# REPORT on the IMPLICATIONS for EUROPEAN SITES

## Proposed Mona Offshore Wind Farm

An Examining Authority report prepared with the support of the Environmental Services Team

Planning Inspectorate Reference: EN010137

19 November 2024

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# 1 INTRODUCTION

## 1.1 Background

1.1.1 Mona Offshore Wind Limited (the Applicant) has applied for a development consent order (DCO) under section 37 of the Planning Act 2008 (PA2008) for the proposed Mona Offshore Wind Farm ('the Proposed Development'). On behalf of the Secretary of State for Housing, Communities and Local Government, an Examining Authority (ExA) has been appointed to conduct an Examination of the application. The ExA will report its findings and conclusions and make a recommendation to the relevant Secretary of State (SoS) as to the decision to be made on the application.

1.1.2 For applications submitted under the PA2008 regime, the relevant SoS is the competent authority for the purposes the Conservation of Habitats and Species Regulations 2017 ('the Habitats Regulations') and the Conservation of Offshore Marine Habitats and Species Regulations 2017 ('the Offshore Marine Regulations') which apply beyond UK territorial waters ie 12 nautical miles. The findings and conclusions on nature conservation issues reported by the ExA will assist the Secretary of State in performing their duties under the Habitats Regulations and the Offshore Marine Regulations.

1.1.3 This Report on the Implications for European sites (RIES) documents and signposts the information in relation to potential effects on European Sites that was provided within the DCO application and submitted during the Examination by the Applicant and Interested Parties (IPs), up to Deadline 4 (D4) of the Examination (4 November 2024). It is not a standalone document and should be read in conjunction with the Examination documents referred to. Where document references are presented in square brackets [] in the text of this report, that reference can be found in the Examination library published on the National Infrastructure Planning website.

1.1.4 For the purpose of this RIES, in line with the Habitats Regulations and relevant Government policy, the term 'European sites' includes Special Areas of Conservation (SAC), candidate SACs, proposed SACs, Special Protection Areas (SPA), potential SPAs, Sites of Community Importance, listed and proposed Ramsar sites and sites identified or required as compensatory measures for adverse effects on any of these sites. For ease of reading, this RIES also collectively uses the term 'European site' for 'European sites' defined in the Habitats Regulations 2017 and 'European Marine Sites' defined in the Conservation of Offshore Marine Habitats and Species Regulations 2017, unless otherwise stated. The 'UK National Site Network' refers to SACs and SPAs belonging to the United Kingdom already designated under the Directives and any further sites designated under the Habitats Regulations.

1.1.5 This RIES is issued to ensure that IPs, including Natural Resources Wales (Advisory) (NRW (A)) and the Joint Nature Conservation Committee (JNCC) as the Appropriate Nature Conservation Bodies (ANCBs) are consulted formally on Habitats Regulations matters. This process may be relied on by the Secretary of State for the purposes of Regulation 63(3) of the Habitats Regulations and Regulation 28(4) of the Offshore Marine Regulations.

1.1.6 It also aims to identify and close any gaps in the ExA's understanding of IPs' positions on Habitats Regulations matters, in relation to all European sites and qualifying features as far as possible, in order to support a robust and thorough recommendation to the Secretary of State.

1.1.7 Comments on the RIES are timetabled for Deadline 5 (3 December 2024).

1.1.8 Following consultation, the responses will be considered by the ExA in making their recommendation to the Secretary of State and made available to the Secretary of State along with this report. The RIES will not be revised following consultation.

## 1.2 Documents used to inform this RIES

1.2.1 The Applicant's Habitats Regulations Assessment (HRA) Report (the HRA Report) comprised the following documents:

- HRA Stage 2 Information to Support an Appropriate Assessment (ISAA) Part 1 – Introduction and Background [APP-031];
- HRA Stage 2 ISAA Part 2 – Special Areas of Conservation (SACs) assessments [APP-032] ('the HRA Stage 2 SAC Report');
- HRA Stage 2 ISAA Part 3 – Special Protection Areas (SPAs) assessments [APP-033], revised in [REP2-010] ('the HRA Stage 2 SPA Report');
- HRA Stage 1 Screening Report [APP-034], revised in [REP2-012] ('the HRA Screening Report'); and
- HRA Integrity Matrices [APP-035], revised in [REP2-014].

1.2.2 The HRA Report was supported and informed by several Environmental Statement appendices which are referred to therein (ie [APP-086 to APP-096].

1.2.3 In addition to the HRA Report, the RIES refers to representations submitted to the Examination by IPs, Statements of Common Ground (SoCG) and other Examination documents as relevant. An overview of documents submitted to date of relevance to the HRA is provided in Sections 2.5 and 3.3 of this RIES. All documents can be found in the Examination Library.

## 1.3 RIES questions

1.3.1 This RIES contains questions predominantly targeted at the Applicant, JNCC and NRW (A), which are drafted in *blue, underlined italic text.*

1.3.2 The responses to the questions posed within the RIES and comments received on it will be of great value to the ExA in understanding IPs' positions on Habitats Regulations matters. It is stressed that responses to other matters discussed in the RIES are equally welcomed. In responding to the questions within the main body text, please refer to the preceding paragraph number. In responding to the questions in Tables 2.4 to 2.6 and 3.1 to 3.4, please refer to the ID number in the first column.

## 1.4 HRA matters considered during the Examination

1.4.1 The Examination to date has focussed on the following matters:

- Offshore ornithology - the approaches used by the Applicant in various aspects of the assessments, including:
  - foraging ranges;
  - age class apportioning;
  - non-breeding season methods for apportionment of impacts;
  - the incorporation of sabbatical birds;
  - approach to seasonal definitions particularly for collision risk assessments;
  - the displacement and mortality rates used;
  - approach to in-combination assessment including gap filling for historical projects and accuracy of figures used;
- Marine mammals:
  - noise impacts on harbour porpoise from high-order Unexploded Ordnance (UXO) clearance;
  - injury and disturbance from elevated underwater sound due to vessel use;
  - potential in-combination effects from vessel collision; and
- Securing mitigation for Annex I habitats and red throated diver.

## 1.5 Change Request

1.5.1 On 1 November 2024, the Applicant submitted a Change Request [CR1-001 to CR1-013] which comprised amendments/alterations to onshore elements of the Proposed Development.

1.5.2 The Applicant's Change Request did not state whether there would be any implications for the HRA. However, in respect of the assessment presented within the Environmental Statement, the Applicant considered that the Change Requests did not result in any new or different likely significant environmental effects in respect of onshore ecology or onshore and intertidal ornithology [CR1-001].

**1.5.3** At the time of publication of the RIES, the Change Request has not been accepted by the ExA.

# 2 LIKELY SIGNIFICANT EFFECTS

## 2.1 European sites considered

### Introduction

2.1.1 The Proposed Development is not connected with or necessary to the management for nature conservation of any European site.

2.1.2 Section 1.2.6 of the HRA Screening Report [APP-034] set out the process undertaken by the Applicant to identify the European sites and features to be included in the screening assessment. This was based on the following criteria:

- Criterion 1: European or Ramsar site overlaps with the Proposed Development site boundary.
- Criterion 2: European or Ramsar site with qualifying mobile features/species (eg, birds, Annex II marine mammals, migratory fish, otter) whose range (eg, foraging, migratory, overwintering, breeding or natural habitat range) overlaps with the Proposed Development site boundary.
- Criterion 3: European or Ramsar sites and/or qualifying interest features located within the potential Zone of Influence (ZoI) of impacts associated with the Proposed Development (eg, habitat loss/disturbance, sound and risk of collision).

### Sites within the UK National Site Network (NSN)

2.1.3 The Applicant's HRA Screening Report [APP-034, revised in REP2-012] identified 76 European sites within the UK NSN for inclusion within the assessment. The locations of European sites relative to the Proposed Development are depicted on Figures 1.9, 1.10 and 1.11 of the HRA Screening Report [APP-034, revised in REP2-012].

2.1.4 The Report was structured according to different receptor groups, with the relevant European sites being detailed in the following:

- Table 1.4: Annex I habitats (offshore and coastal) (one site shown on Figure 1.3);
- Table 1.5: Annex II diadromous fish species – (nine sites shown on Figure 1.5);
- Table 1.6: Annex II marine mammals (15 sites shown on Figure 1.9);
- Tables 1.8 to 1.11: Offshore ornithological features (45 sites shown on Figure 1.10); and
- Table 1.12: Onshore ornithological features (eight sites shown on Figure 1.11).

2.1.5 Some European sites were included in the assessment for more than one receptor group ie both onshore and offshore ornithological features.

2.1.6 No European sites designated for onshore Annex I habitats or onshore Annex II species were identified for inclusion with the assessment.

2.1.7 In the Examination to date, no additional European sites within the UK NSN have been identified by IPs for inclusion within the assessment.

2.1.8 European sites within the UK NSN that are located within Wales, Scotland, England and Northern Ireland were identified by the Applicant for consideration within the HRA. NRW (A) and JNCC registered as IPs and have participated in the Examination to date. JNCC [RR-033] confirmed that its statutory advisory role relates to nature conservation in UK offshore waters only (beyond the territorial limit).

2.1.9 On 17 June 2024, the ExA wrote to NatureScot, Natural England and the Department of Agriculture, Environment and Rural Affairs (DAERA) of Northern Ireland inviting them to take part in the Examination as an 'other person' [OD-018] [OD-016][OD-010].

2.1.10 NatureScot [AS-024] responded that it had "*encountered many errors, disparities between text and tables, non-adherence to relevant guidance, and a general lack of clarity in the assessment. We have discussed this with other Statutory Nature Conservation Bodies (SNCBs) and they report the same problems with the quality of this application. We do not have capacity to offer a detailed critique of the application in its current state*".

2.1.11 It noted that the Applicant's HRA used different thresholds for triggering PVA of relevant qualifying species from Scottish SPAs and requested that impacts on European sites in Scotland be assessed following the relevant Scottish guidance (https://www.nature.scot/professionaladvice/planning-and-development/planning-and-development-advice/renewableenergy/marine-renewables/advice-marine-renewables-development)

2.1.12 At Deadline 3, the Applicant [REP3-043] responded highlighting the Examination submissions it had made so far to address errata identified by NRW (A), JNCC and the Applicant itself. It explained that it had followed NRW and JNCC guidance as the Proposed Development sits within their jurisdiction and noted that NatureScot did not respond to the statutory consultation in June 2023. The Applicant highlighted where its assessment had departed from Scottish guidance but did not propose revised assessments.

2.1.13 The ExA issued a Rule 17 request for further information [PD-015] on 16 October 2024 inviting NatureScot to confirm (with reasoning) by Deadline 4 (whether or not it agrees with the Applicant's conclusion of no AEoI of any European site within the jurisdiction of Scotland from the Mona Offshore Wind Farm alone, or in combination with other plans or projects). NatureScot did not respond.

2.1.14 Natural England [PDA-041] responded to the notification but did not provide comment on the Applicant's HRA.

2.1.15 DAERA did not respond to the notification and the Applicant stated [Q1.10.4 of REP3-093] that DAERA had also not responded to the pre-application statutory consultation.

**Non-UK sites**

2.1.16 The Applicant's HRA Screening Report [APP-034, revised in REP2-012] also identified the following non-UK European sites for inclusion within the assessment:

- 11 Irish and 17 French sites designated for Annex II marine mammal qualifying features; and
- 12 Irish sites designated for offshore ornithological features.

2.1.17 The Applicant concluded there would be no adverse effects on the integrity (AEoI) of all non-UK sites [APP-031][APP-032][APP-033][APP-035].

2.1.18 The Isle of Man is not covered by the Habitats Regulations but is part of the Ramsar convention. The Applicant's HRA documentation did not address Ramsar sites located on the Isle of Man. Further to ExA questions, the Applicant [Q1.10.1 of REP3-062] explained that it had considered Ballaugh Curragh Ramsar in its pre-screening exercise, but it was screened out as there is no potential for a receptor-impact-pathway for any features of the site. It explained that the five proposed Ramsar sites identified by the ExA are not included on data maps provided by the Isle of Man Government. It considered there to be no receptor-impact-pathway for two of the sites and noted that the remaining three are covered by Isle of Man MNRs which have been given due consideration within the ES. The Applicant also noted that the Isle of Man Government did not request consideration of these sites during pre-application consultation or in its relevant representation [RR-018].

2.1.19 Only sites within the UK NSN are addressed in this RIES.

## 2.2 Potential impact pathways

2.2.1 The HRA Screening Report [APP-034, revised in REP2-012] detailed the potential impact pathways from the Proposed Development during construction, operation and decommissioning. The impact pathways from the Proposed Development alone are summarised in Table 2.1 below. The screening matrices within [APP-034, revised in REP2-012] detailed which impact pathways were considered for each European site and qualifying feature (ie those greyed out were not assessed by the Applicant).

