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## Morlais Project

# Document MOR-RHDHV-DOC-0158: Statement of Common Ground – NRW – Marine and Terrestrial Ornithology

Applicant: Menter Môn Morlais Limited

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Document MOR-RHDHV-DOC-0158: Statement of Common Ground – NRW  
– Ornithology

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<b>Revision History</b>			
<b>Date</b>	<b>Rev.</b>	<b>Summary of Changes</b>	<b>Issue Purpose</b>
17/05/19	D0.1	First draft for review by Menter Môn	For comment
28/05/19	D0.2	Draft for approval by Natural Resources Wales	For comment
22/07/19	D1.0	Second draft for review by Menter Môn	For comment
30/07/19	D1.1	Second draft for approval by Menter Môn	For approval
07/07/20	D2.1	Post submission draft for review by Menter Môn	For comment
29/07/20	D2.2	Post submission draft for comment by NRW	For comment
16/11/20	D2.3	Post submission draft for approval by NRW	For approval
27/11/20	F1.0	Final for approval by NRW	For approval
01/12/20	F1.1	Final for submission	Final

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## **1. INTRODUCTION**

### **1.1. THE PROJECT**

1. The Project is being developed by Menter Môn, the applicant, a not for profit social enterprise company. If consented, the Project will have a generating capacity of up to 240 MW of tidal energy.
2. The Project is located within one of several marine energy demonstration zones located around the United Kingdom (UK) coast, which have been leased out by The Crown Estate to enable the siting of such developments on the seabed. The Project is located within the West Anglesey Demonstration Zone (WADZ), a zone primarily selected for its tidal resource. Menter Môn has been appointed as the manager of the WADZ by The Crown Estate. In this document and the Morlais Application, the WADZ is referred to as the Morlais Demonstration Zone (MDZ).
3. The development of the Project will provide a consented tidal technology demonstration zone, specifically designed for the installation and commercial demonstration of multiple arrays of tidal energy devices. The Project will include permanent communal infrastructure for tidal technology developers which provides a shared route to a local grid connection via nine export cable tails, an onshore landfall substation, and an onshore electrical cable route to a grid connection via a grid connection substation.
4. The Project would be authorised via the following principal consents:
  - A Transport and Works Act Order under the Transport and Works Act 1992; and
  - A Marine Licence under the Marine and Coastal Access Act 2009 (MCAA).

### **1.2. THE DEVELOPER**

5. Development of the MDZ is being led by Menter Môn who have been allocated funding from European Union (EU) Structural Funds prioritised for marine energy in Wales. Menter Môn is a not for profit, third sector social enterprise, delivering socioeconomic development projects across North Wales. Menter Môn's motivation for the Project is to position itself as a community organisation at the centre of renewable innovation, and to establish Anglesey as a marine energy hub, thereby securing maximum added value for the local economy and community.

### **1.3. PURPOSE OF THIS DOCUMENT**

6. Menter Môn is applying a technical working group (TWG) approach to management of key environmental issues for the Morlais Project (hereafter referred to as 'the Project') and associated Transport and Works Act Order (TWAo) application. A small number of TWGs have been established to enable technical discussions with experts from relevant stakeholders and these have informed the development of this Statement of Common Ground (SoCG). This Statement of Common Ground (SoCG) is a 'live' document that has been prepared by Royal HaskoningDHV on behalf of Menter Môn to record the outcomes of technical discussions with Natural Resources Wales (NRW) regarding marine and terrestrial ornithology. It has been prepared in accordance with guidance published by the Planning Inspectorate and available from the Assembly Government's website (Welsh Government, 2019).

7. Paragraph 1 of the Guidance states that SoCG: “are joint statements made by the appellant/applicant and other parties such as the local planning/relevant authority. The aim of the document is to agree factual information and to provide a commonly understood basis for the appellant/applicant; the local planning / relevant authority and/or other parties”. The SOCG also serves to highlight matters not agreed in order to inform the examination/inquiry process.
8. Menter Môn is submitting SoCG on key technical issues, including ornithology, marine mammals, seascape and landscape visual impact assessment (SLVIA) and shipping. Although there is no statutory requirement, SoCG are useful tools and their submission is encouraged where a SoCG contributes to an improvement in the quality of the evidence and a reduction in the quantity of material which needs to be considered (Welsh Government, 2019).
9. The aim of this SoCG is to provide a clear position of the state and extent of matters relating to the Project which are agreed and not agreed between Menter Môn and NRW at the time of writing. The SoCG will continue to evolve during the post-application period.
10. The contents of this document, including NRW’s views are based on pre- consent discussions/submissions of further environmental information as part of the application process, and therefore NRW’s views and position are subject to change (at least on some aspects).
11. The first draft of the SoCG for ornithology was provided to NRW by Menter Môn on 28<sup>th</sup> May 2019 for review and comment.
12. The document has been updated as a result of ongoing discussions between Menter Môn and NRW . Updates are recorded in the “Revision History” table provided on the front page of this document. This draft was provided to NRW in November 2020 for approval.
13. Once finalised, the SoCG will be submitted to the Planning Inspectorate as part of the Inquiry process under the Transport and Works Act 1992.
14. This document should be read in conjunction with the relevant technical chapters in the ES; **Chapter 11, Marine Ornithology (Volume I** of the ES) for information on seabirds and **Chapter 19, Onshore Ecology (Volume I** of the ES) for terrestrial ornithology. In addition, the following further information has been submitted during the post submission stage:
  - Marine Ornithology Collision Risk Modelling (CRM) (document reference MMC317 MOR/RHDHV/DOC/0115, submitted 27<sup>th</sup> March 2020, and updated on the 22<sup>nd</sup> October 2020);
  - Onshore Ornithology Response to Comments on Chough (document reference MMC319 MOR/RHDHV/DOC/0120, dated 5<sup>th</sup> May 2020);
  - Response to RSPB comments (document reference MMC153 MOR/RHDHV/DOC/0126, submitted 22<sup>nd</sup> May 2020); and
  - Response to NRW comments in relation to chough (document reference MMC152 MOR/RHDHV/DOC/0120, submitted 22<sup>nd</sup> May 2020)
  - Tagging of guillemots and razorbills (document reference: MMC191 MOR/RHDHV/DOC/0150 submitted 18th September 2020)

- Ornithology Revised CRM Signposting Document (document reference: MMC360 MOR-RHDHV-DOC-0153, submitted 22<sup>nd</sup> October 2020)
- Morlais\_Environmental Statement (ES) Chapter 11 Marine Ornithology version F4 (document MMC362 MOR-RHDHV-DOC-0016, submitted 22<sup>nd</sup> October 2020)
- Morlais\_ES\_Appendix 11.3\_ Encounter Rate Modelling, Collision Risk Modelling and Population Viability Analysis Technical Report, version F4 (document reference MMC363 MOR-RHDHV-DOC-0019, submitted 22<sup>nd</sup> October 2020)
- Outline Environmental Mitigation and Monitoring Plan (document reference MOR/RHDHV/DOC/0072 (04), submitted 18<sup>th</sup> November 2020)

