

JERICO-Next cabled coastal observatories

Harmonization of technologies and methodologies for coastal cabled observatories - technical strategy

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JERICO-Next Introduction

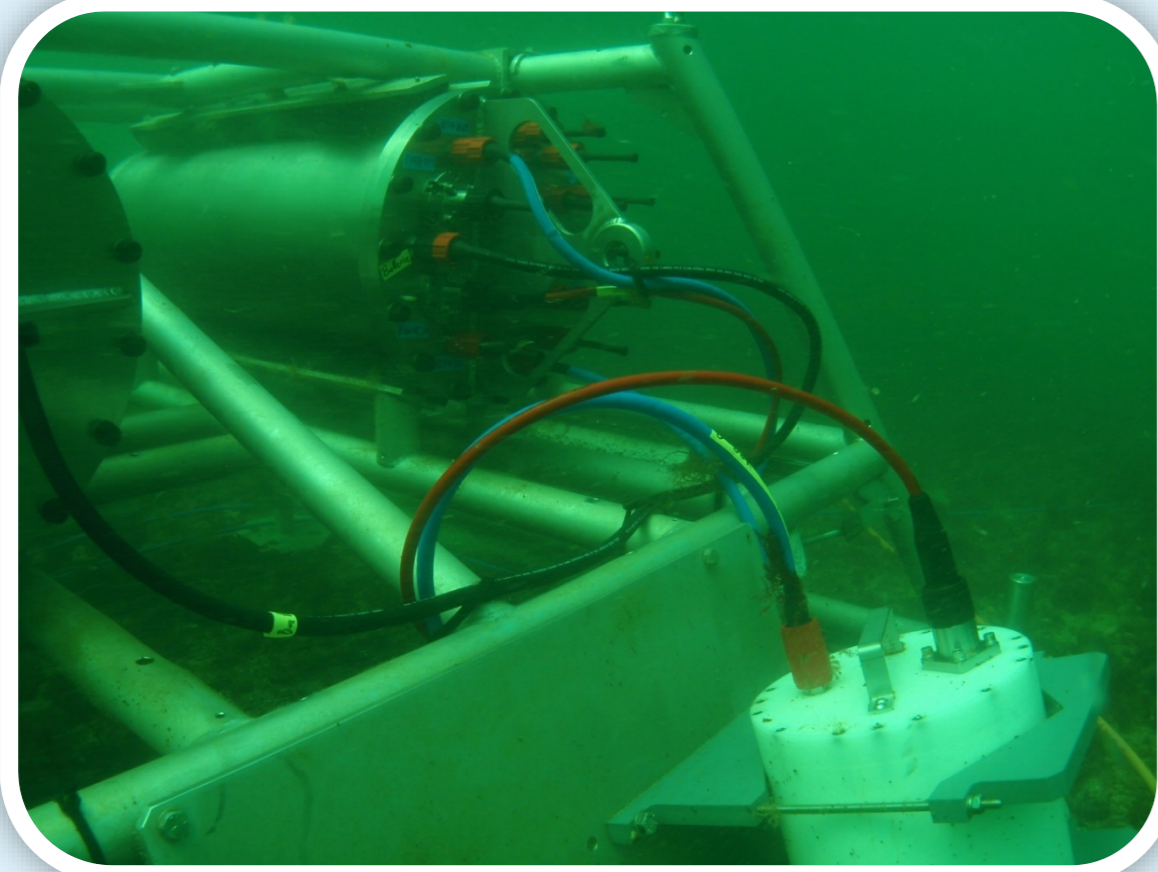
Since coastal areas are one of the most productive and dynamic environment of world's ocean with significant impact on ecosystem, JERICO-Next believes that the interconnection between physics, biogeochemistry and biology in the sea should be analysed in order to understand its complexity. That process requires new technological developments that guarantees the continuous monitoring of a larger set of parameters. So the project's vision is to improve and innovate the cooperation in coastal observatories around Europe.

WP2. Harmonization of technologies and methodologies

Work Package 2 contemplates the harmonization of technologies, methodologies and procedures on any kind of remote, heterogeneous, multifaceted, coastal observing infrastructure or isolated instrument in order to improve its efficiency and the optimal functionality of each of it as a network set. Working in such harmonization provides an intelligent use of resources across the network and helps to provide uniformed access modes and interfaces to users.

