

Press release

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**ZephIR Lidar win prestigious Institute of Physics Innovation Award**

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Industry-leading wind lidar manufacturers ZephIR Lidar have been announced today as winners of the prestigious 2013 Institute of Physics Innovation (IOP) Award.

The prize is one of the most coveted honours in British science, and was awarded for “developing and commercialising a novel ‘lidar’ anemometry system for use in wind farm siting and construction.”

The IOP Innovation Awards recognise companies in the UK and Ireland that have built success on the innovative application of physics.

Based in Malvern, Worcestershire, ZephIR Lidar were the first company to develop a commercial lidar system, and since 2003 have pioneered the use of the technology for wind anemometry.



Figure 1: A deployed ZephIR 300.

The winners will be celebrated with a reception at Parliament, hosted by the Rt Hon Dr Vince Cable MP, on Wednesday 6 November 2013, and the awards will be formally presented at the annual IOP Awards dinner on Friday 15 November.

In 2003 the company released the first commercial wind lidar, ZephIR®, exploiting decades of research at UK government Research & Development establishment QinetiQ, further optimised for the wind industry by leading international renewable energy consultancy and sister company Natural Power. ZephIR has paved the way for many of the remote sensing devices seen in the market today and whilst the ZephIR Lidar team continue to innovate with world firsts addressing complex client requirements, the system has now amassed more than 3.5 million hours of operation across 650+ deployments globally spanning a decade of commercial experience.

Professor Sir Peter Knight, President of IOP, said, “ZephIR Ltd has addressed an ongoing problem for firms trying to bring affordable and reliable wind energy to the grid. They are highly deserving of this award.”

Ian Locker, Managing Director of ZephIR Ltd, said: “We are delighted that ZephIR Ltd has won this prestigious award for the use of physics to develop a highly innovative product. ZephIR Ltd started as a small company but it has made a big impact in the renewable energy field, demonstrating how a dedicated team’s practical exploitation of some exciting physics can make a small but significant difference to the world.”

Dr. Michael Harris, Chief Scientist, added: “It gives us great satisfaction to win this award, at a time when laser anemometry is becoming a well-established tool for wind power applications. This was far from the case when we started out at ZephIR, when such methods were unheard of and treated with great suspicion! This award recognises a decade of pioneering work in wind lidar, and we are proud of our long list of world-firsts in the wind industry.”

The Innovation Award is just the latest in a series of successes for the company. Since 2003 it has been involved in a string of world firsts, which include becoming:

- 2003 - The first wind lidar to make upwind measurements from a turbine nacelle
- 2004 - The first and original commercially available lidar for the wind industry
- 2004 - The first wind lidar to investigate the behaviour of turbine wakes
- 2005 - The first wind lidar to be deployed offshore on a fixed platform
- 2008 - The first wind lidar to be signed off against an industry-accepted validation process
- 2009 - The first wind lidar to take measurements from a turbine spinner
- 2009 – The first wind lidar to be deployed offshore on a floating platform (SeaZephIR)
- 2010 - The first wind lidar to re-finance and re-power a wind farm
- 2011 - The first wind lidar to be proven in a wind tunnel
- 2012 – The first wind lidar to be used with very short masts and secure project financing
- 2013 – The first wind lidar to provide true dual mode functionality in one platform; ground based and turbine mounted

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.

ZephIR DM is a Dual Mode variation of the successful 300 system. Mounted inside the spinner or on top of the nacelle, ZephIR DM measures wind characteristics in front of or behind a turbine from just 10 metres (33 feet) out to 300 metres (984 feet), during the operation of wind farms onshore and offshore. ZephIR DM provides valuable advanced wind data for the optimised performance and alignment of wind turbines, for in-situ power performance measurements, to reduce wind loading on turbine components and for specific troubleshooting applications.

#### **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](http://www.zephirlidar.com) for more information.

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