



Type III - PT02_Aviso4_0016

Networked Ocean - Networked Ocean and Vehicles for Communications and Data Collection in Remote Oceanic Areas

DESCRIPTION

The project concerns the development and demonstration at sea of a networked vehicle system for persistent communications and data collection in remote oceanic areas. The system is composed of a long endurance autonomous surface vehicle (ASV), long endurance autonomous underwater vehicles (AUV), long range unmanned air vehicles (UAV), helikites, and control stations. The ASV is both a communications hotspot and a docking base (for AUVs), operating 24/7 in remote ocean areas. The ASV supports smart routing protocols for direct communications, via persistent UAV relays, or delayed data transfer to control stations. The control stations provide advanced planning and execution control capabilities, as well as dissemination of data. The system supports inter-operability protocols to allow expansion to vehicles from third parties.

The project is organized into 6 work-packages: 1: Project management and systems engineering; 2: Communications and inter-operability; 3: Unmanned vehicle systems; 4: Land/ship control stations; 5: System integration and testing; and, 6: Demonstration at sea. The project builds on technological, scientific and operational experience of a consortium of FEUP (leader), IPMA, and Portuguese Navy from Portugal, and AMOS from Norway.

PROJECT PROMOTER

Faculty of Engineering, University of Porto (FEUP)

PROJECT PARTNERS

Portuguese Sea and Atmosphere Institute (IPMA), Naval Research Center - CINAV

TOTAL COST

372.321€

TOTAL ELIGIBLE COST

372.297€

EEA Grant

316.452€

OUTCOME

Outcome#2 - Improve monitoring of marine waters

OUTPUT

Capacity on fixed or mobile unmanned oceanic and coastal monitoring operations increased

INDICATOR

Number of communications services for supporting smart platforms for collecting and disseminating marine environment and human activities data at remote oceanic areas

TARGET

1 Service