

Invitation to Apply to Arctic Phi-Lab call for proposals

Reference: Arctic Phi-Lab Open Call – Issue 1.0, 01/10/2024

Thank you for your interest in the ESA Φ -Lab Norway, hereafter referred to as the Arctic Phi-Lab.

Space-based studies and technology developments bring benefits to Earth in the form of services and top-class science. This makes the space industrial sector of high strategic and economic value. At the same time leading edge research brings benefit to space, and indeed to Earth and society with disruptive innovation.

As part of the Φ -labNET, one of the Components of the Innovate Element in the ScaleUp Programme, ESA is rolling out several different Φ -labs in ESA Member States.

The objective is to create a dynamic network of Φ -labs across Europe focusing on delivering innovation, reducing the time-to-market and with potential to disrupt and transform markets.

In Norway, Kongsberg Satellite Services is responsible for managing the Arctic Phi-Lab on behalf of the local Arctic Phi-Lab partners now including UIT, NORCE, NORINNOVA and Akvaplan-niva

The Arctic Phi-Lab offers a comprehensive package of support to research teams selected, including access to and use of Phi-Lab laboratories, equipment, innovation seed funding, technical support, business coaching, and legal/IPR advice.

The focus of the Arctic Phi-Lab is innovative research and development related to satellite-based technologies, products and/or services with an Arctic focus. The activities shall foster innovative capabilities for operational information systems and services, new space-borne sensors and platforms, and generate information products which are complementary to existing commercial and institutional space programs, e.g. Copernicus.

The Arctic Phi-Lab hereby invites you to submit your application in response to the Arctic Phi-Lab open call invitation. This document provides an introduction to the application and evaluation process and contains references to the templates that should be used when applying.

This first Open Call deadline is October 31. 2024 at 15.00 CET. Proposal submitted after the closing date may be considered for a later open call. It is expected that the evaluation process will take approximately one month.

For submission of your proposal, please read the Open Call instructions below.

The Arctic Phi-Lab encourage potential bidders to contact the Phi-Lab early in the preparation phase to obtain support and advice on how to prepare your proposal most successfully.

Yours sincerely,
Jan Petter Pedersen
Senior Advisor
The Arctic Phi-Lab

Open Call Instructions

Introduction

The purpose of this Open Call instructions for Arctic Phi-Lab are to inform about the opportunity for research projects to become supported by Arctic Phi-Lab and to provide the material and guidance needed to apply for support.

Selection and evaluation of applications are scheduled periodically, see www.arcticphilab.no for details.

Innovation Focus at the Arctic Phi-Lab

The Arctic Phi-Lab research and innovation focus shall in general include:

- Development of updated and reliable multi-mission information for operational use within resource management, environmental surveillance, and safety and security in the Arctic.
- Contribution to the development of tools and systems for generation and dissemination of reliable and timely information to the Arctic end users. Norway has a heritage on the provisioning of near real-time information to operational users. This heritage will be maintained by the Φ -lab, and will provide end-to-end service chains including navigation, communication and EO based elements. These elements will rely on technologies and services both provided by European and other global EO satellite operators, large global communication systems e.g. including Galileo, OneWeb and Iridium, and technologies and services provided locally and regionally by the Arctic Φ -lab partners.
- Development and utilisation of new sensors and systems like AIS- and electronic emitter detector types for use within security, environment and resources management (illegal fishing), as well as integration of space and non-space platform data will be key objectives.
- Leveraging on the expertise within the energy Industry to secure the European countries for a long-term reliable energy supply. This activity shall also include Energy Transition processes by creating new solutions with zero emission (as e.g. off-shore windfarms).
- Development of Polar Ocean ice navigation tools with real time ice charts updates using satellite images.
- Improvement of the Communication, Navigation and Information systems in the Arctic region.

The Arctic Phi-Lab shall actively seek an early involvement from local, national and European space technology and service industry. This to ensure that the industry will get early access to the new innovative solutions as well as define the premises for the development and implementation stages. Arctic Phi-Lab will contribute with support on project planning, IP management, commercialisation and network within ESA gateway and industry to support successful commercialisation of new products and services.

This first call has a quite open interest sphere and seeks innovative proposals beneficial for the space industry and for user groups including offshore oil and gas, shipping, fisheries, aquaculture, wind

farming, deep water mining and/or safety and security, all with presence and/or interests in the Arctic.

Thematics and technologies to be covered by this call include, but is not necessarily limited to:

- Sea ice, including ice bergs
- Ocean state and conditions
- Snow and ice conditions
- Safety and security
- Terrestrial applications
- Environmental Monitoring

Who can apply?

