Press release

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**ZephIR 300 verified against IEC compliant Lelystad met mast**
January 2014

ZephIR Lidar, the industry-leading wind lidar manufacturer, is proud to announce that its flagship system, ZephIR 300, has been successfully verified against a fully IEC compliant met mast at the Lelystad Test Site.

***Figure 1: ZephIR 300 deployed at Test Site Lelystad during its verification.***

The verification, carried out by Ecofys WTTS in parallel with three other ZephIRs, deems that ZephIR 300 "is suitable for field measurements as a replacement of cup anemometers in flat terrain."

The 81 meter MM02/03 mast is equipped with cup anemometers at heights of 40 m, 60 m and 81 m. It also has vanes at heights of 76 m and 79.5 m for wind direction measurement. The ZephIR 300 was collecting wind data at 40 m, 60 m and 80 m between 19th March 2013 and 11th April 2013.

The results show "consistent, highly-correlated measurements with slopes near unity," said Ecofys' official report. It continued: "The calculated uncertainty in the lidar wind speed measurements is … in line with high quality anemometry. The calculated uncertainty tables can be used directly in wind resource assessments, together with the classification uncertainty and site-specific uncertainty components."

It also states that "the lidar measurements were also validated against the NORSEWInD (Northern Seas Wind Index Database) criteria which stipulate thresholds for the quality of the correlation. The lidar meets the majority of the NORSEWInD criteria … The overall high correlations and excellent linear regression fit indicate that the lidar is functioning properly with high accuracy."

ZephIR 300 was also found to be insensitive to external conditions: "Sensitivity tests of the wind speed deviation revealed that the wind speed deviation shows no significant linear correlation to external conditions: vertical wind speed, horizontal wind speed, turbulence intensity or rain. This indicates that the lidar is relatively insensitive to these factors."

Ian Locker, Managing Director of ZephIR Ltd, said: "ZephIR 300's successful verification against this fully IEC compliant mast adds to the substantial body of evidence gathered by ZephIR Lidar, our clients and industry leading organisations such as Ecofys. The independent report's statement that 'the [ZephIR] is suitable for field measurements as a replacement of cup anemometers in flat terrain' is an important step forward for

lidar technology as a whole. It shows beyond doubt that our lidar is capable of delivering met mast quality data, and that verification is very exciting."

Erik Holtslag, Ecofys WTTS Operational Manager said: "The verification report shows that the uncertainty at all heights measured by ZephIR is low after comparing it with the IEC compliant TSL-MM02/03 met mast. Ecofys WTTS deems that the ZephIR 300 is suitable for field measurements as a replacement of cup anemometers in flat terrain. We are happy to furthermore see our 81 m mast has been replaced by a tailored 120 mast including full test pad functionality for plug and play LiDAR verification and validation."

ZephIR 300 measures wind characteristics onshore and on fixed or floating platforms offshore from just 10 metres (33 feet) up to 300 metres (984 feet) from installed position to inform wind regime and quality studies during the development and operation of wind farms onshore and offshore. ZephIR 300 is accurate, reliable and affordable, adding value to wind energy projects at every stage - from pre-planning, through development and on to operation. Every system is uniquely subjected to an industry-approved validation process, part of which occurs at the UK's Lidar and Sodar test site, ensuring repeatable finance-grade data.

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**Notes for Editors**

About ZephIR Ltd.

In 2003 we released the first commercial wind lidar, ZephIR®, exploiting decades of research at UK government Research & Development establishment QinetiQ. Designed specifically for the wind industry ZephIR has paved the way for many of the remote sensing devices seen in the market today. Our original lidar technology continues to innovate with world firsts such as taking measurements from a wind turbine spinner and being the first to deploy an offshore wind lidar, both fixed and floating. ZephIR has also now amassed more than 3 million hours of operation across 650+ deployments globally spanning a decade of commercial experience. For wind measurements onshore, offshore and in turbine-mounted applications, ZephIR provides accurate, reliable finance-grade wind data.

ZephIR Ltd. is a wholly owned subsidiary of Fred. Olsen Ltd. - established in the UK in 1963 with business interests primarily focussed on renewable energy, including ZephIR. Visit www.zephirlidar.com for more information.

About Ecofys WTTS

Ecofys WTTS provides high quality wind measurement services based on its 15-year experience. Since its foundation in 2010, Ecofys WTTS is also the operator of the largest site for wind turbine prototyping testing and certification in Europe, located in Lelystad in the Netherlands. Ecofys WTTS is a subsidiary of Ecofys, a consultancy company with an international track record of 30 years in the wind energy sector. Our aim is to serve our clients with cutting edge wind measurement technology prepared for future international standards. With safety and quality first, we provide front running solutions to our clients. Ecofys WTTS is accredited by DNV according to ISO 9001:2008 quality standard for all its activities.

Visit www.ecofyswtts.com for more information.