



## Welcome

Welcome to our autumn newsletter. We have had a busy and eventful year so far and thought it would be a good idea to focus this edition on bringing you up to date with our recent activities. We have been actively funding various projects in our priority areas and have taken some steps towards addressing some of the sector challenges. The next newsletter is in January and we would welcome any articles, news or comments for it. Please email us at [mrekep@nerc.ac.uk](mailto:mrekep@nerc.ac.uk)

## Priority area projects

### Cumulative Impact Assessment (CIA)

CIA is one of the crucial aspects that is causing uncertainty in the planning process for offshore wind farms and presents a significant challenge in the consenting process. The programme has funded a project that has developed a set of guiding principles for CIA, for offshore wind developments. The aim of the guiding principles is to assist developers in producing meaningful assessments, which provide a balance between practicality and precaution. The guiding principles have delivered best practice recommendations that will set an expectation of standards. If you would like to receive a full version of the guiding principles, containing the rationale and implementation proposals please contact Eleanor Ashton [elht@noc.ac.uk](mailto:elht@noc.ac.uk)

This work will be taken forward with the original stakeholders in Renewable UK and the regulators to expand the 'toolbox' to develop a CIA software tool and to further adapt the guidelines for wave and tidal energy. The guiding principles have already been circulated to all planning officers through the Planning Inspectorate (PINS) – this also helps to ensure that a consistent approach is adopted from within PINS to all applications.

The programme has also funded an internship in partnership with the RSPB. This has developed methods for cumulative impact assessment in relation to marine renewables and seabirds. For more information on this project and the internships we have funded this year please visit our [www.mrekep.net](http://www.mrekep.net)



Elizabeth Marden, RSPB

### Underwater Noise

The joint MREKEP and SOFI workshop has led to the funding of various projects in the area of underwater noise. This includes working closely with the NaREC noise group - field campaigns are currently underway to test a variety of noise and passive acoustic monitoring equipment at the offshore wind demonstration site. For more info on this project please contact Per Berggren at Newcastle University [per.berggren@ncl.ac.uk](mailto:per.berggren@ncl.ac.uk)

The MREKEP has funded a number of internships, with industry partners. One of the internships aims is to develop a monitoring protocol for underwater noise. The protocol will be designed to capture the local environmental characteristics, interpret the impacts of anthropogenic noise, but also take into account the need for a cost effective approach. This internship will provide a case study that can be used to inform policy regarding a cost efficient method to monitor underwater noise. It will potentially forge long term partnerships between academics and industry to work towards more efficient mitigation and impact assessment measures. For more information on our underwater noise internship please visit the website [www.mrekep.net](http://www.mrekep.net)



NERC Autosub

### Cost effective monitoring

The programme funded an internship with the purpose to investigate the potential applications of existing autonomous underwater vehicles / glider technology and to assess the feasibility and needs of integrating these technologies into routine survey operations. The project produced a digital brochure (pdf) of available instruments and their applications with reference to the needs of the offshore renewable energy sector. The outcome of consultations with key industry players, such as Kongsberg, has been documented in a written report addressing any current barriers. The report has also made recommendations as to how a collaborative programme of testing and demonstration might be taken forward to address the problems identified. For access to the brochure and report please visit the programme activities area of our [www.mrekep.net](http://www.mrekep.net)



Image – Dr. Bernie McConnell Sea Mammal Research Unit

## Development of a decision support tool

At a workshop funded jointly by MREKEP / JNCC and CCW the development of a decision tool based on research undertaken by Prof John Harwood and colleagues with NERC funding was discussed. The framework called PCoD (Population Consequences of Disturbance), once fully developed, will enable developers to be confident that the information on marine mammals that they provide in their Environmental Statements and Habitats Regulation Assessments is relevant and appropriate. A PCoD strategy was developed out of the initial MREKEP workshop and subsequent development of the model has resulted in an interim approach, which is due to be available on line in October of this year. For more information on the project please visit [www.mrekep.net](http://www.mrekep.net)

## Fisheries and energy interactions workshop

This workshop brought together key experts in the field of marine renewable energy and fisheries interactions. There was a general consensus on the need for a collaborative effort to overcome the potential difficulties associated with the co-existence of marine industries within limited marine space. There was also an overwhelming sense of genuine desire for the two industries to work together to find solutions. The key conclusions related to :

- (1) Assessing fishing effort displacement** – it was generally agreed that accurate data need to be gathered through appropriate assessment methodologies with guidelines developed / distributed at a national level. Case studies need to be analysed to inform behaviour rules of various gears, vessels, skippers and collaboration and communication between all stakeholders is essential.
- (2) Mitigation** - better communication is needed in consultation and engagement processes and systematic analysis of case studies of marine renewable developments is needed to identify successes and failures of mitigation options.

The report is available on the MREKEP website [www.mrekep.net](http://www.mrekep.net)

## Impact of underwater noise

NERC has recently jointly funded with the TSB, a three year Knowledge Transfer Partnership (KTP) linking HR Wallingford with the University of Exeter. The project will develop the HR Wallingford HAMMER model to incorporate the behavioral response of marine species to anthropogenic noise associated with the construction and operation of marine renewable energy devices. The scheme was funded as a result of an initial collaboration via the MREKEP internship programme. For further information on the partnership please contact the KTP associate, behavioural ecologist, Dr Rick Bruintjes [r.bruintjes@exeter.ac.uk](mailto:r.bruintjes@exeter.ac.uk)



For more information on these projects and many more please visit the programme activities area of our website!



### Events

We will be exhibiting at Renewable UK's annual conference in Birmingham 5<sup>th</sup>, 6<sup>th</sup> and 7<sup>th</sup> November. Please stop by and visit our stand (WT6) to learn more about our activities and discuss areas of potential collaboration.

### Environmental Interactions of Marine Renewable Energy Technologies (EIMR)

A call for abstracts for the above conference has recently been announced. For more details please visit [www.eimr.co.uk](http://www.eimr.co.uk)

