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## Morlais Project

# Navigation and Shipping Responses

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Making Sense of the Marine Environment™



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## Introduction

This document provides the Applicant's responses to Natural Resources Wales (NRW) comments regarding ES Chapter 15 Shipping and Navigation and associated figures and appendices. An overview of ongoing consultation with stakeholders is also provided, along with relevant clarifications.

## Response to NRW comments

***Suggest a meeting with TH to discuss options and suitable access route and location for the support vessel.***

Consultation with TH is ongoing.

***The suggested additional risk mitigation measures that restrict navigation through the MDZ and exclusion of fishing within the MDZ, as we believe this project to be similar to other offshore renewable energy installations and therefore marine vessels should be able to navigate freely within the "red line boundary". Moreover, it is unclear which suggested additional mitigation measures will be taken forward by the applicant.***

This project is not like other offshore renewable energy installations, mainly due to its size, the number of devices in the area and the associated complexities of the arrays. It is also acknowledged that this is a novel project, with spacing between devices that is much smaller than the spacing between wind turbines.

The project is not looking to exclude navigation from the area, but rather, following discussions with the MCA and TH, it is likely that the area will need to be marked as an Area to be Avoided on navigational charts, but within which the right of navigation will remain. It is anticipated that navigation through the site will still be possible between groups of devices, to a certain extent, dependent on the final layout of the devices. However, there will be safety zones around devices, as with other offshore renewable energy installations, that should be avoided and so navigation will be restricted.

As detailed in the ES there is very little fishing activity in the MDZ with local fishing in the area restricted to static gear. The phased approach will also mean that restrictions on fishing will be phased.

A full list of proposed Additional Mitigation Measures is provided below.

***As we do not know where, when and how the MDZ will be developed, the NRA has significant limitations and therefore we would like it secured within the Order that a separate NRA must be produced by the developer of each site within the MDZ. This will ensure cumulative developments within the MDZ are accurately considered.***

As stated in the ES, separate NRAs will be undertaken for the initial deployments of new devices.

***The safety of navigation issue is imperative and conditions 20 & 21 in the draft order may require some re-drafting, as we would like to see matters such as layout design(s), aids to navigation requirements and promulgation of marine information more adequately secured. We will provide***

***more substantive comments and propose wording regarding the draft order in due course but attach a list of our standard conditions for renewable energy projects for your information.***

The Applicant has been in discussion with TH regarding layout design(s), aids to navigation requirements and promulgation of marine information and will provide a Statement of Common Ground in due course.

***Consideration and clarification is required on the potential for embedded mitigation measures. Currently, it is not possible to assess which safety measures will be applied. Furthermore, as Trinity House note, greater clarity is required to understand which additional mitigation measures will be taken forward.***

Details of embedded mitigation measures and additional mitigation measures proposed for the project are provided in Annex 1.

## Consultation

The following table provides an overview of meetings undertaken with shipping and navigation consultees. Consultation remains ongoing.

Navigation Stakeholder	Meeting date	Comments
MCA	4 <sup>th</sup> February	Action Plan Agreed
TH	4 <sup>th</sup> February	Action plan agreed
Canoe Wales and the Snowdonia Canoe Club	10 <sup>th</sup> February	Actions agreed and ongoing
TH Operations	w/c 23 <sup>rd</sup> March	Postponed – to be rescheduled
RYA	24 <sup>th</sup> March	Postponed – to be rescheduled
Chamber of Shipping and Ferry Companies	Date to be confirmed	

## Clarifications

### Traffic Survey Data

The NRA is compliant with MCA requirements as specified within MGN 543. The requirement for a traffic survey of minimum 28 days duration is set out within Annex 1:

‘An up to date, traffic survey of the area concerned should be undertaken within 12 months prior to submission of the Environmental Statement. This should include all the vessel types found in the area and total at least 28 days duration but also take account of seasonal variations in traffic patterns and fishing operations.....Note: AIS data alone will not constitute an appropriate survey.’

Specific data sources are not stipulated within the MGN. The combination of AIS and RADAR survey data to prevent the omission of non-AIS carrying vessels, as utilised within the NRA, adheres to the specified requirement.

The western offshore route between South Stack and NW Bardsey Sound was identified and assessed within the NRA. Recreational stakeholders reported in consultation that ‘Tracks transiting SW / NE through site are from Bardsey Island and Cork. Usage of this route is limited in comparison to the inshore route.’

NRA assessed the impact to recreational vessels across the entirety of the MDZ. Owing to the propensity of the vessels within the lower density western route to be larger AIS carrying craft, often with more experienced crews, mitigation measures were aimed primarily towards the eastern inshore route where the following risk factors exist: narrowing of the route as a result of the

presence of the MDZ creating 'pinch-points' and increasing the proximity of the coastline, utilisation by smaller non-AIS carrying vessels potentially with more inexperienced crew, increased vessel density as a result of the inability of vessels to access the western route due to the presence of the MDZ.

An MGN 542 Checklist was supplied with the NRA as part of the application.

#### Vessel displacement

The effect of vessel displacement and the subsequent increase vessel density was considered within the NRA. 'Risk scores of small vessels (<3m draught) were driven by the restriction of sea room as a result of the narrowing of the inshore passage and an increase of vessels utilising the inshore passage in order to navigate around the site'.

The implications of closing the inshore route were discussed widely during the course of the NRA and it was deemed unacceptable for the reasons stated and given the propensity for smaller non-AIS carrying recreational vessels, potentially with more inexperienced crew, to utilise this route. The impact to the inshore route was reported by local stakeholders and the MCA to be among the greatest of concerns. Mitigation was, therefore, provided aimed at ensuring continued access to the inshore route.

