Current state of knowledge of the effects of offshore renewable energy generation devices on marine mammals and research requirements

Marine Mammal Scientific Support Research Programme MMSS/001/11

MR 1 & MR 2 Report

Current state of knowledge of the effects of offshore renewable energy generation devices on marine mammals and research requirements.

Update, September 2014

Executive Summary

This report is designed to provide an update to fulfil requirements MR1 and MR2 within the Marine Mammal Scientific Support Research Programme MMSS/001/11. An initial review of the current state of knowledge on the effects of offshore renewable energy generators on marine mammals was provided to the Scottish Government in August 2013 (http://www.smru.st-and.ac.uk/documents/1321.pdf). This report provides an update to the 2013 report highlighting improvements to the current state of knowledge of effects of offshore renewable energy generators on marine mammals and provides an update on progress on the prioritised list of research gaps presented in the previous report.

A total of 28 specific research gaps were identified in the previous report. Of these, 16 were at that time already under investigation to some extent with either active research projects or planned and funded future projects.

The 12 remaining projects were yet to secure funding. Of these, funding has been secured for two (AVOID and ARRY) and discussions are underway in relation to funding for a further two (TAG and MECH). The remainder remain unfunded.

Largely the research priorities remain similar, but additional priorities that were not highlighted in the original report have been identified here.

In parallel with this study an analysis of research requirements for developing models to identify Population Consequences of Disturbance (PCOD) has been carried out under the ORJIP programme. As part of this work, a number of research priorities have been identified – this has been used to extend the list of research gaps and amend the priorities of specific projects in this update.