

Request for Proposals (RFP) – October 2026:

Phased demonstration of zero- and low-emission aircraft suitable for regional aviation

Phase 1: Virtual Test Arena

Phase 2: Physical Test Arena

Contents

1. Background on the Test Arena.....	3
2. This RFP at a glance – two phases	3
3. Who can apply and what is within scope.....	4
4. Phase 1: Joint analysis and preparation for possible testing and demonstration	5
5. Phase 2: Testing and demonstration.....	6
6. What applicants must submit	6
7. Assessment and selection of proposals	7
8. Project agreement and procurement framework	8
9. Roles, responsibilities and funding.....	8
Test Arena responsibilities – Phase 1	8
Test Arena responsibilities – Phase 2	9
OEM and operator responsibilities – Phase 1.....	9
OEM and operator responsibilities – Phase 2.....	10
10. Timeline and questions	10
11. Further information	10
12. Key terms and definitions	10
13. Information about the procuring parties behind this RFP	11

1. Background on the Test Arena

Supported by the Norwegian Ministry of Transport, Avinor and the Civil Aviation Authority of Norway (CAA Norway) have jointly established the International Test Arena for zero- and low-emission aircraft in Norway (the *Test Arena*). The overall objective is to prepare the aviation ecosystem for zero- and low-emission aviation and establish the basis for scaling. The Test Arena supports the development and sharing of knowledge by facilitating operational testing and demonstration of new zero- and low-emission aviation technologies and addressing barriers to their implementation.

The Test Arena provides market players with a common point of contact in Avinor and CAA Norway, as well as a joint process from concept development to testing and flight demonstrations. This includes airports and infrastructure, airspace, energy supply, and regulatory guidance for national and international stakeholders who wish to test and demonstrate zero- and low-emission aircraft in Norway. Avinor will provide airports and relevant infrastructure, airspace, and access to energy, while CAA Norway will offer regulatory guidance, including a regulatory sandbox.

The Test Arena covers the entire Norwegian airport network and airspace. Specific geographical locations for the establishment of test operations will be decided in dialogue with market participants, based on their needs, as well as assessments of technological maturity, the availability of relevant energy and aviation safety.

The Test Arena will, over its lifetime, host multiple projects to test and demonstrate operations of different aircraft concepts and technologies. [Two projects](#) are already included in the Test Arena. The first demonstrated a battery-electric aircraft in a cargo configuration and the second is planned to demonstrate an ultra-short (uSTOL) hybrid-electric aircraft. Both were selected through previous Request for Proposals (RFP).

What is an RFP?

A Request for Proposals (RFP) invites interested organizations to submit proposals describing their concept and how they would participate in the Test Arena. Proposals are assessed through a competitive public procurement process to ensure fair and transparent selection.

2. This RFP at a glance – Virtual test Arena to Physical Test Arena

The overall goal of this RFP is the demonstration of zero- or low-emission aircraft with at least nine passenger seats in Norway.

Although aircraft of this type are developing rapidly, the Test Arena recognizes that many aircraft concepts are not yet sufficiently mature for market entry or operational demonstration. Accordingly, this RFP is structured as a two-phase process spanning 2027–2029: Phase 1, The Virtual Test Arena, is a collaborative pre-project, followed by a potential Phase 2, the Physical Test Arena for actual testing and demonstration. This

allows for broad market participation and knowledge sharing, while the most mature aircraft concepts can progress efficiently towards well-considered physical demonstration in Norway. OEMs with longer timelines can still participate, test their concept in the virtual Test Arena, and begin preparing for future zero- or low-emission regional air services in Norway, in close collaboration with the Test Arena, through participation in Phase 1.

