INFO MEETING

ESA Phi-Lab Sweden Open Call

Edge AI in Space

June 24th, 2025

AGENDA

- Introduction to ESA Phi-LabNET
- Introduction to ESA Phi-Lab Sweden
- Introduction to Vinnova
- Summary of the call
- Q&A

ESA Phi-LabNET

Innovation Services

ScaleUp Programme Division

Commercialisation Services Department


exploration


human spaceflight

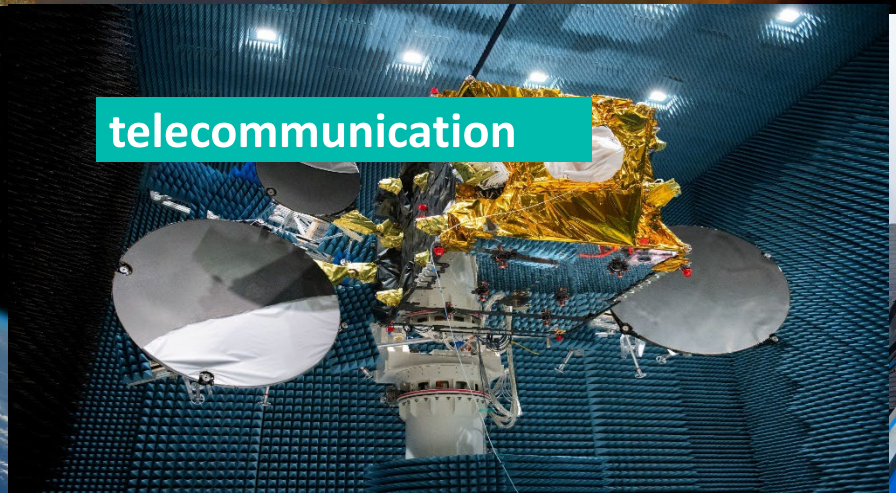

science


earth observation


commercialisation


navigation


space transportation


telecommunication


technology
Excellent research in Dresden
Fraunhofer
esa

SCALEUP

INVEST

SUPPORTING THE SCALEUP OF VENTURES

BUSINESS SUPPORT

Pool of various services to best answer individual acceleration needs

For companies with high business potential with mature technology

ESA MARKETPLACE

Development of industrial players on new upstream & downstream markets aggregating service requests and offers from and for industry

INNOVATE

BOOSTING INNOVATION AND COMMERCIALISATION

Disruptive research innovation projects

Phi-LabNET

Start-up creation & incubation services for entrepreneurs

ESA BICs NETWORK

Commercial innovation projects integrating space technologies

ESA BROKERS
ESA AMBASSADORS

ESA Phi-LabNET – in a nutshell

- ESA Phi-LabNET aims at **bringing research closer to commercialisation** by bridging disruptive research and commercial needs.
- Phi-LabNet focuses on **maturing technology in response to needs coming from the commercial world**, which are brought in by commercial operators. (consolidation of / exploring new applications, increase the TRL of prototypes, market verification, etc.)
- Each Phi-Lab proposes **a thematic focus** and shall position itself as a reference centre/cluster for this specific theme.
- Each Call can further narrow down this focus in response to specific **national and European priorities and needs**.
- The construct and governance of the Phi-Lab NET (including the Advisory Boards) ensures a strong link with **ESA and national programmes**.
- Each Phi-Lab creates a sustainable ecosystem for innovation and provides comprehensive support to selected economic operators, including intellectual contributions and a range of services **under one roof**.
- As a **network** spanning ESA Member States, the Phi-Labs foster the exchange of ideas, resources, and knowledge to develop sustainable commercial concepts through rapid iterative research.