'The primary concern is the restriction of the inshore passage which is essential to recreational vessels' – (Local recreational stakeholder NRA consultation).'

At this stage there is no proposal to revisit the NRA but Morlais have committed to undertake additional work looking at interactive boundary assessments. Preliminary results from these indicate that 90% of vessel traffic is now either outside the eastern boundary of the site or within the area that has been designated for devices with UKC of great than 8m (See below). Our intention is not to close off the eastern inshore route or to displace recreational craft from using the inshore route.

#### Revised site layout

The revised site layout developed following additional consultation with sea users and the preliminary interactive boundary assessments now provides an extension to the zone of 8m UKC devices to give more sea room to recreational users and we would seek to consult further to determine whether this addresses some of the concerns raised by stakeholders.

Should the developer ever take a decision in the future that it would like to deploy surface emergent devices in the northern area of the MDZ, at the absolute minimum, this would require a further device specific NRA to assess risk and would have the benefit of experience from previous phases of development on the project.

#### Canoeist and Kayakers

The impacts on recreational craft including kayaks and canoes were assessed in the ES. A meeting was also held with Canoe Wales and the Snowdonia Canoe Club on the 10<sup>th</sup> February to discuss the project and any concerns in further detail. Key points from that meeting are listed below. Note that effects on tourism and recreation are now considered in document MOR/BAU/DOC/0001.

1. **Socio-economic impacts** on their businesses via reduced access to areas used by guides/visiting kayakers. Socio-economic impacts have been further considered in the Supplementary Tourism and Recreation Assessment (document no. MOR/BAU/DOC/0001) and Supplementary Socio-economics Assessment (document no. MOR/BAU/DOC/0002).

2. **Reduced amenity/recreation value** to themselves and other users due to loss of access/sea areas due to presence of devices/cables etc. Socio-economic impacts have been further considered in the Supplementary Tourism and Recreation Assessment (document no. MOR/BAU/DOC/0001) and Supplementary Socio-economics Assessment (document no. MOR/BAU/DOC/0002).
3. **Changes in hydrodynamic regime = reduction in amenity value.** Changes to the hydrodynamic regime have been further considered in Document MOR/HRW/DOC/0001.
4. **Safety issues from interactions of kayakers with project infrastructure** – the NRA is being reviewed with reference to this specific point and supplementary information regarding this point will be provided in due course.
5. **500 metre safety zones closing off the inshore route** – the ES advised that for the operation and maintenance (including repowering) phase there will be a need to restrict navigation, anchoring and fishing activity within the MDZ and the export cable corridors. This will be achieved by excluding any navigation within an “operational safety zone” of **up to 500m** of any offshore works. We can confirm that there is no intention that by imposing an operational safety zone that this would close off the inshore route. Safety zones will be determined based on risk assessments for the required works and will be minimised to ensure as little disruption as possible to navigation along the inshore route whilst also ensuring the safety of all navigators and offshore works.

## Annex 1

### Proposed Embedded Mitigation Measures

- Compliance with applicable guidance and regulations (including COLREGs and SOLAS);
- Ensuring devices marked as per International Association of Lighthouse Authorities (IALA) Guidance and Aids to Navigation and in accordance with Trinity House;
- Promulgation of information to local stakeholders via Notice to Mariners and other appropriate Maritime Safety Information dissemination methods;
- Selection of appropriate construction/decommissioning and maintenance vessels;
- Global Positioning System off station alarm / Supervisory Control and Data Acquisition (SCADA) monitoring system;
- Incidents and near misses are reported and investigated by developer and operators;
- Surveyed and charted as required by United Kingdom Hydrographic Office;
- Formulation and implementation of an Emergency Response Co-operation Plan (ERCoP);
- Passage plans for construction/decommissioning and maintenance craft;
- Consideration of weather and sea state during construction/decommissioning planning;
- Enhanced cable protection where burial is not possible and for those locations where a potential risk is identified.

### Proposed Additional Mitigation Measures

- Continuous Monitoring by Marine Co-ordination Centre;
- Restrict Navigation through the MDZ;
- Only deploy devices that provide at least 20 m UKC as shown within **Figure 4-1 (Volume II)**;

- Redesign the Northern Boundary (by the deployment of devices with at least 20m UKC as detailed above);
- Use of guard vessel(s) where appropriate during construction (and repowering), maintenance and decommissioning phases. Provision of a guard vessel for the operational phase will be kept under consideration and will be based on the outputs of the device-specific NRA's expected to be required to be undertaken as part of any eventual ML condition.
- Implementation of Safety Zones;
- Temporary navigation aids as required by Trinity House;
- Undertake device specific NRA's prior to deployments, i.e. once exact locations and scale/type of device deployment is known;
- Provisions made for continued use of ferry poor weather routing or alternative routes to be established;
- Exclusion of fishing within the MDZ; (to mitigate risk to safety, it is proposed that fishing activity will be gradually excluded from the Morlais site in areas where TECs and related infrastructure are deployed. As the deployment will be phased over a number of years, this will leave parts of the site open to fishing up to the point where full 240 MW deployment is achieved. Upon full deployment, it is proposed that all commercial fishing activity will be excluded)
- Only deploy devices that allow at least 8 m UKC along eastern boundary;
- Ensure appropriate alignment and spacing of devices;
- Ensure regular programme of device condition surveys; and
- Establish no anchoring areas.