Introduction

SITEP is looking for European border or coast guard authorities to participate in a project to be submitted to horizon Europe grants initiative.

The topic to which we will apply is the HORIZON-CL3-2025-01-BM-01: Open topic on efficient border surveillance and maritime security.

Coordinator & Partners

Coordinator: SITEP (UAV, IA and GIS systems, Spain)

Partners: Thales (Radar System, France), Nexvision (ISR, RF & laser light Comms systems, France), Asense (Optics of the ISR and Laser light comm system, Spain), Hellenic Instruments (testing support, Grece)

Border or coast guard authorities that has already (October 14th, 2025) confirmed their participation in the project: Guardia Civil (Spain)

We are looking for two additional border or coast guard authorities.

Project abstract

The proposed project consists of the development, adaptation/customization and integration of the components that will form an intelligence, surveillance and reconnaissance system designed specifically for the security forces in charge of maritime border surveillance with the aim of providing them with a tool that will allow the people responsible for decision-making and those who execute the actions, have a better situational awareness of the theatre of operations.

The proposed system will consist of a helicopter UAV equipped with the sensors and systems that will provide the ability to detect, identify, recognize, track and intercept fast boats and other threats at European maritime borders.

We propose the development of a border surveillance system including:

-A UAV helicopter with a combustion engine, capable of operating both from land and ships, day or night. It will offer uninterrupted flight times of up to 4 hours and will have a payload capacity to carry the sensors mentioned below (or up to 50 kg at the expense of autonomy).

-An ISR (Intelligence, Surveillance, and Reconnaissance) system that will integrate, among other things, a NATO Level 5-night sensor.

-A radar with MIT (Moving Target Indicator) capability.

-Advanced features for detection, recognition, and automatic tracking and of targets.

-A long-range radio link for UAV command and control, as well as for the transmission of video, data, and payload control.

-A point-to-point laser communication system, which is redundant to the previous one, allowing communication over distances of up to approximately 20 km while maintaining the relative

position of the UAV to the ship or ground station, even in scenarios where the GNSS signal is spoofed or jammed. This feature will enable the UAV to navigate automatically and geolocate data at all times.

-A powerful speaker to communicate with individuals located on ships or in the water.

-A flotation system for individuals: The UAV will be able to transport and deploy flotation systems, light signals, and/or geolocation for distressed ships and individuals.

-A flotation system for the UAV helicopter itself to prevent loss in the event of a forced landing or destruction.

-Possible systems to disable vessels (to be defined in collaboration with security forces regarding their suitability and type).

The system will be defined jointly among project participants, police bodies, and companies, both in the current phase of proposal preparation and during its execution, in a more limited manner, depending on the operational needs of end users (participating security forces), operational conditions, and the technologies that participating companies will provide.

Currently, SITEP has developed a UAV with a maximum payload capacity of 50 kg, capable of flying at 120 km/h, which operates interchangeably with automotive gasoline or heavy fuel.

SITEP will provide a unit of this helicopter for the project. At the same time (outside the scope of the proposed project.

In addition to designing and manufacturing its UAV helicopters with a maximum takeoff weight ranging from 25 to 150 kg, SITEP is a software engineering company specializing in geographic information systems (GIS). Therefore, we are experts in capturing, processing, transmitting, and presenting georeferenced data to users, which will enable us to design a system ready to be integrated into the GIS systems of the participating coast guard agencies in the project.

We offer not only a UAV helicopter but also the opportunity to collaboratively develop a complete, fully integrated, and customized system, in which the UAV is just one piece of the puzzle.

Contact data

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