



Marine energy and mining resources

# SUBSEE4D

# DIGITAL TWIN FOR 4D MONITORING OF OPERATIONAL WIND TURBINES

The SubSEE4D involves developing a digital twin solution to facilitate exploitation of floating wind turbine parks.

This solution will be based on 3D modelling of the parks. It will be updated using undersea imaging as well as simulated dynamic behaviour and how it evolves: ocean weather conditions and marine growth on underwater structures.

The technological building blocks developed as part of the project will make it possible to integrate predictive maintenance of floating wind turbines for the sections above and below the surface, and thus reduce the risks.

Surveillance of pilot wind parks, involving measurements and observation based on this 4D management software tool, is a key factor that has the potential to reduce costs and attract investors.

This project is also recognised by the Mer Méditerranée and Imagaes & Réseaux clusters.

### **Partners**

#### COM\_PROJECTS\_CATEGORIE\_PARTNER\_ ENTREPRISES

CervVal, Brest [Project Developer]

#### **Research centers**

France Energies Marines, Plouzané (29) et Marseille IMT Atlantique Bretagne-Pays de la Loire,

Brest

#### **Funders**

Région Bretagne FEDER

#### Labelisation

24/05/2019

## Overall budget

730 K€