In this section

- News
  - News Releases
  - News Search
  - Events Diary
  - Press Packs
  - Press Registration
  - Press Contacts
  - Awards

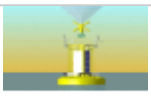
Press Registration

> Subscribe to QinetiQ news releases

FIA06 Press Briefings

> Click here for a full pack covering all Press briefings for Farnborough International Airshow

SeaZephIR



> SeaZephIR - measuring wind to improve the siting of wind power turbines

25 January 05

Seeing the light - Development programme announced for SeaZephIR Laser Anemometer

QinetiQ's SeaZephIR

QinetiQ, together with npower renewables, Trinity House Lighthouse Service, and with funding from the DTI, has announced a major new collaborative project to develop its buoy-mounted LIDAR anemometry system, known as SeaZephIR.

The project aims to turn an established technology - light detection and ranging (LIDAR) - into an exciting and viable new solution to measure wind for the optimal siting of offshore wind farms.

SeaZephIR is a derivation of QinetiQ's land-based ZephIR system which has been trialled successfully in the UK and in Denmark. Designed to be a floating laser anemometer, the SeaZephIR system will help to ensure the optimal siting of offshore wind farms and positioning of the wind turbines, both of which require a thorough understanding of local wind behaviour.

Mounted on a floating buoy, SeaZephIR reduces the requirement to install more expensive, fixed meteorology mast. The system can operate independently offshore for long periods, and can be swiftly redeployed. It is anticipated that the SeaZephIR system will bring both increased flexibility and cost-savings to the rapidly growing offshore renewables industry.

The project team will be led by QinetiQ, with Trinity House Lighthouse Service providing the buoy, supporting systems, and all communications and maintenance support. Further to its financial support, npower renewables will also provide expertise in offshore wind measurements, and data from its fixed offshore meteorology masts which will be used for validation purposes.

Additional data validation support will be provided by Risø National Laboratory of Denmark. QinetiQ has worked with Risø for a number of years and the organisation has helped to record and validate data for QinetiQ's land based LIDAR, ZephIR.

Commenting on the DTI funding and the furthering of the relationship with npower renewables, Riso and the Trinity House Lighthouse Service, Ian Locker, Business Development Director for Renewable Energy at QinetiQ, said: "We are delighted that both the wind energy industry and the DTI have recognised the potential significance of this revolutionary technology. LIDAR has been used for years with a variety of applications; from catching errant drivers exceeding the speed limit to measuring the atmosphere's water vapour levels. With SeaZephIR it has found, arguably, its most potent application to date."

Neil Birch, npower renewables' Head of Offshore Renewables, said: "I am delighted to be able to announce npower renewables' involvement in this ground-breaking collaborative project. The SeaZephIR system has the potential to revolutionise the way wind data is captured offshore, producing more wide-ranging data for a lower cost than traditional offshore met masts. This, combined with the elimination of decommissioning issues, as well as the time-consuming procurement and installation requirements for fixed met masts, is an exciting opportunity and we feel that the team involved in this cutting edge project could not be better."

The project, which is being partly funded through the DTI's 'Succeeding Through Innovation' technology programme, is expected to last three years, during which period the buoy is expected to spend more than two years at sea. This offshore testing will include the LIDAR buoy spending time alongside npower renewables' fixed offshore masts, as well as long-term endurance and reliability testing.

It is expected that development of the SeaZephIR system will be completed by early 2006, and will be followed by deployment in the waters off North Wales. Trinity House Lighthouse Service, the statutory authority responsible for Aids to Navigation around England, Wales and the Channel Islands, will deploy the buoy in the same way as it would for other scientific buoys, and will be responsible for informing mariners of its location as appropriate.

Steve Squires, Commercial Contracts Manager at Trinity House Lighthouse Service, said, "Trinity House is pleased to be part of the SeaZephIR collaboration project, which further extends the organisation's capabilities to provide data acquisition services to the offshore wind industry."

> SeaZephIR

Press Officer: Chris Moseley
More news releases about: Energy