



Draft Strategic Roadmap **Key Recommendation 4.6:**

De-Risking Environmental Consenting through an
Integrated Programme of Measures

Work Package: Learning the Lessons of Environmental Monitoring of Ocean Energy Devices

Prepared for:

Forum Open Session Conference
23-24 February 2016, Edinburgh

OEF Session 4b

Day 2 Wed 24 February 2016 1115-1200hrs

Lowther Room Level -1

Ocean Energy Forum



Document produced by;	Ocean Energy Forum Environment & Consenting Workstream: Phil Gilmour (Marine Scotland) Chair and David Pratt (Marine Scotland) Co-Chair with Forum Secretariat - Patsy Falconer & Jon Rees (Cefas), Helen Smith (University of Exeter)
Document produced for;	Ocean Energy Forum Open-Session Conference Edinburgh 23-24 February 2016
Context;	<p>Following publication of the Forum's <i>Draft</i> Strategic Roadmap in October 2015 (where 6 key recommendations were outlined to help develop the ocean energy sector), the Forum has been tasked with producing action plans for each recommendation to help realise the aims and ambitions of the Roadmap. The actions plans will be reflected in the final Strategic Roadmap due to be published in November 2016.</p> <p>Key recommendation 4.6 - Monitoring Often environmental licences have monitoring conditions associated with them. In Edinburgh we will develop a proposal to consider the best approaches to apply strategic monitoring at the regional scale to enable regulators to recognise the sensitivity of the area to be developed and the potential impact risks faced.</p>
About this Paper;	<p>This paper has been prepared to discuss and develop an action plan (project specification) that will help promote integrated planning and consent of ocean energy devices.</p> <p>The paper will be discussed at the Forum's open session conference in Edinburgh. All Forum members are welcome to participate and contribute to Session 4b discussion.</p>
Next steps for Forum Edinburgh event:	<p>Please consider:</p> <ul style="list-style-type: none"> • Ongoing monitoring and other environmental data gathering initiatives (including other sectors) • Value (practical as well as need) of a central data-sharing platform or tool for avoiding duplication of data gathering • Estimate of associated costs, duration and phases to deliver and implement any practical steps
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Distribution;	Non-restricted – All Forum members



1. Context

This paper has been prepared to discuss and develop an action plan (project specification) that will review existing monitoring results, identify linkages and build and publish a live database.

Due to the emerging technology requirements of the ocean energy sector it is difficult to predict the level of impact devices and arrays will have on the marine environment. Strategic planning and project application assessment work can lead to the identification of gaps in knowledge on interactions between development and marine habitats, marine mammals, sea birds and fish. Strategic monitoring using swathe bathymetry, underwater video and photography techniques, aerial survey, LIDAR, passive acoustic monitoring, active sonar, satellite and acoustic tagging and other techniques can be used to track species and characterise behaviours.

Also pre and post development sites can be subjected to intensive monitoring to build up empirical data of key species at risk of impact. These approaches are important for demonstration and early commercial development sites to ensure that future impact assessment outputs can be calibrated and ground truthed.

2. Key Considerations for the Work Package:

- Ongoing monitoring and other environmental data gathering initiatives (including other sectors)
- Value (practical as well as need) of a central data-sharing platform or tool for avoiding duplication of data gathering
- Estimate of associated costs, duration and phases to deliver and implement any practical steps

3. Background to the Work Package:

Often environmental licences have monitoring conditions associated with them which can range from monitoring of coastal processes to community response of mammals in the vicinity. On a wider scale, targeted research programmes at either National or International level gather data on a generic level.



However, lessons learnt from individual device monitoring or more generic research are either not incorporated in future monitoring conditions or perceived to be not relevant in the next similar licence application. In some cases, monitoring can demonstrate that impacts are not significant and thus are not required in future monitoring conditions. This paper will help develop a full project proposal for reviewing existing monitoring results, identifying linkages and build and publish a live database.

4. Expected Outcome(s):

The resulting project will consider the best approaches to apply strategic monitoring at the regional scale to enable developers and regulators to recognise the sensitivity of the area that they propose to develop in and at the same time the potential impact risks they face.

In the case of site level assessment, a demonstration strategy approach should be considered which reduces the burden on early or initial developers with the costs of intensive monitoring, the development of monitoring devices and the collection, analysis and conversion of empirical data to underpin the production of impact models and methodologies potentially shared amongst stakeholders with a vested interest in development of the ocean energy sector.

To ensure EU regulator and developer access to strategic monitoring, research and demonstration strategy technology and empirical data an EU portal and repository of strategic data and analysis, research papers, site monitoring data, data analysis and resultant assessment models and methodologies should be created as part of this project, although existing facilities such as the Renewables Catapult facility could be used to provide an EU portal facility.

5a. Considerations / input in developing the Work Package:

- Who: Forum, Others?
- What:
- When: (deadlines)



- Existing evidence / Exeter Evidence Review: E.g. ORE Catapult Wave and Tidal Knowledge Network; Report by Inter-Governmental Offshore Wind Forum

5b. Considerations for the Project Specification:

- Timeline and Duration of project:
- Costs / Funding of project:
- Length of project spec.: (number of pages): *how comprehensive spec. needs to be*

6. Suggested Milestones for the Work Package:

- M1 – Meeting with the Commission 13 January 2016
- M2a – Scoping document initiated 21 January 2016
- M2b – Scoping document outline accepted by DG MARE 31 January 2016
- M3 - Roundtable meeting DG MARE, DG ENV, developers & planners 19 February 2016
- M4a – Discuss scoping document at OEF Edinburgh Conference 23-24 February 2016
- M4b – Agree overall direction and key areas of focus for Work Package at Edinburgh
- M4c – Agree next steps to develop project specification at Edinburgh
- M5 - Post-conference discussion with DG MARE on next steps w/c 07 March 2016
- M6 – Advise plans to Forum members / Steering Committee as required and follow-through on next steps

Future milestones tbc – e.g. Paris Steering Committee meeting input. Suggestions are made below but timings of requirements are currently unknown until after the Forum Edinburgh event

- *M?? – First Draft project specification to DG MARE by XXXX*
- *M?? – Final Draft project specification to Steering Committee by XXXX (e.g.) 16 May 2016*
- *M? – Steering Committee meeting 16 June 2016 Paris*
- *M? - Updates for final Strategic Roadmap by 31 July 2016*
- *M? – Presentation of final Strategic Roadmap 08 November 2016 Brussels*

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