INSTRUCTIONS TO CALL 2025-D

Open call to research establishments in Sweden to propose a national doctoral school for students aiming at a doctoral degree in fields related to space activities

SCHEDULE

Release: Release in Prisma planned no later than June 30, 2025.

Deadline: Applications must be submitted no later than **October 14, 2025**, at **14:00**.

Decision: The SNSA grant decision is expected by December 2025.

PURPOSE OF THE CALL

In the 2024 Research Bill (2024/25:60) the Swedish Government proposed the establishment of a national doctoral school dedicated to the field of space. The Swedish National Space Agency (SNSA) has been tasked with funding this initiative through a dedicated appropriation. This call invites proposals from consortia of Swedish research establishments.

FUNDING LEVEL AND DURATION

SNSA expects to receive appropriations from the Swedish Government as follows:

2026: 10 Mkr 2027: 10 Mkr 2028: 15 Mkr 2029: 15 Mkr

Please note that the amounts above are planned total grant amounts, including overhead / indirect costs. Pending available budget, SNSA may choose to extend ongoing support to a doctoral school beyond the initial grant, up to approximately ten years in total.

SNSA plans to award the full amounts above to a single hosting organization (applying organization in Prisma). However, SNSA does not rule out a distribution of the grant among two or more organizations, if SNSA receives well-founded proposals in this direction.

TYPE OF SCHOOL

The school must aim for a broad portfolio of educational activities that will raise the general level of competence of space research in Sweden. The consortium behind the proposal must have an appropriate geographical distribution for a national school. The focal point must be studies aiming towards a doctoral degree. It may include all types of research which utilise or have clear potential for utilizing equipment in space, including stratospheric ballons and sounding rockets launched from Esrange, or for promoting future development of space activities in Sweden. Proposals may therefore include thesis studies in the following domains, but is not limited to them:

- Basic Space Research
- Space Technology, including Dual Use, Space Innovation and Commercialization
- Space Safety, Space Situation Awareness
- Space Policy, Space Law, Space Diplomacy,
- Research on Space Education

Please note that many research areas can fit within the first bullet above, including:

- Life and material sciences using space environment, including suborbital platforms and relevant ground analogues (e.g. ones used within ESA Exploration programme)
- Earth observation from satellites
- Atmospheric science
- Space physics
- Planetology
- Astrophysics
- Astrobiology
- etc.

The proposal should address how the school will interact with:

- Relevant research institutes and academic partners
- Space industry and other relevant companies
- Government agencies and local authorities utilizing space
- International partner organizations

Detail how these interactions will provide tangible benefits to the PhD students' training, research, and future career prospects, as well as contribute to the broader Swedish space ecosystem.

Please address how the school will promote gender equality.

SYNERGIES

While it is advantageous to present a broad ambition for the doctoral school, as outlined above, it is essential that all components function well together as an integrated unit. Avoid artificially broad descriptions that lack concrete plans for leveraging synergies across the proposed fields. Please clearly describe how courses and other activities within the school will support and enhance integration across all included disciplines.

NATIONAL GOVERNANCE

The school should be dedicated to addressing national needs and reflect a good geographical distribution. The proposed governance structure should ensure national relevance and broad stakeholder engagement. Representation from relevant partners should be considered, including academia, industry and other stakeholders within the space sector. It should also include a suitable governing body to ensure that the school supports a wide section of the Swedish space community.

RECRUITMENT OF PHD STUDENTS AND COURSES

Specify the proposed rules for recruitment of PhD students and selection of courses. Please address inclusion of PhD students and relevant courses partly or fully funded from other sources. It is an advantage if an application demonstrates that the SNSA funding is augmented by other sources of funding for the benefit of the school. The plan may include enrolment in the school of students who have already started their PhD studies. In addition to a plan for four years, you may include a ten-year perspective in case of prolonged funding.

Please note that the students enrolled in the school must be employed by a Swedish entity and carry out the major part of their studies within Sweden. The recruitment process of PhD student candidates should be carried out according to the rules of the educational establishment concerned.

INTERNATIONAL ASPECTS

Please address relevant issues raised by the Swedish Council for Higher Education (Universitets- och högskolerådet), the Swedish Research Council (Vetenskapsrådet) and Vinnova in response to the Government task U2023/02127 on promotion of responsible internationalisation (Ansvarsfull Internationalisering, UHR rapport 2024:1, <u>https://www.uhr.se/globalassets/_uhr.se/publikationer/2024/ansvarsfull-internationalisering_uhr-2024_1.pdf</u>).

COSTS

SNSA believes that one hosting organization for the full grant is easiest to manage, but the agency is open to consider more distributed set-ups.

