

Request for Proposals (RFP) – September 2025:

Demonstration of zero and low emission aircraft suitable for the regional aviation sector

Background

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 purpose of the Test Arena is to accelerate implementation of zero and low emission aviation by reducing barriers for operational testing and demonstration. Through the Test Arena the parties aim to gain and share knowledge, prepare the aviation ecosystem, and provide a foundation for scaling new technologies.

The Test Arena provides the market 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 infrastructure, airspace, energy supply, and regulatory facilitation for national and international stakeholders who wish to test and demonstrate zero- and low-emission aircraft in Norway. Avinor will provide relevant infrastructure, airspace, and access to energy, while CAA Norway will offer regulatory facilitation, including a regulatory sandbox.

The Test Arena will, in principle, cover 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 and the availability of relevant energy.

Test Arena Projects

The Test Arena will, over its lifetime, host multiple projects to test and demonstrate different aircraft concepts and technologies. The first project, with preparatory activities and flight operations in 2025, is demonstrating a piloted battery-electric aircraft in a cargo configuration, mainly operated between Stavanger airport and Bergen airport.

This RFP is a call for proposals for projects at the Test Arena scheduled to start in 2026. Testing and demonstrations shall primarily be performed in 2026, or latest in 2027 with preparatory activities starting in 2026.

A parallel RFI/RFP process specifically targeting hydrogen infrastructure at airports is expected to be issued in the latter part of 2025.

Request for Proposals

Avinor and CAA Norway hereby invite interested stakeholders as OEMs (Original Equipment Manufacturers), airlines / air operators, or consortiums, to test and demonstrate zero and low emission aircraft at the Test Arena.

The RFP aims to follow a structured and predictable process leading to a firm agreement between the parties on the preparations and test activities to be carried out.

This RFP requests proposals within the main topic: “Demonstration of zero and low emission aircraft suitable for the regional aviation sector”

“Demonstration” will typically mean higher-TRL (Technology Readiness Level) solutions that can be demonstrated in an operational airport/airspace environment. Learning generated from the demonstrations will provide valuable input for airlines, OEMs, Government, regulators, airports, ANSPs (Air Navigation Service Providers), and the wider aviation ecosystem and society to enable and accelerate the transition towards zero and low emission aviation.

“Zero and low emission”: solutions where the propulsion system is based on battery-electric, hydrogen-electric, hydrogen combustion, or any hybrid solution that will contribute significantly to emission reductions compared to aircraft with conventional propulsion systems. A parallel RFI/RFP process specifically targeting hydrogen infrastructure at airports is expected to be issued in the latter part of 2025.

“Aircraft” is here broadly understood as a piloted fixed-wing, rotor-wing, multirotor (eVTOL), or any other configuration in a clean sheet or retrofit design. Uncrewed aircraft are not in the scope of this call. Payload can be passengers and/or cargo.

“The regional aviation sector” is here generally understood as short flights less than 1000 km operated by aircraft with less than 100 seats, but does also embrace very short flights less than 100 km operated by aircraft with less than 10 seats. Focus is on net emission reduction while providing relevant air mobility services.

Response to the RFP

Interested parties or consortiums should submit a response to the RFP that contains at least the following information:

- Information about company/consortium partners, visions and plans
- Aircraft concept: payload (pax/cargo), energy carrier, range, and any other relevant information
- Initial high-level plan for preparations, testing and demonstration activities at the Test Arena

Interested parties or consortiums are encouraged to submit relevant documentation demonstrating how their proposed testing and demonstration activities contribute meaningfully to the overall objective of the Test Arena: **to accelerate the transition towards zero and low emission aviation by generating and sharing knowledge on the use of new and environmentally sustainable technologies.**

The overall objective is structured around the following five key thematic areas:

- 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
 - 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

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 may be submitted as attachments.

Timeline; information and questions

There will not be any common information meeting regarding the RFP. Interested parties may, however, submit questions regarding the RFP. If necessary, individual meetings for clarification of issues can also be set up. Please note that Q&A's will be shared anonymously with all parties that have expressed interest in the RFP.

An estimated timeline for RFP and following steps is:

- RFP closing: proposals must be received by October 31st, 2025, at 16:00 CET
- Project agreement: aims to be signed by the end of 2025
- Project period: startup in 2026, for a duration of 6-24 months including any preparatory activities and applications

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.

One or more proposals can be selected, depending on the Test Arena funding and the amount of simultaneous project activities that the Test Arena can accommodate.

For all selected proposals, the parties will be invited to a final negotiation with the objective of entering into a firm project agreement.

Project agreement

The project agreement for work to be done at the Test Arena will be based on a standard Government research and investigation agreement. The scope of the project agreement is to outline the parties' duties, responsibilities and rights during project execution, as well as any necessary administrative provisions. The standard Government research and investigation agreement template can be downloaded from the Test Arena web page or forwarded by contacting the Test Arena e-mail address (see *Further information* below).

Please note that this RFP is part of a non-binding market dialogue aimed at engaging with relevant stakeholders for the Test Arena project. 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.

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:

- CAA Norway will provide advice, support, setup of regulatory sandbox and processing of any applications at no fee for the applicant. CAA Norway will also provide guidance for stakeholders interested in exploring national and EU funding opportunities.
- Facilitation of relevant airport infrastructure and services and the use of these services at no cost, including provision of relevant fuel (electricity, hydrogen, SAF) and infrastructure to provide relevant fuel (i.e. chargers).
- Adaption of airspace services and the 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 funding of necessary aircraft or other items to be tested and demonstrated, as well as the operations and all preparatory and supporting activities. If necessary, OEMs and operators may apply for national and EU funding schemes to support their project cost. Please note that CAA Norway has a dedicated advisory role for aviation stakeholders that pursue relevant funding schemes.

Further information

Contact: testarena@avinor.no

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

Information about the parties

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 travels 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.

CAA Norway is an independent administrative body under the Ministry of Transport. CAA Norway is responsible for ensuring 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 customizing national and international legislation and regulations, issuing approvals and certificates to organizations and individuals, safety promotion, as well as providing guidance and advise to different 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 EU Aviation Safety Agency (EASA), close collaboration with EASA for 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.