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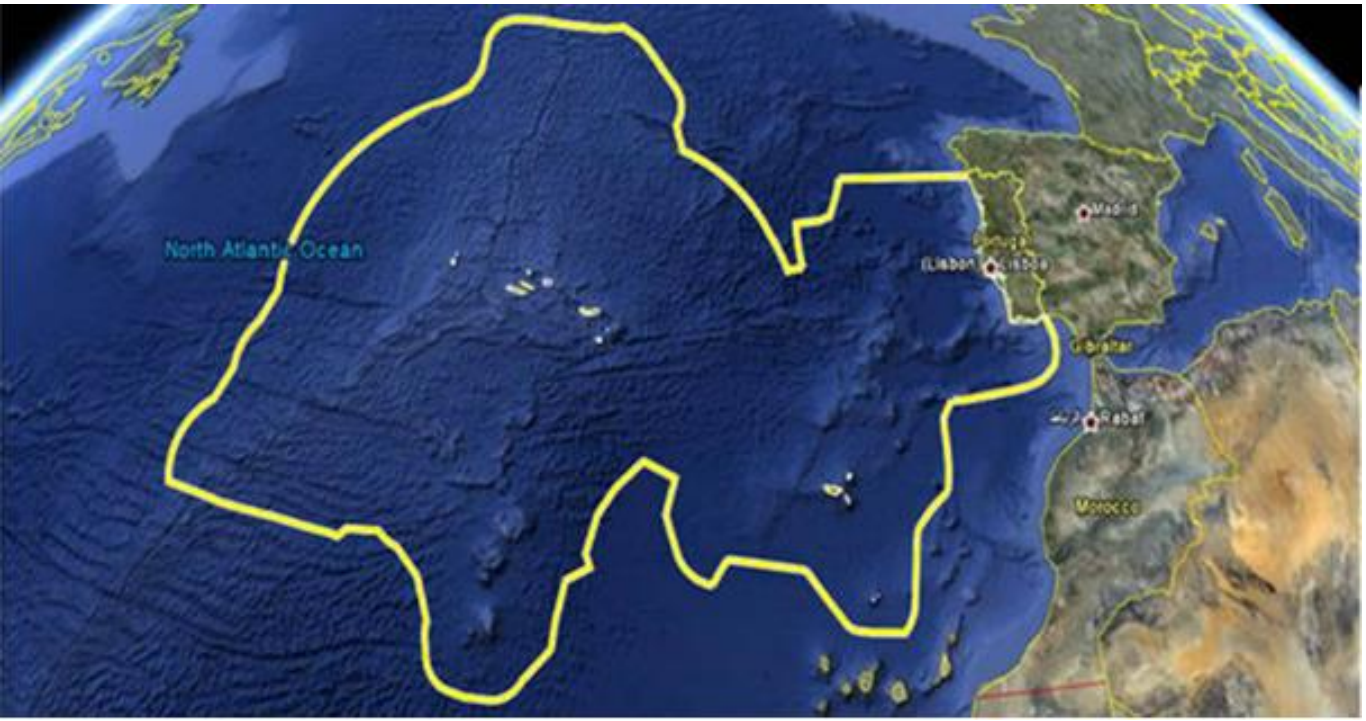
BLUECOM+

PT02_Aviso4_0005

GOVERNO DE PORTUGAL | MINISTÉRIO DA AGRICULTURA E DO MAR

dgpm Direção-Geral de Política do Mar

Motivation



Dissemination of marine data collected by fixed and mobile ocean intelligent platforms (ASVs and AUVs) in remote ocean areas

Users' access to state of the art Internet-based services and applications in remote ocean areas