## **2. PROJECT DESCRIPTION**

### **2.1. OVERVIEW**

16. The Project will provide the supporting electrical infrastructure to connect tidal energy converters (TECs) within the MDZ and export the electricity generated to grid. The Project aims to secure a broad consent envelope, which will encompass a range of tidal device types and technologies with the potential to be installed and operated as part of the Project. The final details of all equipment to be installed, including tidal devices, will be confirmed following consent.
17. The Project comprises two development areas, as follows:
  - Offshore Development Area: including all intertidal and offshore areas where offshore infrastructure may be placed and encompassing the MDZ (covering an area of 35 km<sup>2</sup>), and the export cable corridor (covering an area of 4.75 km<sup>2</sup>).
  - Onshore Development Area: including all intertidal and onshore areas where infrastructure may be placed (covering an area of 1 km<sup>2</sup>).
18. As a pre-consented and grid connected commercial demonstration zone, a number of different tidal devices and array configurations may be deployed at the Project over its 37-year lifetime. Tidal devices would be deployed in multiple arrays within the MDZ, to a maximum installed capacity of 240 MW.
19. The key components of the offshore works associated with the Project include:
  - Tidal Devices, TECs and inter-array cables within the MDZ;
  - Up to nine export cable tails (shared with onshore components);
  - Navigation and environmental monitoring equipment;
  - Mooring and foundation structures; and
  - Offshore electrical infrastructure, including submerged, floating or surface emergent hubs.
20. The key components of the onshore works associated with the Project include:
  - Cable landfall works, including;
    - Up to nine Horizontal Directional Drilling (HDD) ducts or trenched equivalents,
    - Up to nine transition pits or bays, and
    - Up to nine export cable tails (shared with offshore components).
  - A landfall substation at Ty-Mawr (hereafter referred to as Landfall Substation);
  - A switchgear building at Parc Cybi (hereafter referred to as Switchgear Building);
  - A grid connection substation at the existing Orthios Eco-Park to the east of Holyhead (the site of the former Anglesey Aluminium works) (hereafter referred to as Grid Connection Substation); and,
  - Onshore cable route between Landfall Substation, Switchgear Building and Grid Connection Substation).

#### 2.1.1.1. Phasing

21. An adaptive management approach is being adopted at Morlais, whereby a first phase of device will be deployed and monitored prior to deployment of further devices. The scale of the first phase is constrained and defined as having a predicted impact of less than 0.7 Bottlenose dolphin collision per year. The number of devices and MW that this corresponds to is subject to review post consent depending on the device type being deployed and its associated collision risk. This will be managed through an Environmental Mitigation and Monitoring Plan (EMMP) which will be a condition of the Marine Licence, in accordance with the outline EMMP (document reference, MOR/RHDHV/DOC/0072 (latest version submitted 18th November 2020). The position of Menter Môn and NRW regarding mitigation and monitoring is discussed in Section 3.



### 3. RECORD OF CONSULTATION

22. The preparation of this SoCG has been informed by a programme of discussions between Menter Môn and NRW . The relevant meetings are summarised in **Table 3-1** and the outline of topics covered relevant to SoCG discussions for marine ornithology and terrestrial ornithology are shown in Table 3-2 and Table 3-3, respectively..

**Table 3-1 Ornithology Technical Meeting Details**

<b>Meeting / Date / Attendees</b>	<b>Agenda</b>	<b>Documents sent to NRW prior to meeting</b>
TWG First Meeting 13/12/18	<p>Assessment Approach</p> <ul style="list-style-type: none"> <li>Project background (recap)</li> <li>Review of project design envelope</li> <li>Species, conservation sites and populations to be included</li> <li>Appropriate spatial scale for assessment</li> <li>Review species parameters and vulnerability by species/group: <ul style="list-style-type: none"> <li>Above water</li> <li>Submerged</li> <li>Foraging distances</li> </ul> </li> <li>Approach to Collision Risk Modelling (CRM)/ Encounter Rate Modelling (ERM) <ul style="list-style-type: none"> <li>Appropriate avoidance rates</li> </ul> </li> <li>Potential Biological Removal (PBR)</li> <li>Approach to assessment / potential impacts</li> <li>Cumulative assessment</li> </ul>	<p>Technical note detailing current plan for assessment of impacts upon seabirds.</p> <p>PowerPoint outlining main areas proposed for discussion.</p>
TWG Second Meeting 19/02/19	<p>Assessment Parameters</p> <ul style="list-style-type: none"> <li>Overview of CRM and ERM: <ul style="list-style-type: none"> <li>Methods, limitations, interpretation, role in Environmental Impact Assessment (EIA)</li> </ul> </li> <li>Device parameters and overview of modelling scenarios</li> <li>Bird input parameters (densities and diving behaviour) and sources of information</li> <li>Avoidance rates</li> <li>Presentation and review of preliminary results</li> <li>Plans for future work</li> <li>Obtaining feedback on work already undertaken and planned</li> </ul>	<p>PowerPoint presentation outlining the key works undertaken since the previous meeting and points for discussion at second meeting.</p>
TWG Third Meeting 03/05/19	<ul style="list-style-type: none"> <li>Outstanding points and queries raised in first and second TWG meetings</li> <li>Progress update on Marine Ornithology EIA, including ERM/CRM and Population Viability Analysis (PVA) for Holy Island Coast Site of Special Scientific Interest (SSSI)</li> <li>Progress update on Marine Ornithology Habitats Regulations Assessment (HRA)</li> <li>Progress update on Terrestrial Ornithology EIA - chough</li> </ul>	<p>PowerPoint presentation outlining the key works undertaken since the previous meeting and findings of assessment works undertaken.</p>
First Post Submission Meeting 29/11/19	<ul style="list-style-type: none"> <li>Technical discussions focused on RSPB's concerns around ERM/CRM, and PVA. As an action, additional work on</li> </ul>	

Meeting / Date / Attendees	Agenda	Documents sent to NRW prior to meeting
	<p>modelling impacts for a 17MW deployment were undertaken, as well as investigating PVA for Manx shearwater.</p> <ul style="list-style-type: none"> <li>Discussions on EMMP and requirements for further detail also included.</li> </ul>	
<p>Terrestrial Ecology Assessment Meeting 13/12/19</p>	<ul style="list-style-type: none"> <li>questions on the chough assessment in relation to functional linkage, separating foraging transect data into breeding and winter and ranking fields by chough use to provide further background information on chough mitigation</li> </ul>	