Phase	What applicants apply for	What applicants can expect
Phase 1: Virtual Test Arena	A collaborative pre-project assessing how the proposed aircraft and/or air service concept could fit into a future Norwegian air mobility system. Phase 1 is not a physical aircraft demonstration.	Joint modelling and analysis of demand, routes and networks, operational and commercial assumptions, infrastructure, energy, regulation, financing and possible demonstration scenarios. The International Test Arena will provide an analytical approach and tools that can be applied and refined throughout the process. The outputs are documented use cases and a shared decision basis for a potential Phase 2.
Phase 2: Physical Test Arena	An option to continue into physical operational testing and demonstration based on the Phase 1 findings.	A quick pathway to testing and demonstration in Norway, in close collaboration with the Test Arena, for the best projects. (Subject to submission and assessment of a Phase 2 proposal) Participation in Phase 1 does not guarantee Phase 2.

3. Who can apply and what is within scope

Avinor and CAA Norway invite applications from aircraft manufacturers (OEMs), air operators, and consortia led by or including at least one such organization.

Applicants' proposals must meet the following criteria:

- The aircraft intended must:
 - Use battery-electric, hydrogen-electric, hydrogen-combustion, or hybrid propulsion and qualify as zero- or low-emission.
 - Be a crewed aircraft.

- Designed to carry at least nine passengers.
 - Be an aircraft intended for regional aviation.
- The activity must be feasible at a relevant Norwegian airport or in Norwegian airspace.
 - The project must define clear systemic learning objectives related to technology, operations, infrastructure, airspace, safety, regulation, or scalability.
 - The project must be technologically and operationally mature enough for testing or demonstration to be planned realistically within the stated timeframe.
 - Both testing and demonstration are eligible, but mature demonstration projects are preferred.
 - The project must comply with applicable requirements for safety, airspace, infrastructure, energy, and regulatory approvals.

4. Phase 1: A virtual test Arena - Joint analysis and preparation for possible testing and demonstration

Phase 1 will assess how each aircraft concept could fit into a future Norwegian air mobility system. A central part of the work will be to apply an analytical model that Avinor and CAA Norway will provide as part of the process. The analysis framework will be based on realistic Norwegian scenarios and on Avinor's and CAA Norway's knowledge of passenger demand, routes and airport networks, infrastructure, energy, operations and the regulatory environment.

What is the Virtual Test Arena?

The Virtual Test Arena is a collaborative and structured analysis process for exploring how zero- and low-emission aircraft and services can work in Norway. Avinor and CAA Norway is developing a common analytical methodology and will use it to deliver an individual analysis for each participant, funded by the Test Arena and developed in close collaboration with the participant. Based on realistic (Norwegian) scenarios, the analyses will assess potential routes, demand, commercial viability and infrastructure needs, providing a shared basis for possible testing and demonstration in Phase 2.

Selected participants will work jointly with Avinor and CAA Norway to apply the model to their aircraft and air service concept. Participants will contribute relevant data and assumptions concerning aircraft performance, maturity, energy requirements, operations and commercial models. All information and data shared within the Test Arena will of course be treated responsibly and within the applicable legal framework. The

parties will use this input to develop and assess relevant Norwegian use cases and iteratively refine the model, assumptions and scenarios.

The purpose is to identify how the proposed aircraft and air service concept could contribute to a future Norwegian air mobility system, including the opportunities,

requirements and barriers associated with its possible introduction. Phase 1 will result in participant-specific analysis, realistic use cases and a shared decision basis for possible testing and demonstration in Phase 2.

The joint Phase 1 analysis will provide an evidence base for each participant's proposal for possible testing and demonstration in Phase 2, should they wish to proceed. Each participant will be responsible for defining and submitting the aircraft, operating concept, scope, activities, resources, financing and intended learning outcomes it proposes for Phase 2. Any selection of projects for Phase 2 will be made through a separate, transparent and documented decision process, in accordance with the applicable public procurement rules, published assessment criteria, available funding and capacity, and the conditions established for progression.

