

Training course on:

“Methods and environmental data collection in Marine Renewable Energy Sites”

The European Marine Energy Centre (EMEC), WavEC Offshore Renewables and the Marine Engineering Institute – Italian National Research Council (CNR-INM)

June 23rd - 24th 2020

Course Outline

23/06/2020: Importance of environmental data in Marine Renewable Energy Sites

09:00 hs – 17:00 hs

- Registration & refreshments
- Introduction and welcome
 - o Housekeeping
 - o EMEC, WAVEC, CNR introductions
 - o Course overview
- Introduction – description of parameters
 - o Wave
 - o Wind
 - o Currents
 - o Noise
 - o Electromagnetic fields
 - o Species behavior
- Lunch
- Importance for MRE
 - o Resource
 - o Design basis: survivability
 - o Ops and maintenance plans
 - MetOcean criteria development
 - o Environmental impact
 - Regulatory requirements
- Types of data
 - o Modelling
 - o In-situ observations

24/06/2020: Data Collection Methods in Marine Renewable Energy Sites

09:00 hs – 17:00 hs

- Recap of yesterday's session and overview of Day 2 plans

- In situ observations: Wave
 - o Method & Instrumentations
 - o Quality Control
 - o Processing / analysis
- Break
- In situ observation: Tidal
 - o Methods & Instrumentations
 - o Quality Control
 - o Processing / analysis
- Lunch
- In situ observations: Active & Passive Acoustics
 - o Method & Instrumentations
 - o Quality control / calibration
 - o Processing / analysis
- Break
- In situ observations: Environments
 - o Method & Instrumentations
 - o Quality control / calibration
 - o Processing / analysis
- Operational Health & Safety
 - o Planning & Permitting
 - o PPE

25/06/2020 – Site visit TO BE CONFIRMED

There is a 3rd day optional site visit that is being organized by EMEC but, that will depend heavily on the weather conditions on that day. If the proposed visit can be done not all participants will be able to attend. Once the selection process finishes and we contact the selected participants, they will be required to indicate if they are interested in this visit.

EMEC is proposing an optional site visit to scale wave test site, Scapa Flow in parallel with marine operations to deploy an ADCP and a static acoustic survey:

- Tour of workboat with overview of operation from EMEC personnel.
- Site visit to observe operations from additional RIB (It may also be possible to see wave energy devices at test during the operation).

Limitations of site visit:

- For safety reasons, no delegates will be able to observe the operation from the work boat – a separate RIB will visit the site alongside the workboat.
- 1-2 members of EMEC operations personnel will join the delegates and provide to provide an explanation of the preparation and installation processes.
- Max: 10 delegates
- Adjustments for accessibility will not be possible
- Site visit is weather dependent and is not guaranteed to go ahead. If for some reason it is cancelled at short notice, EMEC will plan an alternative visit itinerary.

Organized by:

- The European Marine Energy Centre (EMEC)
- WavEC Offshore Renewables
- The Marine Engineering Institute – Italian National Research Council (CNR-INM)

Venue:

The European Marine Energy Centre Limited, The Charles Clouston Building, ORIC, Back Road, Stromness, Orkney, KW16 3AW, Scotland.

Accommodation:

The options for accommodation near EMEC are limited. Further information will be uploaded in the Marinet2 website in the following weeks.

Please, be aware that minor internal changes could occur prior to the beginning of the course.