Invitation to Apply to ESA Phi-Lab Norway

Reference: ESA Phi-Lab Norway Open Call – Issue 4, 11/11/2026

Thank you for your interest in ESA Phi-Lab Norway.

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 Phi-LabNET, one of the Components of the Innovate Element in the ScaleUp Programme, ESA is rolling out a dynamic network of Phi-Labs in ESA Member States.

Phi-Labs do bridge the gap between early-stage research and commercialisation. They ensure that the research is not just innovative but closely serve ESA or industry needs. Phi-Labs are geared for early stage exploration and maturation of technologies that enable commercial applications. The focus is given to technologies with the potential to disrupt existing markets or even create new markets. The support provided is intended to boost the delivery of innovation, thereby reducing the time to market. Beyond the creation of new technical capabilities, the activity shall output an assessment of the market disruption potential and a roadmap to commercialisation.

The ESA Phi-Lab programme is not a TRL-driven development programme like GSTP, ARTES, FIRST, Boost!, or NAVISP. Because of its role of "innovation catalyst", the Phi-Lab's programme supports work typically covering low to mid TRLs, with an emphasis on TRL 2–4 upon entry, occasionally extending to TRL 5–6 when activities mature into prototypes that can be handed over to programmes such as InCubed, GSTP, NAVISP, ARTES, or FIRST.

In Norway, Kongsberg Satellite Services AS (KSAT) is responsible for managing ESA Phi-Lab Norway (the Arctic Phi-Lab), together with NORCE, UiT The Arctic University of Norway, Akvaplan-niva and Norinnova as consortium partners. Please note that this Open Call is issued under the exclusive responsibility of Kongsberg Satellite Services AS.

ESA Phi-Lab Norway offers a comprehensive package of support to research teams selected, including access to and use of Phi-Lab laboratories, equipment and data of the consortium partners (such as Earth observation data and ground station services at KSAT, SAR tools and airborne data collection at NORCE, autonomous ocean vehicles and models at Akvaplan-niva, and high-performance computing and guest research stays at UiT), workspace, innovation seed funding, technical support, business coaching, and legal/IPR advice. The focus of ESA Phi-Lab Norway is the use of space assets and space-based information to develop cutting-edge technologies, products and services that address Arctic needs and have a potential global market.

ESA Phi-Lab Norway hereby invites you to submit your application to enter the Phi-Lab Norway programme. All research activity proposals shall be rooted in novel research, as well as targeted and shaped for potential commercial applications.

This document provides an introduction to the application and evaluation process and contains references to the templates that should be used when applying.

Please contact ESA Phi-Lab Norway for any further questions.

Yours sincerely,
Torgeir Solberg
Manager
ESA Phi-Lab Norway

Introduction

The purpose of this Open Call for ESA Phi-Lab Norway is to inform about the opportunity for research projects to become supported by ESA Phi-Lab Norway 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.

This Open Call (Open Call #4) is open from 11.11.2026 until 17.12.2026 at 23:59 CET. Applications received after the closing date and time will not be considered in this Open Call, but may be submitted to a later Open Call of ESA Phi-Lab Norway.

Objectives and scope of Phi-Lab activities

The proposed activity shall focus on maturing a technology, through a research led process, towards the performance levels required by the target application(s). The proposed work must include a clear plan of research activities, with defined roles for scientific or technical contributors. It shall be based on solid research-driven evidence of its feasibility.

Priority will be given to developing technical capabilities with the potential to enable market disruptive applications, with high socio-economic impact.

In addition to technical research, the activity shall include a market analysis for the product & services enabled by the technology, a roadmap to commercialization, and an investigation of the potential socio-economic impact.

The technology to be matured shall have a valid space connection, i.e.

- It has been developed for a space application, and/or
- It enables new capabilities relevant for space applications, or relevant for an element of the space value chain.

Research Focus of the call – Norway

The research activity shall deliver a clear benefit to Norway industrial ecosystem. This is of particular importance for applicants that are part of a legal entity established in a state different from the one of the Phi-Lab.

In addition the project shall be relevant for the specific focus of competence of the Phi-Lab and the specific topics as defined below.