***Table 2.1 Pathways for LSE assessed by the Applicant***

| Receptor group | LSE pathway |
|---|---|
| Annex I habitats (see Section 1.4.3 of [APP- | • Temporary habitat loss/disturbance<br>• Increases in Suspended Sediment Concentration (SSC) and associated deposition<br>• Release of sediment bound contaminants |

| Receptor group | LSE pathway |
|---|---|
| 034, revised in REP2-012]) | • Long-term subtidal habitat loss<br>• Introduction of artificial structures<br>• Changes in physical processes<br>• Electromagnetic fields (EMF)<br>• Heat from subsea electrical cables<br>• Increased risk of introduction and spread of invasive non-native species<br>• Removal of hard substrates<br>• Accidental pollution |
| Annex II diadromous fish species (see Section 1.4.4 of [APP-034, revised in REP2-012]) | • Temporary habitat loss/disturbance<br>• Increases in SSC and associated deposition<br>• Underwater sound impacting fish and shellfish receptors<br>• Long-term subtidal habitat loss<br>• Introduction of artificial structures and colonisations of hard structures<br>• EMF<br>• Disturbance/remobilisation of sediment bound contaminants<br>• Accidental pollution |
| Annex II marine mammals (see Section 1.4.5 of [APP-034, revised in REP2-012]) | • Injury and disturbance from underwater sound from piling, UXO detonation and site investigation surveys<br>• Injury and disturbance from underwater sound due to vessel use and other activities<br>• Increased risk of injury due to collision with vessels<br>• Changes in prey availability<br>• Changes in water clarity<br>• Operational sound<br>• EMF<br>• Accidental pollution<br>• Increased SSC and associated sediment deposition. |
| Offshore ornithological features (see Section 1.4.6 of [APP-034, | • Temporary and permanent habitat loss/disturbance and increased SSC<br>• Disturbance and displacement from airborne sound, and presence of vessels and infrastructure |

| Receptor group | LSE pathway |
|---|---|
| revised in REP2-012]) | • Collision risk<br>• Barrier to movement<br>• Changes in prey availability<br>• Accidental pollution |
| Onshore ornithological features (see Section 1.4.7 of [APP-034, revised in REP2-012]) | • Temporary habitat loss/disturbance and change in prey availability<br>• Permanent habitat loss/displacement<br>• Disturbance and displacement from presence of vehicles/heavy machinery<br>• Collision risk |

2.2.2 The Applicant assessed the potential impacts during construction, operation and maintenance and decommissioning. The Applicant considered that all potential impacts during the decommissioning phase would be similar to, and potentially less than, those outlined in the construction phase [APP-034, revised in REP2-012]. The only exception being additional impacts on Annex I habitats, unique to the decommissioning phase, due to the removal of hard substrates and long-term/permanent habitat loss (paragraph 1.4.3.57 of [APP-034, revised in REP2-012]).

2.2.3 In the Examination to date, no additional impact pathways have been identified by IPs for inclusion within the assessment.

## 2.3 In-combination effects

2.3.1 Section 1.4 of the HRA Screening Report [APP-034, revised in REP2-012] detailed the Applicant's overarching approach to assessing in-combination effects. For screening, it stated that it is not necessary to consider sites/features for which an LSE 'alone' has been identified; rather it is for those were no LSE was concluded. The HRA Screening Report did not identify specific plans or projects included in the in-combination assessment.

2.3.2 Matters discussed during the Examination in relation to the in-combination assessment are detailed in Sections 2.5 and 3.3 of this RIES.

## 2.4 The Applicant's assessment (application stage)

2.4.1 The Applicant's screening conclusions at the point of the DCO application were presented in [APP-034]. Screening matrices for each European site considered were provided in Section 1.4, with a summary in Table 1.125.

**Sites for which the Applicant concluded no LSE on all qualifying features**

2.4.2 At the point of application, the Applicant concluded that the Proposed Development would not be likely to give rise to significant effects, either alone

or in combination with other projects or plans, on all qualifying features of the European sites detailed in Table 2.2 below.

**Table 2.2 Sites for which the Applicant concluded no LSE on all qualifying features**

| Receptor group | European site |
|---|---|
| Annex II marine mammals | • Treshnish Isles SAC<br>• Monach Islands SAC<br>• North Rona SAC |
| Offshore ornithological features | • Fair Isle SPA<br>• Foula SPA<br>• Forth Islands SPA<br>• Farne Islands SPA<br>• Hermaness, Saxa Vord and Valla Field SPA<br>• Morecambe Bay and Duddon Estuary SPA<br>• Noss SPA |
| Onshore and offshore ornithological features | • Burry Inlet SPA<br>• Burry Inlet Ramsar<br>• Dee Estuary SPA<br>• Dee Estuary Ramsar<br>• Dyfi Estuary/Aber Dyfi SPA<br>• Severn Estuary SPA<br>• Severn Estuary Ramsar<br>• Traeth Traeth Lafan/Lavan Sands, Conway Bay SPA. |

2.4.3 The Applicant's conclusion of no LSE with respect to the sites in Table 2.2 above have not been disputed to date in the Examination.

**Sites for which the Applicant concluded LSE on some or all qualifying features**

2.4.4 At the point of application, the Applicant concluded that the Proposed Development would be likely to give rise to significant effects, either alone or in combination with other projects or plans, on one or more qualifying features of the UK European sites detailed in Table 2.3 below. See Table 1.125 of [APP-034] for the qualifying feature(s) and effect(s) screened in.

**Table 2.3 European sites within the UK NSN for a which a LSE was identified by the Applicant**

| Receptor group | European site |
|---|---|
| Annex I habitats | • Menai Strait and Conwy Bay/ Y Fenai a Bae Conwy SAC |
| Annex II diadromous fish | • Dee Estuary SAC/Aber Dyfrdwy SAC<br>• River Dee and Bala Lake/Afon Dyfrdwy a Llyn Tegid SAC<br>• River Ehen SAC<br>• River Eden SAC<br>• Afon Gwyrfai a Llyn Cwellyn SAC<br>• River Kent SAC<br>• River Derwent and Bassenthwaite Lake SAC<br>• Solway Firth SAC<br>• River Bladnoch SAC |
| Annex II marine mammals | • North Anglesey Marine/ Gogledd Môn Forol SAC<br>• North Channel SAC<br>• Pen Llŷn a`r Sarnau/ Lleyn Peninsula and the Sarnau SAC<br>• West Wales Marine/ Gorllewin Cymru Forol SAC<br>• Strangford Lough SAC<br>• Murlough SAC<br>• Cardigan Bay/Bae Ceredigion SAC<br>• The Maidens SAC<br>• Pembrokeshire Marine/ Sir Benfro Forol SAC<br>• Bristol Channel Approaches/ Dynesfeydd Môr Hafren SAC<br>• Lundy SAC<br>• Isles of Scilly Complex SAC |
| Offshore ornithological features | Wales<br>• Skomer, Skokholm and the seas off Pembrokeshire / Sgomer, Sgogwm a Moroedd Penfro SPA<br>• Grassholm SPA |

| Receptor group | European site |
|---|---|
| | England<br>• Bowland Fells SPA<br>• Flamborough and Filey Coast SPA<br>• Irish Seafront SPA<br>• Isles of Scilly SPA<br>• Ribble and Alt Estuaries SPA<br>• Ribble and Alt Estuaries Ramsar<br><br>England / Wales<br>• Liverpool Bay SPA<br>• Aberdaron Coast and Bardsey Island SPA / Glannau Aberdaron ac Ynys Enlli SPA<br><br>Scotland<br>• Ailsa Craig SPA<br>• Buchan Ness to Collieston SPA<br>• Canna and Sanday SPA<br>• Cape Wrath SPA<br>• East Caithness Cliffs SPA<br>• Flannan Isles SPA<br>• Fowlsheugh SPA<br>• Handa SPA<br>• Mingulay and Berneray SPA<br>• North Caithness Cliffs SPA<br>• North Colonsay and Western Cliffs SPA<br>• North Rona and Sula Sgeir SPA<br>• Rum SPA<br>• St Kilda SPA<br>• Sule Skerry and Sule Stack SPA<br>• Shiant Isles SPA<br>• Troup, Pennan and Lions Heads SPA<br>• West Westray SPA<br><br>Northern Ireland<br>• Copeland Islands SPA<br>• Rathlin Island SPA |

## 2.5 Pre-Examination and Examination matters

**Matters agreed by ANCBs prior to Examination commencing**

2.5.1 JNCC [RR-033] advised that LSE is unlikely for harbour porpoise sites other than North Anglesey Marine SAC due to their distance from the Proposed Development.

2.5.2 NRW (A) [RR-011][REP1-056] agreed with the screening undertaken in relation to diadromous fish features of the Welsh protected sites; Dee Estuary/Aber Dyfrdwy SAC, River Dee and Bala Lake/Afon Dyfrdwy a Llyn Tegid SAC, and Afon Gwyrfai a Llyn Cwellyn SAC (ie that a LSE pathway exists).

**Examination overview**

2.5.3 The Applicant's initial screening conclusions presented in [APP-034] were disputed by IPs and questioned by the ExA during Examination in respect of the following receptor groups:

- marine mammals (project alone or in-combination) (see Table 2.5 below); and
- offshore ornithology (project alone or in-combination).

*Offshore ornithology*

2.5.4 Both NRW (A) [REP1-056] and JNCC [REP2-096] made numerous comments on the Applicant's approach to the assessment with both parties lacking confidence in the LSE screening or Stage 2 assessment as a result. The comments related to the Applicant's approach to various aspects of the assessments including age class apportioning; non-breeding season methods for apportionment of impacts; sabbaticals; approach to seasonal definitions particularly for collision risk assessments; and displacement assessment to designated sites not covering the full range of advised displacement and mortality rates. Both JNCC and NRW (A) considered that the assessments should be updated with the SNCB-advised approach. These issues related to both the screening stage and the assessment of effects on integrity and are detailed in Tables 2.4 and 3.3, respectively, below.

2.5.5 JNCC [REP2-096][REP2-097] was concerned that multiple errors in the Applicant's assessment could compound one another and that the implications should be considered for the assessment as a whole, rather than for each error individually.

2.5.6 Given the number of documents related to offshore ornithology that have been submitted to date in the Examination, a summary is provided below for ease of understanding.

2.5.7 Pre-Exam and Deadline 1: The Applicant responded to JNCC and NRW (A) concerns in [PDA-008] and provided an Errata sheet [REP1-044].

2.5.8 Deadline 2: The Applicant updated the following relevant documents to address the errata matters:

- Volume 2, Chapter 5: Offshore ornithology [REP2-016] (subsequently revised in [REP4-007], see below);
- Volume 6, Annex 5.2: Offshore Ornithology displacement technical report [REP2-018] (subsequently revised in REP4-009, see below);
- Volume 6, Annex 5.3: Offshore Ornithology collision risk modelling technical report [REP2-020];
- Volume 6, Annex 5.5: Offshore ornithology apportioning technical report [REP2-022];
- Volume 6, Annex 5.6: Offshore ornithology population viability analysis technical report [REP2-024];
- HRA Stage 1 Screening Report [REP2-012];
- The HRA Stage 2 SPA Report [REP2-010]; and
- HRA Integrity Matrices [REP2-014].

2.5.9 It also submitted 'Schedule of Changes to the Offshore Ornithology Environmental Impact Assessment (EIA) and HRA Documents' [REP2-087] describing all changes to the offshore ornithology HRA documents up to Deadline 2.

2.5.10 The Deadline 2 revised HRA documentation identified the following LSEs (in addition to those presented within the original HRA documents):

- Wicklow Head SPA – black-legged kittiwake (disturbance and collision risk during operation and in-combination effects);
- Skomer, Skokholm and the Seas off Pembrokeshire / Sgomer, Sgogwm a Moroedd Penfro SPA – black-legged kittiwake (disturbance and displacement and collision risk during operation and in-combination effects) and lesser black-backed gull (collision risk);
- Morecambe Bay and Duddon Estuary SPA – lesser black-backed gull (collision risk during operation and in-combination effects);
- Skelligs SPA – Northern gannet (disturbance and collision risk during operation and in-combination effects); and
- Shiant Isles SPA – common guillemot (disturbance during operation and in-combination effects).

2.5.11 The Applicant considered that the amendments made to the documents did not change the original conclusions presented in respect of AEoI.

2.5.12 Deadline 3: NRW (A) [REP3-090] considered that the Applicant's assessment remained difficult to follow in the Deadline 2 updated HRA documents and requested tables be produced for each European site "*so that the calculations from unapportioned figures through to the apportioned impacts and the*

*resulting proportions (%) of baseline mortality the impacts equate to, can be fully followed through*". It sought clarity on discrepancies within the documents.

2.5.13 JNCC provided detailed comments in respect of the Applicant's assessment in [REP3-085].

2.5.14 The Applicant submitted two further errata notes:

- Errata Note [REP3-075]; and
- Offshore Ornithology Errata Clarification Note [REP3-073]).

2.5.15 The Applicant also submitted 'Offshore ornithology supporting information in line with SNCB advice' [REP3-059] to signpost where assessment information and further supporting details could be found, and to present additional information in accordance with the advice of NRW (A) and JNCC. It included revised in-combination assessments and Population Viability Analysis (PVA) (relevant to the Stage 2 assessment). The Applicant considered that the amendments did not change the original conclusions presented in the application documents.

2.5.16 Deadline 4: JNCC [REP4-101][REP4-102] and NRW (A) [REP4-105] considered the Applicant's 'Offshore ornithology supporting information in line with SNCB advice' [REP3-059] lacked the clarity it had previously requested and appeared to not follow SNCB advice. They were unable to replicate the Applicant's values and provided detailed comments for the Applicant to address in future submissions.

2.5.17 The Applicant submitted the following documents to address the concerns of NRW (A) and JNCC that had been raised with the Applicant in meetings and correspondence external to the Examination:

- Revised documents:
  - Volume 2, Chapter 5: Offshore ornithology [REP4-007]*;
  - Volume 6, Annex 5.2: Offshore Ornithology displacement technical report [REP4-009]*;
  - Offshore ornithology supporting information in line with SNCB advice [REP4-031]; and
  - The Gap-fill technical note [REP4-029].
- New documents:
  - Offshore ornithology apportioning clarification note [REP4-042];
  - Review of offshore ornithology CEA and in-combination assessment [REP4-027];
  - Errata Sheet [REP4-088] (in respect of the HRA Stage 2 HRA Report [REP2-012], the HRA Screening Report [REP2-012], the Offshore Ornithology Apportioning Technical Report [REP2-022] and the Offshore PVA Report [REP2-024]).

* The Applicant explained [REP4-050] that as a result of these revisions, Errata documents [REP2-087] and [REP3-073] are obsolete.

**Further matters discussed during Examination**

2.5.18 Further matters raised in the Examination to date, or those for which the ExA seeks clarity, in relation to LSEs are summarised in Tables 2.4 to 2.6 below.

