

Date: 03/04/2024

To: John Fayne, Maritime Area Regulatory Authority

From: Francis O'Beirn, Marine Institute

Re: Request for Observations: LIC23-001 North Irish Sea Array Windfarm Ltd, Site Investigation off the Coast of Counties Dublin, Meath and Louth

North Irish Sea Array Windfarm Ltd are seeking a Maritime Usage Licence for a period of up to 7 years to conduct site investigation activities for the proposed North Irish Sea Array (NISA) wind farm to be located approximately 12km off the coast of counties Dublin, Meath and Louth. The objective of the NISA site investigations is to determine the environmental conditions, seafloor and subsurface geological characteristics within the Licence Area. The overall area which is the subject of this application is approximately 125km².

In addition to the application form and maps a number of other supporting documents were submitted by the applicant, including:

- Supporting Information for Screening for Appropriate Assessment (SISAA) Report,
- Natura Impact Statement Report, dated
- Risk Assessment for Annex IV Species Report,
- Assessment of Impact of Maritime Usage (AIMU) Report,

The overall aim of the site investigations is to collect the necessary data and information required to inform the engineering and detailed design of the cable route and proposed windfarm areas as well as identifying the wider ecological characteristics of the proposed licenced area. It is noted the installation of a windfarm and associated infrastructure in the area in the future would be the subject of a separate application process and is not the subject of this current application.

A number of geophysical methodologies are proposed, including following acoustic-based techniques:

- Single beam Echosounder for detailed bathymetric mapping
- Multibeam Echosounder (MBES) system for detailed bathymetric mapping;
- Side Scan Sonar for detailed seabed morphology and seafloor mapping;
- Magnetometer for detecting geomorphological anomalies and ferrous obstructions;
- Sub-bottom Profiling (SBP), both single and multi-sourcings, to identify and characterise the layers of sediment/rock underneath the seafloor along the cable route corridor;
- Ultra-high-resolution multi-channel seismic (UHRS) to identify and characterise the layers of sediment/rock underneath the seafloor within the windfarm site.
- Intertidal geophysical surveys including seismic, electrical resistivity and electromagnetic methods. Up to 10 static acoustic monitoring devices (SAM)

In addition, a number of geotechnical and ecological surveys are also proposed comprising, among others, the following methodologies:

- Metocean Survey:
 - Floating LiDAR
 - Acoustic Doppler Current Profiler (ADCP)
 - Wave Buoy
- Boreholes:
 - Rotary drilling
 - Cone Penetration Tests (CPT)

- Vibrocoring/Gravity Coring
- Intertidal trial pits
- Passive Acoustic Monitoring of Cetaceans (CPODs)
- Water Quality Sondes
- Benthic and intertidal video, grabs and cores
- Fish and shellfish GPS Tracking
- Archaeological survey
- Water Quality monitoring

The proposed site investigation methods are relatively standard and have been used in similar investigations in Irish waters and internationally. It is noted that there are no bird monitoring or investigations proposed for the area in question. Is this an oversight or do the applicants consider there are sufficient data to inform this subject area during EIA?

There are no licenced aquaculture sites within the proposed site investigation area. The closest licenced aquaculture site to the maritime area is in Carlingford Lough and is approx. 31km from the proposed activities. On this basis, impacts on aquaculture are not considered likely.

The proposed site investigation areas does overlap with two Classified Bivalve Mollusc Production Areas (Skerries and Gormanstown) and the Balbriggan/Skerries Shellfish Waters Directive Area - <https://dafm-maps.marine.ie/aquaculture-viewer/>. All areas are designated for the fishing/production of razor clams. Assuming all safety measures are fully implemented and risk mitigated (e.g., risk of oil spill is considered negligible), it is unlikely the proposed activities will have any impact on the current status of these protected areas.

There is other commercial fishing activity within the proposed site investigation area in the maritime area and therefore, some interaction with fishing activity may occur.

We draw MARA's attention to fishery risk assessments relating to Natura Qualifying interests that have been carried out nationally and more specifically, on the east coasts. These reports can be found at the following link and give an indication of likely fisheries activities occurring in the area in question.

<http://www.fishingnet.ie/sea-fisheriesinnaturaareas/concludedassessments/>

The NIS submitted identifies a number of risks to conservation features (e.g., marine mammals) likely to result from the proposed activity. As mitigation, a number of actions are suggested that should reduce the risk. Foremost among these is the use of marine mammal observers (MMO) during operations including a 'soft start' protocol. The MI is satisfied that such measures will mitigate any risk to marine mammals during the site investigations.

Furthermore, in light of the intensive nature of the methodologies proposed, the MI believe it would be important that MARA consider the cumulative effects of these activities in light of the location and timing of similar activities along the East Coast (and other locations further afield) and consider the likely longer term effects on marine mammals, birds and other biota, if any, and how these effects might be measured?

On a broader note, the MI advises MARA that similar data gathering surveys be carried out in a co-ordinated fashion in order to avoid redundancy of effort and minimise disturbance while also broadening spatial and temporal extent of the baseline of information on habitats and species, in particular. In addition, having these baseline data will facilitate future assessment of impacts of developments beyond the footprint of the licence/lease area. The extension of ecological surveying (e.g. fisheries, CPOD and bird surveying?) beyond the footprint of the maritime usage licence application area might also be considered?