



## AMM-EMR

### MONITORING THE LIFESPAN OF FLOATING MRE ANCHOR SYSTEMS

The AMM-EMR project will devise innovative tools to monitor the lifespan of anchor components for floating MRE installations while in service.

The anchor systems offered for floating MRE installations, and particularly wind turbines, differ noticeably from those used in offshore oil and gas. Norms and design tools need to be adapted and validated. The solutions employed – configurations, materials and anchor-sharing – increase the uncertainty around predicting their lifespan. And yet any rupture in an anchor line constitutes a major hazard to other marine activities.

Monitoring the conditions of anchoring components while in service would therefore seem to be a key issue for floating MRE installations. The AMM-EMR project objectives involve setting up a methodology that incorporates experimental measurements and numerical simulations to ensure the lifespan of anchor components and, ultimately, to create early-warning tools to prevent the risk of rupturing.

#### Partners

##### Companies

Bureau Véritas, Paris  
Geps Techno, Saint-Nazaire  
Ideol, La Ciotat  
Naval Energies, Brest

##### Research centers

École Centrale de Nantes, Laboratoire de recherche en Hydrodynamique, Énergétique et en Environnement Atmosphérique (LHEEA), Nantes [\[Project Developer\]](#)  
Ecole Centrale de Nantes - Université de Nantes, Institut de recherche en Génie Civil et Mécanique (GeM), Nantes  
France Energies Marines, Plouzané (29) et Marseille

#### Funder

- WEAMEC

#### Labelisation

28/04/2017

#### Overall budget

129 k€