

Shipping and Navigation Surveys

Introduction

As part of the Environmental Impact Assessment (EIA), a Navigational Risk Assessment (NRA) will be completed to assess and mitigate the potential effects from the construction, operation and decommissioning of the Moor Vannin Offshore Wind Farm. This NRA is undertaken using 12 months of data on vessel traffic movements and supported by winter and summer surveys completed at the site to validate the accuracy of the longer-term data.

Timeline

Two surveys were undertaken on behalf of Moor Vannin in August 2023 and January 2024 to provide information on vessel routing around the proposed Offshore Array area plus a 10 nautical mile (18.5km) buffer. The surveys were completed in summer and winter to capture the difference in area usage or vessel routing resulting from different times of year.

Methodology

This survey was undertaken on both occasions by a vessel going to, and remaining at, the site for the two-week survey period. The aim of the surveys was to identify and validate the routing of vessels and the level of vessel activity within a 10 nautical mile (nm) buffer around the Offshore Array. This was achieved by recording, in real time, the positions of vessels within range of the detection equipment, including an Automatic Identification System (AIS) receiver and an Automatic Radio Detection and Ranging (Radar) Plotting Aid (ARPA). All vessels over a certain size require AIS to be fitted and so were automatically picked up by the receiver aboard the survey vessel. Any smaller vessels without AIS were detectable by the ARPA. In addition to this AIS and ARPA information, the data was supplemented by the observation of vessels within visual range to obtain information on type and size where the information was not available via AIS.

Findings

The results from the two surveys demonstrate the different uses of the Offshore Array area at different points through the year and can be used to better understand the annual data that is available for the site. Below are two figures that show the split between different vessels using the site in summer and winter.

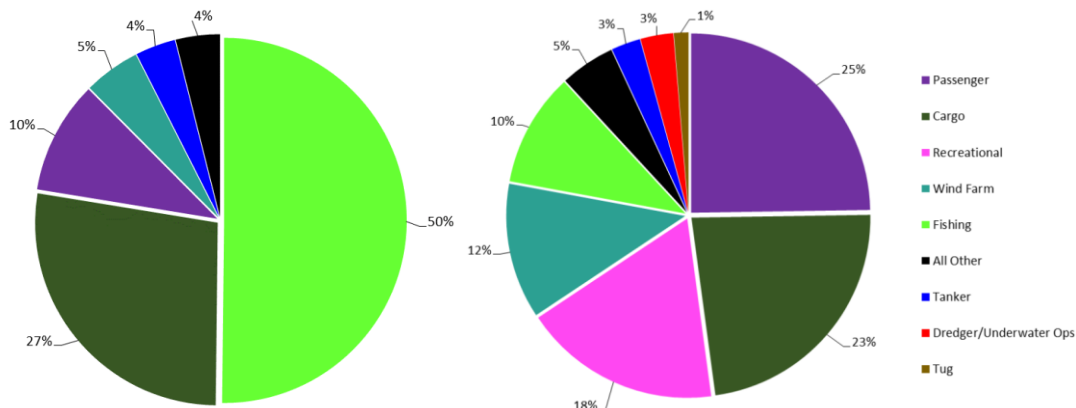


Figure 1: Vessel type distribution Winter 2023 (left) and Summer 2024 (right)

Additionally, the data shows where vessels currently route through and are close to the Offshore Array area. Below is the map of vessel routing from Summer 2023.

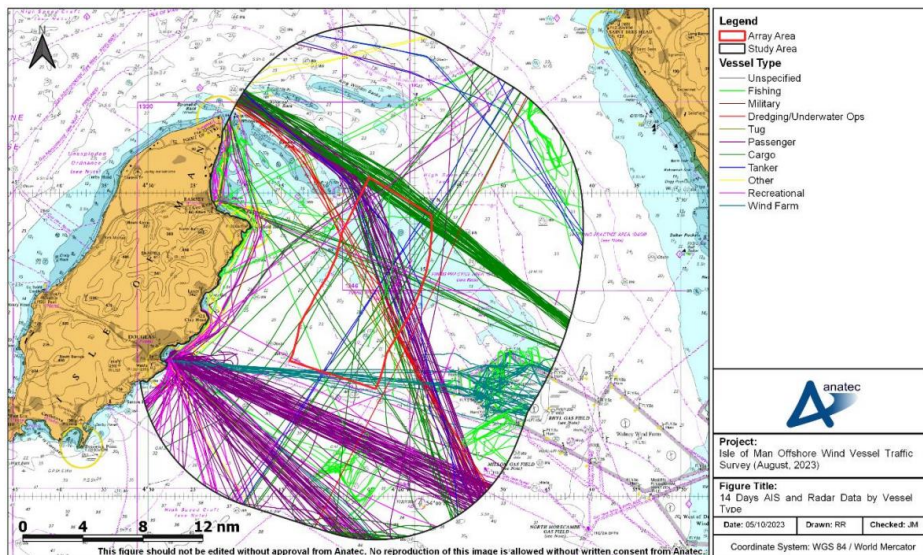


Figure 2: Vessel Traffic Routing by type Summer 2023

Next Steps

Based on the results from these surveys and the longer-term data for the area, Moor Vannin have identified those marine users and route operators that stand to be impacted by the Proposed Development. This information is being / will be used for the following next steps:

- For further engagement with the Steam Packet ferry company regarding potential cumulative impacts to their route into Douglas through the Lifeline Services Technical Advisory Group.
- To inform further engagement for project alone and cumulative impact assessments with other passenger and cargo route operators through the Lifeline Services Technical Advisory Group.
- Refinement of the Offshore Wind Farm design.
- To inform the NRA conclusions and to inform planning of appropriate mitigation of impacts to ensure navigational safety in the area.