2.5.19 The ExA understands that matters coloured green are resolved, and matters coloured amber are outstanding.

2.5.20 Note that matters relating to semantics/minor clarifications have not been included.

***Table 2.4: Offshore ornithology - issues raised in the Examination to date by the ExA and IPs in relation to the Applicant's screening of LSEs (alone and in-combination)***

| ID | Issue | Details | ExA observation/ question |
|---|---|---|---|
| **Baseline** | | | |
| 2.4.1 | Manx shearwater | RSPB Cymru [RR-071] considered the Applicant's Digital Aerial Survey (DAS) effort was unlikely to properly characterise the activity of Manx shearwater at the application site. It stated that it did not have confidence in the baseline densities of Manx shearwater presented, and therefore it is impossible to make any conclusions as to the significance of impacts.<br>However, the Applicant [PDA-008] considered its surveys to be sufficient and noted that the baseline drew upon multiple data sources.<br>Further to ExA questions, NRW (A) [Q1.17.3 of REP3-093] and JNCC [Q1.17.3 of REP3-084] acknowledged limitations of DAS in relation to crepuscular and nocturnal species such as Manx shearwater. However, both parties were satisfied that the site-specific DAS survey reflects shearwater baseline characterisation.<br>RSPB Cymru did not comment on the matter further, although the matter is marked as an ongoing point of discussion within the Deadline 2 SoCG [REP2-088]. | The ExA notes this matter is not resolved with RSPB Cymru**.** |
| **Qualifying features** | | | |
| 2.4.2 | Skomer, Skokholm and the Seas off Pembrokeshire / Sgomer, Sgogwm | JNCC [RR-033] [REP1-066] and NRW (A) [RR-011] advised that the qualifying features in the HRA Screening Report [APP-034] appeared to be incorrect.<br>The Applicant [PDA-008] acknowledged errors but considered the discrepancies did not contribute to an error in impact assessment. It | The ExA understands this matter to be resolved. |

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| | a Moroedd Penfro SPA | stated that all potentially impacted species had been assessed; therefore, the conclusions remained valid. It amended the HRA Screening Report [REP2-012] and the HRA Stage 2 SPA Report [REP2-010] accordingly. | |
| **Displacement assessment** (Also applicable to Stage 2 assessments) | | | |
| 2.4.3 | Atlantic puffin, guillemot and razorbill – foraging range | JNCC [RR-033][REP1-066] did not agree with the foraging range provided for Atlantic puffin, guillemot and razorbill in Table 1.7 of the HRA Screening Report [APP-034]. JNCC considered it to be unclear if the correct SPAs had been screened in with regard to these species.<br>The Applicant [PDA-008] acknowledged the incorrect foraging ranges had been presented in [APP-034], and amended the updated HRA Screening Report [REP2-012] accordingly. It confirmed that no additional SPAs should be screened in and that it was confident in the conclusions of the HRA Report.<br>Specifically in respect of Atlantic puffin, JNCC [RR-033] [REP1-066][REP2-097] advised the foraging range within Table 5 of Woodward *et al.* (2019) (137.1 ± 128.3 = 265.4km) should be applied to all SPAs. It was concerned that SPAs with Atlantic puffin as a qualifying feature may not have been treated correctly at the screening stage. However, the Applicant confirmed [PDA-008] [REP2-081][REP3-036] that there are no SPAs between 250.8 (the initial foraging range it had applied) and 265.4km, which could have been excluded from the application documents, and that all sites identified by JNCC [REP1-066][REP2-097] had been considered at the point of application.<br>JNCC [REP3-086] subsequently confirmed it was satisfied that the HRA screening had identified the relevant SPAs that fall within the foraging range of Atlantic puffin. | The ExA understands this matter to be resolved. |
| 2.4.4 | Atlantic puffin - Mean Seasonal | JNCC [RR-033][REP1-066] and NRW (A) [RR-011] advised that incorrect Mean Seasonal Peak abundance estimates appear to have been | *Q.a) Can the Applicant confirm the five breeding* |

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| | Peak abundance estimates (non-breeding season) | calculated for Atlantic puffin in the non-breeding season, and therefore predicted displacement mortalities may be incorrect.<br>The Applicant [PDA-008] acknowledged the discrepancy and confirmed the non-breeding mean peak should be 22 birds, not O and reflected this in the updated HRA Screening Report [REP2-012]. It confirmed [REP2-081] that the corrected annual impact on Atlantic puffin from displacement was 0 (0 to 2) birds (based on 30% displacement and 1% mortality to 70% displacement and 10% mortality). The Applicant [REP3-036] calculated an annual mortality of 0.1 (50% displacement and 1% mortality) which would result in <0.1 birds from each of the five SPAs considered being impacted. It did not consider apportioning to be necessary and did not screen in any additional European sites for Atlantic puffin.<br>However, JNCC [REP2-097][REP3-085][REP3-086][REP4-102] calculated 3 annual mortalities (based on 70% displacement and 10% mortality) from the project alone. It advised that, in line with the Applicants own approach, impacts to Atlantic puffin should be apportioned to SPAs, and if apportioned impacts are greater than 0.0 mortalities, the feature should be taken through to Stage 2 (as was done for lesser black-backed gull and herring gull).<br>The Applicant [REP3-036] agreed with JNCCs calculations at 70% displacement and 10% mortality but considered that apportioning the impact to five breeding season sites and nine non-breeding season sites is not proportionate to the risk. It concluded that there would be no measurable impact from the project alone.<br>Nevertheless, the Applicant provided full apportioning for Atlantic puffin in the Deadline 4 'Offshore ornithology supporting information in line with SNCB advice' [REP4-031]. The largest impact (in terms of number of birds and apportioning size during the breeding period) was apportioned to Skomer, Skokholm and the Seas off Pembrokeshire/Sgomer, Sgogwm | *sites and nine non-breeding sites relevant to Atlantic puffin?*<br>*Q.(b) The ExA notes that Figure 1.1 of the HRA Stage 2 SPA Report [REP2-010] states that where there are >0.0 birds impacted, a LSE cannot be ruled out. Can the Applicant explain why it has not followed this methodology?*<br>*(c) Do JNCC/ NRW (A) consider a LSE should be identified for any European site with Atlantic puffin as a qualifying feature?* |

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| | | a Moroedd Penfro SPA. Based on 70% displacement and 10% mortality rates, this would result in impacts on 0.7 birds annually, which is an increase in baseline mortality of 0.01%. It considered an in-combination assessment was not required as the increase in baseline mortality was <0.05% from the project alone. The Applicant concluded that there is no risk of LSE on any SPA designated for Atlantic puffin (alone or in-combination). It considered it not proportionate to screen in this feature or any associated SPAs as there is no plausible risk. | |
| 2.4.5 | Manx shearwater - Mean Seasonal Peak abundance estimates<br><br>(Also applicable to Stage 2 assessments) | NRW (A) [RR-011] identified discrepancies between various application documents in the Mean Seasonal Peak abundance estimates for Manx shearwater (spring and autumn migration seasons).<br><br>The Applicant [PDA-008] acknowledged the discrepancy during spring migration but considered the autumn migration season peak of 182 Manx shearwaters to be correct. However, NRW (A) [REP1-056] disagreed and considered that the autumn migration mean peak estimate would be 13.<br><br>The Applicant subsequently agreed with NRW (A) and amended the seasonal mean peak numbers in the updated HRA Screening Report [REP2-012] and revised the HRA Stage 2 SPA Report [REP2-010]. The Applicant confirmed [REP2-080] that the amendments to the documents do not alter the conclusions. | The ExA understands this matter to be resolved. |
| 2.4.6 | Displacement rates and mortality ranges<br><br>(Also applicable to Stage 2 assessments) | The Applicant [APP-057] applied rates of 50% displacement and 1% mortality across the site and a 2km buffer for auks and Manx shearwater. It advocated rates of 70% displacement and 1% mortality for gannet.<br><br>JNCC [RR-033][REP1-066][REP2-097] and NRW (A) [RR-011] [REP1-056] advised a range of displacement rates and mortality ranges should be presented (ie confidence intervals). JNCC stated that evidence suggests that there is a range of displacement rates occurring at operational windfarms and currently no empirical evidence of mortality rates of displaced birds. JNCC [REP1-066] stated that in assessing single | *Q. Are JNCC and NRW (A) content that an appropriate range of displacement and mortality has been presented in [REP4-031] to enable an informed decision to be made by the Secretary of State?* |

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| | | rates, it is difficult to know whether any combination of displacement and mortality rates could result in impacts greater than 1% baseline mortality for any feature of any SPA, and whether any SPA feature should have been taken through to PVA.<br>NRW (A) [REP1-056] considered the Applicant has not presented any evidence to justify its preferred rates and that single values risk 'false precision'. It considered that a range of potential effects takes into account the large degree of uncertainty regarding displacement rates and effects. It advised a range of displacement rates from 30%-70% across a 2km buffer for auks and Manx shearwater, and a range of 60-80% displacement for gannet. NRW (A) advised that very little information is available about the consequences of displacement for individuals, therefore a range of mortality rates from 1-10% should be assessed for all species for displacement assessments.<br>The Applicant [PDA-008] acknowledged minimum impact values (ie lowest displacement and mortality rates) were used in error but confirmed that no additional site would have been taken forward to Stage 2 had a range been presented. It further considered that the most appropriate rates were used and it would be overly precautionary to use the largest displacement impacts which are not scientifically justified.<br>NRW (A) [REP1-056] and JNCC [REP2-097][REP3-086] confirmed they would not base their advice solely on the worst-case scenario but reiterated their stances that a range of displacement and mortality rates should be provided. They sought SPA-apportioned displacement matrices to help determine whether any SPA feature should have been taken through to PVA.<br>At Deadline 3, the Applicant presented the apportioned displacement and collision impacts using a range-based approach for the project alone and in-combination, in accordance with the SNCBs' advice in Section 1.5 of | |

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| | | 'Offshore ornithology supporting information in line with SNCB advice' [REP3-059] (subsequently updated at Deadline 4 [REP4-031]. | |
| 2.4.7 | Black-legged kittiwake displacement | The Applicant assessed black-legged kittiwake displacement in the application documents at the request of JNCC during pre-application. However, NRW (A) advised that no kittiwake assessment for displacement is required due to an insufficient evidence base [REP1-056].<br>The displacement assessment was updated in 'Offshore ornithology supporting information in line with SNCB advice' [REP3-059]. The Applicant considered there to be a lack of evidence for 30-70% displacement and 1-10% mortality and therefore presented an alternative approach of 30% displacement and 3% mortality (in line with NatureScot guidance).<br>JNCC [REP4-102] acknowledged variability around the behavioural response of black-legged kittiwake, with evidence of both attraction and displacement, hence it argued the need for both a collision and displacement assessment. It considered that evidence supports recommended displacement rates of 30% to 70%. | *Q.a) Can the Applicant provide an assessment of black-legged kittiwake displacement applying JNCC's recommended displacement rates of 30% to 70%?*<br>*b) Would any additional European sites be screened in as a result of applying JNCC's recommended displacement rates?*<br>*c) Would there be any change to the conclusions of the Stage 2 assessment in respect of black legged kittiwake?* |
| 2.4.8 | Macroavoidance – gannets<br>(Also applicable to Stage 2 assessments) | NRW (A) [REP1-056] advised that macroavoidance should not be applied for displacement assessments. The Applicant [REP2-080] confirmed that it adjusted collision estimates for gannet macro avoidance in the revised HRA Screening Report [REP2-012] and HRA Stage 2 SPA Report [REP2-010]. | The ExA understands this matter to be resolved. |

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| **Collision risk** | | | |
| 2.4.9 | Seasonal definitions<br>(Also applicable to Stage 2 assessments) | NRW (A) [REP1-056] and JNCC [REP1-066] did not agree with splitting monthly collision impacts across two different seasons. They advised to use the full breeding season to define the breeding season, and where there is overlap of months considered in both the full breeding season and the non-breeding seasons (e.g. with autumn and spring migration seasons) the non-breeding periods should be adjusted accordingly.<br>The Applicant [REP2-080] [REP2-081] acknowledged this approach should have been undertaken to assess collision impacts for northern gannet, black-legged kittiwake and fulmar. It updated that the HRA Screening Report [REP2-012] and HRA Stage 2 SPA Report [REP2-010] to reflect this approach. | The ExA understands this matter to be resolved. |
| 2.4.10 | Errors in seasonal collision totals<br>(Also applicable to Stage 2 assessments) | NRW (A) [RR-011] [REP1-056] noted there were errors in seasonal collision totals presented in Section 5.7.5 of the Offshore Ornithology Chapter [APP-057] compared to the monthly collision estimates in the Collision Risk Modelling (CRM) Annex [APP-093]. The seasonal collisions had been used to inform the HRA.<br>The Applicant amended the seasonal collision estimates in the updated HRA Screening Report [REP2-012] and HRA Stage 2 SPA Report [REP2-010]. The Applicant confirmed [REP2-080] that the amendments to the documents do not alter the conclusions. | The ExA understands this matter to be resolved. |
| 2.4.11 | Confidence intervals<br>(Also applicable to Stage 2 assessments) | JNCC [RR-033][REP1-066][REP2-097] considered that confidence intervals associated with collision estimates should be provided and taken through the assessment to assess the full range of potential effects and determine the need for further assessment. JNCC [REP3-086] advised that upper and lower confidence intervals for collision mortalities should be apportioned to individual relevant SPAs; this information would be particularly important in determining Compensation requirement, should AEOSI not be ruled out and a Derogation case required. | The ExA understands this matter to be resolved. |