Main topics:

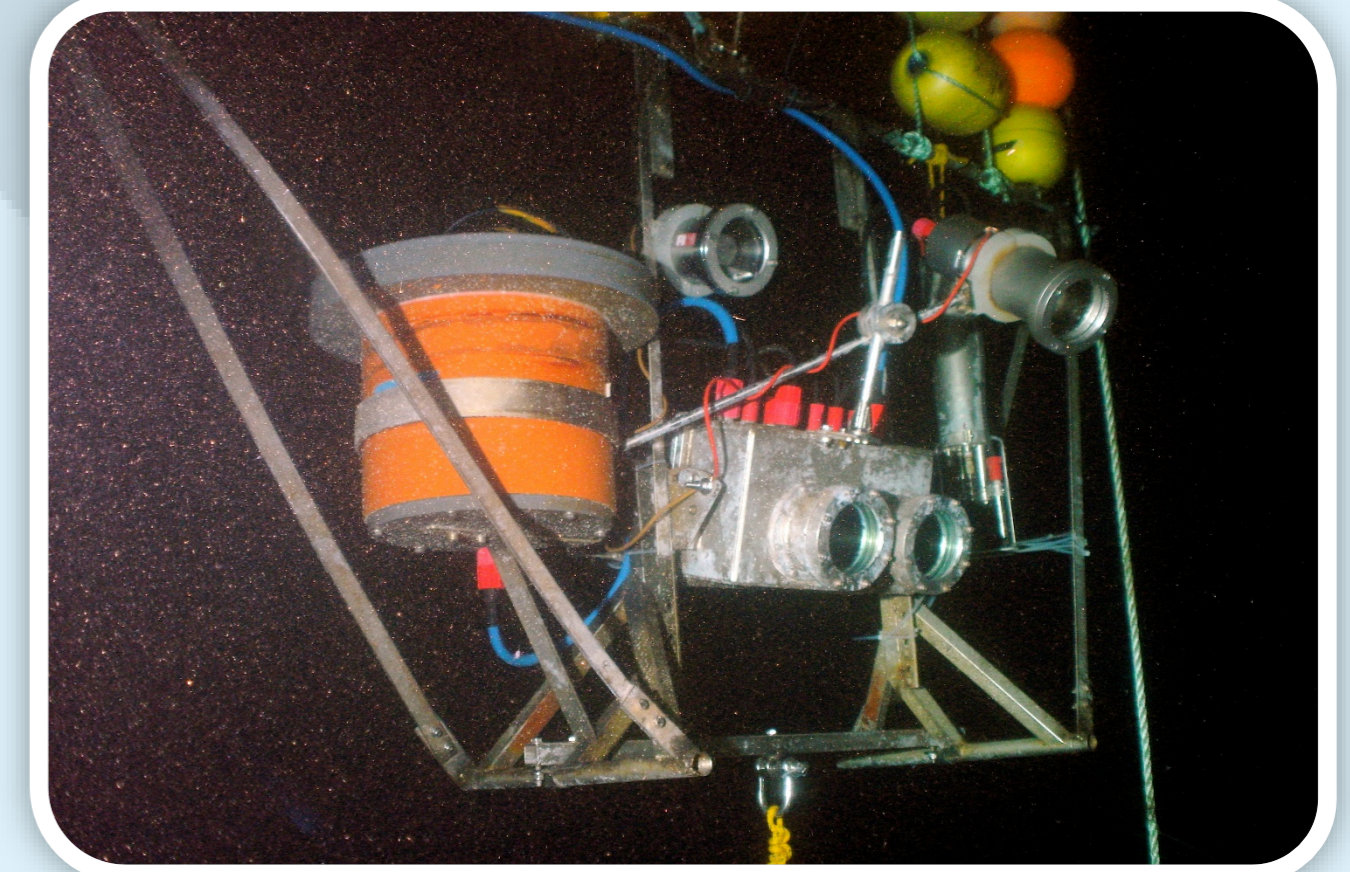
- ✓ Issues during the installation phase
- ✓ Main operational issues
- ✓ Site maintenance
- ✓ Quality assessment
- ✓ Data management
- ✓ Applications
- ✓ Biofouling session
- ✓ Best Practices - Cables and connectors



COSYNA (Coastal Observation System for Northern and Arctic Seas) is an operational coastal monitoring, forecasting and information system for the North Sea composed by fixed platforms, FerryBoxes, gliders and HF-radar systems. Two nodes are available. Underwater node Helgoland is a cabled observatory at 11 meters depth located at the North Sea, with 10 pluggable access points. Underwater Node Spitzbergen is an experimental platform located in a polar fjord system.

