from space for own research.

## **PURPOSE OF THIS CALL**

The N call described in this document allows researchers to apply for support for phases 2-4 above. A successful proposal may result in a long-term commitment from SNSA (more than four years is possible). SNSA may also enter into agreements with international partners concerning delivery of essential hardware, software or other work that is essential for the realisation of the space mission. Before making such commitments, SNSA may also enter into negotiations with the organisation in Sweden where the work is to be carried out.

It is possible to apply for support for taking on new work packages and new commitments for an existing space mission. However, in this call it is not possible to apply for coverage of cost increases within running projects.

### **Research disciplines**

This call is open to support to space missions within all research disciplines. Thus, the space mission may address Earth Observation, Astrophysics, the Solar System, in-situ measurements, research taking advantage of the microgravity conditions in space, etc.

## **OTHER CALLS**

SNSA has a continuously open call for support to organisation of events and travel ("Stöd för arrangemang och resor"), which allows researchers to apply for support of activities under Phase 1 above. In addition, please note the continuously open call "Rymdstyrelsens stöd inför framtida vetenskapliga rymdprojekt", which addresses support letters and other support during phase 2.

SNSA does not normally make any commitments for the science data exploitation phase (5) in advance. Funding for the science exploitation will not be granted in response to the N call described in this document. Such support may be sought from other funding agencies or in response to the annual R calls of SNSA.

## **EXAMPLES OF PREVIOUS SUPPORT**

The following types of long-term support have been funded by SNSA in the past:

- Ground-based calibration or validation of measurements by an instrument on a satellite, which are essential to meet the goals of the instrument.
- Development of software, algorithms, data handling procedures, or instrument simulation tools required for a specified international space mission.
- Design and construction by research groups of a scientific instrument, or parts thereof, for flight on a specified international space mission.
- Industrial work which contributes to a specified international space mission, and which supplements work by researchers in Sweden on the international project.

## **FUNDING PERIOD**

In the Prisma budget forms you specify costs for the number of years (maximum 4 years) for which reasonable detailed cost specifications can be made. Justify these costs and estimate the costs for all phases of the project (may be longer than 4 years) in the enclosure “Project Description” described below.

## **CONFLICTING SCHEDULES**

In cases where a planned international space mission is foreseen to undergo a significant evolution or decision step after the nominal deadline of this call, please contact SNSA with this information. SNSA may in such cases allow for a special process.

## **SPECIAL RULES FOR RESULTS AND ECONOMIC ACTIVITIES**

In this call only projects that fulfils the following two conditions can be funded:

- Project contributions funded, such as instruments or parts of instruments, must be unique to the application of the research project and lack direct use in any sort of commercial applications.
- Science results related to the grant must be made available and published.

Applicants and participating persons may be employed at universities (*lärosäten*), research institutes and companies. For participants with economic activities (e.g. companies), if SNSA funds non-economic activities then these non-economic project activities must be fully separated in the companies economic accounting.

Note also that if your project is funded, it will be clearly stated in the grant rules that:

- No profit is allowed from a grant.
- All results from a grant must be owned by the full project, not by individual companies or other actors.
- Participating companies are not allowed to take patents based on the grant work.

## ENCLOSURES

A set of enclosures in the form of PDF documents must be uploaded to the Prisma system for inclusion in the application. The minimum font size for bulk text in the enclosures is **12 p**. The required contents of these enclosures are described in the following sections. Each enclosure you write should have a **heading** corresponding to the heading of a section below.

### Project Description

**(mandatory enclosure)**

For this enclosure you **must** use the headings and structure of the template (Word file) provided by SNSA and available at [www.rymdstyrelsen.se/forskning/utlysningar/2022-N](http://www.rymdstyrelsen.se/forskning/utlysningar/2022-N). In the template, each section contains instructions on the required content written in *blue italic font*. Please read these instructions carefully. It is also very important that applicants check that the application includes clear answers to all questions in chapter “CRITERIA FOR EVALUATION”.