Problem

HF – narrowband

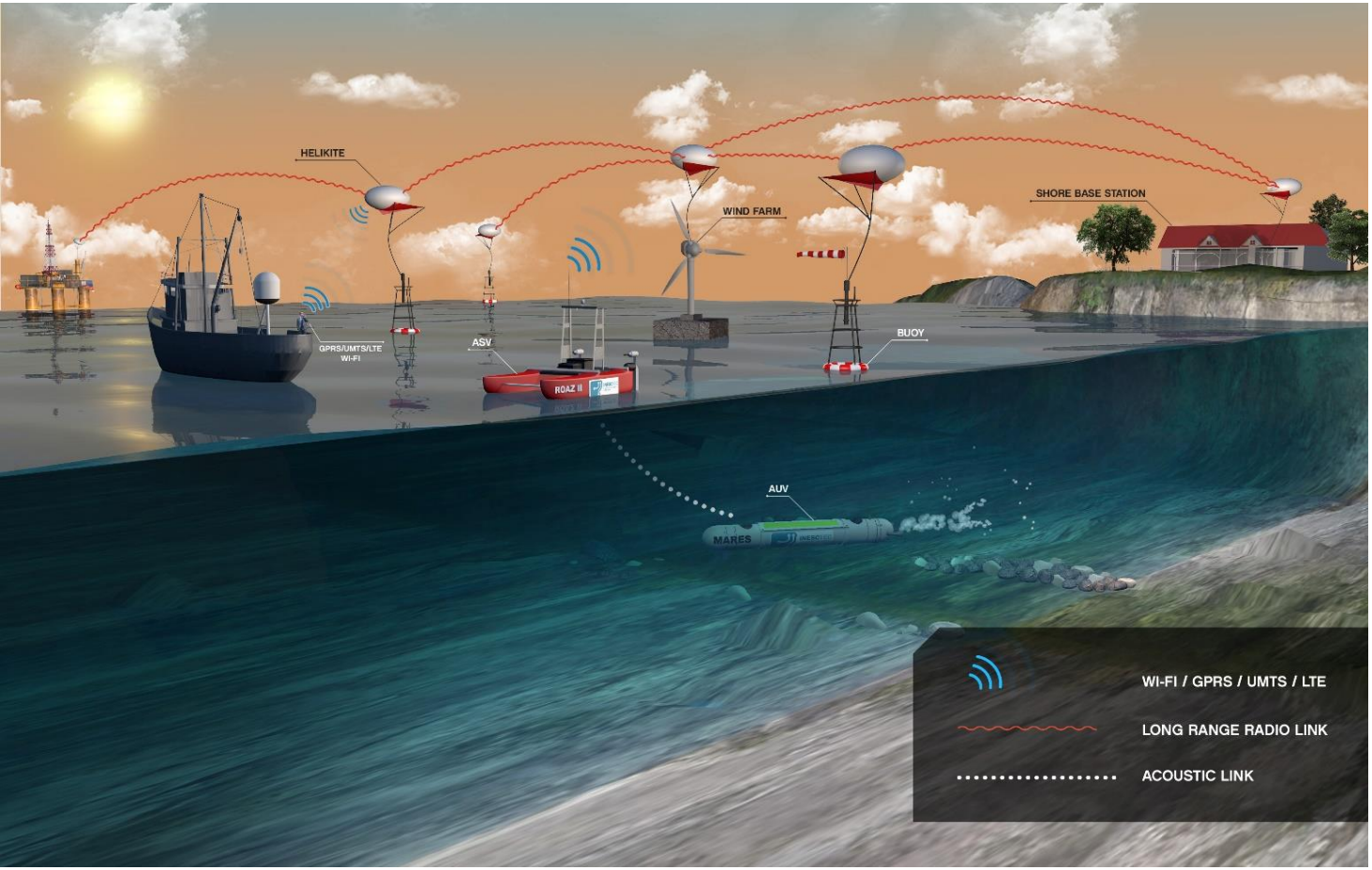
Satellite – high costs and narrowband

VHF Radio – narrowband and half-duplex

Mobile GPRS/3G/4G – broadband, only near shore

There is **no communications solution enabling broadband, cost-effective** Internet access at **remote ocean areas** in alternative to satellite communications