### 3.1. STATEMENT OF COMMON GROUND – MARINE ORNITHOLOGY

**Table 3-2 Statement of Common Ground – Marine Ornithology**

Issue	Date	Menter Môn position	NRW position	Status	Actions (if required)
<b>Marine ornithology: Environmental Impact Assessment (EIA) – Baseline Environment</b>					
1. Species to be considered in the baseline environment	13/12/18	<p>The proposed bird species to be included in the assessment (i.e. EIA, HRA or both) are:</p> <ul style="list-style-type: none"> <li>▪ Terns: Arctic tern, common tern, Sandwich tern, roseate tern</li> <li>▪ Gulls: black-headed gull, common gull, great black-backed gull, herring gull, kittiwake, lesser black-backed gull</li> <li>▪ Auks: guillemot, puffin, razorbill</li> <li>▪ Tubenoses: fulmar, Manx shearwater</li> <li>▪ Seaducks: common scoter</li> <li>▪ Divers: red-throated diver</li> <li>▪ Gannets: gannet</li> <li>▪ Cormorants and shags: shag</li> </ul>	NRW agreed in principle with the list of species to be included in the assessment.	See below	N/A – Full details will be present in the assessment submitted in September 2019. (Complete)
	07/07/20	The species included in the ES are agreed	Agreed	Agreed	N/A
2. Data sources	13/12/18	<p>Site specific survey data – November 2016 to October 2018</p> <p>Various data sources used to refine species list include (but are not limited to) the following;</p> <ul style="list-style-type: none"> <li>▪ Furness R.W., Wade H.M., Robbins A.M.C. and Marsden E.A. (2012) Assessing the sensitivity of seabird populations to adverse effects from tidal stream turbines and wave energy devices ICES Journal of Marine Science (2012), 69(8), 1466–1479.</li> <li>▪ JNCC (2018) Seabird Monitoring Programme Online Database [online: <a href="http://jncc.defra.gov.uk/smp/sitesBrowser.aspx?siteID=84733">http://jncc.defra.gov.uk/smp/sitesBrowser.aspx?siteID=84733</a>].</li> </ul>	<p>NRW agrees in principle. However, has not yet seen the full set of papers and references and how they have been used.</p> <p>The list of data sources is accepted. However, NRW advise that Menter Môn could also use Wildfowl and Wetlands Trust (WWT) and European Seabirds at Sea (ESAS) combined data set, Future of the Atlantic Marine Environment (FAME), Biologically Defined</p>	See below	Full details will be present in the assessment submitted in September 2019. (Complete)



Issue	Date	Menter Môn position	NRW position	Status	Actions (if required)
		<ul style="list-style-type: none"> <li>NRW (2015) Proposal to extend and reclassify Ynys Feurig, Cemlyn Bay and The Skerries Special Protection Area and rename it as Anglesey Terns Special Protection Area. Advice to the Welsh Government June 2015.</li> <li>Thaxter C.B., Lascelles B., Sugar K., Cook A.S.C.P., Roos S., Bolton M., Langston R.H.W. and Burton N.H.K. (2012) Seabird foraging ranges as a preliminary tool for identifying candidate Marine Protected Areas. Biological Conservation 156 (2012) 53–61.</li> <li>Oppel S., Bolton M., Carneiro A.P.B., Dias M.P. et al. (2018) Spatial scales of marine conservation management for breeding seabirds. Marine Policy 98 (2018) 37–46.</li> <li>RSPB (2018) Combining habitat modelling and hotspot analysis to reveal the location of high density seabird areas across the UK: Technical Report. RSPB Research Report 63, September 2018.</li> <li>All relevant Countryside Council for Wales (CCW)/NRW Marine Monitoring reports.</li> <li>Minesto Deep Green Holyhead Deep Project Environmental Statement.</li> <li>Minesto Deep Green Holyhead Deep Project Offshore Habitats Regulations Assessment Report.</li> <li>Horizon Wylfa Newydd Power Station baseline information, Environmental Statement and information for Habitats Regulations Assessment.</li> </ul>	<p>Minimum Population Scales (BDMPS) and papers such as Frederiksen (2012) for kittiwake. NRW advises that other papers and data sources are available that show the movement of birds from sites, e.g. Manx shearwaters, gannets. Also there is useful information about tidal turbines and birds in Alex Robbins' PhD.</p> <p>Data should also include populations from Sites of Special Scientific Interest (SSSIs) for those features which are potentially affected, e.g. guillemots and Carreg y Llam SSSI.</p> <p>NRW advise that the applicant should use Thaxter <i>et al.</i> 2012, as a blunt tool for scoping in of sites to the assessment. Data such as FAME can then be used to inform more local movements/use of the sea.</p>		
	19/02/19	More references have been included for the bird input parameters as discussed in the previous meeting. Alex Robbins' PhD thesis has been used where there was high confidence in data, and substituted for other studies where there was lower confidence.	<p>NRW agreed.</p> <p>NRW agrees in principle but still needs to see the detail of the process of determining high</p>	See below	



Issue	Date	Menter Môn position	NRW position	Status	Actions (if required)
		Robbins (2017) has not applied conversions to published data, so in some cases this has had to be converted to make compatible with SNH methods and spreadsheets.	and low confidence and what has been left out through that process.		
	07/07/20	The values for bird input parameters used in the assessments are agreed	NRW agrees with the use of parameters in the assessments made	Agreed	N/A
3. Terns	13/12/18	<p>Commic terns will be allocated to one species or the other by establishing the ratios of each species seen by month and applying this ratio to the birds that could not be identified to species level.</p> <p>Terns have a low predicted sensitivity to displacement and disturbance impacts and a low sensitivity to collision risk as they only use the first 2-3m of the water column for feeding.</p> <p>All terns will be screened into the EIA and HRA.</p>	<p>NRW agreed with the ratio allocation for “commic” terns to species level.</p> <p>NRW agreed with the low sensitivity, and doesn’t consider collision as a risk for terns.</p>	Agreed	N/A
4. Kittiwake	13/12/18	<p>Possible use of apportioning calculations (Scottish Natural Heritage, SNH) including Irish Special Protection Area (SPA) populations</p> <p>Kittiwake have a low predicted sensitivity to displacement and disturbance impacts and a low sensitivity to collision risk as they only use the first 1m of the water column for feeding.</p> <p>Kittiwake will be screened into the EIA and considered during the screening stage of the HRA before being discounted for further consideration.</p>	<p>NRW agreed that the SNH method could be used for apportioning kittiwake numbers to SPAs.</p> <p>NRW agreed with the low risk of collision for kittiwake. However, NRW advised that kittiwake needs to be screened at Stage 1 HRA before determining whether they need to be included in Stage 2.</p>	Agreed	N/A
5. Other gulls	13/12/18	<p>Other gulls have a low predicted sensitivity to displacement and disturbance impacts and a low sensitivity to collision risk as they only use the first 1m of the water column for feeding.</p> <p>As such, other gulls will be included in the EIA but screened out of the HRA.</p>	NRW advised that other gulls should be considered at HRA screening, at which stage further consideration should be given by the applicant to whether they need to be included within Stage 2 of	Agreed	N/A



