

INSTRUCTIONS TO CALL 2023-T

Call for technology research proposals in space applications

SCHEDULE

Release: The call will be released in the Prisma system at the end of March 2023.

Deadline: Proposals must be submitted no later than **14:00** on **2023-06-07**.

Decision: Grant decisions are expected before the end of 2023.

Period: Grants can cover a duration of up to four years, for example, to fund a PhD student.

PURPOSE OF THE CALL

The Swedish National Space Agency (SNSA, *Rymdstyrelsen*) aims to support Technology Research for space applications that meet the following criteria:

- Applicants must demonstrate the potential for excellent results within Technology Research, achievable within a grant period of 1-4 years, and resulting in publication in esteemed peer reviewed journals for Technology Research.
- The anticipated results should have significant long-term applications in future space activities. This may involve technology for spacecraft, sounding rockets, high-altitude balloons, software or ground-based equipment required for space-based activities.

Proposals may also include requests for dedicated 4-year support for a doctoral student position. For more information, see Appendix D.

Applicants uncertain about whether their projects fit the criteria of this call are advised to contact SNSA staff.

ENCLOSURE

Applicants must upload the required project description to the Prisma system for inclusion in the proposal. The minimum font size for bulk text in the enclosures below is 12 pt. The required and optional enclosures are described in the following sections.

Project Description (mandatory enclosure)

It is mandatory to use the appropriate template from the home page of the call (see <https://www.rymdstyrelsen.se/forskning/utlysningar/aktiva-utlysningar/2023-T/>).

Make sure that you include clear answers to all questions in the section “Criteria for evaluation” (see below).

For detailed instructions on the required content for the project description, refer to the project description template, see the homepage of the call.

Letters of Information (optional enclosure)

You may only include the following types of letters of information:

- If your project requires special laboratory resources or other services, then you may include a letter (e.g., from the university) stating what resources are made available to the project.
- You may include letters from end-users of your technology (industry, universities, institutes, government agencies) which demonstrate the interest in the application of your research for space activities.
- Letters of commitment from externally funded collaborators, confirming their participation in the project, should it be awarded funding.

Note that it is **not allowed** to include any appraisal of the applicants or of the excellence of proposed technology research in the letters. However, end-users may provide their feedback on the potential value of the research for their needs.

CRITERIA FOR EVALUATION

The reviewers in the evaluation process are asked to judge the following criteria:

Scientific excellence:

- The scientific excellence of the proposed Technology Research project. The novelty of the project and its potential to renew, develop and promote future research efforts.
- How the project relates to similar, on-going, or planned research internationally.

Potential:

- The new technology's significance for future space activities and its potential for successful implementation.

Implementation:

- Project plan, timeline, implementation method, and work packages.
- Realistic and well-motivated cost estimates.
- For dedicated doctoral student positions: the suitability of the proposed doctoral project and the supervision plan.

Actors:

- The suitability of the proposing team to carry out the described work. How is the experience of the team and its scientific and technical capacity? How is the quality of the publication record from past projects? Are laboratory resources adequate?
- Research environment, collaborations, competitiveness, and international standing of the group.

The final research programme of SNSA will mainly be based on the above criteria, combined with the following programmatic considerations:

- Budgetary constraints.
- To what degree is the realization of the proposed project a result of previously made investments by the applying team and by SNSA in a space mission?
- Strategic considerations.
- Potential of the project to increase the number of women active in space-research.
- Extent to which the applicants have delivered mandatory reporting of previous projects funded by SNSA. Moreover, the lack of high-quality publication of results from grants previously funded by SNSA is not in favour of a new grant.
- Urgency of the proposed work.

