

Smart Multi-Sensor Buoy for Water Quality Monitoring and Flood Detection

Sector: Marine monitoring & surveillance

Short description of the needs:

Call 1: The company develops smart, self-sustaining buoys powered by solar and wave energy for continuous water quality monitoring and real-time flood detection. Each IoT-enabled H2Orbit Stationary buoy integrates multi-parameter sensors (pH, ORP, DO, conductivity, temperature) with onboard AI algorithms for autonomous data processing and anomaly detection. The system enables above/below-water communication, supports AUV charging, and is deployable in rivers, lakes, coasts, and marinas.

The core innovation lies in combining satellite (GIS) and real-time buoy data to enhance flood prediction and water quality assessment. We seek partners (SMEs/researcher institutions) skilled in GIS and spatial modeling for satellite data fusion.

Call 2: The company develops smart, self-sustaining buoys powered by solar and wave energy. The product, diver-support buoy, enhances maritime safety via acoustic communication and diver tracking. For this product the company seeks for partners who are experts in market entry, networking, and AI-driven marketing tools, in order to support commercialization.

More info: For more information apply to PP2 Maritime Innovation Cluster MARINN via e-mail nikolina.radic@gitone.hr, dora.vujnovic@gitone.hr.

Point of contact for the brief/challenge: Maritime Innovation Cluster MARINN

Company position in the value chain: OEM