Issue	Date	Menter Môn position	NRW position	Status	Actions (if required)
			HRA. All species to be included in EIA.		
6. Puffins	13/12/18	<p>Puffins have a medium predicted sensitivity to displacement and disturbance impacts and a high sensitivity to collision risk as they use the full water column.</p> <p>Puffins will be included in the EIA and HRA, with further investigation into Skokholm and Skomer SPA foraging (seems unlikely).</p>	NRW agreed.	Agreed	N/A
7. Guillemot and razorbill	13/12/18	<p>Birds that were either guillemot or razorbill will be allocated to one species or the other by establishing the ratios of each species seen by month and applying this ratio to the birds that could not be identified to species level.</p> <p>Razorbills and guillemots have a low to medium predicted sensitivity to displacement and disturbance impacts and a high sensitivity to collision risk as they use the full water column.</p> <p>Guillemot and razorbill will be included in the EIA (with particular emphasis on collision risk). They will be included in HRA, with a further investigation into the presence of foraging SPA-qualifiers during the breeding season.</p>	NRW agreed with the approach for allocating unknown guillemot / razorbill sightings to one species (the disturbance referred to is for birds at sea and not the colony).	Agreed	N/A
8. Fulmar	13/12/18	<p>Fulmar have a low predicted sensitivity to displacement and disturbance impacts and a low sensitivity to collision risk as they only use the first 5m of the water column.</p> <p>Fulmar will be included in the EIA and HRA, but that likely significant effect would potentially be ruled out due to low numbers of birds/SPA distance.</p>	NRW agreed with this assessment, though did add that the breeding pattern for this species was to breed in small pockets in many locations rather than large colonies.	Agreed	N/A
9. Manx shearwater	13/12/18	<p>Manx shearwater has a medium predicted sensitivity to displacement and disturbance impacts and a high sensitivity to collision risk as they dive to 30m water depths</p> <p>Manx shearwater will be included in the EIA and HRA, using apportioning calculations to allocate counts to SPAs.</p>	NRW agreed but also advise that the sensitivity of the diving bird will depend on the depth of the turbines.	Agreed	N/A



Issue	Date	Menter Môn position	NRW position	Status	Actions (if required)
10. Gannet	13/12/18	Gannet have a low to medium predicted sensitivity to displacement and disturbance impacts and a medium sensitivity to collision risk as they only use the first 5 to 10m of the water column.  Gannet will be included in the EIA and HRA, although it may be possible to screen out due to low numbers in the development area.	NRW agreed but also advise that the sensitivity of the diving bird will depend on the depth of the turbines.	Agreed	N/A
11. Shag	13/12/18	Shag have a medium to high predicted sensitivity to displacement and disturbance impacts and a medium to high sensitivity to collision risk, with an average dive depth of 20.5m.  Shag will be included in the EIA but screened out of the HRA at Stage 1.	NRW agreed but also advise that the sensitivity of the diving bird will depend on the depth of the turbines.	Agreed	N/A
12. Common scoter	13/12/18	Common scoter have a high predicted sensitivity to displacement and disturbance impacts and a medium sensitivity to collision risk, with an average dive depth of 10m.  Common scoter will be included in the EIA but screened out of the HRA.	NRW agreed but also advise that the sensitivity of the diving bird will depend on the depth of the turbines.	Agreed	N/A
13. Red throated diver	13/12/18	Red-throated divers have a high predicted sensitivity to displacement and disturbance impacts and a medium sensitivity to collision risk, with an average dive depth of 10m  Red-throated divers will be included in the EIA but screened out of the HRA.	NRW agreed but also advise that the sensitivity of the diving bird will depend on the depth of the turbines.	Agreed	N/A
14. Cormorant	19/02/19	Cormorant are not included within the Collision Risk Model (CRM)/Encounter Rate Model (ERM) as surveys have only recorded cormorant in flight, therefore it is not appropriate to model without 'on water' densities.  For the impact assessment, Menter Môn will look qualitatively at the potential impact of attraction to surface devices as resting locations, for cormorant and shag.	NRW cannot confirm agreement yet because we have not seen the map, which we thought was to be presented for the second TWG meeting. Please note that this relates to a disturbance scenario for birds 'at sea' and not the colony and the sensitivity of the diving bird will depend on the depth of the turbines.	See below	Full details will be present in the assessment submitted in September 2019. (Complete)



Issue	Date	Menter Môn position	NRW position	Status	Actions (if required)
	07/07/20	The assessment of impacts on cormorant is agreed	Agreed	Agreed	N/A
<b>Marine Ornithology: Impact Assessment</b>					
15. Construction and decommissioning impacts	13/12/18	<p>Potential construction and decommissioning impacts are identified as:</p> <ul style="list-style-type: none"> <li>Airborne noise and visual disturbance/displacement;</li> <li>Potential barrier effects;</li> <li>Disturbance at breeding sites (e.g. vessels moving to and from the site/landfall);</li> <li>Potential changes in water quality (e.g. suspended sediments, accidental release of contaminants); and</li> <li>Potential changes in prey availability (e.g. due to underwater noise, disturbance, loss of seabed habitat, increased suspended sediment and sediment re-deposition).</li> </ul>	The list of potential impacts seems comprehensive although the potential impact of lighting on seabirds is missing, e.g. collision, disturbance. We recommend that this potential impact is included for assessment.	Agreed	Full details will be present in the assessment submitted in September 2019. (Complete)
16. Operation impacts	13/12/18	<p>Potential operation impacts are identified as:</p> <ul style="list-style-type: none"> <li>Airborne noise and visual disturbance;</li> <li>Potential changes in water quality (e.g. accidental release of contaminants);</li> <li>Potential changes in prey availability (e.g. underwater noise, disturbance, loss of seabed habitat, introduction of hard substrate (e.g. foundations, cable and scour protection), changes to water quality and electromagnetic fields (EMF);</li> <li>Potential barrier effects;</li> <li>Potential entanglement with moorings for floating devices; and</li> <li>Collision risk with tidal devices.</li> </ul>	The list of potential impacts seems comprehensive although the potential impact of lighting on seabirds is missing, e.g. collision, disturbance. NRW recommends that this potential impact is included for assessment.	Agreed	Full details will be present in the assessment submitted in September 2019. (Complete)
17. Cumulative impacts	13/12/18	<p>Potential cumulative impacts are identified as:</p> <ul style="list-style-type: none"> <li>Airborne noise and visual disturbance;</li> <li>Collision risk with tidal devices; and</li> <li>Potential changes in prey availability.</li> </ul>	The list of potential impacts seems comprehensive although the potential impact of lighting on seabirds is missing, e.g. collision, disturbance. We	See below	Full details will be present in the assessment submitted in