5. Phase 2: Physical Test Arena

Phase 2 shall include operational testing and demonstration of an eligible aircraft in a relevant Norwegian airport or airspace environment. The scope, location, activities, responsibilities, financing, learning objectives and required approvals will be defined in the applicant's Phase 2 proposal and, if selected, in the applicable project agreement.

Based on the Phase 1 analysis, each participant may decide whether to submit a proposal for Phase 2. Participation in Phase 1 does not create an obligation to submit a Phase 2 proposal, and participants may withdraw from the process after Phase 1 without any commitment to continue.

Submission of a Phase 2 proposal does not guarantee selection. Proposals will be assessed through the applicable public procurement rules and against the published criteria, available funding and capacity, technological and operational maturity, required approvals, and the feasibility of the proposed activities.

Participation may also be discontinued during either phase if the participant or the Test Arena concludes that the concept is no longer feasible or relevant, subject to any obligations already agreed in the applicable project agreement.

6. What applicants must submit

We welcome responses from interested organizations and consortia. Responses to the RFP must contain at least the following information:

- Information about the company/consortium partners, visions and plans
- Aircraft concept and/or air service concept. Where a specific aircraft has been identified, the response should include payload (passenger/cargo), energy carrier, range and other relevant information.
- Norwegian regional air mobility use cases that are initially considered relevant. Technical, operational and commercial data and assumptions that the applicant can contribute to the joint Phase 1 analysis. If possible, at this stage, include

analysis of future demand, operational concepts, business cases and decision support.

- A preliminary high-level plan outlining the indicative timeline and key milestones for preparations, testing, and demonstration activities in the Test Arena, for OEMs and consortia that are interested in participating in Phase 2.

The overall objective of the Test Arena is to prepare the aviation ecosystem for zero- and low-emission aviation and establish the basis for scaling. The thematic areas used to assess proposals are set out under *Assessment and selection of proposals*.

Please use the attached template when submitting the RFP response. The template can also be downloaded from the Test Arena web page or forwarded by contacting the Test Arena e-mail address (see *Further information* below).

Additional information should be submitted as attachments.

7. Assessment and selection of proposals

Selection of proposals will be conducted through a holistic assessment of the anticipated impact on the overall objective of the Test Arena. The five key thematic areas will serve as the foundation for evaluating all proposals.

- Climate and environment
 - Expected emission reduction in future commercial operations.
 - Energy efficiency
- Innovation
 - Degree of innovation in technology
 - Degree of innovation in operations
- Maturity
 - Technical maturity
 - Maturity in operations and safety
 - Regulatory maturity
- Execution
 - Operational concept for testing and demonstration activities
 - Preparations for testing and demonstrations
 - Resources
 - Financing
- Scalability
 - Value (learning) of testing/demonstration activities at the Test Arena including relevance for Norway
 - Value creation of aircraft/operating concept in future commercial operations (e.g. delivery of relevant and valuable air mobility services)
 - Expected market introduction (entry into service) and scalability of commercial operations

One or more proposals may be selected, subject to available Test Arena resources, including funding and the capacity to support concurrent project activities.

Applicants whose proposals are selected may be invited to final negotiations with the aim of entering into a project agreement.

8. Project agreement and procurement framework

Applicants accepted into Phase 1 will enter into a Phase 1 project agreement and obtain pre-qualified status for Phase 2. The agreement will be based on the Norwegian Government's Standard Agreement for Research and Investigation Assignments (SSA-F), adapted as necessary to define the parties' responsibilities, rights, deliverables and administrative obligations during Phase 1.

Pre-qualified status makes the participant eligible to submit a proposal for testing and demonstration in Phase 2, should the participant wish to proceed. Participation in Phase 1 does not create an obligation to submit a Phase 2 proposal, and each participant may decide whether to proceed based on the results of the Phase 1 analysis.

