EUROCONTROL
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i- CALL FOR TENDERS

Current opportunity

Procedure No.	ECTL_SRC_260083
Title:	Proof-of-Concept (POC) of Quantum Technologies for ATM

General:

The purpose of this Tender is to enable EUROCONTROL to assess the current state of the art of quantum computing technologies and compare their capabilities with traditional computing approaches in the context of Air Traffic Management (ATM). While quantum computing continues to attract significant interest and investment, the technology remains at a relatively early stage of maturity, with most applications still focused on experimentation, testing and optimisation rather than operational deployment.

Given the potential of quantum computing to address complex optimisation challenges, EUROCONTROL seeks to explore whether these emerging computational approaches could provide relevant benefits for ATM-related processes, algorithms and models, including supporting capacity growth and maintaining high levels of safety across the European aviation network.

As EUROCONTROL does not currently possess the specialised expertise and technical infrastructure required to independently evaluate these technologies, external support is required to conduct a structured Proof of Concept (PoC). The work will focus specifically on the quantum computing pillar of quantum technologies, identified as the most relevant area for EUROCONTROL's activities.

The objective is not to procure an operational solution, but to generate evidence-based findings, technical benchmarking and recommendations that will inform future research and innovation activities, institutional readiness decisions, and the Agency's technical and technological roadmaps. The outcome will establish whether quantum computing can already provide meaningful value in ATM-related contexts or whether further technological maturity is required before broader adoption can be considered.

Technical subject matter:

The contract requires the Contractor to propose, design and implement a Proof-of-Concept (PoC) to test the applicability of quantum computing to one or two aviation-relevant

challenges linked to facilitating air traffic management across EUROCONTROL Member States, increasing capacity and/or preserving the highest levels of safety in the aviation system.

The proposed solution shall use quantum computing as the primary technological component, with the Contractor selecting and justifying the most appropriate quantum approach, including where relevant hybrid quantum-classical architectures. The work shall assess how the selected quantum approach differs from, complements, or improves upon traditional computing methods.

A core objective is to benchmark the quantum approach against relevant classical baselines, providing a credible and evidence-based comparison of current capabilities, maturity, limitations and applicability. The PoC shall be supported by relevant data and ATM domain expertise to ensure testing is performed against real or representative aviation challenges.

The contract is intended to generate findings, recommendations and knowledge-transfer material that will help EUROCONTROL assess whether quantum computing is sufficiently mature and relevant for deeper engagement, or whether continued monitoring of the technology remains the most appropriate course of action.

Main selection and assessment criteria:

TECHNICAL CAPACITY CRITERIA
The tenderers shall have a minimum of 5 years of experience in proposing, design and implementation of a Proof-of-Concept to test the applicability of quantum computing to aviation-relevant challenges, and/or defence drones would be an asset.
The proposed team shall have a proven minimum 5 years of experience in translating traditional computing language to quantum computing.
The tenderers shall own or have access to a quantum computer.

TECHNICAL ASSESSMENT CRITERIA
Understanding the need and key aspects of the Tender's technical part [M]
Organisation of the service provision, i.e. compliance of the Tender with the project plan and deliverables [M]
Competence/skill, compliance of the Tender with the requirement of the Call for Tenders for at least 3 people in the team: a. Proven experience in the required areas of expertise and b. Professional expertise and qualification of assigned key staff [M]
Minimum level in English – B2 as defined by Common European Framework of Reference for Languages (CEFR) of the Council of Europe [M]
The Tenderer has proven experience in working with real-time data processing projects [D]

The economically most advantageous offer will be established in accordance with the following Award criteria:

For the Technical tender, a weighting of 50% is applied, for the Financial tender, a weighting of 50%.

Tender closing date:

08 September 2026 at 15:00 Brussels time

Point of Contact:

Please see the "Important Notice" below and if you have any other related questions, please contact:

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If this Call for Tenders should interest you, please read the important information below:

IMPORTANT NOTICE

The full i-Call for Tenders documentation is in electronic format (.pdf).
If you wish to obtain the i-Call for Tenders documentation, please read and follow carefully the instructions below:

1. If you are already registered in the EUROCONTROL Supplier Portal, you can search for this Call for Tenders, and its relevant documentation, in the "*View Active Negotiations*" section of the Supplier Portal.
2. If you are not yet registered as a EUROCONTROL supplier, please follow the process described on the following link: https://www.eurocontrol.int/portal/new-supplier-portal.
3. EUROCONTROL accepts no responsibility whatsoever for the completeness, accuracy and/or timeliness of the transmission of the electronic documents (nor for the electronic documents themselves).
4. Submission of tenders shall be made electronically and shall be exclusively made in strict accordance with the instructions given in the tendering documentation.
5. You may:
   a) print out the documents;
   b) forward the documents further on a strictly need to know basis (always fully acknowledging the source, i.e. EUROCONTROL), and
   c) use printouts of the electronic i-Call for Tenders documents for the submission of tenders (especially the Price Offer Form ref: I-TSF-E).

6. You may not:
   a) modify, edit and/or change the electronic documents other than to submit the required info and to sign/stamp where required;
   b) transmit such documents to any third person who has no need to know them;
   c) post such documents on any private or public website;
   d) alter the originating source (EUROCONTROL) and or copyright signs etc., and
   e) transmit the documents without indication of the source.

An environmental notice:
With a view to reduce the exponential growth of paper consumption, we would invite you only to print out electronic documents received and/or request paper copies of the price enquiry documentation if you are actually considering to submit a tender.