



Funded by the European Union

CARIOQA-PHA

THE INAUGURAL PHASE OF THE CARIOQA QUANTUM PATHFINDER MISSION PROGRAMME

CONCEPT

CARIOQA-PHA project marks a significant step of the CARIOQA project that focuses on quantum technologies for space gravimetry.

Its overarching goal is to showcase the feasibility of a Quantum Space Gravimetry Pathfinder Mission for testing an atom accelerometer on board a satellite for subsequent use in the context of space geodesy.

OBJECTIVES

Formalize Technical Demonstration Needs Study System Operations Concepts

2020

Confirm Mission Feasibility



As the inaugural phase of the CARIOQA programme, CARIOQA-PHA plays a crucial role in:

1. Responding to environmental and societal challenges of climate change through the improvement of space gravimetry data.

2. Enabling to fly a Quantum Pathfinder Mission for space gravimetry within the decade.

3. Ensuring EU leadership and non-dependence of quantum sensors in space.

HOW DOES THE CONSORTIUM MAKE A DIFFERENCE

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.

CARIOQA PROGRAMMATIC PLANNING

Enable to fly a Quantum Space Gravimetry Pathfinder Mission for space gravimetry within the decade

2030