ESA Phi-LabNET

An ESA PHi-Lab:

- is a centre managed by an Entity (or a consortium) contracted by ESA;
- Offers funding, support and access to labs/infrastructure to Economic Operators (in general not part of the consortium) that propose research activities (in view of and shaped for potential commercial applications).
- Adopts an “under-one-roof” approach
- Provides a unique opportunity for Economic Operators and Phi-Lab managers to generate innovation. It helps:
  - Economic Operators to find new solutions for potential commercial applications levering on know-how of Phi-Lab researchers and access to existing Φ-lab facilities
  - Phi-Lab Researchers to turn their findings / research into business

ESA Phi-LabNET – implementation 2023-2025

Austria

Industrial innovation for the upstream domain

Switzerland

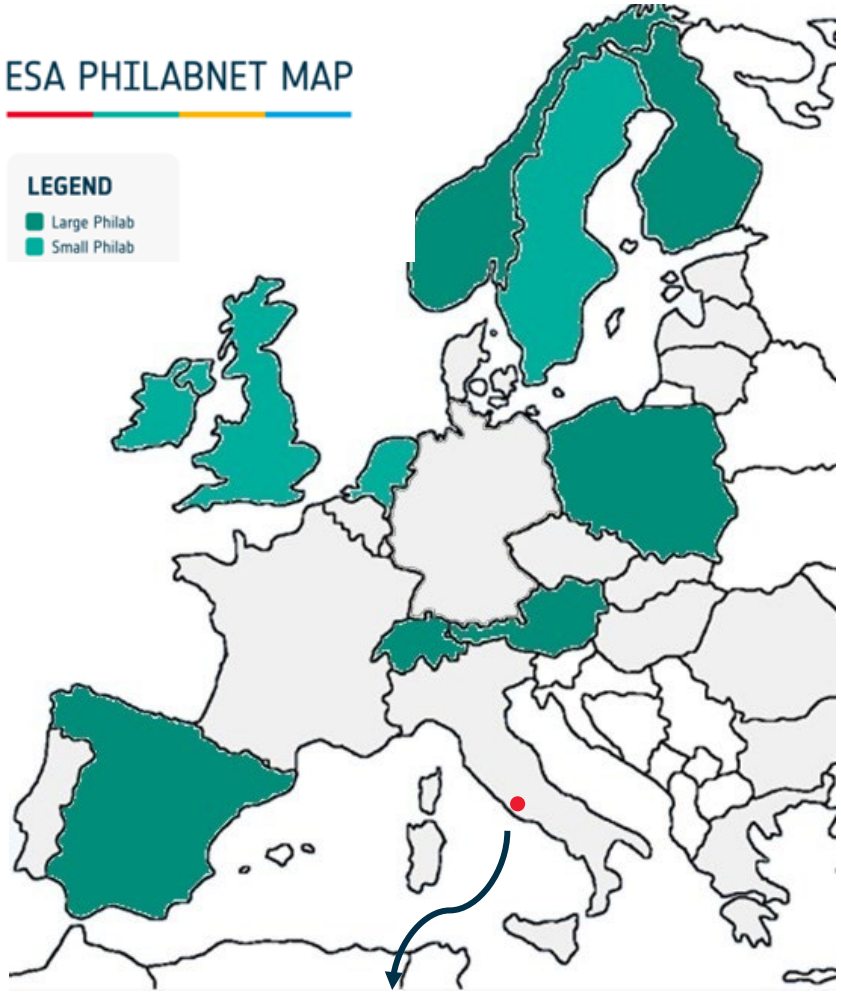
Deep tech innovation (quantum, data, materials)

Poland

Robotic and AI for autonomy

Ireland

Advanced Manufacturing



ESA Φ-lab

ESRIN, Italy

Norway

Arctic requirements and needs

Spain

Space technologies and their application to boost climate resilience

Netherlands

EO, critical PNT infrastructure, secure satellite communication

Finland

Sensors & Geospatial Innovation

UK

Space enabled sustainability technologies

Sweden

Edge Learning

*On-going discussion and/or Procurement

RI.SE

VINNOVA esa

ESA COMMERCIALISATION GATEWAY

SPACE FOR BUSINESS
BUSINESS FOR SPACE

ESA Phi-Lab Sweden

AI and Edge Learning for Space

AI and Edge Learning

Our goal is to enhance Sweden's innovative power and position in the space market by facilitating the exchange of ideas, resources, and knowledge.

