## Fugro Focuses on Innovation at WindEnergy Hamburg



The Fugro stand at WindEnergy Hamburg in Germany will feature a selection of recent innovations that reduce costs and improve efficiency in the development of offshore wind farms. Highlights include a live feed of metocean data from working Fugro Lidar buoys; the 3Direct real-time precise jacket and foundation positioning system; Fugro OARS centralised positioning support for offshore installations and Fugro's large-diameter drilling capability for pile relief drilling and installation.

Fugro's experts on the stand will speak from experience, having supported all stages of offshore wind developments at numerous sites, from feasibility studies to installation, operation and maintenance.

Live data from Fugro's Seawatch Lidar buoys located at two Dutch windfarm development sites - Borssele and Hollandse Kust - will be fed to the stand, providing visitors with instant understanding of the benefits to the OWF project team.

## **Focus on 3Direct**

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Elsewhere on the stand a model of Fugro's 3Direct system, complete with model jacket structure, will demonstrate how this innovation provides vital information to team managers and engineers in real time.

3Direct uses vision-based technology to track the position of monopile and jacket components during installation. Using high-resolution, digital video cameras on the construction vessel the position, elevation, inclination and heading of structures can be constantly determined and monitored. In contrast to traditional methods no equipment needs to be installed on jackets or monopiles so personnel do not need to work near, or on, the monopile or jacket, significantly enhancing safety.

## **Qualified Surveyors on Duty 24/7**

Another innovation, Fugro OARS (Office Assisted Remote Services), is a service that eliminates the need for specialist teams to be present on vessels during offshore installations. Global OARS command centres are manned by Fugro's qualified surveyors who are available to conduct survey tasks as though they were physically on board the vessel.

These specialists can assist 24/7 with offshore vessel positioning and safe mooring operations; collect survey data; monitor and plan operations; and provide survey solutions. Clients can view vessel operations through a secure web browser interface.

Tony Hodgson, Fugro's global product manager for renewable energy, is keen to share these developments with visitors to the Hamburg show but Fugro will also be reminding them of core expertise in areas such as large diameter drilling for pile relief drilling and installation; pile foundation and structural monitoring during construction and O&M phases; and providing marine and land site characterisation, integrating geo-data to provide cost-effective foundation and cable installation.

https://www.hydro-international.com/content/news/fugro-focuses-on-innovation-at-wind-energy