



HYPERWIND

GLOBAL SURVEILLANCE OF WIND FARMS

The HYPERWIND project involves developing a global surveillance system for overseeing the functioning of offshore and onshore wind turbines: surveillance of blades, gearbox and shaft, as well as overall functioning of the wind turbine (interconnection between all systems). The project will be of particular interest to the offshore wind turbine sector, given the increased constraints imposed on operational maintenance and repair - weather, readily available means and resources, etc.

The aim is to offer wind farm operators a global, dynamic overview of their installations, and the farm as a whole, to alert them as rapidly as possible to any malfunctioning detected and to provide them with a clearer understanding of the reasons for it.

Integrating a global monitoring system is an innovative development and the use of a collection of models to interpret the data will help shape the operational strategy for installations (single turbine or whole farm), in relation to the system's external constraints (energy demand, development of the primary resource, etc.).

A prototype surveillance system will be incorporated into a pilot onshore installation, but there are also plans to carry out tests on an offshore wind turbine.

The HYPERWIND project is recognised jointly by the Pôle EMC2.

Partners

Companies

KEOPS Automation, Carquefou [[Project Developer](#)]
Astrium, Blanquefort
Meteodyn, Nantes

Research centers

ARMINES - IMT Atlantique Bretagne-Pays de la Loire
Université de Nantes - UMR CNRS 6241 - Equipe Connaissances et Décision, Nantes

Funders

- Fonds Unique Interministériel
- Conseil régional des Pays de la Loire

Labelisation

23/11/2012

Overall budget

3 640 K€