Issue	Date	Menter Môn position	NRW position	Status	Actions (if required)
		<p>The proposed projects and plans to include in the cumulative impacts and in-combination assessments are identified as:</p> <ul style="list-style-type: none"> <li>Wylfa Newydd Power Station;</li> <li>Minesto Holyhead Deep; and</li> <li>Holyhead Port Expansion.</li> </ul>	<p>advise that this potential impact is included for assessment NRW advise that the applicant needs to consider foraging ranges from available data for the breeding season, as well as the Furness (2015) BDMPS report for the non-breeding season before determining which projects would need to be included.</p>		September 2019. (Complete)
	11/04/19	<p>Proposed projects to be considered within the CIA and HRA have been updated and reflect foraging distances. Those screened into the HRA for marine ornithology, with sufficient information available to assess potential impacts are as follows;</p> <ul style="list-style-type: none"> <li>Holyhead Deep Phase I;</li> <li>Argyll Tidal Demonstration;</li> <li>Alexandra Basin Redevelopment Project</li> <li>Greater Dublin Drainage</li> </ul> <p>Due to the project suspension, the Wylfa project has been removed from screening. A number have been screened in on a precautionary basis but insufficient information is freely available; Anglesey Eco Park Power Station; Marine Energy Wales Marine Testing Area; East Rhyl Coastal Defence Scheme; Sirius SBC Renewables; Amlwch LNG; Greenlink Interconnector; Milford Haven Maintenance Dredge; Proposed New Cruise Berth Dun Laoghaire; Codling Wind Park II; Kinsale Head / Ballycotton gas fields and Seven Heads gas field; Gas Storage Project Islandmagee; and Fair Head Tidal Energy Park.</p>	<p>NRW agreed with this approach but advised that the applicant needs to also consider potential effects outside of the breeding season. <i>E.g.</i> Wave hub in Cornwall is potentially causing mortality of gannets at Grassholm. Therefore, NRW advise that the applicant needs to conduct a wide and thorough search.</p>		Full details will be present in the assessment submitted in September 2019. (Complete)
	03/05/19	<p>NRW suggested that cumulative assessment with Minesto (Holyhead Deep) would be necessary. RHDHV confirmed that a scoping report for an updated 80MW project has been published, but nothing detailed is available.</p>	<p>NRW iterated that the project needs to be assessed in the CIA.</p>	See below	NRW checked how the Project can be included effectively and reverted to



Issue	Date	Menter Môn position	NRW position	Status	Actions (if required)
			NRW advise that the applicant needs to assess t all other plans or projects that could have a cumulative impact		RHDHV: Any cumulative impact assessment must include the Minesto work that has been consented, and anything currently within the planning system.
	07/07/20	<p>The proposed projects and plans included in the cumulative impacts and in-combination assessments are:</p> <ul style="list-style-type: none"> <li>▪ Holyhead Deep Phase I</li> <li>▪ Holyhead Deep Phase II</li> <li>▪ Bardsey Sound</li> <li>▪ Argyll Tidal Demonstration</li> <li>▪ Fair Head Marine Renewable Tidal Array</li> <li>▪ Sound of Islay Demonstration Site</li> <li>▪ West Islay Tidal Energy Farm</li> </ul> <p>A CIA matrix summarising the cumulative impacts, including pathways for effect was submitted on 03 July 2020.</p>	<p>Our advice to NRW's Marine Licensing Team (shared with the applicant on 18/09/20) detailed our remaining comments on the applicant's CIA.</p> <p>In summary, an updated matrix with full reference to all plans and projects that have been considered within the CIA should be provided . This should be accompanied, as necessary, by an updated CIA addendum.</p> <p>Outstanding topic-specific issues will need to be addressed prior to the CIA being finalised.</p> <p>NRW is satisfied that these are secondary matters that should be capable of being resolved by agreement between both parties during this process, such that they do not propose</p>	Ongoing	An updated matrix with full reference to all plans and projects that have been considered within the CIA should be provided . This should be accompanied, as necessary, by an updated CIA addendum.



Issue	Date	Menter Môn position	NRW position	Status	Actions (if required)
			to give evidence on these issues at the Inquiry.		
18. Impact assessment methodology	13/12/18	Matrix approach proposed to standardise impact assessment, with due reference to recent guidance.	NRW agreed with the proposed EIA methodology, but advised that impacts on SSSIs also needed to be considered. Therefore not agreed in absence of further information.	Agreed	N/A
19. Standard Assessment table for importance	03/05/19	It is proposed that the main driver for sensitivity within the Morlais ES is sensitivity rather than importance, therefore locally important species, such as SSSI species are not underplayed.	NRW can not agree to this as we have not yet been able to critically evaluate the information presented.	See below	Full details are presented in the assessment submitted in the ES (September 2019).
	07/07/20	No comments received on bird sensitivity, presumed to be agreed	Agreed	Agreed	N/A
20. Airborne noise and visual disturbance	13/12/18	It is proposed that the potential airborne noise and visual disturbance impacts will be determined from a desk-based review and assessment.  Because the airborne noise and visual elements for Morlais will have some commonality with other marine projects, a broad range of project literature concerning the interaction between marine birds and anthropogenic activities in the marine environment will be consulted during the preparation of this assessment.	NRW agreed with approach.	Agreed	N/A
	03/05/19	An assumed displacement distance of 2km for red throated diver is considered within the medium sensitivity rating. One of the criteria of 'high' sensitivity is inability to adapt, assumed that will be displaced elsewhere.	NRW had not agreed to this as we had not been able to critically evaluate the information presented.	See below	Full details are presented in the assessment submitted in the ES (September 2019).
	07/07/20	Bird sensitivity is agreed	Agreed	Agreed	N/A



Issue	Date	Menter Môn position	NRW position	Status	Actions (if required)
21. Disturbance at breeding sites	13/12/18	<p>To assess any potential effects on breeding colonies, the location of any sites used by the species of interest in the wider Gwynedd area will be identified. This will be done primarily by reviewing all relevant reports, publications and data sources. The known source of data is the Joint Nature Conservation Committee (JNCC) Seabird Monitoring Programme Online Database (JNCC, 2018), but other sources of information (e.g. local ornithology club reports) will be consulted if deemed to be relevant.</p> <p>The location of the breeding colonies and foraging areas will be mapped in relation to the Morlais Demonstration Zone and the potential for any disturbance at each identified site assessed for all relevant activities, both onshore and offshore, including any vessel movements to and from the site.</p>	NRW agreed with approach.	Agreed	N/A
22. Changes in water quality	13/12/18	<p>The assessment will be based on the maximum potential area that could be affected by any changes to water quality.</p> <p>The maximum potential number of individuals that could be affected in that area will be based on the relevant species density estimates from boat-based surveys. The number of individuals of each species that could be affected will be considered as a proportion of relevant reference populations.</p>	NRW agreed with approach.	Agreed	N/A
23. Changes in prey availability	13/12/18	<p>It is anticipated that the potential effects on prey could include, but not limited to:</p> <ul style="list-style-type: none"> <li>▪ Underwater noise;</li> <li>▪ Loss or changes of habitat;</li> <li>▪ Changes to water quality, increased suspended sediment concentrations and sediment re-deposition;</li> <li>▪ EMF effects; and</li> <li>▪ Physical interactions with the infrastructure.</li> </ul> <p>As a worst-case scenario, the assessment will be based on the maximum potential area for any changes in prey availability.</p>	NRW agreed with approach.	Agreed	N/A