ESA Phi-Lab Norway – the Arctic Phi-Lab – supports research that turns space assets and space-based information into technologies, products and services that address Arctic needs. The Arctic is a demanding test and use environment: a harsh climate, polar night and persistent cloud cover, sparse infrastructure and communications, and rapidly changing sea-ice, ocean and land conditions, combined with growing maritime activity and high strategic importance. Solutions proven in the Arctic are well positioned for other remote and high-latitude regions.

Open Call #4 focuses on one thematic area: Earth observation for Arctic environmental and maritime monitoring. This focus has been selected on the basis of the Arctic Phi-Lab Call for Ideas held in autumn 2026, and reflects the competence of the Phi-Lab consortium in satellite data acquisition, processing and downstream services. Proposals shall mature a technology that turns satellite data into operational, near-real-time services for Arctic waters, coasts and land areas that are changing fast and getting busier.

Research activities in response to this Open Call shall address one or more of the following topics:

- Sea ice, icebergs and ice-related hazards: detection, classification, drift and pressure, in support of navigation and offshore, coastal and port operations;
- Marine pollution and oil spills: detection, discrimination from look-alikes, drift forecasting and decision support for response;
- Ocean and coastal environment: algal blooms, water quality, coastal change and erosion, and conditions relevant for fisheries and aquaculture;
- Vessel traffic and maritime domain awareness: detection and characterisation of vessels, fusion of SAR and optical imagery with AIS and other data sources, and detection of non-reporting vessels;
- Land-based Arctic monitoring (explicitly in scope): permafrost thaw and ground movement, snow and hydrology, avalanches and landslides, vegetation and grazing land, and infrastructure and critical assets;
- Cross-cutting enabling technologies: multi-sensor and multi-mission data fusion (Copernicus Sentinel, commercial SAR and optical, and new EO missions), machine learning and AI for automated detection and interpretation, processing under polar night and cloud, near-real-time and low-latency processing chains, and onboard or edge processing for Arctic timeliness.

Examples of how research in this field may disrupt the market include: automated, near-real-time ice and iceberg services that replace manual ice charting and enable safe routing for a growing Arctic fleet; satellite-based oil-spill detection and drift prediction that cuts response time from days to hours and reduces the need for aerial surveillance; fused satellite–AIS vessel detection that gives fisheries control, coast guards and insurers a continuous picture of non-reporting vessels; and permafrost and ground-movement monitoring that turns reactive infrastructure maintenance into predictive risk management for roads, airports, pipelines and buildings in the north.

Further information on the focus area and on the Call for Ideas is available at www.arcticphilab.no/call-for-ideas/.

Who can apply?

The research project proposal must be submitted by applicants who are part of a legal entity, or a consortium of legal entities.

The applying legal entity(ies) shall be established in Norway or in another ESA Member State, Associate Member or European Cooperating State. Applicants that are part of a legal entity established outside Norway shall demonstrate that the research activity delivers a clear benefit to

the Norwegian industrial ecosystem (see the section “Research Focus of the call – Norway” and Table 1, criterion 5).

The team applying shall have the skills necessary to achieve the proposed activity, including insight in the industrial and market ecosystem that the technology will impact.

An Economic Operator may be part of maximum 2 applications per call and may be the prime contractor of only one application.

The entities composing the Phi-Lab consortium are allowed to be part of the applying consortium (yet not as prime contractor). The Phi-Lab compositing entities can receive (collectively) up to 25% of the ESA Innovation Seed funding.

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.

Additional application requirements

- The work proposed under the submitted ESA Phi-Lab project shall not being funded through other means (e.g. ESA R&D activities, ESA Business Incubation, ESA Business Applications, European Commission etc).
- The Funding is exclusively dedicated to completing the work packages of the ESA Phi-Lab Research project.
- The Applicant must have meaningfully interacted with ESA Phi-Lab Norway about the project (incl. support and involvement of the Phi-Lab) prior to submitting the application.

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 Phi-Lab Research Proposal:
    - Executive Summary
    - R&D and Potential Impact Proposal
    - Activity and Management Proposal
- Draft Research Contract including Draft Service Agreement

Contact ESA Phi-Lab Norway prior to applying to discuss the scope of your project, as well as the fit with the objectives (see Table 1, criterion 5). An optional Idea Outline can be submitted via www.arcticphilab.no no later than 4–6 weeks before the submission deadline.

