

MONA OFFSHORE WIND PROJECT

Applicant's Responses to Other Consultees

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Image of an offshore wind farm

MONA OFFSHORE WIND PROJECT

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Contents

1	THE APPLICANT’S RESPONSES TO OTHER CONSULTEES	1
1.1	Introduction	1
1.2	Applicant’s Response to Cadw’s Representation.....	2
1.3	Applicant’s Response to Cefas’ Representation	4
1.4	Applicant’s Response to Crown Estate’s Representation	15
1.5	Applicant’s Response to Environmental Public Health Service in Wales’ Representation	16
1.6	Applicant’s Response to Heneb - The Trust for Welsh Archaeology – Clwyd-Powys Region’s Representation	20
1.7	Applicant’s response to Joint Nature Conservation Committee’s Representation.....	21
1.8	Applicant’s Response to Maritime and Coastguard Agency’s Representation	72
1.9	Applicant’s Response to MOD Safeguarding’s Representation.....	78
1.10	Applicant’s Response to North Western IFCA’s Representation	79
1.11	Applicant’s Response to Port of Mostyn’s Representation	80
1.12	Applicant’s Response to Royal Commission on the Ancient and Historical Monuments of Wales’ Representation	81
1.13	Applicant’s Response to Royal Yachting Association’s Representation.....	83
1.14	Applicant’s Response to RSPB’s Representation	85
1.15	Applicant’s Response to Trinity House’s Representation.....	95
1.16	Applicant’s Response to UK Hydrographic Office’s Representation.....	99
1.17	Applicant’s Response to Welsh Government - Fisheries Enforcement and Marine Licence Compliance’s Representation.....	100
1.18	References	103
Table 1.1:	Cadw.....	2
Table 1.2:	Cefas	4
Table 1.3:	Crown Estate	15
Table 1.4:	Environmental Public Health Service in Wales	16
Table 1.5:	Heneb - The Trust for Welsh Archaeology – Clwyd-Powys Region.....	20
Table 1.6:	Joint Nature Conservation Committee.....	21
Table 1.7:	Maritime and Coastguard Agency	72
Table 1.8:	MOD Safeguarding.....	78
Table 1.9:	North Western IFCA	79
Table 1.10:	Port of Mostyn.....	80
Table 1.11:	Royal Commission on the Ancient and Historical Monuments of Wales.....	81
Table 1.12:	Royal Yachting Association	83
Table 1.13:	RSPB.....	85
Table 1.14:	Trinity House.....	95
Table 1.15:	UK Hydrographic Office.....	99
Table 1.16:	Welsh Government- Fisheries Enforcement and Marine Licence Compliance.....	100

1 The Applicant's Responses to Other Consultees

1.1 Introduction

1.1.1.1 On 21 May 2024, the application by Mona Offshore Wind Limited (the Applicant) for a standalone Natural Resources Wales (NRW) Marine Licence was submitted to the NRW Marine Licensing Team (NRW MLT). Following the initial submission of documents, various consultees submitted their comments on the application. This document presents the Applicant's responses to all consultation responses not submitted by either the NRW MLT or NRW Advisory (NRW (A)).