Issue	Date	Menter Môn position	NRW position	Status	Actions (if required)
24. Collision risk with tidal devices	13/12/18	At this stage, it is recommended that ERM only is used for the Morlais project to quantify collision impacts on birds, for the following reasons: <ul style="list-style-type: none"><li>▪ Outputs from the model are familiar to Statutory Nature Conservation Bodies (SCNBs) and regulators, bearing similarity to collision risk modelling carried out for wind farms;</li><li>▪ Outputs from the model are simple to interpret; and</li><li>▪ The model can be easily adapted to cover a range of devices, which is a key strength compared to the CRM method.</li></ul>	NRW advises that both ERM and the CRM should be used, similar to the approach being taken for the marine mammal work.	Agreed	N/A
	19/02/19	Menter Môn agree to undertake both ERM and CRM in the assessment of collision risk to marine birds.	NRW agreed with this approach.		
Marine Ornithology: Modelling					
25. Potential biological removal	13/12/18	PBR will not be used for the Morlais Project as it is simplistic and makes assumptions, particularly on density dependence and population trajectory.	NRW is satisfied that PBR is not proposed for use and that PVA will be used instead where necessary.	Agreed	N/A
26. Collision risk modelling	13/12/18	A level of 1% increase in the population mortality rate is identified as a threshold. If predicted mortality due to collisions with tidal devices represents less than a 1% increase in the population mortality rate, then this is considered likely to be within the range of natural variation and not significant. If predicted mortality represents a 1% or greater increase in the population mortality then this may cause population effects and requires further investigation, such as PVA.	NRW agreed with this approach.	Agreed	N/A
27. CRM and ERM guidance	19/02/19	SNH-authored spreadsheets provided with the 2016 guidance were redesigned for high throughput application.  Appropriate Quality Assurance (QA) has been applied to ensure outputs of revised sheets are as original.	NRW agreed with this approach and requested that when presenting the final data, workings are shown against	Agree	N/A



Issue	Date	Menter Môn position	NRW position	Status	Actions (if required)
			SNH original sheet for comparison.		
28. Tidal device parameters	13/12/18	<p>The assessment will take into account the wide range of potential tidal device parameters, for example:</p> <ul style="list-style-type: none"> <li>Some on surface and some fully submerged;</li> <li>Rotor diameters typically 5-16m diameter, although some could be larger;</li> <li>Rotor speed 11-15 rpm typically, but some could be greater; and</li> <li>Tip speeds typically 20-30 m/s, but some might be higher.</li> </ul> <p>The potential tidal devices for the marine bird encounter and collision risk assessment have been initially grouped based on:</p> <ul style="list-style-type: none"> <li>Different rotor diameters, including related parameters for number of rotors per device, rotor width, blade chord width and rotation speed; a</li> <li>Position in the water column.</li> </ul>	NRW does not agree with the different groupings and advises that more groups need to be included which may well have a similarity in the collision risk models. For instance, floating devices may have more contact with diving birds as closer to the surface. NRW advises that the groupings need further consideration.	See below	Full details are presented in the assessment submitted in the ES (September 2019).
	19/02/19	<p>Rather than modelling three device groups/scenarios, this has been amended to nine device groups/scenarios.</p> <p>It is hoped to refine these further to approximately five groups.</p>	When grouping tidal device parameters, consideration should be focused on whether there is an ecologically meaningful way to categorise in terms of potential encounter rates for birds, for example using depth.		
	03/05/19	Refining of device parameters and groupings completed. Nine groups of devices have been assessed.	NRW cannot agree in absence of the full assessment	See below	Full details are presented in the assessment submitted in the ES (September 2019).



Issue	Date	Menter Môn position	NRW position	Status	Actions (if required)
	07/07/20	Device parameters used in CRM/ERM are agreed	NRW agrees that this is adequate to make an assessment at the reduced 0.7 bottlenose dolphin level.	Agreed	N/A
29. Avoidance rates	19/02/19	<p>Given the following considerations, it is expected that avoidance rates are expected to be high:</p> <ul style="list-style-type: none"> <li>Hydrodynamic forces are expected to reduce potential for collision, and may influence collision rates;</li> <li>Burst speed of diving birds relative to tidal turbine blades is far higher than equivalent situation for flying birds and wind turbine blades as a result of the much slower rotation speed of tidal turbines; and</li> <li>Expected reduced mortality when collisions do occur.</li> </ul> <p>It is suggested that avoidance rates between 98-99% should be used in the assessment, however the full range of 0%, 50%, 90%, 95%, 98% and 99% are presented in the ES.</p>	Due to the many unknowns with tidal devices, NRW advises that all/further qualitative evidence is submitted. Therefore, the assessment should include all suggested by SNH (2016) Guidance (0%, 50%, 90%, 95%, 98% and 99%).	Agreed	Full details are presented in the assessment submitted in the ES (September 2019).
	03/05/19	<p>Avoidance rates will be presented using the range outlined in SNH (2016).</p> <p>PVA outputs for guillemot and razorbill indicate that the application of higher avoidance rates of &gt;99% and higher results in mortality rates that are less likely to result in population level effects at the South Stack colonies.</p>	<p>NRW agreed that monitoring designed to collect evidence of high avoidance is required. Further advice from expert bodies such as RSPB, academic organisations and NRW should be sought.</p> <p>NRW can not agree to this in absence of the information required.</p>	See below	Monitoring and management measures to be developed post consent with appropriate partners.
	30/06/20	<p>Avoidance rates have been presented using the range outlined in SNH (2016).</p> <p>While avoidance rates are expected to be high, it is recognised that there is uncertainty. The approach to adaptive management</p>	There is the potential that avoidance rates are high but there is also uncertainty.	See below	Updated Outline EMMP submitted 02/11/20 for ongoing consultation



Issue	Date	Menter Môn position	NRW position	Status	Actions (if required)
		and monitoring of collision risk will be agreed post consent through the EMMP.	Discussions regarding EMMP are ongoing and therefore not agreed		
30. General bird parameters	13/12/18	The information contained in SNH (2016) will be used as a starting point for the modelling. Where appropriate, the information presented will be updated using species-specific empirical data from more recent literature.	No comment, there are no diving parameters mentioned.	See below	Full details are presented in the assessment submitted in the ES (September 2019).
	19/02/19	There is not a large enough amount of information regarding diving behaviour of seabirds, and behaviour is likely to be highly location specific. Therefore, the model uses three categories for the key species; deep diving (guillemot, shag), shallow diving (razorbill, puffin, red-throated diver, Manx shearwater) and plunge diving (gannet), as indicated by the guidance document.	NRW agrees in principle but is not in a position to agree .		Full details are presented in the assessment submitted in the ES (September 2019).
	19/02/19	The models require dive frequencies to be calculated for each species. There are no standardised approaches although two methods are possible. The end outcome is dives per second.	NRW agrees in principle but is not in a position to agree in absence of required information	See below	Full details are presented in the assessment submitted in the ES (September 2019).
	19/02/19	Mean animal density is taken from two years of boat-based survey data, distance corrected where number of records allowed (razorbill and guillemot), non-speciated birds added to totals where relevant (razorbill and guillemot)  A range of parameters have been obtained from literature – length/wingspan, proportion of time at sea foraging, dive frequency when at sea, foraging trips per day, dives per trip, dive duration, vertical swim speed.	NRW agrees in principle but cannot agree in absence of required information	See below	Full details are presented in the assessment submitted in the ES (September 2019).
	07/07/20	Bird parameters used in CRM/ERM are agreed	Agreed	Agreed	N/A
	19/02/19	SNH Apportioning: 97.25% of birds from South Stack, corroborated by Cleasby <i>et al.</i> (2018) – assume 100%.	NRW suggested that the draft assessment so far was missing key SSSI sites and therefore	See below	Menter Môn to ensure SSSI





