

NUTRA Ocean Passive Sensor Network

This whitepaper outlines a practical and scalable ocean surveillance concept using passive sensors. The system relies on underwater modules that detect chemical traces (e.g., fuel, pollutants) and trigger buoy deployment with GPS signaling.

Key Features:

- Passive seabed sensors (e.g., sponge, membrane)
- Mechanical buoy release system
- Surface GPS signal transmitter

Advantages:

This system is low-cost, eco-friendly, deployable without infrastructure, and ideal for remote or contested environments. Its simplicity allows for rapid prototyping, including DIY implementation.