Event: Marine Data and Marine Renewable Energy

12th July, 11-1pm

Overview:

Marine data plays a crucial function in Marine Renewable Energy development from early project consideration and development through operation and management to de-commissioning.

This event has two key focuses:

1. Identifying the key Marine data flows for Floating Offshore Wind in the Celtic Sea through the whole project lifecycle.
2. Increasing awareness of Marine data sets available in the SW with a focus on the Isles of Scilly alongside consideration of new technologies and methods for data collection, data transfer, data management and analysis.

Agenda

Timing	Speaker Topic	Presenter
11.00 - 11.05am	Event Introduction & Marine-I	Prof. Lars Johanning, University of Exeter
	Sector case study: Floating Offshore Wind and the Celtic Sea	
11.05 – 11.15am	**The Celtic Sea FLOW opportunity and FLOW data requirements** An introduction to the Floating Offshore Wind opportunity in the Celtic Sea and the newly launched Cornwall FLOW Accelerator programme.	Neil Farrington, Offshore Renewable Energy Catapult
11.15 – 11.30am	**FLOW Project development, consenting and licensing data requirements.** Identifying the Marine data flows involved in FLOW project development, their sources and collection methods.	Max Bradbury, University of Plymouth
11.30-11.45am	**FLOW operational data requirements** Marine data plays a critical role in maintaining and operating floating offshore wind turbines. This session will start to map data needs and requirements whilst reflecting on data architecture.	Daniel Milano/Charlotte Wilkinson, Offshore Renewable Energy Catapult
11.45 – 12.00pm	**FLOW simulation and simulators** CFA FLOW simulation and simulator activities The simulation of offshore operations can reduce risk, help to minimise cost and provide a safe playground for the introduction of technology innovations. The development of simulators offers the opportunity to increase skills and operator confidence whilst testing system interactions. The CFA project offers a chance to increase these critical capabilities in the SW.	Ben George, Offshore Renewable Energy Catapult
	Marine Renewable Energy Data sources and new data collection	
12.00 - 12.15pm	**Case study: Isles of Scilly (and the SW) MRE resource data** The IoS will be used as a case study to help identify the current key sources of MRE resource data available in the SW. New data collection methods will also be identified to help build a full profile of required MRE resource information.	George Crossley, University of Exeter
12.15 – 12.25pm	**Application of satellites to derive marine data** This presentation will outline the new capabilities of satellites in the offshore domain, their application in offshore renewable energy (particularly wind). We will outline our current feasibility study to assess how and when space data can be utilized further by ORE, funded by Marine-i	Michael Hanley, 4EI

Time	Title	Speaker
12.25 – 12.35pm	**HF Radar and MRE data collection** Functions, services and MRE data provision	Max Bradbury, University of Plymouth
12.35 -12.45pm	**The future of marine data collection with RAS** Investigating new technologies including Remote and Autonomous systems that have the capability to improve marine data collection, increasing efficiency whilst reducing costs and carbon emissions.	Alex Whatley, University of Plymouth
12.45-12.55pm	**Marine data collection, transfer and storage methods** This presentation will discuss centralisation of processing and storage for the Marine industry, why this is an increasingly important strategy for the future and how it will play a part in the Celtic Wind Farm project and Cornwall technologies in general. Discussion will also cover a de-centralised model where processing can be done remotely on board which can lead to significant cost savings and efficiencies in conjunction with the Universities of Plymouth and Exeter.	Tony Redfearn, BILDR
12.55-13.00pm	**Summary and Close**	