The project proposal must be submitted by (a team part of) a legal entity or a consortium of legal entities.

Some further criteria apply:

- the project shall be relevant for the specific focus of competence of the Φ -Lab and the specific topics as defined in the previous Section;
- the applicants must fulfil all the requirements below:
 - To be a legal entity (a public law company / a private law company / an association / a foundation, etc.) registered under the laws of an ESA Member State
 - Subject to approval by the Phi-Lab, the calls may also be open for legal entities not registered in Norway. Such approval shall be done before submitting a proposal.
 - In the case this legal entity is not registered in Norway the research activity shall deliver a clear benefit to Norway i.e. by having a Norwegian partner and/or assuring that the result will be available for use by a Norwegian entity/The Phi-Lab.
 - To observe the remaining requirements stated in this document;
 - When acting in collaboration with other national or foreign entities, the applicant will be the sole contractor and will be fully responsible for managing the funding.
 - To declare that the activities proposed under the submitted ESA Φ -Lab project are not being funded through other means (e.g. ESA Business Incubation, ESA Business Applications, European Commission etc).

How to apply

Please make sure you have received the following documents, which are part of the Open Call documentation:

- Cover Letter including Requirement Checklists
- ESA Φ -Lab Research Proposal:
 - Executive Summary
 - R&D and Potential Impact Proposal
 - Activity and Management Proposal
- Draft Research Contract including Draft Service Agreement

Make sure to fill in all required sections in the application templates and pay particular attention to the following:

- Instructions inside the documents ([highlighted in blue in each template](#)) shall be followed in order to fulfil all pre-conditions of the Open Call and for the application to be accepted.

- Please read the Draft Contract carefully. The Cover Letter must include a clear, explicit and unambiguous statement declaring that the applicant has read, understood and accepted the terms and conditions contained in the contractual documentation (this is part of the Cover Letter template). Modifications or amendments to the Contract may only be done in exceptional cases. Please contact the local Arctic Phi-Lab Manager for guidance.
- Make sure the Cover Letter and the Requirement Checklists are signed by the legal representative of the Legal Entity.
- Support in Arctic Phi-Lab may be requested for a maximum of 24 months.

Please submit the application documents in electronic form (pdf, maximum three files, one for each required document) to the following e-mail address: application@arcticphilab.no with subject “Arctic Phi-Lab Open Call”.

In order to prepare the proposal we encourage you to contact the Phi-Lab very early in the planning process. The Phi-Lab will assist you during the preparation and in particular to obtain access to and include the Phi-Lab services and resources in an optimum way. Any questions related to preparation and/or submission of proposals should be sent to the same e-mail address: application@arcticphilab.no

Budget

The maximum budget for the implementation of this Call is 800,000 Euro. This shall include the ESA Seed funding, the bidders own/other funding and/or bidders in-kind contribution (see below). The Arctic Phi-Lab intends to issue up to 4 contracts.. It is left up to the potential bidder to determine the size of the proposed work.

The duration of each contract may be maximum two years.

The proposed amount shall clearly indicate the required funding sources, e.g. the ESA Innovation Seed funding, the other funding amount and/or the in-kind contribution.

Note that the ESA Innovation Seed funding amount shall represent a percentage ranging from 50% to 80% of the total allowable cost of the activity, subject to compliance with the following provisions:

- Work carried out by SMEs may be funded up to a maximum level of up to 80% of the total allowable cost of the activity
- Work carried out by universities and research institutions involved as subcontractors in a consortium and justifying no further commercial interest in the product or service may be funded to a maximum level of 100% if this funding does not exceed 30% of the total allowable cost of the activity;
 - Should work need to be (sub)contracted for more than 30% of the total eligible costs, such additional share shall be co-funded up to a maximum of 50% of the total eligible costs;
 - Universities and research institutions claiming to have any commercial interest in the future exploitation of the final product or service shall be required to demonstrate this interest. In such a case, the funding level for SME or non-SME shall apply.
- Work carried out by economic operators that are not SMEs nor universities and research institutions may be funded up to a maximum level of 50% of the total allowable cost of the activity.

Eligible costs

In order to be eligible, all project costs must be:

- Necessary to the execution of the project;
- Incurred by the beneficiary and recorded in its accounts;
- Incurred during the contract term;
- Indicated in the cost planning in the proposal;
- Without VAT, interest owned, or duties.

Expenses incurred in the preparation and dispatch of the proposal will not be reimbursed.

