



# **THE FIRST PHASE OF THE CARIOQA QUANTUM PATHFINDER MISSION PROGRAMME**

On January 1<sup>st</sup>, 2024, the CARIOQA-PHA project (Cold Atom Rubidium Interferometer in Orbit for Quantum Accelerometry – Phase A) was kicked off under the European Commission’s Horizon Europe program. CARIOQA-PHA project marks a significant step of the CARIOQA project that aims to develop a new technology to be used in space within the next decade: a quantum accelerometer. Its overarching goal is to showcase the feasibility of a Quantum Space Gravimetry Pathfinder Mission for testing a quantum accelerometer on board a satellite for subsequent use in the context of Quantum Space Gravimetry Missions.

The CARIOQA-PHA project aims to ensure EU leadership and non-dependence of quantum sensors in space, by responding to environmental and societal challenges of climate change through the improvement of space gravimetry data. For doing so, three main objectives have been defined for the 1-year CARIOQA-PHA project that deal with the formalization of Technical Demonstration Needs, the study of System Operations Concepts and finally the confirmation of Mission Feasibility of the Quantum Space Gravimetry Pathfinder Mission within the decade.

The consortium behind CARIOQA-PHA consists of esteemed partners, including CNES, DLR, AIRBUS and FORTH, who are also part of the CARIOQA-PMP consortium. Additionally, a new industrial partner, GMV joins the project for mission analysis.

### **THE CARIOQA-PHA CONSORTIUM**



### **STAY IN TOUCH**

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