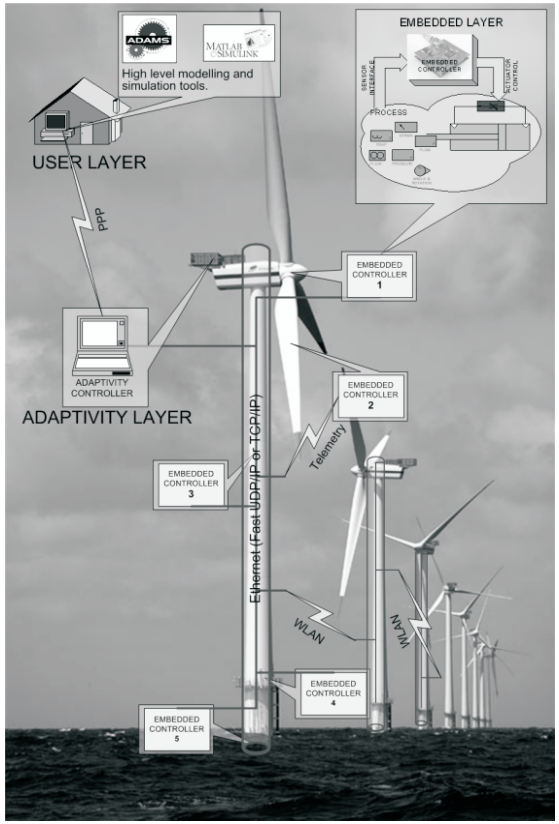
Background

In the ERA-NET project AERTOs (Associated European Research and Technology Organisations) the five research and technology organisations (RTOs) Fraunhofer, TNO, VTT, SINTEF and CEA have agreed to establish a framework for long term strategic cooperation in R&D. In order to promote long-term cooperation between the RTO partners, AERTOs has decided to launch a joint program for funding of collaborative research projects between the partners.
The project OMO is one of 6 projects selected as a pilot for such a program.



2nd OMO Workshop on
Operation and Maintenance of Offshore Wind Parks

The Project OMO - Operation and Maintenance of Offshore Wind Parks

Besides a high overall effectiveness, minimum maintenance is defined as one target for offshore wind parks. For this, optimized maintenance strategies relying on Predictive Health Monitoring (PHM) and Condition Based Maintenance (CBM) have to be developed in order to optimize the number of maintenance visits to the wind parks. Here, distributed sensor networks will play a critical role providing real-time information on operational conditions and the structural integrity of the asset. Such development of distributed sensor networks for wind parks will not be done by industries alone but in cooperation with research partners.

Within OMO a strategic research agenda (SRA) will be defined for a distributed, hierarchical sensor network controlling the operation and enabling maintenance-on-demand strategies for offshore wind parks. The SRA is aimed to identify future research needs to be addressed by VTT, SINTEF, Fraunhofer and TNO in cooperation with industrial stakeholders. The SRA will be derived from benchmark and feasibility studies performed by the participating RTOs. The proposed research aims at minimizing the cost of the generated energy over the life time of the park by combining advanced system models and real-time information received from hierarchical sensor networks and weather forecasts to adapt wind park and wind turbine operation. The objective is to demonstrate the benefit of a sensor network for operation and maintenance of wind parks.

In OMO, SINTEF Energy Research, VTT Industrial Systems, TNO Technical Sciences as well as the Fraunhofer Institutes LBF and IWES are working together.

2nd OMO Workshop on
Operation and Maintenance of Offshore Wind Parks

About the workshop

The SRA of EWEA identifies the availability of “robust low-maintenance offshore turbines” as well as “increased reliability and availability” as preconditions for the success of wind energy. These challenges should be addressed by focused R&D investments guided by medium to long term research agendas. Among others a dedicated and detailed SRA is needed covering the monitoring and maintenance aspects of wind parks.

Such a SRA has been derived by the OMO partners taking into account input given by industrial stakeholders in a previous workshop. This second workshop is addressing again mainly the end-user/owners, manufacturer, (grid-) operators, maintenance and insurance companies interested in operation and maintenance of offshore wind parks. During the workshop, the Strategic Research Agenda derived by the OMO partners will be presented and discussed with the industrial stakeholders .

Why should you attend the workshop?

- Learn more about the research needs in monitoring and maintenance-on-demand concepts for offshore wind parks
- Get in touch with leading experts on monitoring from four european RTOs
- Exploit synergies in research and development with the participating RTOs
- Discuss the SRA together with research providers impacting publically available funding

Program

13:20 – 13:30	**Registration**
13:30 - 13:35	**Welcome and Introduction**
13:35 – 13:45	**Introduction of the AERTOs OMO-Project**
13:45 - 14:30	**Presentation of the OMO Strategic Research Agenda**
14:30 -14:45	**Coffee Break**
14:45 – 15:45	**Round-table and discussion on the presented OMO SRA** The industrial point of view
15:45 – 16:00	**Conclusion from the round-table and discussion**
16:00	**End of Workshop**

The workshop will take place on site of the Offshore 2011. Although the workshop is free of charge, you are required to have a pass of the OFFSHORE 2011 (exhibitor staff pass, exhibition visitor pass etc.) to enter the workshop.

Venue:
Amsterdam RAI Exhibition and Convention Centre
Elicium, D 404 (4th floor)

2nd OMO Workshop on
Operation and Maintenance of Offshore Wind Parks

Registration Form

First Name: .....

Last Name: .....

Company: .....

Address: .....

.....

Phone: .....

Email: .....

The Workshop is free of charge!

Completed registration form should be sent to:
Ms. Ricarda Boehm
Email: ricarda.boehm@lbf.fraunhofer.de
Phone: +49 6151 705 401, Fax: +49 6151 705 214

Deadline
The registration form should be received by the **11th of November 2011**. As there are limited spaces in the workshop these will be allocated to registrations on a “first come first served” basis. However, registration can also be made at the Offshore 2011 Exhibition at the booths of Fraunhofer IWES, TNO and Sintef.

AERTOs

OMO

2nd OMO-Workshop

Operation and Maintenance of Offshore Wind Parks

December 1, 2011

in conjunction with

OFFSHORE 2011

Amsterdam, The Netherlands

Program and Registration