Phase 2 proposals may only be submitted by pre-qualified participants. Establishing suitability and relevant capabilities through Phase 1 is intended to enable an efficient and proportionate assessment of Phase 2 proposals. Pre-qualification does not guarantee selection for Phase 2.

Phase 2 proposals will be assessed through a transparent and documented process in accordance with the applicable public procurement rules, the published assessment criteria, available funding and capacity, and the conditions established for progression. The scope, responsibilities, financing and other terms of any selected Phase 2 project will be set out in the applicable project agreement.

Based on the responses to the RFP, an assessment will be made if further dialogue with individual stakeholders can be pursued in the current shape and form, and if the above-mentioned standard Government research and investigation agreement is fit for the purpose. If necessary, potential contracts will be announced in accordance with public procurement regulations.

9. Roles, responsibilities and funding

Within the Test Arena, all parties will in general fund their own activities.

Responsibilities and contribution from the Test Arena setup (Avinor and CAA Norway) will typically be:

Test Arena responsibilities – Phase 1

- Facilitating workshops and working sessions with relevant stakeholders, including manufacturers, operators, airports, regulators and public procurers.
- Providing relevant regulatory, airport, airspace and infrastructure input for modelling future regional air mobility concepts in Norway.
- Supporting analysis of future demand, route concepts, airport network implications, infrastructure needs, operational constraints and business-case assumptions.
- Facilitating regulatory dialogue and learning and identifying relevant regulatory matters for clarification and assessment.
- Establishing a safety risk-management model adapted to the project.
- Supporting development of a shared knowledge base and decision material for a possible later test and demonstration phase.
- Providing guidance on relevant national and EU funding opportunities where applicable.

Test Arena responsibilities – Phase 2

- Guidance, support and processing of relevant applications needed for the demonstrations to take place at no fee for the candidate. Guidance will also be given for stakeholders on relevant national and EU funding opportunities and support schemes where applicable.
- Relevant airport infrastructure and provide relevant services at no cost, including provision of relevant fuel (electricity, hydrogen, SAF) and infrastructure to provide relevant fuel (i.e. chargers).
- Adaptation of airspace services and use of these services at no cost.
- Other relevant and necessary services to perform tests and demonstrations, like risk analysis, technical measurements and evaluation, or market surveys.

OEMs and operators will be responsible for:

OEM and operator responsibilities – Phase 1

- Providing relevant technical, operational and commercial input about the proposed aircraft concept and/or air service concept, including expected maturity, performance, energy needs, intended service, operating model and, where applicable, the pathway towards access to an eligible aircraft.
- Participating in workshops, modelling activities and joint analysis.
- Contributing to the development of realistic use cases, route concepts, business-case assumptions, regulatory development and possible demonstration scenarios in Norwegian aviation.

- Funding their own participation and internal project activities in the pre-project phase, unless otherwise agreed.

OEM and operator responsibilities – Phase 2

- Funding of necessary aircraft or other items to be tested and demonstrated
- Operating the aircraft during the testing
- All preparatory and supporting activities.

If necessary, OEMs and operators may apply for funding schemes to support their project cost. Please note that the Test Arena offers dedicated advisory service to help aviation stakeholders to pursue relevant funding schemes.

10. Timeline and questions

Interested parties are welcome to submit questions regarding the RFP, and if of interest, individual meetings for clarification can be arranged. Please note that Q&As will be shared anonymously with all parties that have expressed interest in the RFP.

An estimated timeline for the RFP is as follows:

Phase 1:

- RFP opening. October 27th 2026
- Initial deadline: Proposals for prequalification must be received by November 30th, 2026, at 16:00 CET to be considered among the first batch
- Later applications for prequalification can however be received and processed throughout 2026 and 2027 based on capacity.
- Project agreements for phase 1: Expected to be signed by the end of Q1 2027
- Project period for phase 1: All of 2027

Phase 2

- Expected deadline for phase 2 proposals: Q4 2027
- Project agreements for phase 2: Expected to be signed by the end of Q1 2028
- Project period for phase 2: Startup in 2028, for a duration of 12-36 months including any preparatory activities.