We develop commercial concepts and applications that leverage the latest advances in AI and edge-learning technologies for space applications.

Partners

CO-FUNDING Partner

VINNOVA
Sveriges innovationsmyndighet

COORDINATOR

RI. SE | Research Institutes of Sweden

SUPPORT PARTNERS

IRF INSTITUTET FÖR RYMDFYSIK
Swedish Institute of Space Physics

KTH VETENSKAP OCH KONST

SSC Swedish Space Corporation

Innovation is more important than ever

AND WE’RE RUNNING OUT OF TIME

VINNOVA

We help organisations come together

Companies, researchers, public sector and civil society

VINNOVA

ESA Phi-Lab Sweden: Edge AI in Space

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Thematic Areas

AI

ACCELERATING AI FOR SPACE APPLICATIONS

EDGE LEARNING

INNOVATIVE CROSS-SECTOR EDGE LEARNING SOLUTIONS APPLIED TO THE SPACE DOMAIN

HARDWARE

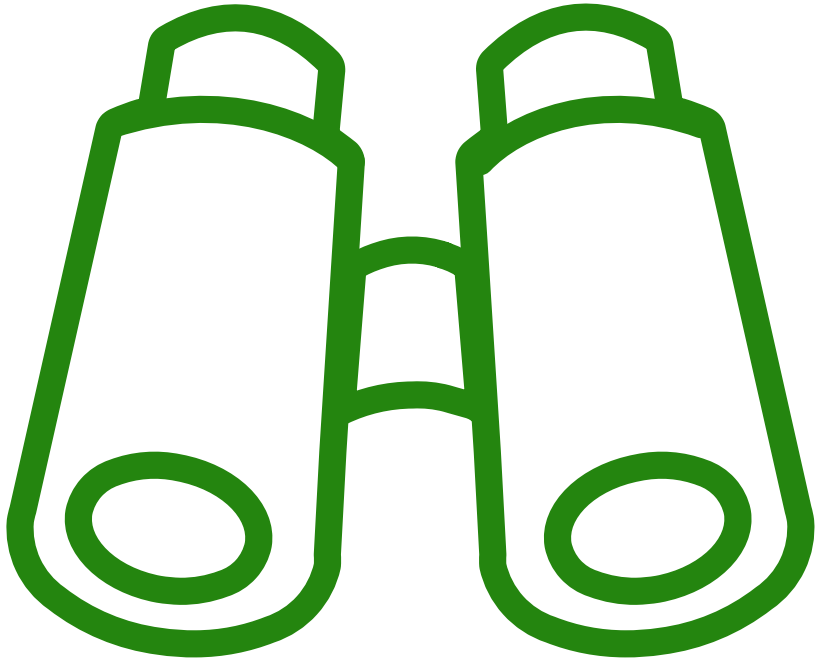
OPTIMIZED HARDWARE FOR AI IN SPACE TECHNOLOGY

CLIMATE AND SUSTAINABILITY

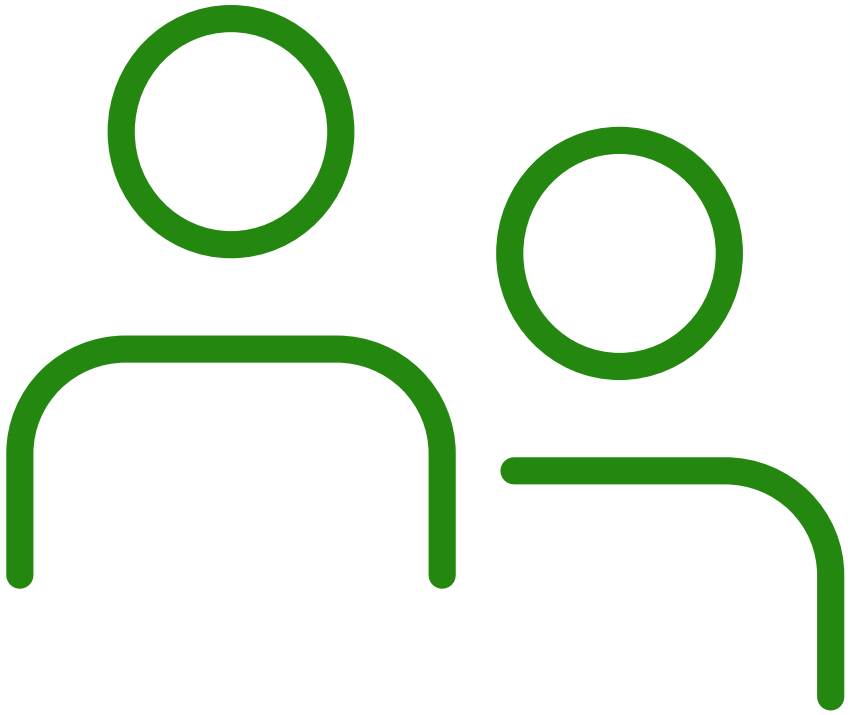