1.2 Applicant's Response to Cadw's Representation

Table 1.1: Cadw

Ref No.	Question From	Comment	Applicant response
1	Cadw	<p>Scheduled Monuments and Non-Designated Archaeological Sites</p> <p>The ES has considered the impact of the proposed development on the settings of scheduled monuments AN038 Dinas Gynfor Hillfort; AN024 Din Sylwy Hillfort; and AN064 Tower and remains of church and monastic settlement on Puffin Island. It has concluded that at worst there will be minor adverse, but not significant effects on the setting of these scheduled monuments. We concur with this conclusion.</p>	<p>The Applicant notes Cadw's comments.</p> <p>In relation to Marine Archaeology, the Applicant notes that Cadw accept that the assessments carried out to date and the measures set out in the Outline Offshore Written Scheme of Investigation and Protocol of Discoveries (WSI and PAD) (J18 F02) are appropriate. The Applicant confirms that the Royal Commission on the Ancient and Historic Monuments of Wales (RCAHMW) have been consulted and that they have requested that the Applicant update the Outline Offshore WSI and PAD (J18) to refer to RCAHMW as an archaeological curator. The Applicant has made revisions in line with their comments in the updated Outline Offshore WSI and PAD (J18 F02).</p>
2	Cadw	<p>The assessment of the Marine Archaeology has been carried out, so far, following appropriate surveys. Assessment of geophysical surveys and hydrographic data has identified 30 anomalies that are thought to represent archaeological sites and these will be protected by Archaeological Exclusion Zones around them. This will prevent any direct impact on them during the project.</p>	
3	Cadw	<p>The assessment has also considered the impact of the proposed development on unidentified archaeological features and considered that they likely impact effect on them will be a minor adverse: However, an Offshore Written Scheme of Investigation and Protocol for Archaeological Discoveries will be put in place in order that any archaeological sites or features revealed during the construction programme are appropriately investigated and recorded. It is understood that these documents are currently being finalised but the proposed measures appear to be appropriate</p>	

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
		<p>but the determining authority should consult the Maritime Investigator of the Royal Commission on the Ancient and Historic Monuments of Wales for specific advice on the effect of the proposed development on marine archaeology.</p>	

1.3 Applicant's Response to Cefas' Representation

Table 1.2: Cefas

Ref No.	Question From	Comment	Applicant response
1	Cefas	With reference to the above application for a marine licence for the construction and operation of the transmission assets for Mona Offshore Wind Farm off Llanddulas North Wales, in the East Irish Sea by Mona offshore Wind Farm Limited and your request for comments dated 23 rd July 2024 please find my comments below	The Applicant notes these comments.
2	Cefas	<p>1. This minute is provided in response to your advisory request in relation to the above proposal in my capacity as scientific and technical advisor for dredge and disposal. The response pertains to those areas of the application request that are of relevance to this field. This minute does not provide specialist advice regarding benthic ecology, marine processes, fish and fisheries, shellfisheries, or underwater noise as, whilst these are within Cefas' remit, they are outside my area of specialism.</p> <p>In providing this advice I have spent 12.5 hours of the allocated 15 hours by the NRW. I have booked my time to ORM2429T.</p>	
3	Cefas	<p>4. I have provided my comments based on the below category system:</p> <p>Category 1: Major Comment (Action)- It is my advice that the application should not be granted a licence until this is resolved. There is high uncertainty or a large risk to the environment. NRW are strongly advised to request this further information then re-consult Cefas.</p> <p>Category 2: Minor Comment (Action)- There is data/ information/ evidence missing that could affect the assessment. Provision of the data/information would allow for due diligence to ensure there is sufficient confidence in the applicant's and my own assessment but would not necessarily preclude the granting of a licence. NRW advised to request further information from applicant and then to re-consult Cefas, however NRW may be able to</p>	The Applicant notes these comments and the categorisation used in the responses provided by Cefas.

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
		<p>grant licence if this information is not submitted, provided NRW have clear rationale for their decision.</p> <p>Category 3: Minor Comment (No Action)- These highlight those things that should be included as best practice but would not affect my overall conclusions. Should be taken forward by the developer for any future applications/ post consent requirements, or presentation issues. NRW case team could pass this on to applicant however this information is not required for consultation with Cefas.</p> <p>Category 4: Observation- Statements regarding what is stated in the application, or areas of good practice are highlighted. No action for NRW case team but this could be passed on to applicant if NRW wish, to pass on areas of good practice.</p>	
4	Cefas	<p>Documents reviewed</p> <ol style="list-style-type: none"> 5. Marine Licence application for Marine Works form ID: B89640AD_0AF8-4357-A1A8-3E616035B3D6 6. Mona Offshore Wind Limited. Marine Licence cover letter (A3) (Paul Carter-Mona consents lead) to Natural Resources Wales. MOCNS-J3303-JVW-00003 dated 29th April 2024 7. Mona Offshore Wind Limited. Guide to the Marine Licence Application (A2) Document List. MOCNS-J3303-RPS-10005May 2024 F02 by RPS. 8. Mona Offshore Wind Limited. Mona Array Area -Disposal Site Characterisation Report J19 MOCNS-J3303-RPS-10156 February 2024 F01 by RPS. 9. Mona Offshore Wind Limited. Offshore Cable Corridor -Disposal Site Characterisation Report J20 MOCNS-J3303-RPS-10157 February 2024 F01 by RPS. 10. Mona Offshore Wind Project Environmental Statement. Volume 1 Chapter 3, Project Description MOCNS-J3303-RPS-10037 February 2024 FO1 by RPS. 11. Zip file containing shape file for- A5.1 Mona Array area disposal site (Annex 1 figure 1 of this minute). 12. Zip file containing shape file for - A5.2 Mona Offshore cable corridor disposal site (Annex 1 figure 2 of this minute). 	

