

RiCORE

Risk Based Consenting of Offshore Renewable Energy Projects

Dr Ian Broadbent
on behalf of the RiCORE consortium

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- Project context
- Aims, partners and work packages
- Workshops and example quotes
- Overview of key project deliverables/reports
 - Review of the Survey, Deploy and Monitor policy
 - Current practices in pre and post consent monitoring
 - Commonalities/differences in approaches to pre-consent surveys
 - Innovative monitoring approaches
 - Marine Renewable Energy Licensing and Regulatory Systems
 - Legal and Institutional Review of National Consenting Processes
- Next steps



- Challenges facing development of Offshore Renewable Energy* Projects
 - *defined as offshore wind, wave and tidal
 - Technology costs
 - Transmission grid infrastructure
 - Consenting procedures
 - Environmental impacts
 - Grant and revenue support



RiC*RE

Relevant EU legislation includes:

- Renewable Energy Directive (2009/28/EC)
- Marine Strategy Framework Directive (MSFD 2008/28/EC)
- Strategic Environmental Assessment, (2001/42/EC)
- Environmental Impact Assessment Directive (2014/52/EU)
- Water Framework Directive (2000/60/EC)
- Birds Directive (2009/147/EC)
- Habitats Directives (92/43/EEC)

SPA's
SAC's



- Legislation aims to address
 - climate change
 - promote low-carbon energy whilst maintaining biodiversity,
 - protecting endangered species and habitats,
 - minimising adverse impacts of development
 - protecting the marine resource base
- Uncertainty about appropriate application - further prolonging consenting processes
- EIA varies considerably in scope and intensity both within and across MS
- Different methodologies and timeframes are utilised
- Costly and time consuming surveys are required even for perceived lower risk projects

- *“The current consent process is not fit for purpose, as the requirements for consenting a single prototype are broadly the same as those for a 1 GW commercial offshore windfarm. The timeframe and cost of achieving this represent an inefficient use of valuable resources and capital, and present a substantial roadblock to accessing investment and to the deployment of prototype devices”.*

Offshore renewables project developer, 2016



- To ensure the successful development of the ORE in the EU member states by reducing the cost and time taken to consent projects of low environmental risk through the development of a **risk based approach to the consenting of projects** which standardises the assessment of key components of environmental risk from ORE deployment.