PRISMA

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

Please note that the Prisma system will automatically prevent registration of your application after the call deadline. We therefore **strongly advise** 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://prismasupport.research.se/user-manual/researcher/apply-for-a-grant/register-application.html>

QUESTIONS AND CONTACT PERSONS

For questions on this specific call, please contact:

- Vilgot Claesson (08-40 90 77 75, vilgot.claesson@snsa.se)
- Kristell Pérot (08-40 90 77 72, kristell.perot@snsa.se)

APPENDICES

- **D** – Full Support to a Doctoral Student Position
- **G** – General instructions

Appendix D

Full Support to a Doctoral Student Position

This appendix contains rules for seeking full support to a PhD student position for 4 years. Please note that if only part-time work by a doctoral student is included in your application, then you can ignore this appendix and treat the student as any other staff.

You can apply for full support of a doctoral student position for 4 years. The doctoral student must be an appropriate resource in your research project. Furthermore, the academic environment for the student should provide for an excellent education with a promising potential for future excellent research.

You seek full support for a doctoral student as follows:

1. Tick the box "I apply for funding for a doctoral student" in Prisma under the heading "Doctoral student".
2. Present the "Plan for the Doctoral Student Position" in the appropriate section of the project description, in accordance with the mandatory template. See the project template at SNSA home page.
3. Costs associated with the doctoral position should be clearly specified and distinguishable.
4. The intended supervisor must be the project leader or a participating researcher, with an appropriate CV uploaded into the application.

Grants

Successful applicants will generally receive a dedicated doctoral student grant of four years. The grant rules usually allow the usage of the funding to be spread out in five years, provided the receiving institution contributes for the additional time. The doctoral student position shall normally be advertised at least nationally or in accordance with local university rules. The employment rules of the administrating organization apply to the position.

In cases where SNSA does not grant a dedicated doctoral student grant, SNSA may instead decide on a normal project grant which may include part of the sought costs for the student as general staff contribution to the proposed research project.

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 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 via the web site above).

For support and information on Prisma, see: <https://primasupport.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 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 is planned to obtain the PhD degree or comparable degree by the end of the year. For calls with a deadline in May, the confirmation must reach SNSA by October 1 of the same year (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 69 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 the project leadership. 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 submitted proposals based purely on 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

participant can prevent registration of the application. Thus, plan in good time with signing participants.

In addition to the above, note that 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 within Sweden.

Gender aspects

The proportion of female researchers using space-based platforms is still rather small in Sweden. SNSA therefore encourages the scientific community to contribute towards more women getting involved. Without waiving quality requirements, SNSA will consider gender as one of several boundary conditions when evaluating applications within open calls.

Information in the CV

Specific rules for what information can be included in the applicant's CV are imbedded in the Prisma system for each individual call.

BUDGET

Under this heading in the Prisma forms you need to summarize the costs sought for the project from SNSA. The costs should be given in Swedish kronor. Please distribute the costs among 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 costs previously indicated are added automatically
 - Manually add indirect costs (see special section below for more details)
 - “Other costs”, not to be financed by SNSA (optional information in most calls)

All costs must be specified and justified in the project description, in the 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, only sought indirect costs should be included, not total indirect costs. If an organisation has a mandatory tabulation for computation of indirect costs (“full kostnadstäckning”), then please 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 in Sweden 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 extend 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 relevant information becomes available after the application deadline, applicants may inform SNSA (in English) to allow this 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 feedback

The schedule for grant decision is usually provided in the specific instructions for each call. Most calls are planned to allow funding from the month of January following the submission deadline. 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 and conditions (“godkännande av villkor”) 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 to 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 the 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 as a minimum:

- Financial Report (ekonomisk återrapportering), both yearly and at the end of the project.
- 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 about 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 about **SNSA research calls** for research:
 - Vilgot.Claesson@snsa.se
 - [Kristine Dannenberg@snsa.se](mailto:Kristine.Dannenberg@snsa.se)
 - [Per Magnusson@snsa.se](mailto:Per.Magnusson@snsa.se)
 - Kristell.Perot@snsa.se
- Questions on the **individual call**: See specific instructions for the call.