STRIVE FOR SUSTAINABLE SPACE MARKET DEVELOPMENT

What can you apply for?

- Investigate technical and structural feasibility conditions for a commercially-viable product or a service based on AI and edge learning for space applications.
- Develop prototypes or demonstration versions of products and services. This may include pilot work, testing, and validation.
- Research and develop production methods.
- Plan and conduct studies and tests to validate an innovation.
- Investigate market conditions, for example, identifying customers, customer needs, potential partners and competitors for a product/service with a clear connection to space.

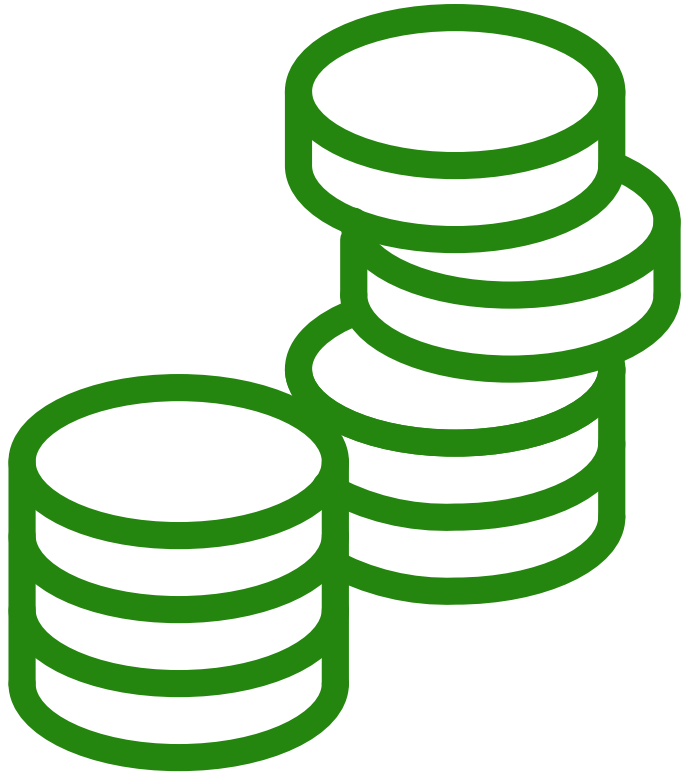


Who can apply?



- Consortia with at least two participants, at least one company.
- Industry, business, academia, research institutes, public activities, authorities or economic associations can be part of the consortium.
- Project partners from an ESA member state other than Sweden can participate.

How much can you apply for?