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| | | The Applicant [PDA-008] noted that upper and lower confidence intervals had been presented in ES Volume 6, Annex 5.3: Offshore ornithology collision risk modelling technical report [APP-093]. It considered the use of mean collision estimates in the HRA to be realistic and proportionate in line with multiple other applications. Nevertheless, it provided confidence intervals associated with collision estimates in Table 1-13 and 1-17 of the Deadline 3 'Offshore ornithology supporting information in line with SNCB advice' [REP3-059]. | |
| **Combined displacement and collision risk** (Also applicable to Stage 2 assessments) | | | |
| 2.4.12 | Kittiwake and gannet<br><br>(Also applicable to Stage 2 assessments) | NRW (A) [REP1-056] advised that impacts to black-legged kittiwake and gannet be presented for collision and displacement separately, as well as a combined total.<br><br>The Applicant revised the updated HRA Stage 2 SPA Report [REP2-010] to present collision and displacement separately. However, it explained that a combined impact was presented within the HRA Stage 1 Screening Report [REP2-012] so that a site would be screened in on a more precautionary impact.<br><br>The Applicant confirmed [REP2-080] that the amendments to the documents do not alter the conclusions. | The ExA understands this matter to be resolved. |
| **Apportionment** (Also applicable to Stage 2 assessments) | | | |
| 2.4.13 | Age class apportionment<br><br>(Also applicable to Stage 2 assessments) | JNCC [RR-033][REP1-066] and NRW (A) [RR-011] did not agree with the Applicant's approach to age class apportioning using stable age structures from Furness (2015) for black-legged kittiwake, Northern gannet, herring gull, great black-backed gull, and lesser black-backed gull in the non-breeding season, and common guillemot, razorbill, and Manx shearwater in the breeding and non-breeding seasons. | *Q. Further to the Applicant's submission [REP4-042], can JNCC and NRW (A) confirm whether they are satisfied the Applicant's approach to age class apportionment during* |

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| | | NRW (A) [RR-011] noted that breeding colony SPAs are designated based on breeding birds, not all birds at the colony, therefore impacts should be apportioned to adults only.<br>For the non-breeding season, NRW (A) [RR-011][REP1-056] and JNCC [RR-033][REP1-066][REP2-097] advised the Applicant to apportion to age class using site-specific data where possible, or take the precautionary approach and assume all 'adult type' birds are adults. NRW (A) advised that the apportionment to designated sites for the non-breeding season(s) should be undertaken based on the proportion of the SPA adult birds across the Biologically Defined Minimum Population Scales (BDMPS) total of birds of all ages for each relevant non-breeding BDMPS season using the information in the tables in Appendix A of Furness (2015).<br>The Applicant confirmed [PDA-008] [REP2-080][REP2-081] that impacts apportioned to SPA are for adult birds only in both breeding and non-breeding period. It confirmed that site-specific survey data (rather than stable age structure) had been used for both non-breeding and breeding birds within the assessments. It acknowledged that the information provided with respect to this was unclear.<br>The Applicant [PDA-008] explained that the calculation of apportioning values for non-breeding seasons had followed the approach used previously for multiple offshore wind farms (e.g., East Anglia THREE Ltd., 2015, Outer Dowsing, 2024) and is advised for use by Natural England (Parker et al., 2022). For apportionment, the contribution of adult birds from an individual designated site, as estimated by Furness (2015), to the relevant BDMPS population for each species/season combination was divided by the total BDMPS population.<br>NRW (A) [REP3-090][ REP4-105] noted the Applicant's approach does mean that in this case, a higher apportionment value for a designated site is calculated, which can be considered precautionary. | *the non-breeding season can be considered appropriate and whether their previous concerns have been resolved?* |

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| | | At Deadline 4, the Applicant submitted 'Offshore ornithology apportioning clarification note' [REP4-042] to clarify its approach during the non-breeding season. It provided a comparison of the Applicant's approach versus the SNCB advised approach. It concluded that the impacts predicted using the Applicant's approach are marginally higher than those predicted using the SNCB's approach for the project alone, and the same for the in-combination assessment. | |
| 2.4.14 | | Black-legged kittiwake – breeding season<br>JNCC [RR-033][REP1-066] and NRW (A) [RR-011] advised that proportions of black-legged kittiwake adults and immatures during the breeding season should be based on age-class information from site-specific surveys (ie 95.23%) or an assumption be made that all birds are adults.<br>The Applicant [PDA-008] confirmed that using 95.23% for the breeding season would not result in a material change to its assessment although one additional site (Wicklow Head SPA) would have been screened into Stage 2. It considered that a conclusion of no AEoI from the project alone would be reached based on an increase in baseline mortality of 0.01 to 0.03%.<br>The Applicant subsequently updated the breeding season age-class apportioning for black-legged kittiwake to be based on site-specific data only. This led to updates in the revised HRA Screening Report [REP2-012] and the HRA Stage 2 SPA Report [REP2-010] within which additional LSEs were identified for black-legged kittiwake for Wicklow Head SPA and Skomer, Skokholm and the Seas off Pembrokeshire / Sgomer, Sgogwm a Moroedd Penfro SPA in respect of disturbance and collision risk during operation and in-combination effects. | The ExA understands this matter to be resolved. It notes the additional LSEs for black-legged kittiwake for Wicklow Head SPA and Skomer, Skokholm and the Seas off Pembrokeshire / Sgomer, Sgogwm a Moroedd Penfro SPA in respect of disturbance and collision risk during operation and in-combination effects. |

| **Barrier effects** | | | |
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| 2.4.15 | Barrier effects | The ExA [Q1.10.2 of PD-013] sought further justification from the Applicant for screening out of operational phase barrier effects for all qualifying features of all European sites.<br>The Applicant [REP3-062] considered the likelihood of the Mona Array Area resulting in barrier effects to be low because of the large foraging ranges used by seabirds and the large distances from the Mona Array Area at which the SPAs are located. It stated that any additional flight cost associated with avoidance of the wind farm during migration or commute between breeding grounds and foraging grounds would result in a very negligible increase in energy expenditure.<br>JNCC [REP3-084] and NRW (A) [REP3-093] confirmed their agreement that barrier effects could be screened out. | The ExA understands this matter to be resolved. |

***Table 2.5: Marine mammals - issues raised in the Examination to date by the ExA and IPs in relation to the Applicant's screening of LSEs (alone and in-combination)***

| ID | Potential impact pathway/issue | Details of issue | ExA observation/ question |
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| **North Anglesey Marine SAC – harbour porpoise** | | | |
| 2.5.1 | UXO clearance | JNCC [RR-033] initially agreed with the Applicant's conclusion of potential LSE on the North Anglesey Marine SAC due to underwater sound from piling, and UXO clearance. JNCC [REP1-066] subsequently changed its position and stated that it agreed there would be no LSE to the site from piling and low order UXO clearances. | *Q. Can JNCC clarify whether it considers there to be a LSE on harbour porpoise of the North Anglesey Marine SAC as a result of piling and UXO clearance?* |

***Table 2.6: In-combination assessment - issues raised in the Examination to date by the ExA and IPs in relation to the Applicant's screening of LSEs (alone and in-combination)***

| ID | Potential impact pathway/issue | Details of issue | ExA observation/ question |
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| 2.6.1 | In combination effects where no LSE from the project alone | Section 1.4 of the HRA Screening Report [APP-034] detailed the Applicant's overarching approach to assessing in-combination effects. It stated that it is not necessary to consider sites/features for which an LSE 'alone' has been identified; rather it is for those were no LSE was concluded. However, numerous screening matrices stated that 'there is no potential for LSE alone, and so no potential for LSE has been concluded in-combination'.<br>The ExA [Q1.10.3 of PD-013] asked the Applicant to provide such an assessment, where this had not been done within the HRA and to identify the projects or plans considered. However, the Applicant [REP3-062] did not consider this necessary given the highly precautionary approach to the screening of the project alone, no additional LSEs on would be identified as a result of in-combination effects.<br>Annex I habitats and fish - NRW (A) [Q1.10.3 of REP3-093] agreed there is no potential for in-combination LSE to benthic habitats and fish for impact pathways for which a conclusion of no LSE alone was reached.<br>Offshore ornithology - JNCC [Q1.10.3 of REP3-084] considered there to be potential for an in-combination LSE for Atlantic puffin, which had been excluded from an in-combination assessment. It considered that a gap-filling exercise could reveal significantly more mortalities for this species than anticipated and did not agree with the rational provided by the Applicant for exclusion of this species from in-combination assessment. As noted in ID 2.4.4 of this RIES, further to a full apportioning exercise, the Applicant subsequently considered an in-combination assessment | *Q.a) Further to the Applicant's Deadline 4 submissions, can NRW (A) and JNCC confirm whether they agree that all in-combination LSEs have been identified by the Applicant in respect of marine ornithology?*<br>*Q.b) Further to the Applicant's response at Deadline 4, Can NRW (A) provide comment as to whether it considers there to be any in-combination LSEs to marine mammals and if so, provide details?* |

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| | | was not required for Atlantic puffin as the increase in baseline mortality was <0.05% from the project alone.<br>NRW (A) [Q1.10.3 of REP3-093] considered there to be potential for LSE to marine ornithology from in-combination effects. NRW (A) [REP4-105] acknowledged that the Applicant had identified additional LSEs in [REP3-059], however due to concerns with the in-combination gap fill assessment and anticipated updates at Deadline 4 (see paragraphs 3.3.9 to 3.3.17 of this RIES), it was unable to provide advice on the levels of significance of in-combination impacts to Welsh SPAs.<br>Marine mammals - JNCC [Q1.10.3 of REP3-084] agreed there is no potential for in-combination LSE to marine mammals for impact pathways for which a conclusion of no LSE alone was reached. However, NRW (A) disagreed [REP3-093], stating there may be a potential for an in-combination contribution to LSE for vessel collision at the management unit level. It advised the Applicant to consider this in line with NRW's position statement on mortality limits, and its position statement on the use of Management Units in HRA (which recommends carrying out an iterative assessment process).<br>The Applicant [REP4-065] noted that NRW (A) had not previously raised the potential for in-combination LSE collision risk. It highlighted that the initial SoCGs with NRW (A) [REP1-025] and JNCC [REP1-028], confirm agreement with the screening of LSE on European sites for marine mammals; the approach to determining LSE; the list of projects screened in; and the overall conclusions of the HRA (with regards to marine mammals).<br>It explained that the closest marine mammal SAC to the Proposed Development is the North Anglesey Marine SAC, which is located 23.67km from the Mona Offshore Wind Project and is designated for harbour porpoise. It noted that, the advice on operations for the North Anglesey Marine SAC (JNCC and NRW and DAERA, 2019a) does not | |

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| | | currently identify the pressure of death/injury by collision as a ‘high’ or significant risk to the harbour porpoise feature of the SAC. The Applicant acknowledged harbour porpoise have known sensitivity to vessel noise but considered the species to be small and highly agile and likely to move away from any vessels at close proximity. Given the distance from this SAC, the Applicant considered the likelihood of collisions occurring between vessels and marine mammals from the SAC to be low and that to some extent, the sound from the vessels themselves would deter animals away from vessels and thereby further reducing the risk of injury due to collision. Fast moving vessels would be limited in number.<br>The Applicant considered that the risk of mortality of five harbour porpoise (NRW’s threshold for AEoI) due to vessel collision to be highly unlikely. It concluded there is no potential for LSE from vessel collision risk across all phases of the Mona Offshore Wind Project from the project alone and in combination with other plans or projects. | |

## 2.6 Summary of Examination outcomes in relation to screening

2.6.1 The ExA understands that whilst the majority of matters relating to LSE have been resolved, the matters coloured amber remain outstanding. The ExA has sought updates and responses to some of the unresolved matters from the Applicant, JNCC and NRW (A), where indicated in Tables 2.4 to 2.6 to provide clarity on the outstanding matters.

2.6.2 The ExA also welcomes corrections from any parties should it have incorrectly marked a matter as resolved.

**ExA's understanding of LSEs after Deadline 4**

2.6.3 The ExA understands that a LSE from the Proposed Development alone or in combination with other projects or plans can be excluded for all qualifying features of the European sites listed in Table 2.2 of the RIES.

*Q. Are JNCC/NRW content that a LSE can be excluded for the European sites listed in Table 2.2 of the RIES?*

2.6.4 The ExA understands that the Proposed Development would be likely to give rise to significant effects, either alone or in combination with other projects or plans, on one or more qualifying feature(s) of the European sites detailed in Table 2.3 and paragraph 2.5.11 of this RIES. This comprises the sites listed in Table 1.125 of the HRA Screening Report [REP2-012], as well as collision risk for lesser-black backed gull from Skomer, Skokholm and the Seas off Pembrokeshire / Sgomer, Sgogwm a Moroedd Penfro SPA; which was not included in Table 1.125 of the HRA Screening Report [REP2-012] (this was however included in the revised Integrity Matrices [Table 1.40 of REP2-014]).

2.6.5 The ExA considers there to be the potential for additional LSEs to be identified in respect of:

- Atlantic puffin of Skomer, Skokholm and the Seas off Pembrokeshire/ Sgomer, Sgogwm a Moroedd Penfro SPA (see RIES ID 2.4.4);
- in-combination impacts to Welsh SPAs (see RIES ID 2.6.1); and
- in-combination impacts to marine mammals (see RIES ID 2.6.1).

2.6.6 As noted in Tables 2.4 and 3.6 above, the ExA would appreciate responses from NRW (A) and JNCC on these matters.

*Q. Further to the Applicant's Deadline 4 submissions, can NRW (A) and JNCC advise whether it considers there to be a LSE to any qualifying feature(s) of any European site(s) in addition to those captured in Table 1.125 of the revised HRA Screening Report [REP2-012] and the lesser-black backed gull from Skomer, Skokholm and the Seas off Pembrokeshire / Sgomer, Sgogwm a Moroedd Penfro SPA? (Please refer to IDs 2.4.4 and 2.6.1 of this RIES where relevant).*

# 3 ADVERSE EFFECTS ON INTEGRITY

## 3.1 Conservation Objectives

3.1.1 The conservation objectives for all of the SACs for which a LSE was identified by the Applicant at the point of the DCO application were summarised within the HRA Stage 2 SAC Report [APP-032, updated in [REP2-012]. They were also provided in full in [REP3-067].