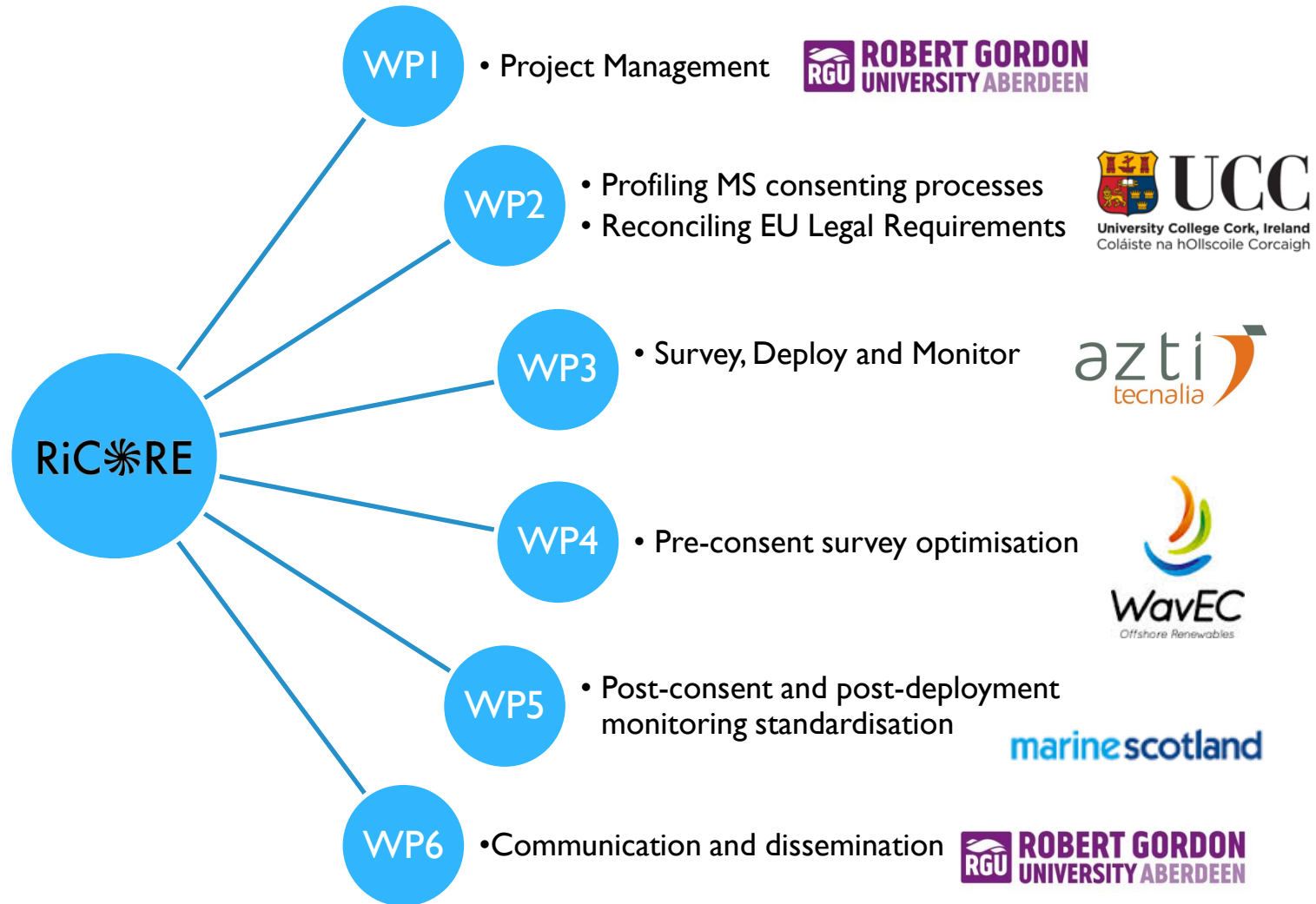
- The Marine Scotland Survey, Deploy and Monitor policy is based upon three main factors:
 - 1. Environmental Sensitivity (of the proposed development location)
 - 2. Scale of Development; and
 - 3. Device (or Technology) Risk.
- Supplementary guidance document to the licencing manual
- Risk-based approach for wave and tidal energy proposals.
- Distinguishes between proposed developments for which:
 - there are sufficient grounds to seek determination based on a minimum of 1 year of wildlife survey effort and analysis
 - and those where a greater level of site characterisation is required





marinescotland





- **Inception Meeting 21-22/1/15 (RGU)**
 - Workshop 1: WP4+5 - 20/4/15 (Bilbao)
 - Workshop 2: WP2 – 21/5/15 (Paris)
 - Workshop 3: WP3 + 2,4,5 – 9-10/11/15 (Dunkeld)
 - Workshop 4: WP2,3,4,5 – 12/4/16 (Cork)
- 84 participants, from 7 EU Member States
- Final project conference – June 2016 (Brussels)



- “Developers are often asked to gather unnecessary or duplicated information.... they may be asked to repeat work that has already been done.”
- “one year is not much due to the inter-annual variability.....three years is very expensive and thus two years is the best option.”
- “Where we have no or a low volume and/or quality of data a precautionary approach should be applied; therefore resulting in a grading of high sensitivity. In this scenario, it is unlikely that a one-year pre-consenting period would be sufficient.”
- “Approaches such as Survey, Deploy and Monitor are beneficial particularly for initial small scale projects”
- “Survey, Deploy and Monitor is likely to identify potential issues early on, encourage development in more suitable areas, and away from more sensitive sites”



