

In a Nutshell

ORBIS introduces a groundbreaking European capability that unifies satellite intelligence with an advanced autonomous UAV system to transform maritime domain awareness, coastal security, and Search and Rescue operations.

At the heart of the project lies the ORBIS UAV, an engineered solution designed specifically for harsh sea environments, contributing to long-range monitoring and AI-enabled situational awareness. ORBIS represents a European first - an intelligent, holistic maritime-operational system that brings space-to-sea coordination to a new technological frontier.

ORBIS's Objectives

- Enhance maritime border observation through integrated satellite-based monitoring that combines optical and SAR data.
- Deploy a robust, sea-operational UAV platform featuring autonomous vessel-based take-off and landing, waterproof and marine-grade design, floating capability, parachute-assisted recovery, and extended-range endurance for real-time maritime surveillance and SAR missions.
- Implement advanced AI-driven predictive analytics and decision making for more efficient border surveillance and faster search and rescue.
- Ensure ethics and regulatory compliance by design to accelerate market uptake.
- Demonstrate, evaluate and validate the solution through real-world use cases.
- Better shape and strengthen the sustainability of EU innovation capacity while facilitating access and uptake to the civil security market.
- Establish synergies, knowledge transfer and cohesion activities.

WHO WE ARE



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Ministry of Maritime Affairs and Insular Policy
www.gov.gr/en/upourgeia/upourgeio-nautilias-kai-nesiotikes-politikes
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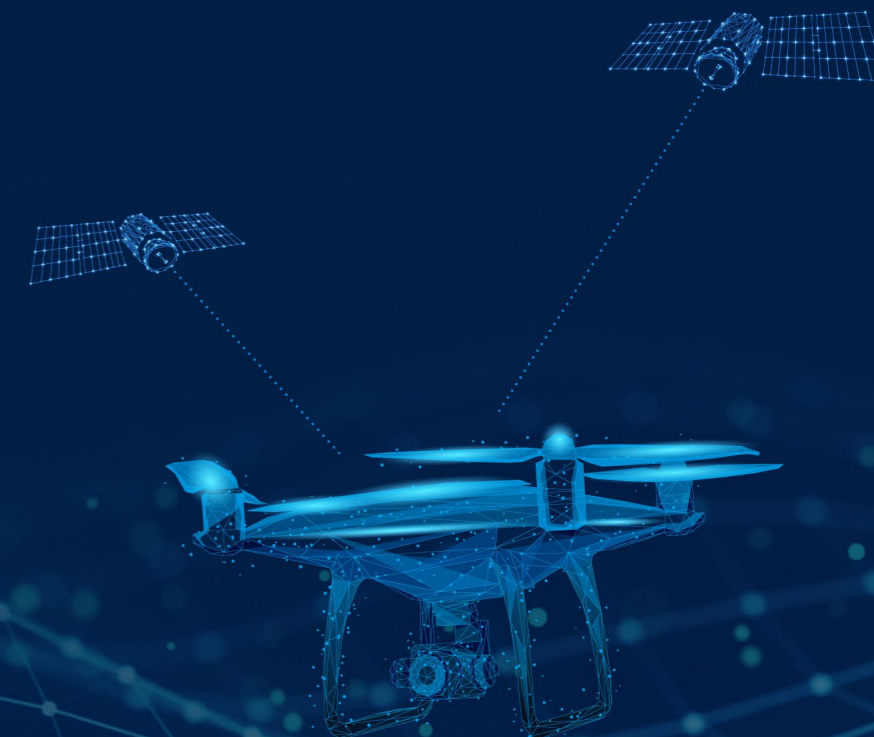
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ORBIS

SMART EYES OVER MEDITERRANEAN WATERS

Optimized Real-time maritime
Border Surveillance with
Intelligent satellite-drone Systems



Stakeholders



Project Identity

PROJECT TITLE:
Optimized Real-time maritime Border Surveillance with Intelligent satellite-drone Systems

FUNDING PROGRAMME: Horizon Europe – Civil Security for Society

GRANT AGREEMENT No: 101225659

TYPE OF ACTION: Innovation Action

START: 1st October 2025

DURATION: 24 Months

BUDGET: €1,499,966.07

ORBIS' Approach

OUR PROJECT WILL GO BEYOND THE CURRENT BOUNDARIES OF KNOWLEDGE AND TECHNOLOGY BY:

- 1** Establishing a high-accuracy monitoring system including SAR, VHR, and Infrared sources.
- 2** Delivering an advanced, autonomous, and cost-effective UAV.
- 3** Exploiting cutting-edge Machine Learning (ML) models to optimise operations.
- 4** Fusing multi-modal data and training distributed ML models for real-time decision making.
- 5** Addressing key market, regulatory, ethical and security requirements.
- 6** Pave the way for other small innovators documenting best practices and lessons learnt in clear replicable steps.