Issue	Date	Menter Môn position	NRW position	Status	Actions (if required)
31. Guillemot modelling parameters		Nocturnal activity – model assumes 60% of daytime activity at night.  Reference population – 6,200 individuals on land (SMP, 2016) x 1.34 correction factor (Seabird 2000) = 8,308 breeding adults.	there may be skewing apportioning percentage. For instance, the third biggest guillemot site in Gwynedd (Carreg y Llam), 20km from the MDZ counted 13,662 in 2018.  Furthermore, although not a SSSI or SPA, the colony at South Stack should be counted.  NRW advise that the applicant needs to consider all relevant colonies, not just SSSI's, in apportioning birds to each different one.		information included for PVA.
	03/05/2019	RHDHV confirm that apportioning follows the same methodology as agreed in the second technical meeting and additional sites requested by NRW at that meeting have been included.	NRW agreed with this approach.	Agreed	N/A
32. Razorbill modelling parameters	19/02/19	SNH Apportioning: 97.34% of birds from South Stack, corroborated by Cleasby <i>et al.</i> (2018) – assume 100%.  Nocturnal activity – model assumes 60% of daytime activity at night during breeding season compared to during the day, 80% in non-breeding season.  Reference population – 1,088 individuals on land (SMP, 2016) x 1.34 correction factor (Seabird 2000) = 1,458 breeding adults.	NRW agree that reference population is largely accurate but check not missing SSSI sites. Therefore not agreed in absence of further information.  NRW advise that the applicant needs to not just consider SSSIs but all relevant colonies, not just SSSI's, in apportioning birds to each different one.	See below	Menter Môn to ensure SSSI information included for PVA.
	03/05/2019	RHDHV confirm that apportioning follows the same methodology as agreed in the second technical meeting and additional sites requested by NRW at that meeting have been included.	NRW agreed with this approach.	Agreed	N/A
33. Puffin modelling parameters	19/02/19	SNH Apportioning: 88.13% of birds from South Stack.  Nocturnal activity – model assumes 10% activity at night compared to during the day (Shoji <i>et al.</i> 2015).	The Skerries SPA has been omitted which is the third	See below	Menter Môn to ensure SSSI



Issue	Date	Menter Môn position	NRW position	Status	Actions (if required)
		Reference population – 11 individuals on land (SMP, 2015) x 1.34 correction factor (Seabird 2000) = 14.74 breeding adults.	biggest puffin site with 471 burrows recorded recently.  NRW advise that the applicant needs to not just consider SSSIs but all relevant colonies, not just SSSI's in apportioning birds to each different one.		information included for PVA.
	03/05/19	RHDHV confirm that apportioning follows the same methodology as agreed in the second technical meeting and additional sites requested by NRW at that meeting have been included.	NRW agreed with this approach.	Agreed	N/A
34. Red-throated diver	19/02/19	Red throated diver reference population – 1,676 individuals (O'Brien, 2010).	NRW advises that there is more up to date data for red-throated diver in Liverpool Bay SPA from consenting monitoring surveys completed for Burbo Bank Extension. NRW advise that the applicant should refer to this data	See below	We do not have access to this information currently, though would be happy to discuss its implications post-submission.
	07/07/20	Applicant considered 1,676 to be the appropriate reference population. No comments received on the red throated diver reference population used, presumed to be agreed	Agreed	Agreed	N/A
35. Manx shearwater	19/02/19	Nocturnal activity – model assumes 10% activity at night compared to during the day (Shoji <i>et al.</i> 2015).  Reference population – 316,070 breeding pairs (Perrins <i>et al.</i> 2012) plus 20,675 occupied burrows (SMP, 2016) x 2 correction factor = 600,000+ breeding adults.	NRW agree that reference population is largely accurate but check not missing SSSI sites.  Therefore not agreed in absence of further information.	See below	Menter Môn to ensure SSSI information included for PVA. Full details are present in the assessment submitted in September
	07/07/20	The Manx shearwater reference population is agreed	Agreed	Agreed	N/A
36. Gannet	19/02/19	Nocturnal activity – model assumes 8% activity at night compared to during the day (Furness <i>et al.</i> 2018).	NRW advised that some data may be missing for this species.	See below	Menter Môn to ensure SSSI



Issue	Date	Menter Môn position	NRW position	Status	Actions (if required)
		Reference population – 138,474 birds based on latest SPA counts.			information included for PVA. Full details are present in the assessment submitted in September
	07/07/20	No comments received on the Gannet reference population used, presumed to be agreed	Agreed	Agreed	N/A
37. Shag	19/02/19	Nocturnal activity – model assumes 10% activity at night compared to during the day (Wanless <i>et al.</i> 1999). Reference population – 13 occupied nests (SMP, 2015/16) x 2 correction factor (Seabird 2000) = 26 breeding adults.	NRW agree that reference population is largely accurate but check not missing SSSI sites  Therefore not agreed in absence of further information.	See below	Menter Môn to ensure SSSI information included for PVA. Full details are present in the assessment submitted in September
	07/07/20	The Shag reference population used is agreed	Agreed	Agreed	N/A
<b>Marine Ornithology: Habitats Regulations Assessment (HRA)</b>					
38. Species to be considered	13/12/18	Species to be included within HRA Screening: <ul style="list-style-type: none"> <li>▪ Kittiwake;</li> <li>▪ Guillemot;</li> <li>▪ Razorbill;</li> <li>▪ Puffin;</li> <li>▪ Manx Shearwater; and</li> <li>▪ Gannet.</li> </ul>	We agree in general with the preliminary findings of the HRA screening, however, would need to see the raw survey data before providing a definitive answer. We believe that the mean-maximum distances provided in Thaxter <i>et al.</i> (2012) should be used as a coarse screening filter for sites in the breeding season and that data from papers and FAME/Seabird Tracking and Research (STAR) projects	See below	Full HRA screening to be presented at future meeting.