- Bald, J., Menchaca, I., Bennet, F., Davies, I., Smith, P., O'Hagan, A.M., Culloch, R., Simas, T., Mascarenhas, P. (2015).
- Review of the state of the art and future direction of the Survey, Deploy and Monitor policy. (RiCORE deliverable 3.1)
- Describes the SDM policy and 2 case studies (Hywind Scotland Pilot Park and Meygen Tidal Turbine Array)
- Recommendations include:
 - Extend to post-consent monitoring
 - Update criteria for new technologies (offshore wind)
 - Establish common criteria for environmental sensitivity evaluation
 - Establish common criteria for technology risk evaluation
 - Guidance for pre- and post consent environmental monitoring
 - Introduce the aspect of uncertainty into the assessment
 - Weighting of environmental factors



- Simas, T., and Heinrichs, J. (2015).
- Marine Renewables and environmental risks: Current practices in pre and post consent monitoring (RiCORE Deliverable D4.1/5.1)
- RiCORE Workshop I report
- Key findings:
 - Information requirements for pre & post consent established on case-by-case basis
 - Some MS are more prescriptive
 - Duration of monitoring activities is often main prescriptive requirement
 - Impact quantification is main prescriptive requirement post-consent
 - Consensus that >1 year of pre-consent data is needed (2 years typical)
 - Developers are concerned regarding length and cost of activities
 - Compromise between data utility/significance & data collection/processing costs
 - Focus on collecting data for what is really necessary
 - Methodologies need to be aligned between pre & post consent monitoring



- Simas, T., Heinrichs, J., Bald, J., Menchaca, I., Culloch, R., Bennet, F. (2015)
- Report on the analysis of commonalities and differences in approaches to pre-consent surveys (RiCORE Deliverable 4.2)
- Key findings:
 - Review of spectrum of pre-consent monitoring practices across EU MS for various receptors
 - Most methodologies were found to be generally applicable/transferable to offshore wind (fixed and floating), wave and tidal
 - Some exceptions e.g. site depth for floating wind may influence types of benthos/sediments assessment, acoustic assessment
 - Use of drifting systems recommended in high tidal flow areas to minimise effects of flow noise
 - Some parameters/receptors may not be a concern for some MRE types (e.g. bats for wave/tidal projects, LIDAR wind resource measurement for wave/tidal)



- Culloch, R., Bennet, F., Bald., J., Menchaca, I., Jessopp, M. and Simas, T. (2015)
- Report on potential innovative monitoring approaches, identifying potential reductions in monitoring costs and evaluation of existing long-term datasets (RiCORE Deliverable 4.3)
- Key findings:
 - Review of innovative technologies for various receptors
 - Costs of surveys varied considerably within receptors
 - Survey design requires initial assessment of logistic constraints of a site, and requirements of regulators
 - Review of aspects of survey design including power analysis
 - Key aspects of pre-consent survey design - can the data detect a change in abundance if it occurs – and is the data fit for purpose?



- O'Hagan, A.M., Nixon, C. and Mascarenhas, P. (2015)
- Marine Renewable Energy Licensing and Regulatory Systems (RiCORE Deliverable 2.1)
- RiCORE Workshop 2 report
- Le Lièvre, C., and O'Hagan, A.M. (2015)
- Legal and Institutional Review of National Consenting Processes (RiCORE Deliverable 2.2)
- Key findings:
 - One-stop shop for consents and EIA processes
 - Works well in Scotland
 - Progress in France, Ireland and Portugal towards more integrated consenting systems
 - Parallel consents required in Spain
 - Current consenting legislation is compatible with wave and tidal but implementation and collaboration remain problematic
 - No specific legal barriers identified to implementation of risk-based approaches to consenting



- Completion of final project deliverables
- Final project report
- Delivery of recommendations to EU
 - Brussels June 15th
- Academic outputs/publications





<http://ricore-project.eu/>

Contact:

Dr. Ian Broadbent i.d.broadbent1@rgu.ac.uk
Aberdeen Business School, Robert Gordon University
Twitter: @ricoreproject