Concept

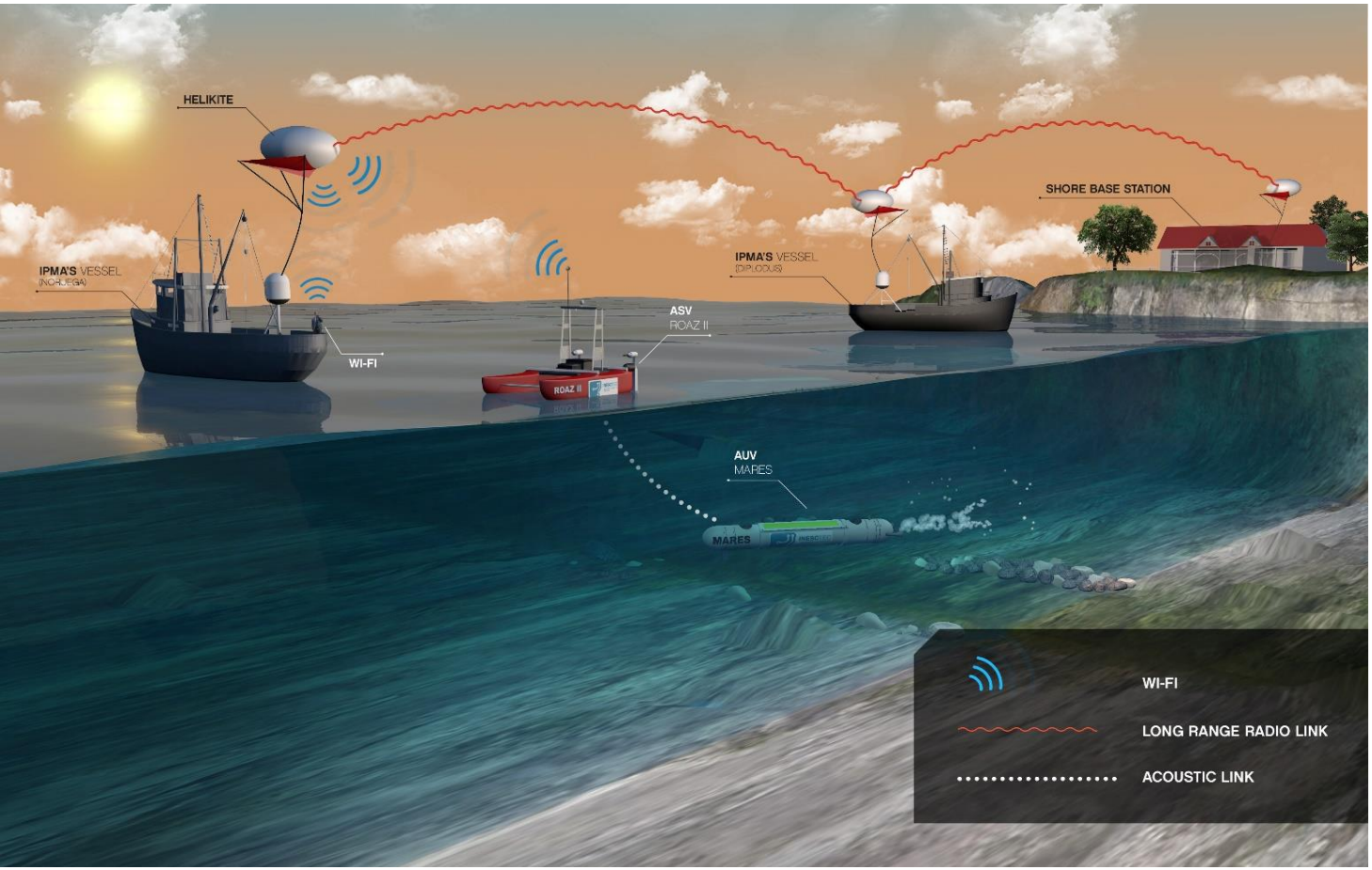


Innovative shore-sea communications solution

Helikites tethered to existing and new ocean platforms, used as Flying Wireless Routers for maximizing line of sight coverage

First to enable broadband Internet access at remote ocean areas through standard wireless access technologies and long-term communications infrastructure that extends broadband on land to remote ocean areas

Demonstrator



BLUECOM+ prototype

Will be demonstrated at sea using vessels as floating nodes for anchoring the Flying Wireless Routers

Demonstration of real-time data dissemination from ASV/AUV and use of Internet-based applications at remote ocean areas – e.g., VoIP, Web browsing, E-mail

Impact

Scientists and Researchers

who will better understand the potential of multi-hop airborne networks for providing communications at sea

Fisheries, Aquaculture and Fishing Industry

will greatly benefit in terms of more safety at sea, more efficient business processes

Marine Biotechnology

marine mineral and energy resources, which will greatly benefit from the BLUECOM+ solution to collect and disseminate marine data in real-time from/to terrestrial stations

Public employees/Public Administration

whose involvement is crucial in the process of creating the necessary environment for the widespread adoption of BLUECOM+ solutions

Coastal and Marine Water Management System

which will be key beneficiaries of BLUECOM+ solutions regarding marine data collection and dissemination

Maritime transport, logistics and ports

which will benefit from the availability of broadband Internet access offshore

Consortium

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Promoter:

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