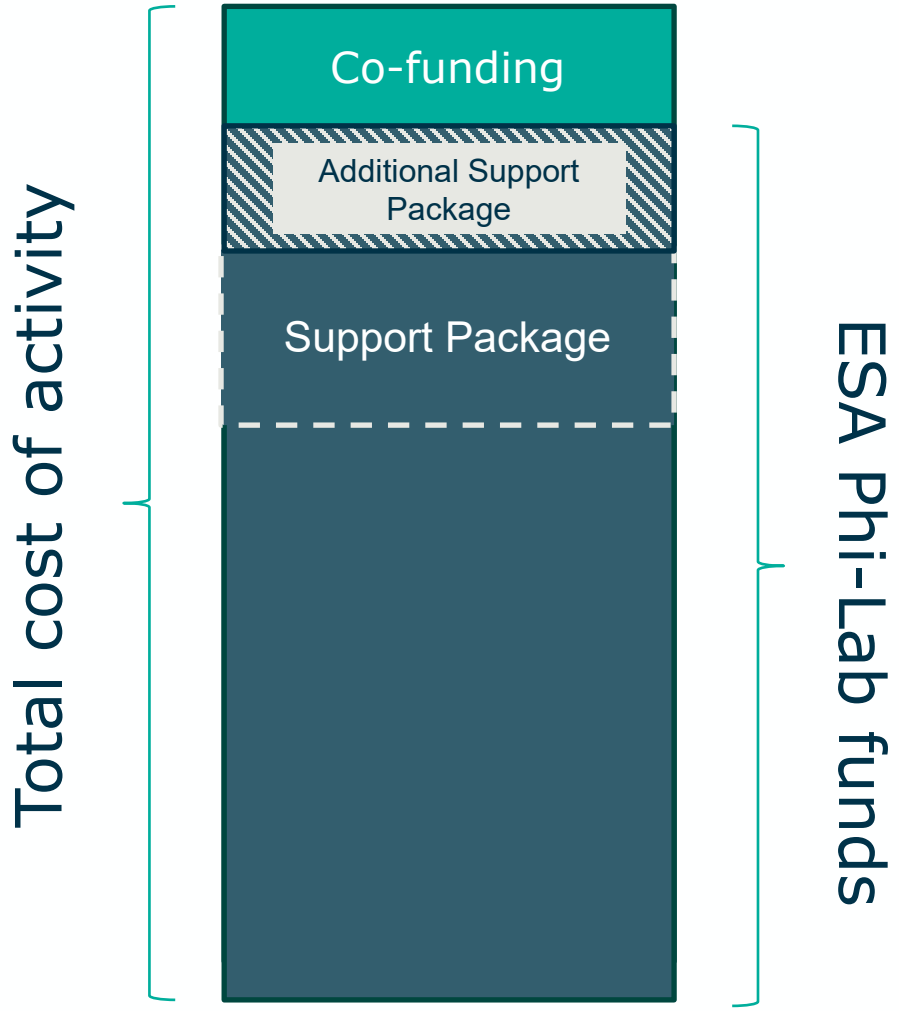
From 2.5 to 5 million SEK per project

Up to 100% of eligible costs

Vinnova finances the participation of the Swedish actors with a maximum of 2.5 million SEK per project. ESA finances the Swedish the actors, plus any project partners from an ESA member state other than Sweden, with a maximum of 2.5 million SEK per project.

Support Package

- Research mentorship/technical support
- Business coaching
- Legal advice
- Access to equipment and facilities
- Access to background intellectual properties



Parallel Submission Process

- **Step 1**: Fill in all the sections the ESA Philab Sweden Research Proposal Application Template provided in attachment in the Vinnova e-service portal.

- **Step 2**: Provide the CVs of the main contributors to the project activities.

- **Step 3**: Adapt the text produced in Step 1 to the Vinnova application form. Once completed, generate a pdf of your application, including also the attachments produced in Step 1 and 2. Submit the application via the Vinnova portal.

- **Step 4:** Send the full application pdf, including ALL the attachments to application@esaphilab.se.