Issue	Date	Menter Môn position	NRW position	Status	Actions (if required)
			should then be used to provide a more detailed look at where the birds come from. Furness (2015) should be used where applicable to try and allocate birds in non-breeding months. Therefore in absence of further information, not agreed.		
	07/07/20	The species list included in the HRA screening is agreed	Agreed	Agreed	N/A
39. Sites/species screened in	03/05/19	An update to the HRA was presented with many sites screened out and sites for gannet, guillemot, Manx shearwater and puffin taken through to Appropriate Assessment (AA).	NRW requested that all sites should be screened in initially and taken through to AA. There should be a separate screening report which screens in those sites which could be impacted and then take them through to an appropriate assessment where the reasons for the sites being impacted or not are looked at in enough detail to make an informed decision.	See below	RHDHV has considered all sites in AA. Screening report and AA presented in separate document – Information to Support HRA – submitted in September with the ES.
	07/07/20	HRA Screening agreed by NRW in letter dated 13 May 2020.	Agreed	Agreed	N/A
<b>Mitigation and Monitoring</b>					
40. Phased approach to development	19/02/19	There is potential for the project to be phased and an adaptive monitoring approach with regular review of mitigation measures and monitoring outcomes may be taken.	NRW advises that the array results should be additive as the Project will have all of these devices in at the one time, as worst-case scenario.	See below	Phasing approach presented at future meeting (see below). Full details are present in the assessment submitted in September



Issue	Date	Menter Môn position	NRW position	Status	Actions (if required)
	03/05/19	<p>The proposed first phase deployment to 40MW will be undertaken over several years. Before the first deployment and during subsequent deployments, detailed information on the behaviour of guillemot and razorbill using the MDZ will be collected using three principal approaches:</p> <ul style="list-style-type: none"> <li>Coastal vantage point watches</li> <li>Colony counts</li> <li>Dual deployment of bird-borne time-depth-temperature recorders and GPS recorders on as large a sample of the Holyhead Island Coast SSSI population as is permitted.</li> </ul>	NRW advised of the potential for active sonar to be used and advised that the applicant needs to consider whether other monitoring could also be available to be used. Please note that this may not be our only recommendation, subject to our further consideration and evaluation of the proposal.	See below	Use of active sonar to monitor bird species to be explored.
	07/07/20	A reduced first phase based on reducing marine mammal collision risk to <0.7 bottlenose dolphin is being considered in consultation with NRW. Ornithology collision risk was modelled on this basis, as presented in the Marine Ornithology Collision Risk Modelling report submitted on 27 <sup>th</sup> March (document no. MOR/RHDHV/DOC/0115).	Discussions are ongoing regarding the adaptive management approach and therefore not agreed	See below.	Updated Outline EMMP submitted for consultation 02/11/20
	29/09/20	Discussion is ongoing regarding the outline EMMP. The detailed EMMP will be developed post consent. The detailed methodology requires the final design of the phased deployment.	<p>Discussions are ongoing.</p> <p>There is the potential that avoidance rates are high but there is also uncertainty.</p>	Not agreed	Development and agreement of the EMMP is ongoing and will be undertaken in consultation with NRW.



### 3.2. STATEMENT OF COMMON GROUND – TERRESTRIAL ORNITHOLOGY

**Table 3-3 Statement of Common Ground – Terrestrial Ornithology**

Issue	Date	Menter Môn position	NRW position	Status	Actions (if required)
<b>Terrestrial Ornithology: EIA and HRA</b>					
41. Chough	03/05/2019	Menter Môn recognises the potential for construction works to disturb/displace breeding chough. Therefore, Menter Môn is proposing a stand-off zone of 500m from active nest during the breeding season (1 April until 31 July in a given year). It is proposed that this not apply to the cable route where it is along active roads given existing levels of disturbance along the road. Menter Môn proposes closing the road during cable laying works, with cable laid within the road and potentially in a 30m buffer applied either side. Works will be very localised along road.	NRW requested that figures of the works and designation boundaries should be submitted to NRW. Therefore not agreed in absence of further information.	See below	RHDHV/ Menter Môn to provide plans to NRW.
	03/05/2019	RHDHV confirmed that an AA will be carried out for chough.		Agreed	AA presented in separate document – Information to Support HRA – submitted in September with the ES.
	15/05/20	<p>Detailed responses to NRW comments on the EIA and HRA assessments for chough in relation to the export cable landfall and onshore cable route are included in document MOR-RHDHV-DOC-0120. A summary of the revised Menter Môn position in relation to these comments is provided here.</p> <p>In the ES, mitigation was identified to avoid adverse effects of construction activities at the onshore development area (ES Chapter 19, Section 19.6.5.11.3). This was that no construction works would take place within 500m of an active chough nest during the breeding season. The distance of 500m was selected to include the core foraging ranges of chough, based on the foraging</p>	NRW Letter 15 <sup>th</sup> May 2020: The response to comments on chough FEI document has sufficiently addressed all three functional linkage tests and confirmed that the Onshore Development Area represents a significant contribution to the requirements of breeding and wintering chough from Glannau Ynys Gybi / Holy Island Coast SPA. Following subsequent discussions with the applicant	Agreed	



Issue	Date	Menter Môn position	NRW position	Status	Actions (if required)
		<p>distances from empirical studies (as described in section 19.6.5.11.2).</p> <p>Based on discussions and correspondence with NRW, revised mitigation has been identified as follows:</p> <p>Two works exclusions zones for the chough breeding season have been identified (Areas 1 and 2 as shown on Figure A19-2-2c, document MOR-RHDHV-DOC-0120). These exclusion zones cover core foraging areas of the chough nest sites closest to the Onshore Development Area. Area 1 encompasses most of the cable landfall works area (except the cable landfall substation and the field to the southwest of the landfall substation which will form the construction compound area) and a section of the onshore cable route immediately to the south of the cable landfall area. Thus, apart from the cable landfall substation and construction compound, no works (including HDD or open-cut trenching to bring the export cables to land) would take place in this area between 20 March and 31 July in a given year.</p> <p>Also based on NRW comments, the active breeding season for chough as defined for the purposes of this mitigation is extended from 1 April to 31 July (ES Chapter 19, Section 19.6.5.11.3), to cover the period 20 March until 31 July in a given year. This now includes the period of courting and nest prospecting and immediately before egg laying as well as the four stages of breeding identified for choughs in Wales by Whitehead et al. (2005): incubation (mid-April to early May), early chick rearing (early May to mid-May), late chick rearing (mid-May to early June), and post-fledging (early June to end of July).</p> <p>With revised mitigation in place there will be no adverse effects on the Conservation Objectives for chough within the Holy Island Coast SPA, and (in relation to the EIA) impacts to chough are assessed to be no greater than minor adverse in significance.</p>	<p>to mitigate the impact of functional linkage tests 1 and 3 NRW advised that the breeding season date should be extended so that no works occur during the 20 March to 31 July and that, in association with a 500m buffer, two recommended exclusion zones (Areas 1 and 2) are provided.</p> <p>The documents confirm that the applicant will include additional mitigation to ensure no/negligible displacement of foraging breeding chough by providing two additional works exclusion zones for the chough breeding season (from 20 March to 31 July). These exclusion zones also cover the core foraging areas for breeding chough. We consider that the applicant has sufficiently addressed our concerns of functional linkage between the Onshore Development Areas and the Holy Island Coast SPA with this additional mitigation.</p>		

**The undersigned agree to the provisions within this SOCG**

Signed	A. Winterton
Printed Name	Andrea Winterton
Position	Marine Services Manager
On behalf of	Natural Resources Wales
Date	01/12/20

Signed	M. Grant
Printed Name	Murray Grant
Position	Principal Ornithologist
On behalf of	Royal HaskoningDHV, supporting Menter Môn
Date	01/12/20