The proposal must include a break-down of planned costs for the school. This may include, but is not limited to:

- Salaries and related costs for PhD students
- Equipment and travel for PhD students
- Educational costs (courses, summer schools, etc.)
- Workshops, seminars, etc.
- Coordination, management and administrational costs
- Premises
- Indirect costs

It is an advantage if the school is also open to shared funding schemes with other organizations and funding sources.

If the budget tool of Prisma is inappropriate for the above break-down, then you are allowed to include the cost plan in the project description (PDF) instead. In this case, you can limit the amounts in the Prisma forms to bulk yearly sums.

ENCLOSURES

Description

(mandatory enclosure)

An enclosure with a description of the plans for the proposed doctoral school must be uploaded to the Prisma system (in PDF format). Please carefully address all the points raised in these instructions, as well as all other aspects you find relevant to give a full picture of your plans. The proposal must be detailed enough to allow a good assessment of the plans and their ability to contribute to the aims of the Research Bill.

The minimum font size for bulk text in the enclosures is **12 p**. You will find the maximum number of pages and pdf sizes of each enclosure in Prisma.

Letters

(mandatory/optional enclosure)

It is mandatory to include letters from all Swedish universities and research institutes standing behind the proposal and intending to contribute to the doctoral school, but without explicit signing the application in Prisma.

Optionally, you may also include letters from other organizations that support the proposal or expect benefits from it.

LANGUAGE

The applications can be written in Swedish or English. However, proposals will likely be reviewed by experts without knowledge of Swedish. Thus, SNSA need to engage a translation service for applications received in Swedish. Applicants are advised to use **English** in the application to make sure that their intents are conveyed without such a translational interface.

CRITERIA FOR EVALUATION

Strategic Relevance and National Benefit

- Alignment with the stated purpose of this call.
- Potential to enhance the competence level and secure long-term competence supply within Swedish space activities, taking into account the diverse needs of research, education, and industry.
- Clarity and feasibility of the plan to meet national needs and contribute to the development of the Swedish space sector.
- Geographical distribution

Scientific and Educational Quality of the Programme

- Quality, breadth, and innovation in proposed educational activities (courses, seminars, supervision models).
- Relevance and potential of proposed research themes and their ability to attract highquality doctoral candidates.

Organisation, Management, and Governance

- Effectiveness and appropriateness of the proposed organizational structure, management plan, and leadership.
- Clarity and suitability of the proposed national governance model, including mechanisms for national coordination and stakeholder influence.
- Experience and qualifications of the proposed host institution(s) and key personnel regarding the management of large-scale educational and research programmes.
- Feasibility of the plan for doctoral student recruitment and for the inclusion of students/courses funded from other sources.

Synergies and Collaboration

- The extent to which the proposal demonstrates an integrated doctoral school, rather than a collection of disparate activities.
- Effectiveness of the plans to create and leverage synergies across different research fields and activities within the doctoral school.

- Quality and feasibility of proposed collaboration, for example with the space industry, public authorities, local bodies, and international partners, as well as the expected collaboration benefits for doctoral students and the Swedish space sector.
- Potential to strengthen the international standing of Swedish space research through interdisciplinary and international collaboration.

Budget and Resource Management

- Clarity, realism, and justification of the proposed budget, including cost breakdown.
- Appropriateness of resource allocation in relation to planned activities and objectives.
- Potential for co-funding or leveraging additional resources, if applicable.

Feasibility and Implementation Plan

- Overall feasibility of the doctoral school given planned resources, timeline, and institutional support.
- Clarity and completeness of the implementation plan, including risk assessment and mitigation strategies.

Gender

• Potential of the project to increase the number of women active in space-research.

International and security aspects

- Strategic and policy considerations.
- Consideration of Sweden's foreign, security and defence policy interests.
- Consideration of project connections to countries identified as security threats by the Military Intelligence and Security Service (MUST) or the Swedish Security Service (SÄPO).
- Consideration of handling or development of dual-use products.

REVIEW PROCESS

Applications will be reviewed by experts from the SNSA Science Advisory Committee (SAC). Additional experts may be included in the assessment process. However, the final decision is taken by SNSA. In case all received proposals are too immature for funding, SNSA may request additional information or initiate a longer process before deciding on funding.

PRISMA

The Prisma system (<u>https://prisma.research.se/</u>) is mandatory for the submission of applications and grant administration. An active Prisma-account is therefore required.

It is crucial to register your application well in advance as the Prisma system will automatically prevent registration of your application after the submission deadline. Prisma will provide you with early feedback 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:

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