

Project Sentinel – AI-enabled autonomous system for continuous monitoring of illegal maritime discharges

Sector: Marine monitoring & surveillance

Short description of the needs:

Illegal maritime discharges such as oil, sewage, grey water, and ballast water often remain undetected due to the lack of continuous, cost-effective, and legally usable monitoring solutions.

Current approaches rely on sporadic patrols or satellite imagery, which have limited temporal resolution and cannot detect subsurface pollution. Increasing regulatory pressure under MARPOL, IMO, and ESG requirements creates demand for verifiable, evidence-based compliance data. The objective is to deploy autonomous underwater gliders with modular sensors and AI analytics to enable 24/7 detection, drift prediction, and generation of enforcement-ready evidence packages.

Cooperation opportunities include joint pilots with port authorities, coast guards, research institutions, and environmental agencies, as well as integration with AIS, satellite monitoring, and existing maritime surveillance systems.

More info: For more information apply to antun.nadramija@hamagicro.hr

Company: ELNAV.AI d.o.o.

Point of contact for the brief/challenge: HAMAG-BICRO

Company position in the value chain: OEM (technology developer and system integrator)