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 ESA Phi-Lab Norway Manager for guidance.

- Make sure the Cover Letter and the Requirement Checklists are signed by a representative of the legal entity that will sign the contract.
- Support in ESA Phi-Lab Norway 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 “ESA Phi-Lab Norway Open Call #4”, or use the web from

Any questions related to submission of proposals should be sent to the same e-mail address: application@arcticphilab.no.

Budget and additional benefits

The total budget allocated for the implementation of this Open Call is 500 000 Euro.
The Innovation Seed Funds per selected project is from a minimum of 200 000 Euro to a maximum of 250 000 Euro.

This amount shall represent a percentage ranging from 50% to 100% 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 their total allowable cost in 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 their 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 their total allowable cost in the activity.

In addition to the budget made available for the research activity, the Phi-Lab will contribute with the following elements:

- Research mentoring and technical advisory
- Business and IP coaching / advisory
- Access to technical facilities, data and infrastructure of the Phi-Lab consortium partners at favourable conditions, as described in the Arctic Phi-Lab Resource Catalogue (www.arcticphilab.no/partners/)
- Access to background IP, subject to agreement with the partner owning the IP
- Workplace and network

A detailed and complete catalogue will be available with the Open Call Documents downloaded by the potential applicants.

Additional cooperation in the R&D may be negotiated between the bidder and the ESA Phi-Lab.

The projects requesting ESA Innovation Seed Funding equal or larger than 500 kE should provide evidence of their co-funding.

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 Phi-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 Phi-Lab Manager.

The evaluation procedure

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

Once a published submission deadline has passed, ESA Phi-Lab Norway first assesses the formal aspects of applications received before the submission deadline. If a non-compliance of formal nature is found, the applicant may be asked to address this in an updated proposal within 24 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 ESA Phi-Lab Norway evaluation board. The evaluation will take place on 2–3 February 2027. The evaluation board consists of representatives of ESA Phi-Lab Norway, ESA, the Norwegian Space Agency, one representative from each of the consortium partners 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	**Sub criteria**
1 - Background and Experience (20%)	a) Experience Team composition b) Partnerships and Support Entities c) Vision
2 - Research and Technology developments (25%)	a) Suitability of technology for targeted application b) Understanding of and leveraging on the State of the Art (SoA), novelty of proposed research c) Depth and significance of technical innovation d) Maturity of technology and feasibility for target application e) Clarity and relevance of the research objectives
3 - Commercial Opportunities and Potential Socio Economic Impact (25%)	a) Potential applications, problem addressed and target markets b) Hurdles, risks and roadmap to commercialisation c) Market disruption, industrial transformation and socio-economic impact d) IPR strategy
4 - Activity and Management proposal (20%)	a) Clarity and relevance of the work to achieve objectives b) Feasibility: Access to facility and data + Availability of personnel. c) Milestones/Cost-planning / Work break down. d) Approach to align research with market needs e) Management of the activity f) Value for cost g) Double funding
5 - Alignment with Objectives (10%)	a) with Phi-lab programmatic objectives b) with Phi-Lab national scope c) with/ objectives the of the call d) Benefit for national ecosystem

Table 1: ESA Phi-Lab evaluation criteria and weighting factors

The criterion on “benefit for the national ecosystem” is particularly critical for applications involving (an) Economic Operator(s) from outside of Norway.

Proposals with a score below 40 (out of 100) for any one of the 5 evaluation criteria will be disqualified.

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. Applicants who wish to submit a complaint to the Local Administrator, are required to request a mandatory debriefing before filing their complaint.

ESA Phi-Lab Norway will enter into contract negotiations the best applications with an overall score of 60 and above within the limits of the available budget. ESA Phi-Lab Norway 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.

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 ESA Phi-Lab Norway 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 ESA Phi-Lab Norway, ESA and/or any third party.
- This Open Call does not impose any obligation upon ESA Phi-Lab Norway to enter into negotiations with any applicant.
- Please note that the Applicant’s application shall be for purposes as stipulated in the HYPERLINK "https://esamultimedia.esa.int/multimedia/publications/SP-1344/ESA_Convention_SP-1344_EN.pdf"ESA Convention.