3.1.2 The HRA Stage 2 SAC Report [APP-032] noted that the following are in unfavourable condition:

- Dee Estuary/Aber Dyfrdwy SAC – river lamprey and sea lamprey;
- River Dee and Bala Lake/Afon Dyfrdwy a Llyn Tegid SAC – Atlantic salmon, river lamprey and sea lamprey;
- River Ehen SAC – freshwater pearl mussel and Atlantic salmon;
- River Eden SAC – river lamprey and sea lamprey;
- Afon Gwyrfai a Llyn Cwellyn SAC – Atlantic salmon;
- River Kent SAC – freshwater pearl mussel;
- River Bladnoch SAC – Atlantic salmon; and
- Strangford Lough SAC – harbour seal.

3.1.3 The HRA Stage 2 SAC Report [APP-032] noted that condition assessments were not available for the following SACs:

- River Derwent and Bassenthwaite Lake SAC;
- Solway Firth SAC;
- North Anglesey Marine/Gogledd Môn Forol SAC;
- North Channel SAC;
- Murlough SAC;
- The Maidens SAC;
- Bristol Channel Approaches/Dynesfeydd Môr Hafren SAC;
- Lundy SAC; and
- Isles of Scilly Complex SAC.

3.1.4 In respect of SPAs, the Applicant followed a two-step process to assessing effects on the integrity of sites for which a LSE was identified (see paragraph 3.2.4 of this RIES for further details). Conservation objectives were provided by the Applicant only for the two European sites that reached Step 2 (Liverpool Bay/Bae Lerpwl SPA and Isles of Scilly SPA) [APP-033].

3.1.5 Further to ExQs [Q1.10.7 of PD-013], the Applicant submitted Conservation Objectives [REP3-068] for all SPAs for which a LSE had been identified in the

HRA Stage 1 Screening Report, except Ribble and Alt Estuaries Ramsar. It explained that NE considers the Conservation Advice packages for the overlapping European Marine Site designations to be, in most cases, sufficient to support the management of the Ramsar interests; therefore the conservation objectives provided for the Ribble and Alt Estuaries SPA apply equally to the Ribble and Alt Estuaries Ramsar site.

3.1.6 The HRA Stage 2 SPA Report [APP-033] did not identify the condition of any of the SPA/Ramsar sites. Further to ExQs [Q1.10.7 and Q1.10.8 of PD-013], NRW (A) [REP3-093] advised that the features of the Welsh SPAs considered in the Mona HRA Stage 2 SPA report to be in unfavourable condition (due to the effects of the mass mortality from Highly Pathogenic Avian Influenza (HPAI)) are:

- Skomer, Skokholm and seas off Pembrokeshire SPA: lesser black-backed gull; and
- Grassholm SPA: gannet.

3.1.7 The Applicant [REP4-065] noted that this information is not publicly available and confirmed that it had used the most recent colony count date from The Seabird Monitoring Programme (SMP) online database available at the time of application. It noted that as apportioning is based on concurrent colony counts and baseline digital aerial survey data, it does not consider it appropriate to use more recent colony counts.

3.1.8 NRW (A) [REP3-093] also explained that the red-throated diver feature of Liverpool Bay SPA has a restore conservation objective for population distribution and extent and distribution of supporting habitat. In addition, there is a minimise target for disturbance caused by human activity.

3.1.9 NRW (A) [REP3-093] explained that condition assessments for all Welsh only SPAs will be published in March 2025.

## 3.2 The Applicant's assessment (application stage)

3.2.1 The European sites and qualifying features for which LSEs were identified were further assessed by the Applicant to determine if they could be subject to AEoI from the Proposed Development, either alone or in combination.

**Mitigation measures**

3.2.2 The Applicant's HRA Stage 2 Reports identified mitigation measures for each receptor group as follows:

- Annex I habitats – Tables 1.5, 1.9, 1.13, 1.16 and 1.18 of [APP-032];
- Annex II diadromous fish species – Tables 1.30 and 1.48 of [APP-032];
- Annex II marine mammals – Tables 1.84 and 1.152 of [APP-032]; and

- Offshore ornithological features – Tables 1.6, 1.8, 1.46, 1.50 and 1.55 of [APP-033] (Tables 1.6, 1.8, 1.46, 1.52 and 1.57 of REP2-010].

3.2.3 These were taken into account in the Applicant's assessment of effects on integrity.

**SPAs/Ramsars - Step 1 and step 2 assessment**

3.2.4 Section 1.4.7 and Figure 1.1 of the HRA Stage 2 SPA Report [APP-033, revised in REP2-010] explained that for SPAs/Ramsars, a two-step process to assessing effects on the integrity of sites for which a LSE was identified. In brief:

- Step 1 comprised a high-level assessment, based on apportioning data, to identify where there is a low risk of an AEoI (ie predicted impacts for the Proposed Development alone and/or in-combination cause a <1% increase in the baseline mortality of the latest population estimate for a qualifying feature).
- Step 2 was for sites for which it is predicted that there would be an increase in baseline mortality of particular qualifying features of >1%. It comprised a more detailed assessment, based on collision risk modelling and displacement assessments to examine impacts against each conservation objective for the relevant SPAs.

3.2.5 The two sites and qualifying features which were taken forward to the Step 2 assessment were:

- Liverpool Bay/Bae Lerpwl SPA – impacts on red-throated diver and common scoter; and
- Isles of Scilly SPA – impacts on non-breeding great black-backed gull.

**In combination**

3.2.6 The projects included in the in-combination assessments at the point of DCO Application were detailed in:

- Annex I habitats – Table 1.21 and Figure 1.9 of [APP-032];
- Annex II diadromous fish species – Table 1.58 and Figure 1.9 of [APP-032];
- Annex II marine mammals – Table 1.154 and Figure 1.13 of [APP-032];
- Offshore ornithological features – Table 1.57 and Figure 1.12 of [APP-033] (Renumbered as Table 1.63 in [REP2-010], however the content remained the same).

3.2.7 Section 1.4.6 of the HRA Stage 2 SPA Report [APP-033] detailed the Applicant's general approach to the in-combination assessment for SPAs/Ramsar sites.

3.2.8 Section 1.4.7 of the HRA Stage 2 SPA Report [APP-033] confirmed that for SPAs/Ramsar sites, an impact of <0.05% increase in baseline mortality from the project alone was deemed non-material and within natural fluctuations of the population and therefore was not taken through to the in-combination assessment. In-combination assessments [Section 1.6.4.6 of APP-033] were therefore undertaken only for the following UK SPAs and features:

- Disturbance and displacement from airborne sound and presence of vessels and infrastructure for red-throated diver and common scoter within the Liverpool Bay/Bae Lerpwl SPA during the construction, operations and maintenance and decommissioning phases.
- Collision risk for great black-backed gull from the Isles of Scilly SPA during the operations and maintenance phase during the non-breeding season.

3.2.9 Matters discussed during the Examination in relation to the in-combination assessment are detailed in Section 3.3 of this RIES.

**Applicant's conclusions in relation to site integrity**

3.2.10 At the point of application, the Applicant concluded that the Proposed Development would not adversely affect the integrity of any of the European sites and features assessed, either alone or in combination with other projects or plans. The assessments were summarised in Table 1.220 of [APP-032] for SACs and Table 1.64 of [APP-033] for SPA and Ramsar's. The Applicant's integrity matrices can be found in [APP-035].

## 3.3 Pre-Examination and Examination matters

**Matters agreed by ANCBs prior to Examination commencing**

3.3.1 NRW (A) [RR-011] agreed there would be no AEoI to the following:

- Diadromous fish features of the Welsh protected sites; Dee Estuary/Aber Dyfrdwy SAC, River Dee and Bala Lake/Afon Dyfrdwy a Llyn Tegid SAC, and Afon Gwyrfai a Llyn Cwellyn SAC.
- Benthic designated features of the Menai Strait and Conwy Bay SAC (notwithstanding minor issues that should be amended by the Applicant but would not change assessment conclusions).

**Examination overview**

3.3.2 The Applicant's initial conclusions in the HRA Stage 2 SAC Report [APP-032] and HRA Stage 2 SPA Report [APP-033] were disputed by IPs and questioned by the ExA during Examination in respect of European sites for the following receptor types:

- Annex I habitats (project alone) (see Table 3.1 below);
- marine mammals (project alone) (See Table 3.2 below); and
- offshore ornithology (project alone or in-combination).

*Offshore ornithology*

3.3.3 In respect of ornithology, NRW (A)'s initial position in its Relevant Representation [RR-011] was that LSEs from the Proposed Development alone would not result in AEoI. However, it considered the assessment of effects in the HRA Screening Report [APP-034] and HRA Stage 2 SPA Report [APP-033] was difficult to follow and unclear in places.

*3.3.4* As noted in Section 2.5 of this RIES, JNCC [RR-033] identified numerous concerns with the assessment. It stated that it was not able to agree with the Applicant's overall conclusions, particularly with regards to Skomer, Skokholm and the Seas off Pembrokeshire/Sgomer, Sgogwm a Moroedd Penfro SPA.

3.3.5 RSPB Cymru [RR-071] did not agree that AEoI could be ruled out for collision impacts from the project alone and in-combination for Manx shearwater of the following European sites:

- Copeland Islands SPA;
- Irish Sea Front SPA;
- Rum SPA;
- St Kilda SPA;
- Glannau Aberdaron ac Ynys Enlli/Aberdaron Coast and Bardsey Island SPA ; and
- Skomer, Skokholm and the Seas off Pembrokeshire/Sgomer, Sgogwm a Moroedd Penfro SPA.

3.3.6 RSPB Cymru also did not agree that AEoI could be ruled out for 'a range of species/SPA combinations' (not specified) resulting from collision impacts from the Proposed Development in combination with other plans or projects.

3.3.7 Up to Deadline 4, no further HRA comments were received by RSPB Cymru, however the conclusions of the HRA are marked as not agreed within the Deadline 2 SoCG [REP2-088]. The Applicant [REP4-089] confirmed that it is progressing a SoCG with the RSPB Cymru and believes the issues are capable of resolution.

3.3.8 A large proportion of the offshore ornithology methodological concerns detailed in Section 2.5 of this RIES also relate to the Stage 2 assessment. See paragraphs 2.5.4 to 2.5.17 for details of the relevant documents submitted to date by the Applicant to address these concerns.

*In-combination effects*

3.3.9 NRW (A) [REP1-025] [REP3-093] confirmed it was content with the projects included in the in-combination assessments with respect of benthic subtidal and ecology, fish and shellfish ecology, and marine mammals. It stated that the list of projects in respect of offshore ornithology was an ongoing point of discussion.

*Q. Can NRW (A) confirm whether it is content with the projects included in the offshore ornithology in-combination assessment presented in [REP4-031]?*

3.3.10 JNCC [REP1-028][REP3-084] confirmed that JNCC had no comments with respect of benthic subtidal and ecology, fish and shellfish ecology and agreed with the projects screened into the in-combination assessment marine mammals in respect offshore waters and offshore ornithology.

3.3.11 Deadline 3: The Applicant submitted a review of information on cumulative plans and projects available in the public domain since the application was submitted [REP3-058]. The review identified a total of 17 offshore projects and one onshore project with the potential to result in in-combination effects (11 of which were considered in the application documents). The review concluded that for Annex I habitats and Annex II diadromous fish, the changes were minimal and there were no changes to the conclusions of the HRA Report. For Annex II marine mammals it confirmed changes are unlikely to amend the conclusions of the HRA Report. It stated that additional work was required for offshore ornithology in respect of in-combination displacement and collision risk in the event that the operations and maintenance phases overlap (to be submitted at Deadline 4).

3.3.12 As noted in paragraph 2.5.16 of this RIES, the Applicant also submitted 'Offshore ornithology supporting information in line with SNCB advice' [REP3-059]. This report identified additional European sites and qualifying features for which a >0.05% increase in baseline mortality resulted from the project alone (when considering the SNCBs advised methodology); these were therefore included in the in-combination assessment. The European sites and qualifying features were detailed in paragraph 1.5.3.1 and in summary were in respect of displacement of:

- black-legged kittiwake (annually) from nine European sites;
- common guillemot (non-breeding) from 13 European sites;
- great black-backed gull (annually) from one European site;
- northern gannet (annually) from four European sites;
- Manx shearwater (annually) from three European sites; and
- razorbill (non-breeding) from seven European sites.

3.3.13 In-combination displacement assessments were presented in Section 1.5, with PVA presented in Section 1.6. The Applicant concluded there would be no decrease in population size under any of the impact scenarios and as such re-iterated its position that there would be no AEoI for any European site and qualifying feature considered from displacement effects.

3.3.14 The Applicant also presented a 'Gap-fill' technical note [REP3-044] to quantify the predicted displacement and collision impacts from historical offshore wind farms in the Irish Sea that were only considered qualitatively within the Stage 2 HRA SPA Report. It also addressed errata identified in the application documents. This note was submitted to address concerns of JNCC [RR-033] [REP1-066]. NRW (A) [RR-011] and RSPB Cymru [RR-071] in relation to the Applicant's qualitative approach for historical projects with no data (which resulted in impacts from these projects assumed as zero). The Gap-fill note concluded that the inclusion of quantitative estimates for historical projects did

not alter the conclusions presented in the HRA Stage 2 SPA Report [REP2-010] and that there would be no AEoI on any sites or features from the Proposed Development alone or in-combination with other plans and projects.

3.3.15 Deadline 4: JNCC [REP4-101][ REP4-102] considered that the in-combination assessments in 'Gap-fill' technical note [REP3-044] lacked the clarity requested and appeared to not follow SNCB advice. Both JNCC and NRW (A) [REP4-105] noted that the gap-filled results were presented only for the sites and features for which an in-combination assessment was presented in the original application documents; gap-filling had not been undertaken in the in-combination assessments of the additional designated site and features identified in [REP3-059] (see paragraph 3.3.14 of this RIES). NRW (A) [REP4-105] also provided comment on the Applicant's assessment presented within [REP3-059], providing points for consideration in respect of any forthcoming in-combination assessment for Welsh designated sites.