11. Further information

Contact: testarena@avinor.no

Further information: please visit <https://om.avinor.no/barekraft-i-avinor/testarena2/>

12. Key terms and definitions

“Demonstration” typically implies solutions with a higher level of technological readiness (TRL) that can be demonstrated in an operational airport and airspace environment. Learning generated from demonstrations will provide valuable input for

airlines, OEMs, government bodies, regulators, equipment and subsystem suppliers, policymakers, airports, air navigation service providers (ANSPs), and the wider aviation ecosystem and society, supporting the transition towards zero- and low-emission aviation. Learning objectives should be outlined as part of the project preparations and jointly documented by the parties behind this RFP and the selected project partners before the project is concluded.

“Testing” typically involves aircraft concepts or technologies that require further validation before they are ready for operational demonstration. Testing activities should be conducted in a relevant airport or airspace environment and have clearly defined learning objectives related to, for example, aircraft performance, flight operations, infrastructure, airspace management, safety or regulatory requirements. Both testing and demonstration activities are within the scope of this RFP, although demonstration projects with a higher level of technological and operational maturity are preferred.

“Zero- and low-emission aircraft” means aircraft with propulsion systems based on battery-electric, hydrogen-electric or hydrogen-combustion technology, or any hybrid solution that contributes significantly to emission reductions compared with conventional propulsion systems.

“Aircraft” means a piloted fixed-wing aircraft of either a clean-sheet or retrofit design. Uncrewed aircraft are outside the scope of this call. The aircraft should be designed for a passenger configuration with at least nine seats.

“Air service concept” means a proposed model for providing regional air transport in Norway, including the intended passenger service, routes or network role, operating pattern, commercial assumptions, and operational and infrastructure requirements. An air service concept may be proposed for Phase 1 without a specific aircraft having been selected or secured, provided that the applicant presents a credible pathway towards identifying, obtaining and operating an eligible aircraft for Phase 2.

“The regional aviation sector” is generally understood here as flights of less than 1,000 km operated by aircraft with fewer than 100 seats. Some analyses suggest that sustainable aircraft with fewer seats and shorter ranges may require a different aviation network structure to make effective use of limited aircraft performance while still providing relevant air mobility services.

13. Information about the procuring parties behind this RFP

Avinor is a wholly owned state limited company under the Norwegian Ministry of Transport and is responsible for 43 state-owned airports and national air navigation services. Avinor has taken a leading role in reducing climate gas emissions from the aviation industry, been a frontrunner in the promotion of electric aviation and the supply of sustainable aviation fuel. Avinor provides safe and efficient travel for around

50 million passengers annually, half of which travel to and from Oslo Airport. Approximately 2800 employees are responsible for planning, developing, and operating efficient airport and air navigation services. Avinor is financed via aviation charges and commercial revenue. The air navigation service provider is organized as a subsidiary, wholly owned by Avinor. Avinor has headquarters in Oslo.

The Civil Aviation Authority of Norway (CAA Norway) is an independent administrative body under the Ministry of Transport. CAA Norway is responsible for ensuring the safe, societally beneficial and sustainable operation of civil aviation in Norway. This includes overseeing and regulating all aspects of civil aviation in Norway; implementing and adapting national and international legislation and regulations; issuing approvals and certificates to organizations and individuals; promoting safety; and providing guidance and advice to stakeholders. In the transition to a greener aviation sector, CAA Norway will contribute to the safe development and integration of new technology and other measures that can reduce emissions. As Norway is a member state of the European Union Aviation Safety Agency (EASA), close collaboration with EASA on regulatory learning and development is instrumental. Through facilitation and a systemic approach, CAA Norway works to include all relevant parts of the aviation ecosystem when new solutions are introduced. CAA Norway's main office is in Bodø.