Helmholtz-Zentrum Geesthacht
Zentrum für Material- und Küstenforschung

AWI ALFRED-WEGENER-INSTITUT
HELMHOLTZ-ZENTRUM FÜR POLAR- UND MEERESFORSCHUNG



The seabed cabled observatory EMSO-Molène was deployed off shore 2 km north of Molène, in the marine protected area "Iroise Marine Park". It is an EMSO testing site at depth 18 meters, dedicated to sensors and equipment in-situ and long-term qualification.

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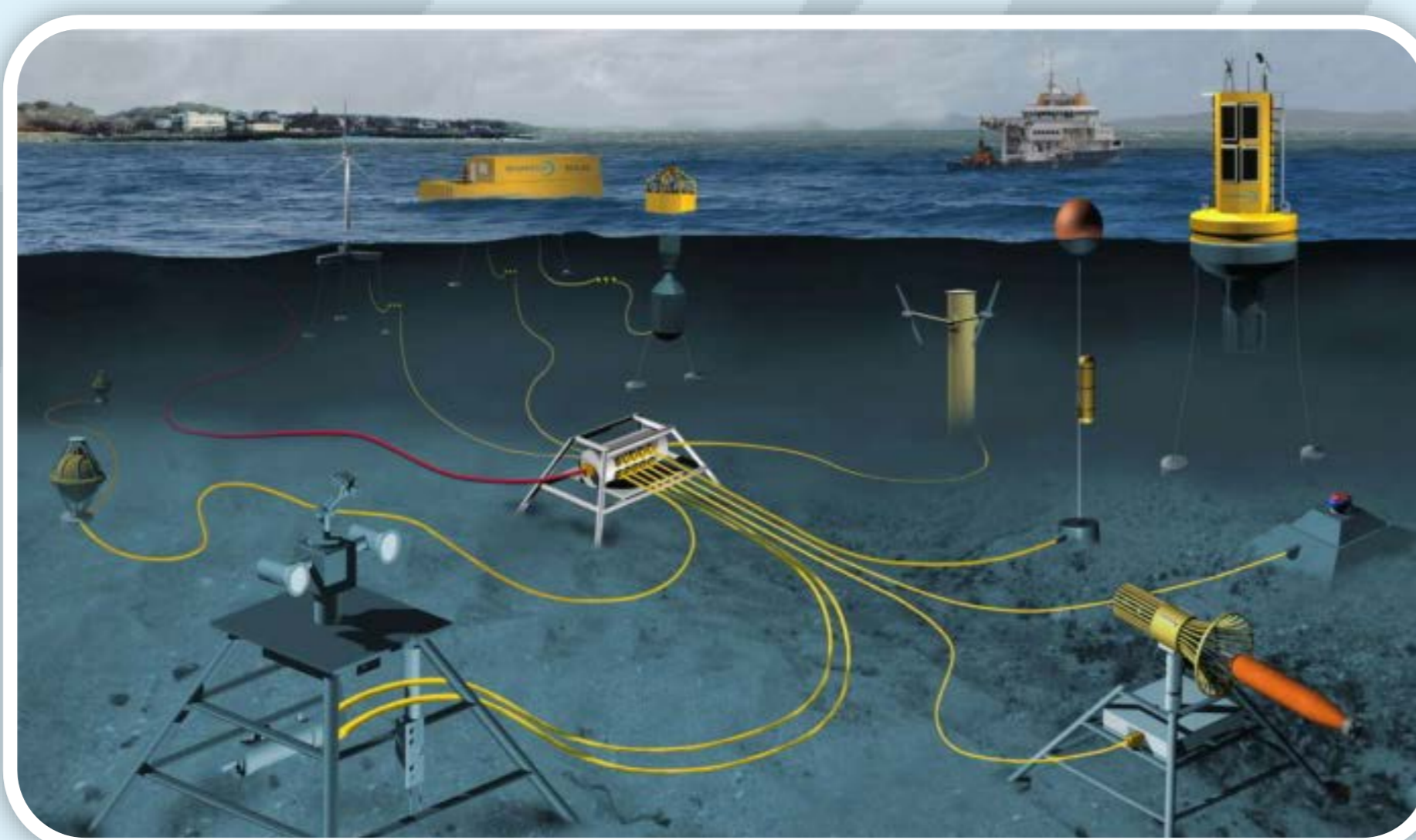


LoVe, cabled observatory with a suite of physical, biological and chemical sensors that involves many scientific fields and is expected to stimulate innovation and research.

