



MORAY EAST

OFFSHORE WIND FARM



Moray Offshore Windfarm (East) Limited

Supply Chain Plan

Annex 14 – Fishing Gear Trials



renewables
powered by nature

Fishing Gear Trials

Evidence for SCP main report section 5.2.10 – Impact 2.

The following documents provide evidence for Moray East's development of scallop gear trials.

Sources:

Extract from a report commissioned by MORL (now known as Moray East) from Bangor University, reviewing potential dredge designs and highlighting the economical issue surrounding fisheries and offshore wind development.

Extract of minutes of a workshop between MORL (now known as Moray East), Bangor University and scallop fishery stakeholders to discuss the development of the trials.



PRIFYSGOL
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**Review of king scallop dredge designs and impacts,
legislation and potential conflicts with offshore wind farms**

Report to Moray Offshore Renewables Limited

September 2014

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Executive Summary

Worldwide energy demands are forecasted to increase three-fold by 2050 and with an estimated 40 year supply of gas and oil reserves left, it is becoming increasingly important to develop alternative and renewable energy options. Globally, offshore wind power represents just 2 % of global wind power (the majority supplied by land-based wind farms). However, Europe has 90 % of installed global offshore wind power with >50 % (3650 MW capacity) of this in UK waters (GWEC, 2013). UK energy suppliers are obligated to provide a proportion of their power from renewable sources such as offshore wind or tidal energy; meaning the industry is rapidly expanding. There are over 6,000 active fishing vessels registered in the UK, which has the second largest fleet capacity in Europe (exceeded only by Spain). Total landings from the UK fleet into the UK and abroad were £770 million in 2012 (MMO, 2012). Inevitably, the development of offshore wind farms coincides with fishing grounds and conflicts can arise between the two activities. In order to protect the economic interests of both industries it is essential to ensure that the two activities can co-exist where possible. The safety of fishermen is paramount, as is ensuring the security of energy supplies for future generations.

Wind farms pose logistical and safety challenges to fishermen, while one of the major concerns of wind farm development companies is the risk of underwater cables being snagged by anchors or bottom towed fishing gear such as scallop dredges. Subsequent to consent for the Telford, Stevenson and MacColl offshore wind farms in the outer Moray Firth, Scotland, this report was commissioned by Moray Offshore Renewables Ltd (MORL) to review: documented interactions between scallop dredgers and underwater cables; current dredge designs that could potentially mitigate the risk of cable snagging and provide environmental benefits; and changes required to use an alternative dredge design under UK fisheries legislation. The report also includes in the appendices an experimental design suitable for testing of alternative dredge gear designs, in relation to catch efficiency, fuel efficiency, sediment resuspension and retained bycatch.

Four alternative scallop dredge designs have been developed in the UK recent years and tested to varying degrees. Two of these designs show potential to maintain or improve catches of scallops while reducing impacts on the seabed and associated fauna, by reducing the impact of the steel belly bag. Another design has been proven to achieve good commercial catch rates and reduced damage to organisms through use of individually sprung tines that replace the fixed dredge teeth. No data is available on snagging risk for any of the designs. Empirical trials for all but one of the designs are limited and therefore further trials are necessary prior to evaluation of their commercial viability. A design that reduces the impact of both the tooth bar and the belly bag is likely to demonstrate the greatest environmental benefits, while reducing snag risk would benefit both fishers and wind farm companies. Due to financial limitations, no such design has yet been developed or tested, however investment in this area could result in significant economic and environmental advantages. Gear design alone will not fully mitigate all the conflicts and risks associated with fishing within a wind farm therefore safety guidelines are recommended.

The report is based on a review of existing information and consultation with various stakeholders associated with the UK scallop sector. Gear trials should be conducted with the full support of, and input from, the fishing industry with trials conducted on board commercial scallop vessels. Finally, consideration must be given to the legislative processes that may be required to amend current legislation in each devolved UK administration in order to put an alternative design into use.

Fishing Gear Trials

The rest of the annex is considered 3rd party confidential and therefore not published.