### Letters of Information

**(mandatory enclosure)**

- It is mandatory to include a letter of information from the **host university/institute**. This should specify the support and facilities offered to the proposed project. It is an advantage if the letter also specifies support during the science data exploitation phase, which is beyond the normal commitment period of SNSA.
- You may also include letters or other relevant documentation that clearly shows the role of the applicant(s) in mission/instrument consortia and other bodies planning a space mission, the need for and the acceptance of the proposed Swedish contribution to the mission, and the plans of the international organization responsible for the space mission. In case of questions, please contact SNSA staff before submission.

## CRITERIA FOR EVALUATION

The following evaluation questions are provided to the reviewers in the evaluation process.

1. Please assess the benefits to Swedish research (both among the applicants and for a broader national perspective) of the proposed participation in the international project. Is the proposal novel compared to previous Swedish contributions? How is the potential to renew, develop and promote future national and international research efforts?
2. Please assess the quality and credibility of the implementation plan, including costs, co-funding scheme and amounts, schedule, work packages and risk assessment. Are all work packages of equal importance?
3. Please assess the strength of the research environment of the applicants, their scientific competitiveness, and international scientific standing. Are laboratory resources adequate? Does the department/institute offer adequate support to the project and does it have a plan for support during the scientific exploitation phase?
4. Please assess the suitability and credibility of the proposed roles and responsibilities of the applicants within the international consortium. Does the Swedish team bring novel or unique knowledge and expertise into the project? Are there good grounds for expecting a Swedish return commensurable to the proposed Swedish investment?
5. In case of ongoing projects, please assess the progress achieved so far, focusing on the management of the project and the credibility of a successful contribution.

The final research programme of SNSA will be based on the above criteria, combined with the following boundary conditions:

- SNSA commitments to partners,
- budgetary constraints and strategic considerations,
- schedule of space research missions,
- the potential of the project to increase the number of women active in space-research,
- the extent to which the applicants have delivered mandatory reporting of previous projects funded by SNSA.

## QUESTIONS AND CONTACT PERSONS

For questions on this specific call, please contact:

- Vilgot Claesson (08-40 90 77 75, [vilgot.claesson@snsa.se](mailto:vilgot.claesson@snsa.se))
- Kristine Dannenberg (08-40 90 77 98, [kristine.dannenberg@snsa.se](mailto:kristine.dannenberg@snsa.se))
- Per Magnusson (08-40 90 77 92, [per.magnusson@snsa.se](mailto:per.magnusson@snsa.se))

For technical questions on the **Prisma** application system, use contact in the menu at:

- English: <https://prismasupport.research.se/user-manual.html>
- Swedish: <https://prismasupport.research.se/>

## ***APPENDICES***

### **G – General Instructions**

## **Appendix G**

### **General Instructions**

**This appendix contains general rules and information concerning some calls within the Research Programme of the Swedish National Space Agency (SNSA, *Rymdstyrelsen*). It is appended to the specific instructions for calls to which it applies. In cases of conflicts between the specific rules of the instructions of a call and this document, the specific rules have precedence over the general rules of this document.**

**In 2020 SNSA gradually migrated to the Prisma system for research administration. Please note that the nomenclature of this document has been adapted to fit Prisma and departs somewhat from the nomenclature used by SNSA for calls made prior to the adoption of Prisma.**

#### **APPLICATION PORTAL PRISMA**

Applicants must have a **personal account** within the system Prisma. For more information, see: <https://prisma.research.se/>

An application is created on the above web site by adding required information in the application form. In addition, most calls require the uploading of bulk information in the PDF format into the application. Please make sure to register the application in good time before the deadline applicable to the call.

Please note that the organization where you are employed (or intends to be employed) must have an **organization account** in Prisma and be accepted by SNSA. If this is not the case, please make sure your employer submits an application to SNSA at least two weeks before the deadline (this is also done on the web site above).

