



Marine energy and mining resources

## GEOSISMEM

### GEOPHYSICAL SURVEYING OF THE SEAFLOOR AT OFFSHORE MRE SITES

Installing offshore structures for the development of MRE on the continental shelf, and particularly along the French littoral, often poses real engineering challenges that demand excellent knowledge of the geology of the seafloor.

The GEOSISMEM project aims to develop a new methodology for ground surveying. A combination of different geophysical surveying techniques, based on Ultra High Resolution (UHR) multi-trace seismic reflection and electromagnetism, and data from geotechnical surveys will be used to optimise the engineering on projects for installing anchoring, foundations and cables, by making it possible to quantify the physical and mechanical properties of the geological environment.

Upstream, the project will seek to improve geological risk assessment and to optimise the number and siting of geotechnical surveys by putting forward an innovative approach to inter-well correlation based on geophysical data.

#### Partners

##### Companies

Bureau Véritas, Paris  
EDF EN, Paris  
ENGIE  
EOLFI  
MAPPEM Géophysics, Brest  
Naval Energies, Paris

##### Research centers

France Energies Marines, Plouzané (29) et  
Marseille [\[Project Developer\]](#)  
Ifremer, Brest  
Université de Bretagne Occidentale, Brest

#### Funders

Agence Nationale de la Recherche  
France Energies Marines

#### Labellisation

15/12/2017

#### Overall budget

638 k€