3.3.16 The Applicant submitted the following documents to address the concerns of NRW (A) and JNCC that had been raised with the Applicant in meetings and correspondence external to the Examination:

- A revised 'Offshore ornithology supporting information in line with SNCB advice' [REP4-031] to address the feedback, including updates to the bioseasons for northern gannet, black-legged kittiwake and great black-backed gull from the migration-free breeding to the full migration period.
- 'Review of offshore ornithology CEA and in-combination assessment [REP4-027]'. Paragraph 1.2.1.4 identified eight projects assessed in the application documents within Tier 2, for which applications had since been made and new information was available; these all became Tier 1 projects and were assessed as such.

3.3.17 The Applicant maintained that an AEoI on all European sites considered can be ruled out, from the project alone or in-combination with other plans or projects.

**Further matters discussed during Examination**

3.3.18 Further matters raised in the Examination to date, or for which the ExA seeks clarity, in relation to AEoIs are summarised in Tables 3.1 to 3.4 below. The ExA understands that matters coloured green are resolved, and matters coloured amber are outstanding.

3.3.19 Note that matters relating to semantics/minor clarifications have not been included.

3.3.20 As noted in Table 2.4 of this RIES, many of the overarching methodological issues discussed for offshore ornithology are applicable to both the screening stage and the Stage 2 assessment. These have not been repeated below.

***Table 3.1: Annex I habitats – key issues raised in the Examination to date by the ExA and IPs in relation to the Applicant's assessment of effects on integrity (alone and in-combination)***

| ID | Issue | Details | ExA observation/ question |
|---|---|---|---|
| **Site Menai Strait and Conwy Bay/Y Fenai a Bae Conwy SAC** | | | |
| 3.1.1 | Management plans | The Applicant's assessment [APP-032][APP-033] relied upon measures in an Offshore Construction Method Statement (CMS) and an Offshore Environmental Management Plan (EMP) to avoid adverse effects on benthic habitats and diadromous fish features of the Menai Strait and Conwy Bay/Y Fenai a Bae Conwy SAC. Commitments to be secured through these plans included:<br>• No sandwave clearance within the Menai Strait and Conwy Bay/Y Fenai a Bae Conwy SAC;<br>• The percentage of export cable requiring cable protection to exceed 10% of total length of export cable in Menai Strait and Conwy Bay/Y Fenai a Bae Conwy SAC;<br>• Cable protection will not be installed higher than 70cm within Menai Strait and Conwy Bay SAC; and<br>• Material arising from drilling/sandwave clearance to be deposited in close proximity to the works.<br>Draft/outlines of these documents were not submitted with the application.<br>The ExA [Q1.10.10 of PD-013] requested an outline Offshore CMS, which encapsulates all relevant measures, to be certified within the DCO and referred to within relevant requirements. The Applicant responded [REP3-062] that the Offshore CMS would be secured within the standalone NRW marine licence, as detailed in the Marine Licence Principles Document | Q. The ExA notes that these measures are intended to be secured in the separate TA ML. Can NRW (A) confirm whether it is content with the Applicant's proposed approach to securing the relevant mitigation for the Menai Strait and Conwy Bay/Y Fenai a Bae Conwy SAC? |

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| | | [REP2-029]. The relevant mitigation measures were also included within the Mitigation and Monitoring Schedule [REP2-030] (refs 5, 7, 10 and 13), a certified document within the dDCO [REP4-005]. | |
| 3.1.2 | Sandwave clearance | The ExA sought assurances that sandwave clearance would not be required within the Menai Strait and Conwy Bay/Y Fenai a Bae Conwy SAC [Q1.10.10 of PD-013].<br>The Applicant [REP3-062] explained that preliminary geophysical surveys indicate cable burial will be possible without sandwave clearance. It noted that although sandwaves are mobile, they move slowly. Should cable burial not be possible, cable protection would be installed (not exceeding 10% of the total length of cable within the SAC). | The ExA considers this matter to be resolved. |
| 3.1.3 | Site clearance | Paragraph 1.5.3.9 of the HRA Stage 2 SAC Report [APP-032] stated that there would be no site clearance activities within the Menai Strait and Conwy Bay/Y Fenai a Bae Conwy SAC, however Section 3.5.4 of the ES project description [APP-050] implied site preparation is required across the entire application site. The ExA [Q1.10.11 of PD-013] noted there is a small overlap of the SAC with the application site.<br>The Applicant [REP3-062] explained that the Offshore CMS, including a Cable Specification and Installation Plan (CSIP) that does not permit sandwave clearance within the Menai Strait and Conwy Bay/Y Fenai a Bae Conwy SAC would be secured within the standalone NRW marine licence, as detailed in the Marine Licence Principles Document [REP2-029]. This was also included within the Mitigation and Monitoring Schedule [REP2-030] (ref 4), a certified document within the dDCO [REP4-005]. | The ExA considers this matter to be resolved. |

***Table 3.2: Annex II marine mammals – key issues raised in the Examination to date by the ExA and IPs in relation to the Applicant's assessment of effects on integrity (alone and in-combination)***

| ID | Potential impact pathway/issue | Details of issue | ExA observation/ question |
|---|---|---|---|
| **Marine Mammal Mitigation Protocol and an Underwater Sound Management Strategy** | | | |
| 3.2.1 | Geophysical activities | Table 1.84 of the HRA Stage 2 SAC Report [APP-032] stated that a Marine Mammal Mitigation Protocol and an Underwater Sound Management Strategy were proposed to secure measures for injurious effects and disturbance from piling, unexploded ordnance (UXO) clearance and some geophysical activities. These are secured through Part 2 Condition 18(1)(i) and Part 2 Condition 20, respectively; however, neither Condition refers to geophysical activities.<br><br>At Deadline 3, the Applicant [Q17.5 of REP3-062] confirmed it would update the deemed marine licence drafting in the dDCO at Deadline 4 to secure the approval of a Marine Mammal Mitigation Protocol (MMMP) for geophysical activities. However, this was not amended in the Deadline 4 dDCO [REP4-005]. | *Q. Can the Applicant explain why the dDCO was not amended to secure the approval of a Marine Mammal Mitigation Protocol (MMMP) for geophysical activities?* |
| **Cardigan Bay and Pen Llyn a'r Sarnau SACs – bottlenose dolphins** | | | |
| 3.2.2 | Connectivity of sites | NRW (A) [RR-011][REP1-056] considered that the populations of Cardigan Bay and Pen Llyn a'r Sarnau are highly connected and advised that the two protected sites be considered together.<br><br>The Applicant [PDA-008] confirmed that both sites have been considered in detail separately as per the HRA process so that effects can be assessed against the two site's conservation objectives. NRW (A) [REP1-056] subsequently agreed the matter could be closed. | The ExA understands this matter to be resolved. |

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| **North Anglesey Marine SAC – harbour porpoise** | | | |
| 3.2.3 | High order UXO clearance | JNCC [REP1-066] highlighted concerns in respect of high order UXO clearance, noting that one conservation objective is no significant disturbance to harbour porpoise of North Anglesey Marine SAC. It explained that there are daily and seasonal noise thresholds for the site. It further noted that the Effective Deterrent Range (EDR) for high order UXO clearance is 26km, meaning disturbance from high order clearance in the array area could impact harbour porpoise of North Anglesey Marine SAC which is 23.67km away. JNCC did not agree that UXO clearance should be included within the DCO and deemed Marine Licence (dML).<br><br>The Applicant [REP2-081] considered UXO clearance activities to be adequately controlled within the dML. It stated that in applying the 26km EDR, the spatial extent of overlap with the North Anglesey Marine SAC would be very small (2.03% of the total area) and temporally limited to 22 days (based on the precautionary worst case assumption of a single clearance activity per day). It considered that even with the assessment using precautionary figures for the maximum design scenario (ie 907kg x 22 UXOs detonated at one per day), disturbance would not exceed the daily 20% disturbance threshold or the 10% threshold of the relevant area of the site over the season. The Applicant considered that behavioural disturbance is not as much of a concern compared to injurious effects as the magnitude of the impact is of very short duration (1 second) for each clearance event and therefore any behavioural disturbance to animals is likely to be limited to 'a short-lived startle reaction'.<br><br>JNCC [REP3-086] maintained its advice that UXO clearance is not included as a licenced activity in the DCO/dML and is instead applied for in a separate marine licence. However, it would also support a scenario whereby the DCO/dML specified that all UXO clearance be restricted to low noise methods [Q1.17.9 of REP3-084]. | *Q The ExA notes JNCC's position that UXO clearance should not be included as a licenced activity in the DCO/dML.*<br><br>*The outline Underwater Sound Management Strategy (UWSMS) [APP-202] and outline Marine Mammal Mitigation Protocol [APP-207] both state that low order UXO clearance techniques will been considered as a potential primary mitigation measure.*<br><br>*a) Can the Applicant explain under what circumstances low order clearance would not be possible?*<br><br>*b) Can the Applicant explain what process would be followed to* |

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| | | The Applicant [REP4-086] set out its position on UXO clearance and justification for its inclusion as a licensable activity (using both high and low order clearance methods) in the dDCO and NRW marine licence. It confirmed the Applicant would prioritise low order methods, however considered that high order methods need to remain an option to ensure all necessary clearance activities can take place without the need for separate consents to be sought and the potential for programme delay. | *determine whether low or high order clearance techniques would be undertaken?*<br>c) *To JNCC: The Applicant has concluded that on a worst case scenario of high order clearance, disturbance would not exceed the daily 20% disturbance threshold or the 10% threshold of the relevant area of the site over the season. Can JNCC explain why it is unable to agree to no AEoI on this basis?* |
| 3.2.4 | UXO clearance – multiple attempts | JNCC [REP1-066] sought clarity on whether additional attempts to clear individual devices would increase the number of days on which clearance could occur (which would count towards the seasonal threshold), or whether additional attempts could be completed within the same day. JNCC also advised that both options need to be considered in- | The ExA understands this matter to be resolved, however would appreciate confirmation from JNCC. |

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| | | combination with other noisy activities occurring within the site at the same time.<br><br>The Applicant [REP2-081] confirmed that clearance operations involving multiple attempts are expected to be completed in one day. | |
| 3.2.5 | Underwater Sound Management Strategy (UWSMS)/ MMMP | JNCC [RR-033] [REP1-066] did not consider the outline MMMP [APP-207] (which focusses solely on injury to marine mammals) to be fit for purpose. It made numerous comments on the content of the outline MMMP and outline UWSMS [APP-202], including in respect of mitigation zones, noise abatement systems, the mitigation hierarchy.<br><br>NRW (A) [REP1-056] provided similar comments on the outline UWSMS.<br><br>The Applicant [REP2-080][REP2-081] responded individually to these concerns. It confirmed that the final MMMP (which would be an annex to the final UWSMS) would be developed in accordance with the outline MMMP in consultation with NRW and relevant statutory nature conservation bodies. This is secured in Schedule 14, Condition 18(1)(h) of the draft DCO. Similarly, it confirmed that the wording in the final UWSMS would be developed post-consent in accordance with the outline UWSMS [APP-202]) in consultation with NRW and relevant statutory stakeholders. This is secured in Schedule 14, Condition 20 of the draft DCO and is expected to be secured within the standalone NRW marine licence for the transmission assets. | *Q. The ExA understands this matter to be resolved, however would appreciate confirmation from NRW (A) and JNCC as to whether the outline MMMP and UWSMS can be considered fit for purpose and sufficiently detailed to provide confidence that an AEoI on harbour porpoise can be excluded.* |
| 3.2.6 | Injury and disturbance to marine mammals from elevated underwater sound due to vessel use | NRW (A) [RR-011][REP1-056][REP3-090] noted that the estimated numbers of animals disturbed by vessels and any subsequent conclusions appear to have been based on static impact radii – i.e. equivalent to vessels that are not moving. As such, the estimated numbers disturbed are for a vessel at a fixed point in time only. Given that vessels would be expected to move location, it considered that estimating numbers based on static impact radii may lead to both underestimates of | The ExA understands this matter to be resolved. |

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| | | daily numbers disturbed, and an underestimate of the overall daily area ensonified; which is required to compare against the time area thresholds for an adverse effect for harbour porpoise SACs. It suggested alternative methodology to determine the number of animals affected.<br><br>The Applicant [PDA-009][REP3-038] considered that assessing the footprint of disturbance for a moving vessel as a continuous area from point A to B along a potential shipping route, based upon a precautionary effect range, would lead to an overestimate of the effect as it would not consider rapid recovery of animals as the vessels pass and therefore would not be an appropriate way of assessing disturbance.<br><br>NRW (A) [REP1-056] subsequently noted the Applicant's commitment to develop and adhere to the Offshore EMP (to be secured through DCO Schedule 14 Part 2 Condition 18(e)) which it considered should mitigate most of the impacts. It stated [REP3-090] that the methodological discussion "*does not materially impact our agreement with the overall conclusions that there will be no significant effect / adverse effect on marine mammal populations due to the mitigation methods that will be employed. Essentially, this is a divergence of opinion on how best to calculate the numbers of animals disturbed*." | |
| 3.2.7 | Impulsive noise characteristics | NRW RR-011] did not agree that changes in the impulsive characteristics of impulsive sound at range implies that disturbance thresholds for piling noise should be considered precautionary at long range (i.e. a few kilometres). The Applicant [PDA-008] responded that this statement aligns with the latest scientific guidance. NRW (A) [REP1-056] subsequently agreed that the differences in opinion did not materially affect the conclusions. | The ExA understands this matter to be resolved. |