For support and information on Prisma, see: <https://prismasupport.research.se/>

#### **LANGUAGE**

The applications can be written in Swedish or English. However, most members of SNSA advisory committees do not understand Swedish and most external expert reviewers are drawn from the international research community. Thus, SNSA need to have translated applications received in Swedish to English. Applicants are advised to use **English** in the application in order to make sure that their intents are conveyed without a translational interface.

However, please note that many calls require a project title in both languages and that a popular science summary in Swedish is required.

## **SPREAD OF INFORMATION**

For successful applicants who are granted funding, SNSA plans to make the following information available on the web (SNSA web site and/or other web pages, such as SweCRIS):

- Funding organisation
- Project leader
- Affiliation
- Abstract (English) and popular summary (Swedish)
- Project duration
- Yearly funding level

## **WHO CAN APPLY?**

The applicant is required to be, or be eligible to become, affiliated to a university or research establishment in Sweden where the project work is to be carried out.

Research contracts are issued only to researchers who have a doctoral degree. Applicants who do not have such a degree but expect to receive it shortly may nevertheless submit a research proposal. In this case SNSA must receive a copy of the doctoral certificate or a written confirmation from the head of department/institute that the principal applicant has applied for the PhD degree or comparable degree. For calls with a deadline in May, the confirmation must reach SNSA by October 1 (for other situations, please consult with SNSA staff). Lacking such confirmation, the application will not be further considered.

A research grant is normally contracted to a project leader who will remain younger than 68 years of age during the first calendar year of the grant. If the applicant will reach the Swedish LAS-limit during the proposed project duration, then the application should contain a plan for the future transfer of leadership of the project. If a university department or institute wishes to receive funding for research leaders older than the above limits, then the case must be clearly stated, e.g. in a letter from the head of department included in the application.

SNSA can reject applications whose applicants have outstanding reports from previous grants.

### **Other participants (*medverkande*)**

Additional staff (maximum six) standing behind the application and intending to work on the proposed project may also sign the application. These persons must also have a personal account in Prisma and CV information from their personal profile in Prisma will be included in the application. Note that lack of a personal account, CV or inaction from an intended applicant can prevent registration of the application. Thus, plan in good time with signing participants.



In addition to the above, you may have any number of additional persons in your project team, without having them sign the application.

### **Participants from other universities**

Both signing and non-signing participants in your team may be affiliated to other research establishments, both in Sweden and abroad. You may include costs at other research establishments in Sweden, but your own organization must be prepared to arrange the transfer of such funding.

### **Gender aspects**

The number of female researchers using space-based platforms is still rather small in Sweden. SNSA therefore encourages the scientific community to contribute towards more women becoming willing and able to commit themselves to successful research projects. Without waiving quality requirements, SNSA will consider gender as one of several boundary conditions when evaluating applications within open calls.

### **Information in the CV**

Imbedded in the Prisma system there are specific rules for what can be included in your CV for each individual call.

## **BUDGET**

Under this heading in the Prisma forms you summarize the costs sought for the project from SNSA. Give costs in Swedish kronor. Distribute costs on the table headings as follows:

- **Salaries** (see special section below for more details)
  - Salaries
  - Social fees (*lönekostnadspåslag*)
- **Running Costs**
  - Instruments and equipment
  - Expendables
  - Computer costs, computing costs
  - Publication costs
  - External consultancy
  - Depreciation costs
  - Premises
- **Expenses - Travel**
  - Transportation of equipment and travel to project meetings
  - Conference travel to present results
- **Total Budget**

- All the above are added automatically
- Manually add indirect costs
- “Other costs”, not to be financed by SNSA (optional information in most calls)

All costs must be specified and justified in the project description, chapter "Cost specification".

### **Indirect costs**

Indirect costs must be computed using standard procedures of the administrating organisation (and the partner organisation, if applicable, without employing double overheads on the same direct costs). Please note that in the budget forms you include sought indirect costs only, not total indirect costs. If an organisation has a mandatory tabulation for computation of indirect costs (“full kostnadstäckning”), then include it in the “Cost specification” chapter of the project description. However, those tables don’t free the applicants from the responsibility of specifying indirect costs in a correct way in the Prisma budget tables.