➡ The ESA Philab Sweden Draft Research Contract is not to be filled at this stage, but it is for your information included in the application documents.

Evaluation Process

- **Parallel application:** proposal must be submitted to both Vinnova (via e-service) and ESA Phi-Lab Sweden (via e-mail).
- **Initial assessment:** Formal aspects are checked after the submission date; applicant may be asked to correct within 48 hours.
- **Interview invitation:** Applicants who meet the requirements may be invited to a presentation to the evaluation group, consisting of ESA Phi-lab Sweden, ESA, Vinnova and other experts.
- **Result notification:** Written notification of evaluation results; oral report available within 10 days upon request.
- **Contract negotiations:** Successful applicant will begin negotiations.

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VINNOVA RI. SE

Important dates

10th of June
Call opens

14th of August
Info meeting

3rd of September
Parallel Application

13th of October
Decision announced
Negotiations start

24th of June
Info meeting

2nd of September
Call Closes

September
Interviews

Mid November
Contracts are signed
Projects may start

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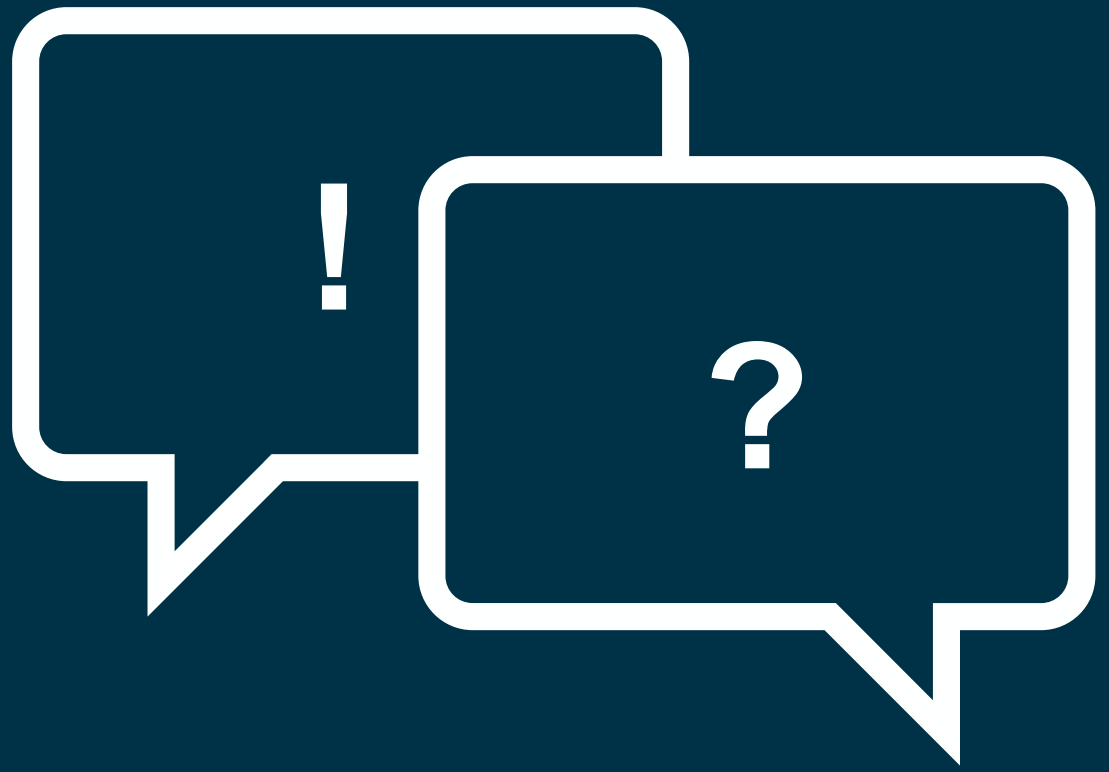

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THANK YOU!

https://esaphilab.se

https://www.vinnova.se