The project may consider the following direct costs:

- a. Staff costs;
- b. Subcontracting costs;
- c. Access to data sources or intellectual property;
- d. Materials, equipment, and facilities;
- e. Travelling, subsistence, and accommodation costs

The following costs incurred are eligible:

- Train and plane costs in Economy Class, up to 700 Euro travelling in Europe and up to 1600 Euro travelling outside Europe;
- Taxi costs;
- Car rental and/or car mileage;
- Accommodation up to 250 Euro per person per night;
- Subsistence costs up to 100 Euro per person per day.

Information regarding all Travelling, Subsistence and Accommodation costs must be provided in the Mid- Term (where applicable) and Final Reports, and shall include the objectives of the occasion (event, meeting, etc.), contacts made and results.

- Business development and promotion (data sheets, flyers, trade shows etc.). Attendance to trade shows (or similar) should be agreed in advance with the local ESA Φ -Lab Manager.
- Other – costs not included in the above categories but deemed critical to the execution of the project should be agreed in advance with the local ESA Φ -Lab Manager.

The evaluation procedure

The evaluation of all received applications is managed locally by Arctic Phi-Lab and follows common ESA Φ -Lab procedures.

Once a published submission deadline has passed, Arctic Phi-Lab first assesses the formal aspects of applications received before the submission deadline. If a formal non-compliance of formal nature is found, the applicant may be asked to address this in an updated proposal within 48 hours. If the proposal is found non-admissible, the applicant will be informed and the reason will be explained. In such a case an applicant is eligible to submit a revised proposal at a later date.

If the application is compliant with the formal requirements, applicants will be invited to hold a presentation to the Arctic Phi-Lab evaluation board. The evaluation will typically take place a few weeks after the submission deadline. The evaluation board consists of representatives of Arctic Phi-Lab, ESA, [National Delegation, Key partner(s)] and other experts. There will also be an opportunity for the evaluation board to ask questions to the applicant.

The application and the presentation will be marked against the criteria in Table 1, taking weighting factors into account.

Criteria	Weighting factor
Background and Experience <ul style="list-style-type: none"> ● Experience and team composition ● Partnerships and Support entities ● Vision 	20%
Research and Technology developments <ul style="list-style-type: none"> ● Relevance to the Arctic Phi-Lab Open Call context ● Assessment of the State of the Art, maturity of the idea, and feasibility of the proposed developments ● Development strategy ● Relevance of the proposed experimental analysis / validation ● Intellectual Property strategy [if any, positive factor] 	35%
Commercial Opportunities and Potential Socio Economic Impact <ul style="list-style-type: none"> ● Potential Market Segment ● Potential Product/Service ● Potential Customers/Users ● Value Proposition ● Potential Socio Economic Impact (including sustainability) 	25%
Activity and Management proposal <ul style="list-style-type: none"> ● Overall quality of the application ● Milestones/Cost-planning ● Work break-down ● Management of the research project 	20%

Table 1: Arctic Phi-Lab evaluation criteria and weighting factors.

All applicants will be notified in writing about the outcome of the evaluation. The applicant may require, within 10 calendar days from the receipt of the notification, an oral debriefing explaining the reason why the application was successful or not.

Arctic Phi-Lab will enter into contract negotiations with successful applicants, taking the comments of the evaluation board into account. Arctic Phi-Lab has the right *not* to place a contract if, after three months after the notification to a successful applicant, no contract still has been signed, and this is because of a reason for which the applicant can be held accountable.

Additionally, Arctic Phi-Lab has the right not to place a contract in case the (intended) legal entity presented in the application is different from the actual established and registered legal entity.

Furthermore, we kindly ask you to pay attention to the following:

- Please note that applications will be treated as confidential. However, the applicant’s idea may through this application fall into the public domain (e.g. if local laws require so). Therefore, we strongly recommend that the applicant discusses the protection of his/her idea with a dedicated expert in this field prior to application, and – if relevant – takes appropriate steps to protect the idea (e.g. by applying for a patent).
- As far as allowed by law, any title held by the applicant to his/her idea shall remain vested in him/her. An application to Arctic Phi-Lab will not result in the acquisition of any title

whatsoever to the idea. *However, ESA retains a right to use the Intellectual Property in specific cases. Please read the detailed conditions described under the section “Use of Intellectual Property Rights” in the Draft Contract.*

- No expenses incurred in either stage of the application procedure will be reimbursed to the applicant by Arctic Phi-Lab, ESA and/or any third party.
- This Open Call does not impose any obligation upon Arctic Phi-Lab to enter into negotiations with any applicant.