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HAVFORSKNINGSINSTITUTTET

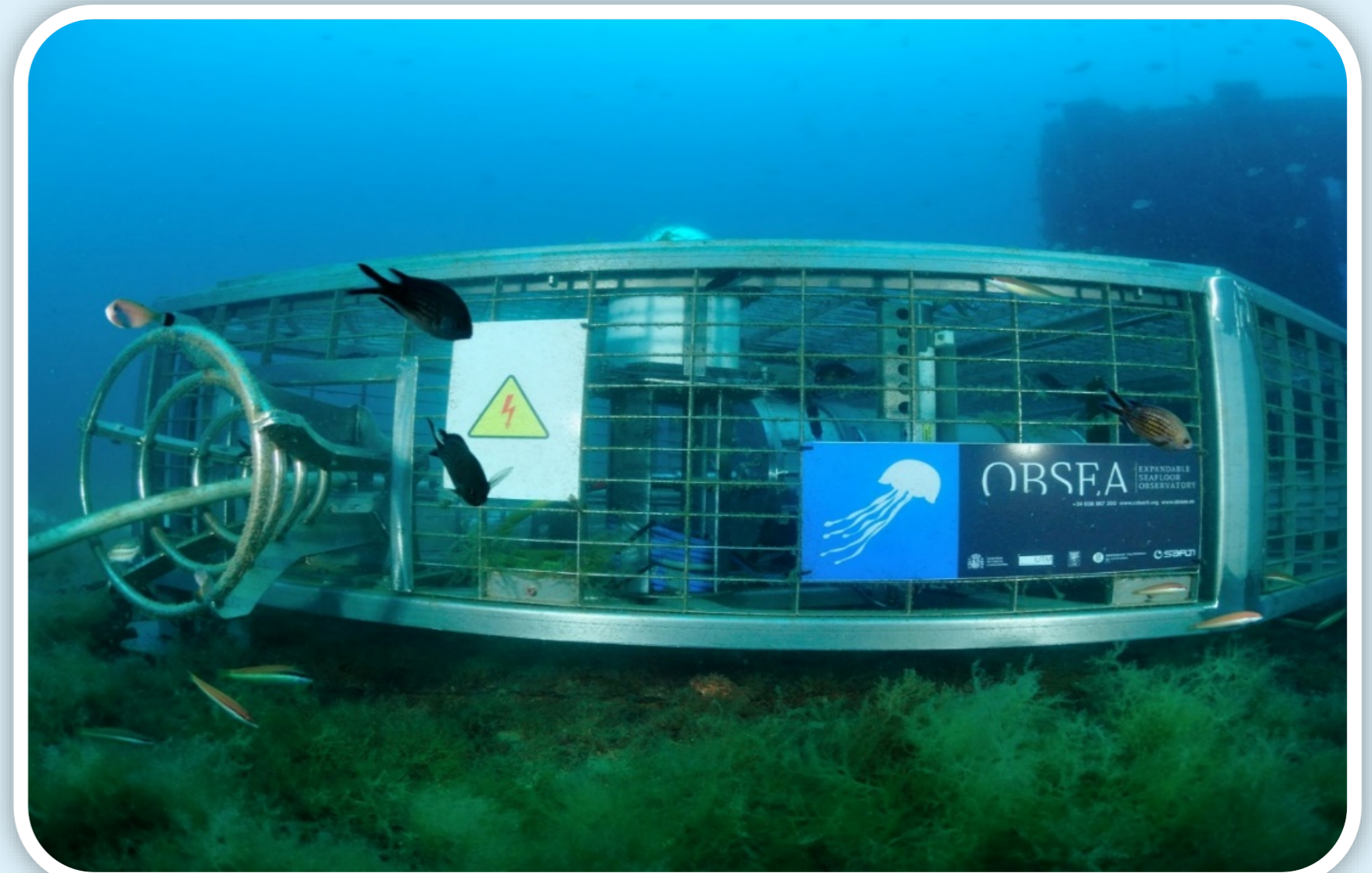
SMARTBAY IRELAND

Galway Bay Marine and Renewables Test Site (CPO) offers the trial and validation of novel marine sensors and other prototype equipment.



OBSEA
EXPANDABLE SEAFLOOR OBSERVATORY

OBSEA, the Underwater cabled seafloor observatory located at 4 km from the coast of Catalonia and 20 meters depth that offers real time data from a fishing protected area.



SARTI



FINNISH METEOROLOGICAL INSTITUTE

The Utö Atmospheric and Marine Research Station is located at Utö Island, in Finland, at the outer edge of the Archipelago Sea at 23 meters depth. It includes a wide range of measurements as current profilers, salinity or temperature among others.

Apply to the TNA calls to have full access to the different underwater infrastructures offered by JERICO-Next!