***Table 3.3: Offshore ornithology - key issues raised in the Examination to date by the ExA and IPs in relation to the Applicant's assessment of effects on integrity (alone and in-combination)***

| ID | Potential impact pathway/issue | Details of issue | ExA observation/ question |
|---|---|---|---|
| **Collision risk** | | | |
| 3.3.1 | Avoidance rates | JNCC [RR-033] [REP1-066] stated that Ozsanlav-Harris (2023) avoidance rates are not JNCC rates and that advice on avoidance rates is contained within joint NE/SNCB guidance on CRM.<br>The Applicant [PDA-008] confirmed Ozsanlav-Harris (2023) avoidance rates had been incorrectly referenced and corrected the discrepancies in the HRA Stage 1 Screening Report [REP2-012] and the HRA Stage 2 ISAA Part Three: SPAs and Ramsar sites Assessment [[REP2-010]. | The ExA understands this matter to be resolved. |
| 3.3.2 | Collision risk assessment – Manx shearwater | RSPB Cymru [RR-071] considered the Applicant's assessment did not reflect the potential behaviour of Manx shearwater in the vicinity of turbines, particularly attraction to illuminations required for turbines.<br>The Applicant [PDA-008] identified critical knowledge gaps regarding light-induced disorientation and considered its assessment to be scientifically valid and robust.<br>NRW (A) [Q1.17.4 of REP3-093] and JNCC [Q1.17.4 of REP3-084] confirmed that Manx shearwaters are known to be attracted to light and can also be disoriented, for example due to the lighting at the top of a wind turbine. They explained that this additional collision risk cannot currently be modelled and they are not aware of any evidence available to quantify that risk. They were both satisfied that the collision risk model is as robust as it currently can be.<br>RSPB Cymru did not comment on this matter further, although it is marked as not agreed within the Deadline 2 SoCG [REP2-088]. | The ExA notes this matter is not resolved with RSPB Cymru. |

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| **Apportionment of impacts** | | | |
| 3.3.3 | Sabbatical birds | NRW (A) [RR-011] and JNCC [RR-033] queried whether sabbatical birds had been excluded from the apportioned impacts during the breeding season. The Applicant [PDA-008] confirmed sabbatical birds were included in the assessment and amended the apportioning technical report accordingly [REP2-022]. JNCC [REP2-097] and NRW (A) [REP3-090] welcomed the clarification. | The ExA understands this matter to be resolved. |
| 3.3.4 | PVA | NRW (A) [REP1-056] advised that should any updates to the assessment during the Examination result in a potential impact exceeding 1% of baseline mortality of the relevant population, consideration should be given to undertaking a PVA.<br>Section 1.6 of the Deadline 3 'Offshore ornithology supporting information in line with SNCB advice' [REP3-059] presented PVA results for sites and features (common guillemot, razorbill, northern gannet and great black-backed gull) where the increase in baseline mortality from in-combination impacts was found to exceed 1% when considering the upper displacement and mortality range recommended by the SNCBs. | The ExA understands this matter to be resolved. |
| **Liverpool Bay/Bae Lerpwl SPA - Displacement of red throated diver and common scoter** | | | |
| 3.3.5 | Displacement of red throated diver – birds on migration | JNCC [RR-033] [REP1-066] did not agree that birds on migration can be excluded from non-breeding season assemblage as any birds present within the SPA would be non-breeding.<br>The Applicant [PDA-008] acknowledged that the HRA Stage 2 SPA Report [APP-033] was not clear. It confirmed all red-throated divers presented within the cable corridor were assessed the updated HRA Screening Report [REP2-012] and revised the HRA Stage 2 SPA Report [REP2-010] accordingly.<br>JNCC [REP1-066] considered that red-throated diver would not occur in sufficient numbers and densities during the summer months (April to | The ExA understands this matter to be resolved. |

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| | | September) for there to be an impact of consequence for the Conservation Objectives of the site. | |
| 3.3.6 | Cable installation restriction | The Applicant proposed a restriction of no offshore export cable installation during the period 1st November – 31st March within Liverpool Bay/Bae Lerpwl SPA (Table 1.6 of the HRA Stage 2 SPA Report [APP-033]). This was intended to avoid adverse impacts on red-throated diver and common scoter of the SPA and would be secured through the stand-alone NRW ML for the transmission assets (as set out in the Marine Licence Principles document [APP-195]) (on the basis that the construction activity within Liverpool Bay SPA is only relevant to the Transmission Assets Marine Licence). It would also be controlled through the Offshore EMP (secured within the deemed marine licence in Schedule 14 of the draft DCO) and would be finalised in accordance with the 'Measures to Minimise Disturbance to Marine Mammals and Rafting Birds from Transiting Vessels' [APP-203].<br>**Clarity over measures**<br>JNCC [REP1-066] sought clarification over the measures to minimise impacts to marine mammals and rafting birds (as described in 'Measures to minimise disturbance to marine mammals and rafting birds from transiting vessels' [APP-203] and the Outline vessel traffic management plan [APP-200]); specially what measures relate to which activity or receptor. It further queried apparent contradictory statements within [APP-203] at Deadline 3 [REP3-084].<br>The Applicant provided clarifications in [REP2-081] and updated 'Measures to minimise disturbance to marine mammals and rafting birds from transiting vessels' at Deadline 3 [REP3-020].<br>**DCO Condition**<br>NRW (A) [REP1-056] and JNCC [REP1-066][REP2-097][REP1-066] welcomed inclusion of the restriction, but considered it should also be | *Q.a) The Applicant maintains that an outline EMP is not necessary. The ExA notes that Part e) of point 18 of conditions listed in Part 2 of Schedule 14 of the draft DCO refers specifically to the certified document 'Measures to minimise disturbance to marine mammals and rafting birds from transiting vessels'. This document contains the cable installation restriction. Can JNCC and NRW (A) further elaborate why this is not sufficient to secure the necessary mitigation?*<br>*Q.b) Where the export cable corridor crosses the Liverpool* |

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| | | secured within the DCO. JNCC [REP3-086] and NRW (A) [REP3-090] advised that "*as the DCO consents all activities and work relevant to the project, it is the controlling consent for the project and should ensure that required mitigation measures are secured by specifying what the requirement is*".<br>NRW (A) noted that that the restriction is not included within the list of information to be included in the EMP in Part e) of point 18 of conditions listed in Part 2 of Schedule 14 of the draft DCO. NRW (A) [REP4-105] sought clarity from the Applicant as to whether the overlap between the Transmission Assets (TA) marine licence (ML) and DCO dML for the Generation Assets areas exists.<br>JNCC provided advice on DCO wording [REP3-084 and REP3-086]. However, the Applicant [REP4-047][REP4-050] did not agree that changes to the DCO dML drafting were required. The Applicant confirmed that the dML and the TA ML do overlap, however the section within Liverpool Bay/Bae Lerpwl SPA would be covered by the TA ML. It stated that the reason for the overlap is that at this stage the location of the offshore substation platforms within the array area is not known and neither is the extent of the TA transfer to the Offshore Transmission Owner (OFTO). It stated that the DCO provides the development consent required for the Mona project, however the marine licences are where the specific controls relating to the various elements of the project are secured through the relevant management plans and details for approval by NRW Marine Licensing Team (MLT).<br>**Outline EMP**<br>The ExA requested an outline EMP from the Applicant to provide assurances that the cable installation restriction would be secured [Q1.10.12 of PD-013]. The Applicant [REP3-062][ REP4-049][ REP4-050] did not consider this necessary as key measures to be included within it | *Bay/Bae Lerpwl SPA, can the Applicant explain why it is not possible to add seasonal restrictions between 1st November – 31st March as a new sub bullet in the dML condition 18 (e)? Would there be particular implications on project delivery that the ExA should be aware of?* |

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| | | were fully detailed in the 'Measures to minimise disturbance to marine mammals and rafting birds from transiting vessels' [REP3-020].<br>NRW (A) and JNCC disagreed with the Applicant [Q1.10.12 of REP3-093 and REP3-084]. NRW (A) stated that if the timing restriction of cable laying activities could be included in an outline Offshore EMP, it may be content that measure would be secured. JNCC advised that should an outline EMP be submitted, this would provide JNCC with more confidence that AEOI on the SPA would be avoided. | |
| 3.3.7 | Cable installation restriction - buffer zone | JNCC [RR-033] advised the Applicant's proposed cable installation restriction be extended to within 2.5km of the SPA boundary.<br>The Applicant [PDA-008] did not consider an additional buffer would reduce the magnitude of impact as the predicted density of common scoter and red-throated diver is significantly reduced towards the SPA boundary (see Figure 1.5 and 1.9 of [APP-033]). In addition, the Applicant predicted no AEoI with or without the buffer.<br>JNCC [REP1-066][REP2-097] subsequently agreed that a conclusion of no AEoI could be reached without the application of a seasonal restriction being applied to a buffer around the SPA. | The ExA understands this matter to be resolved. |
| 3.3.8 | Cable installation restriction – trenchless works at the landfall | NRW (A) [RR-011] queried why the Applicant's proposed cable installation restriction during the period 1st November – 31st March within Liverpool Bay/Bae Lerpwl SPA would not apply for trenchless works on intertidal zone (which would require up to eight vessel movements at the landfall over winter). RSPB Cymru [REP3-105] acknowledged NRW (A)'s point, noting the inshore area supports overwintering common scoter.<br>The Applicant [PDA-008] stated this was discussed with NRW (A) during pre-application as (inter-alia), disturbance would be temporary; there would be other habitat available; and the number of movements is small. As a result, NRW (A) [[REP1-056] confirmed it "*does not expect this temporary activity as part of the construction phase will result in an Adverse Effect on* | *Q. Can the Applicant confirm whether it intends to amend the Measures to Minimise Disturbance To Marine Mammals And Rafting Birds From Transiting Vessels document* |

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| | | *Site Integrity (AEoSI) on the wintering waterbird features of the Liverpool Bay SPA".*<br>Nevertheless, the Outline Vessel Traffic Management Plan was amended at Deadline 3 [REP3-018] to state that the measure would apply at the entry/exit location of the trenchless technique installations works at the landfall.<br>JNCC [REP1-066] also sought clarification over the vessel routes during these intertidal works. The Applicant [REP2-081] stated that it is currently unknown where vessels will be transiting to and from, but that key vessels travelling to the Mona Offshore Cable Corridor and Array Area within and outside Liverpool Bay/Bae Lerpwl SPA would use regular vessel transit routes. This was detailed in the Outline Vessel Traffic Management Plan [APP-200]. These would follow, where possible, established shipping routes within Liverpool Bay and, or chartered approaches to ports and harbours.<br>JNCC [REP4-099] considered it unlikely that vessel transits would be entirely within existing shipping routes. Due to uncertainty in vessel routeing, it considered disturbance of red-throated diver and common scoter to be likely and could not rule out an AEoI. It advised that an AEoI could be ruled out by avoiding works at the landfall from 1st November – 31st March.<br>It also advised the Measures to Minimise Disturbance To Marine Mammals And Rafting Birds From Transiting Vessels document [REP3-020] be amended, to make it clear that the seasonal restriction applies to landfall works. | *[REP3-020], as advised by JNCC?* |
| 3.3.9 | Pre-commencement works, UXO surveys and clearance and guarding vessels | At Deadline 4, JNCC [REP4-099] and NRW [REP4-105] queried whether the measures to minimise disturbance to rafting birds would apply to pre-commencement activities. They noted the potential for non-intrusive pre-construction surveys to take place prior to commencement, and that the Offshore EMP mitigation requirements in draft DCO Schedule 14 Condition 18(1)(e) only apply to the construction and operational phase. They were of | *Q. The ExA understands the Applicant does not wish to restrict such activities in Liverpool Bay SPA at any time* |

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| | | the view that vessel movements associated with pre-construction survey efforts had not been fully considered and advised that it could not rule out an AEoI.<br>JNCC [REP4-099] also considered the potential for adverse impacts from vessel movements associated with UXO surveys and clearance, as well as from those required for 'guarding' as-yet unprotected cables, particularly when combined with other vessel movements associated with the project, and in-combination with other plans and projects. NRW [REP4-105] similarly noted UXO clearance activities could cause disturbance and sought seasonal restrictions within the SPA.<br>JNCC considered that pre-construction surveys and guarding vessel movements had not been fully assessed by the Applicant.<br>JNCC advised that an AEoI could be ruled out by restricting pre-commencement works (including UXO surveys) and UXO clearance within the Liverpool Bay/Bae Lerpwl SPA from 1st November – 31st March within the draft DCO. It also requested that DCO Schedule 14 Condition 21 (which prohibits UXO clearance from commencing until a number of requirements have been satisfied) be amended to include UXO surveys.<br>It further recommended that restricting guard vessel movements would best be secured within 'Measures to Minimise Disturbance To Marine Mammals And Rafting Birds From Transiting Vessels' [REP3-020].<br>However, the Applicant [REP4-062] confirmed that the seasonal restriction outlined in the Measures to minimise disturbance to marine mammals and rafting birds from transiting vessels [REP3-020] only covers export cable installation. It noted that activities during this season of the year would be unlikely due to more challenging weather conditions, however it required flexibility to undertake pre-construction works at any time of year, to avoid impacts on the project delivery programme. | *of the year. Can the Applicant provide evidence as to why it considers no AEoI would occur from these activities?* |
| **Isles of Scilly SPA** | | | |

