

January 2016

Invitation to the IEA WIND Task 32 Workshop #1 on

Floating Lidar System: Current Technology Status and Requirements for Improved Maturity

Date: February 23rd and 24th 2016 Venue: ORE Catapult, Blyth, UK Workshop leader: Julia Gottschall, Fraunhofer IWES

Introduction to IEA Wind Task 32

The main objective of the Task 32 is to identify and to mitigate barriers to the use of the lidar technology in wind energy applications such as site assessment, power performance, loads & control, and complex flow. One yearly workshop is organized for each of the four applications focusing on one specific problem, and with a well-define program and tangible outcome. More details can be found on the task website.

Objective

Floating lidars (i.e. lidars integrated or placed on top of a floating platform or buoys) were recently introduced as a cost-effective alternative to offshore met masts. Today there are several system suppliers on the market, and five of the developed systems have already reached the 'pre-commercial' maturity stage. The first offshore wind projects have already been planned on the basis of floating-lidar data. Despite this fast integration into current practice, not all challenges related to the application of floating lidar systems are fully identified and resolved yet. So-called gaps on the technology's road to full maturity relate e.g. to a complete understanding of the measurement uncertainties of floating lidar measurements, detailed guidance on the system deployment or a classification of different sea climates on the expected system performance.

The workshop follows up on the activities of Phase 1 of IEA Wind Task 32 that resulted in a draft Recommended Practices document, and from other expert working groups as in the Carbon Trust OWA programme. A pre-workshop survey will be distributed and used to prepare the discussion of the key issues and the positions of different stakeholders.

Expected Outcome

A report on the state of the technology (technology review) and necessary next steps (further roadmap to maturity) will be compiled based on the contributions to and the results from the workshop. The report is to be published in a suitable format after the workshop.

Practical Arrangements

Registration

For participation in the workshop, please register by sending an email to the Operating Agent Representative <u>David Schlipf</u>. Please state in your registration email:

- Name and Institution, Member country
- Please describe your stakeholder role (e.g. system developer, end user, lidar supplier, academic, ...).
- Will you attend both days of the workshop?

Please register before 5th February 2016. Upon registration, the participants will receive a more detailed agenda as well as the pre-workshop survey to be completed until 17th February 2016.

Travel Information

The meeting will be held in Charles Parsons Technology Centre (point 9 on the attached map): ORE Catapult, National Renewable Energy Centre, Offshore House Albert Street, Blyth, Northumberland, NE24 1LZ

There is a regular bus service from Whitley Bay to Blyth (308 and 309) and decent metro links to Newcastle city centre. <u>Park Lodge Hotel</u> and <u>The York House Hotel</u> have availability and look to be of a good standard. They are also located close by to one another and to public transport links.

Link to google maps to show where the hotels and our facilities are.

Hotel information

Name and price of best suitable hotels, map from hotel to venue

 Park Lodge Hotel (www.parklodgewhitleybay.com) 158-160 Park Avenue Whitley Bay, Tyne and Wear, NE26 1AU Telephone: 01912 530288 Fax: 0191 252 6879 E-mail: parklodgewhitleybay@outlook.com
The York House Hotel (www.yorkhousehotel.com)

106-110 Park Avenue Whitley Bay, Tyne and Wear, NE26 1DN Telephone: 0191 252 8313 Fax: 0191 328 0008 Email: <u>reservations@yorkhousehotel.com</u>

Program Draft

<u>Day 1</u>	
9:30	start with coffee/tea
10:30	start of workshop
(morning)	introduction to workshop, IEA Wind Task 32 Phase 2;
	Presentation of floating lidar activities within Task 32 and other initiatives
(afternoon)	invited presentations of different stakeholders, identification and discussion of technology gaps
17:30	end of Day 1
(evening)	joint dinner
<u>Day 2</u>	
8:30	start with coffee/tea
9:00	start of workshop
(morning)	focus on technology – with presentations of different system providers and discussion
	of key issues, evaluation of pre-workshop survey
(afternoon)	formulation of next steps, and updated "roadmap" to improved maturity
15:00	end of workshop

Expected Participants

All kinds of stakeholders – system providers, end users (offshore wind farm developers / operators, turbine OEMs), lidar manufacturers, consultants, academics.





Delivery Addresse

ORE Catapult, National Renewable Energy Centre Offshore House, Albert Street, Blyth, Northumberland, NE24 1LZ Tel: 01670 359 555 Fax: 01670 359 666 email: info@ore.catapult.org.uk

Brunel Building 64 Regent Street, Blyth, Northumberland, NE24 1LT

50m Blade Test Facility Euroseas Centre, Albert Street, Blyth, Northumberland, NE24 1LZ

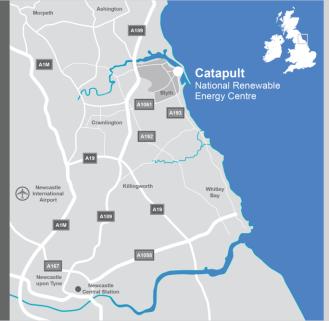
Ark Royal House Catapult Test Site, Albert Street, Blyth, Nothumberland, NE24 1LZ

Charles Parsons Technology Centre High Quay, Blyth, Nothumberland, NE24 2AZ

Site Tour

If you are attending a site tour please bring closed toe shoes and appropriate outdoor clothing for the time of year.

High visibility jackets and hard hats will be provided.



By Air: Newcastle International Airport is 12 miles away off the A696.

- By Rail: Newcastle Central Station on the East Coast Main Line is 15 miles away.
- By Car: Follow signs to Blyth taking the A1061 junction on the A189 and
- By Bus: Regular buses from Haymarket bus station in Newcastle during the day, these include the X4, X11, X12, X13, 10, 11 and 308. Journey time 55 minutes.
- By Taxi: Approximately 20 minutes from Newcastle Airport and 25 minutes from the centre of Newcastle.