Marine energy and mining resources



A LIDAR BUOY FOR MEASURING WIND AT SEA CLOSE TO WIND TURBINES

LIDAR systems for measuring wind are already used on land. The aim of the BLIDAR project is to design and manufacture BLIDAR, a floating system based on LIDAR technology, for measuring wind at sea.

Offering a highly flexible solution, the BLIDAR buoy will be able to measure winds up to 200m above the sea's surface, particularly close to offshore wind-farm sites, no matter what the sea depth. From a technical, financial and environmental perspective, this new technology for measuring at sea will be of greater interest than the current system based on a measuring mast: it involves no heavy equipment, is easily and rapidly installed, can be moved around and has minimal visual impact. Stability will be an integral feature of the buoy's design and dimensions, thereby guaranteeing reliable wind measurements above the sea's surface up to a height equivalent to that of offshore wind turbines (i.e. from 80m to 150m), and in a wide range of sea states.

The R&D, planning, production and sea trials involved will validate BLIDAR's design and performance in real operational conditions.



Partners

Companies

Nke, Hennebont [Project Developer] EOLFI, Paris et Marseille

Research centers

lfremer, Brest Irseem, Rouen

Funders

- Fonds Unique Interministériel

- Conseil régional de Bretagne
- Conseil régional de Haute-Normandie
- Conseil départemental du Morbihan
- Lorient Agglomération

Labelisation

19/11/2010

Overall budget

2 164 K€