### **Salaries and social fees**

SNSA grants can be used by the administrating and participating organisations for salaries and associated social fees for staff working on the project. The employment rules of the organisation apply. SNSA grants may also be used to hire external consultants with appropriate expertise for the research project.

In the budget of your application, you may include any type of staff costs essential to the needs of the proposed project, including secondment/”friköp”), Research Fellows, PostDocs, PhD students, Research Engineers, etc.

Clearly motivate each staff cost.

### **OTHER FUNDING**

Under the heading "Other funding" on the forms, if available, it is mandatory to include information on all awarded grants and submitted applications that overlap with or complement the current application.

For career applications and specifications to prolong a career grant, it is also mandatory to include information on all awarded grants and submitted applications that include funding of the applicant.

## **AFTER SUBMISSION**

Applications are assessed by a scientific advisory committee of SNSA, sometimes supplemented by external expert reviews and programmatic constraints by SNSA.

### **Additional information**

In case new information becomes available after the application deadline, applicants may inform SNSA (in English) to allow the new information to be taken into account. For example, information on new schedules for space missions or allocation of telescope time (please include proof) should be conveyed in this way. Please note that applicants are not allowed to use this avenue to improve their applications with information that should reasonably have been available at the submission deadline. Failure to inform SNSA with data of relevance to the assessment of the feasibility of the project may result in rejection of the proposal.

### **Decisions and feed-back**

The schedule for grant decision is usually provided in the specific instructions for each call. Most calls are planned to allow funding from the following January. Thus, most SNSA grant decisions are made towards the end of the calendar year. However, in some years, formal rules related to limits on commitments for future years (*bemyndiganderam*) may force the formal grant decision to be postponed to early January.

The principal applicants can expect feed-back on their applications through the Prisma system after the grant decision.

Receivers of grants must approve the terms of the grant on time, in order to receive funding.

## **GRANTS**

### **Type and extent of support**

The research grants provide traditional research support, with funding at the disposal of a university entity or research institute (*medelsförvaltare*), in accordance with standard terms (*generella villkor*) of SNSA. The funding for a calendar year is normally provided as monthly instalments. Individual grants are normally limited to a maximum of 3-4 years, but SNSA can make longer-term commitments when appropriate.

### **Publication of results, data policy and open access**

SNSA adheres to the basic principle that results and data from public funded research must be made available on-line to other researchers and the general public free of charge without unnecessary time delay. The objectives are to ensure that other scientists will be able to use

data in future for other projects and to bring more scientific value of investments as an evident part of the knowledge society. More information is provided in the standard grant terms.

## Reporting

Grant holders must report in Prisma in accordance with terms of the grant, which usually involves the following:

- Financial Report (ekonomisk återrapportering), both yearly and finally.
- Scientific report (*Vetenskaplig återrapportering*) at the end of the project.

## STAY INFORMED

In order to receive timely information from SNSA on future calls and other relevant information, please register for our Newsletter for Researchers at:

<https://www.rymdstyrelsen.se/om-rymdstyrelsen/nyhetsbrev/>

## CONTACTS

In case of questions, please get in touch as follows:

- For technical questions on the **Prisma** application system, use contact in the menu at:
  - English: <https://primasupport.research.se/user-manual.html>
  - Swedish: <https://primasupport.research.se/>
- General questions on **SNSA research calls** for research:
  - [Vilgot.Claesson@snsa.se](mailto:Vilgot.Claesson@snsa.se)
  - [Kristine Dannenberg@snsa.se](mailto:Kristine.Dannenbergs@snsa.se)
  - [Per Magnusson@snsa.se](mailto:Per.Magnusson@snsa.se)
- Questions on the **individual call**: See specific instructions for the call.