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| 3.3.10 | PVA – Great black-backed gull | JNCC [RR-033] [REP1-066] considered the Applicant's predicted growth rates of great black-backed gull are at odds with general trend in Global, European and UK populations. It recommended a sense check of PVA input and outputs. RSPB Cymru [RR-071] also expressed concern regarding the decline in the population of the species.<br>The Applicant [PDA-008] acknowledged that the population has decreased slightly within England but confirmed it had used estimates of productivity from JNCC and survival rates advocated by SNCBs.<br>JNCC [REP2-097] thanked the Applicant for the clarification. | The ExA understands this matter to be resolved. |
| **HPAI** | | | |
| 3.3.11 | HPAI | RSPB Cymru [RR-071] stated that the Applicant had not considered the potential impacts from HPAI and that due to uncertainty of future populations, there needs to be a high level of precaution within the assessment.<br>The Applicant [PDA-008] responded that it had considered HPAI in its application documents and explained that the baseline digital aerial survey was undertaken prior to the HPAI outbreak. Where there have been declines in the abundance of certain species, the Applicant considered the impact assessments presented would proportionally decrease in line with a smaller population (where applicable). It stated that it had followed Natural England's guidance and agreed its approach with JNCC, NRW and Natural England.<br>Up to Deadline 4 no further HRA comments were received by RSPB Cymru. The matter is marked as an ongoing point of discussion within the Deadline 2 SoCG [REP2-088]. | The ExA notes this matter is not resolved with RSPB Cymru. |
| **In-combination** | | | |
| 3.3.12 | Inclusion of projects with | JNCC [RR-033] [REP1-066] sought justification over the appropriateness of undertaking in-combination assessments only for SPAs/Ramsar sites with | The ExA understands this |

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| | >0.05% increase in baseline mortality | an impact of >0.05% increase in baseline mortality from the project alone (see paragraph 3.2.8 of this RIES).<br>NRW (A) [RR-011] considered this approach may be appropriate for this project, nevertheless given the concerns with the assessment for the project alone, it advised the sites and species taken forward for in-combination assessment be revisited further to any updates being made.<br>The Applicant [PDA-008] explained that 'non-material' impacts would equate to a negligible impact at EIA scale. This approach was used in Plan-level HRAs and other offshore wind applications.<br>JNCC [REP2-097] subsequently agreed this approach was appropriate for this project, where predicted impacts from the project alone are likely very small. | matter to be resolved. |
| 3.3.13 | Minesto Tidal Kite, Morlais Tidal and TwinHub Floating Offshore Wind Farm | Table 1.3 of the HRA Stage 2 SPA Report [APP-033] identified Minesto Tidal Kite and Morlais Tidal project as Tier 1 projects, but these projects were not included in Table 1.57. Similarly, TwinHub Floating Offshore Wind Farm was included in Table 1.3 as a Tier 2 project but was not included in Table 1.57.<br>The Applicant [Q1.10.13 of REP3-062] confirmed Minesto Tidal Kite and Morlais Tidal Project were identified as having potential for in-combination effects in Table 1.3, but as there is no pathway for impact between them the Liverpool Bay/Bae Lerpwl SPA and Isles of Scilly SPA, they were not included in the in-combination assessment (as listed in Table 1.57).<br>It explained that TwinHub Floating Offshore Wind Farm was incorrectly excluded from Table 1.57 of [APP-033], as noted in the Deadline 3 Errata Sheet [REP3-075]. | The ExA understands this matter to be resolved. |
| 3.3.14 | Abundance estimates at Erebus offshore windfarm | JNCC [RR-033] [REP1-066] and NRW (A) [RR-011] identified errors in abundance estimates for several species at Erebus offshore windfarm as documented in ES Chapter 5: Offshore Ornithology [APP-057]. The Applicant [PDA-008] acknowledged the error. It submitted an Errata document [REP1-044] and corrected the values in ES Chapter 5: Offshore | The ExA understands this matter to be resolved. |

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| | | Ornithology [REP2-016]. It confirmed the discrepancy did not alter the conclusions of the HRA.<br>However, JNCC [REP2-097] and NRW (A) [REP3-090] considered errors remained.<br>The Applicant subsequently acknowledged further minor errors which were noted in the Deadline 3 errata notes [REP3-073][REP3-075]. It also amended values in the Deadline 4 versions of 'Offshore ornithology supporting information in line with SNCB advice' [REP4-031]. | |
| 3.3.15 | Abundance estimates at Burbo Bank Extension | JNCC [REP2-096] noted that no annual value had been provided for black-legged kittiwake from Burbo Bank Extension in [REP1-044]. This was included in the Applicant's Deadline 3 errata sheet [REP3-073] and 'Offshore ornithology supporting information in line with SNCB advice' [REP3-059]. The Applicant considered that the amendments made to the documents do not change the original conclusions presented. | The ExA understands this matter to be resolved. |
| 3.3.16 | Apportionment of impacts | In response to the Applicant's in-combination assessment presented in 'Offshore ornithology supporting information in line with SNCB advice' [REP3-059], both JNCC [REP4-102] and NRW (A) [REP4-105] stated they could not replicate the Applicant's values and requested additional detail and clarifications to track the calculations.<br>They both sought clarity over the age-class apportioning value used for each project considered in the assessment, which the Applicant explained in the Deadline 4 'Offshore ornithology apportioning clarification note' [REP4-042]. (See also ID 2.4.13 of this RIES.) The Applicant confirmed [REP4-031][REP4-049] that it had used the proportion of adult/immature birds within the Appendix tables of Furness (2015) for undertaking the age-class apportioning for all projects considered in-combination assessment due to the lack of site-specific data available for each of the plans or projects. It considered it would not be proportionate to assume all individuals at all sites would be adults as it is an overly precautionary | *Q. Further to the Applicant's Deadline 4 submission [REP4-042] and [REP4-049], can JNCC and NRW (A) provide an update on their positions in relation to the apportionment of impacts in the in-combination assessment?* |

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| | | presumption and not based on any scientific evidence and would not provide additional clarity on the risk to a specific site. It considered this method has precedent as it has been used within multiple other consented offshore wind farm applications and The Crown Estates' Plan Level HRAs (both Round 4 and Round 5). | |
| 3.3.17 | Use of avoidance rates in collision figures for other projects | NRW (A) [RR-011] and JNCC [REP1-066] sought clarity over the use of avoidance rates in predicted collision figures for other projects. The Applicant [PDA-008] confirmed collision figures for other projects have been corrected to ensure a 'common currency' by making a backward calculation within the Band collision model (as was applied on Awel y Môr).<br>JNCC [REP2-097] agreed with this principle and advised the approach be detailed within the HRA documentation. | The ExA understands this matter to be resolved. |

***Table 3.4: In-combination effects (general) - key issues raised in the Examination to date by the ExA and IPs in***

| ID | Potential impact pathway/issue | Details of issue | ExA observation/ question |
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| 3.4.1 | Morgan Offshore Wind Project Generation Assets and Morecambe Offshore Windfarm Generation Assets | NRW (A) [REP1-056] requested the in-combination assessment be revised to take into account Morgan and Morecambe Generation Assets DCO applications.<br>At Deadline 3, the Applicant's Review of Cumulative Effects Assessment and In-Combination Assessment [REP3-058] confirmed that both the Morgan Offshore Wind Project: Generation Assets and Morecambe Offshore Windfarm Generation Assets projects were updated from Tier 2 to Tier. 1. The projects were subsequently included in the Applicant's Deadline 4 Review of offshore ornithology CEA and in-combination assessment [REP4-027]. | The ExA understands this matter to be resolved. |
| 3.4.2 | Oriel and North Irish Sea Array offshore wind farms | The Mona HRA documentation stated that only Scoping Report information was available for Oriel and North Irish Sea Array offshore wind farms. The ExA noted [Q1.10.15 of PD-013] that Meath County Council had responded to the Secretary of States transboundary consultation under the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 [OD-021] identifying that applications had been made for these two projects.<br>The Applicant [Q1.10.15 of REP3-062] noted that applications for Oriel offshore wind project and the North Irish Sea Array offshore wind project were made in May 2024 and June 2024 respectively. The Applicant did not consider that the information would alter the conclusion of the assessments within the application with respect to Annex I habitats and Annex II diadromous fish and marine mammals. | The ExA understands this matter to be resolved. |

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| | | The Oriel and North Irish Sea Array projects were subsequently included in the Applicant's Deadline 4 Review of offshore ornithology CEA and in-combination assessment [REP4-027]. | |

## 3.4 Summary of Examination outcomes in relation to adverse effects on integrity

3.4.1 As noted in Tables 3.1 to 3.4 above, the ExA understands that some matters have been resolved, whilst those coloured amber remain outstanding. The ExA has sought updates and responses to unresolved matters from the Applicant, JNCC and NRW, where indicated in order to provide clarity on the outstanding matters.

3.4.2 The ExA also welcomes corrections from any parties should it have incorrectly marked a matter as resolved.

3.4.3 At Deadline 4, the Applicant remained of the opinion that an AEoI can be excluded for all European sites, from the project alone and in combination with other plans or projects [REP4-030].

3.4.4 Further to the Applicant's updates in 'Offshore ornithology supporting information in line with SNCB advice' [REP3-059], NRW (A) confirmed in [REP4-105] that an AEoI can be ruled out for the project alone for the following Welsh designated sites and qualifying features:

- Skomer, Skokholm and the Seas off Pembrokeshire / Sgomer, Sgogwm a Moroedd Penfro SPA:
  - Manx shearwater – displacement;
  - puffin – displacement;
  - lesser black-backed gull – collision;
  - guillemot (named component of seabird assemblage) – displacement;
  - razorbill (named component of seabird assemblage) – displacement;
  - kittiwake (named component of seabird assemblage) – collision;
- Grassholm SPA:
  - Gannet – collision, displacement, and collision + displacement; and
- Aberdaron Coast & Bardsey Island SPA / Glannau Aberdaron ac Ynys Enlli:
  - Manx shearwater – displacement.

3.4.5 It provided detailed comments on each of the above sites within Appendix 1 of [REP4-105].

3.4.6 However, at the point of publication of the RIES, NRW (A) [REP4-105] stated it was unable to reach conclusions/comment of the potential level of significance of in-combination impacts for Welsh designated sites.

*Q. Further to the Applicant's Deadline 4 documents, can NRW (A) provide comment on the level of significance of in-combination impacts for Welsh designated sites.*

3.4.7 As detailed above, at Deadline 4 JNCC considered errors remained in the Applicant's documents and sought further clarity from the Applicant.

3.4.8 The ExA therefore understands that at the point of publication of this RIES, there is no agreement from JNCC and NRW(A) that AEoI can be ruled out for:

- in-combination effects on sites designated for offshore ornithology where collision risk or displacement has been assessed;
- Liverpool Bay/Bae Lerpwl SPA - displacement of red throated diver and common scoter;
- North Anglesey Marine SAC – impacts of UXO clearance on harbour porpoise

*Q. Further to the Applicant's Deadline 4 documents, does JNCC agree that AEoI can be excluded for any of the European sites and qualifying features assessed by the Applicant, from the project alone or in-combination with other plans or projects? Can JNCC identify the sites and qualifying features for which it does not agree AEoI can be excluded and any aspects of the assessment that require further clarification or development?*

3.4.9 The ExA is cognisant that NatureScot considered there to be errors in the HRA application documents but has not participated in the Examination since (see paragraphs 2.1.10 to 2.1.13 of this RIES). It also notes that NE and DAERA have not participated in the Examination in respect of English and Northern Ireland sites. The Applicant has concluded no AEoI of all European sites and no submissions have been made identifying specific concerns in relation to European sites located within Scotland, Northern Ireland and England.

# 4 DEROGATIONS FROM THE REGULATIONS

## 4.1 Overview

4.1.1 On the basis that the Applicant concluded there would be no AEoI on any European site as a result of the Proposed Development alone or in combination with other projects, it did not submit a derogation case with its DCO application. However, JNCC [RR-033][REP1-066] stated that it could not agree with the Applicant's conclusions early on in the Examination, particularly in respect of the Skomer, Skokholm and the Seas off Pembrokeshire/Sgomer, Sgogwm a Moroedd Penfro SPA.

4.1.2 The Overarching National Policy Statement for energy (NPS EN-1) states that a derogation case should be provided by an Applicant as soon as is reasonably possible and before the close of the examination if a SNCB gives an indication in examination that the Proposed Development is likely to adversely impact the integrity of habitat sites.

4.1.3 The ExA therefore issued a Rule 17 letter [PD-012] requesting the position of JNCC and NRW (A) to be submitted by Deadline 2, as to whether an adverse effect beyond reasonable scientific doubt could be ruled out for any European site.

4.1.4 JNCC [REP2-098] responded to confirm it still could not rule out AEOI beyond scientific doubt due to errors in calculations, lack of necessary detail, and the use of methods and parameters which are different from those advised by SNCBs. However, it considered it possible the Applicant's future submissions could overcome its concerns.

4.1.5 NRW (A) [REP2-100] advised that an AEoI is unlikely, but it cannot be confirmed until it had the opportunity to review current and forthcoming submissions.

4.1.6 The Applicant [REP2-077] considered that none of the updates made to the HRA application material provided at Deadline 2 altered the overall conclusions drawn, nor did it anticipate that any of the additional information (including the results of the gap-filled historical project analysis) to be provided at Deadline 3 would affect the conclusions. It maintained its position of no AEoI from the Mona Offshore Wind Project alone or in-combination with other plans and projects and did not consider there to be a requirement to submit a derogation case (on a without prejudice basis or otherwise).

4.1.7 As noted in Section 3.4 above, at Deadline 4 NRW (A) and JNCC had outstanding concerns with the assessment.

*Q. Based on submissions to date it may not be possible for the competent authority to exclude AEoI on all European sites beyond reasonable scientific doubt. As such, and in line with the relevant NPS EN-1 (paragraph 5.4.27), should the Applicant be unable to reach agreement with NRW (A) and JNCC that there would be no AEoI on all European sites from the project alone or in-combination with other plans or projects by Deadline 5, the ExA considers that a derogations case is required. This is to enable the ExA to examine the information during the Examination and make a recommendation to the*

*Secretary of State, and so that the Secretary of State has all information available to them at the point of decision.*

*a) The Applicant, NRW (A) and JNCC are requested to confirm at Deadline 5 whether an AEoI on all European sites from the project alone or in-combination with other plans or projects can be excluded.*

*b) If agreement of no AEoI with NRW (A) or JNCC is not confirmed by Deadline 5, the Applicant is requested to submit a derogation case by Deadline 6 (20th December 2024).*