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
		Excel containing A5 Mona Disposal site coordinates.	
5	Cefas	<p>Description of the proposed works</p> <p>14. This advice is in response to NRW request for review of documents provided by Mona Offshore wind limited (the applicant) for a marine licence for the construction and operation of transmission assets for the Mona offshore Wind Farm (the Project) approximately 29km of the coast of Denbigshire and Conwy comprises up to 96 wind turbines in an area of up to 300km² and up to four 275 kV max export cables in a corridor of up to 1.5km. The generation assets for the Project are wholly outside Welsh inshore waters and therefore a deemed marine licence has been included as part of the Development Consent Order (DCO) Application. As the transmission assets for the Project are located partially in the Welsh inshore waters, they require a separate ML from NRW marine licensing team.</p> <p>15. In addition to the marine licence application, Mona Offshore Wind Limited has submitted an application for a DCO which is currently being considered by the Planning Inspectorate. The proposed DCO includes a deemed Marine Licence for the Generation Assets. Further information on the application for a DCO can be found on the Planning Inspectorate's website¹.</p> <p>16. The DCO and Marine Licence will, among other things, authorise:</p> <ul style="list-style-type: none"> a. The installation, operation and maintenance of up to four subsea export cable circuits, and any associated cable protection. The Project's offshore export cable corridor (ECC) extends south-eastwards from the array area to the proposed landfall at Llanddulas in Conwy; b. The construction, operation and maintenance of up to four offshore substation platforms (OSPs) and their foundations as well as 	

¹ <https://infrastructure.planninginspectorate.gov.uk/projects/wales/mona-offshore-wind-farm/>

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
		interconnector cables connecting the OSPs to each other, including any associated cable and scour protection; and c. Ground investigation works, removal of accidentally dropped objects, Unexploded Ordnance (UXO) clearance and disposal of sediments to a designated site.	
6	Cefas	17. The maximum spoil volume anticipated to be removed from sandwave clearance within the ECC is 1,504,000m ³ and 1,167,415m ³ in the array area (a total of 2,671,415m ³ seaward of mean high water (application form cited at point 5) and a maximum spoil arising (including drilling and cable laying etc.) for the array area disposal site of 13,037,497m ³ (document cited at point8).	The Applicant notes this comment and confirms that the details and volumes quoted by Cefas are correct.
7	Cefas	18. Up to four temporary deposits which will be used as backfill, associated with the exit pit/trench for the four export cables under the intertidal zone through trenchless techniques located up to 1km seaward of mean low water springs, the location of which will be confirmed as part of post consenting.	
8	Cefas	Responses to questions proposed by Natural Resources Wales (NRW). NRW Advice required on: Whether sufficient sampling has taken place Whether the sampling indicates that the material is suitable for disposal at sea Whether a single site should be designated to cover both array area disposal and the offshore cable corridor disposal or whether it would be expected that this would be separate designated disposal sites, and Confirmation of any further sampling requirements during the duration of the licence to comply with OSPAR requirements.	The Applicant notes this comment.
9	Cefas	Question 1. Has sufficient sampling taken place?	The Applicant notes and welcomes agreement that the number of samples collected is sufficient.

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
		<p>19. The number of sample stations which have been analysed for sediment chemistry has been presented in sections 1.7.1 and 1.7.2 of Volume 2, Annex 2.1 Benthic subtidal and intertidal ecology of the Environmental Statement (ES). The full sediment contamination data are presented in Appendix F. Across the array 10 samples were collected (8 in 2021 and 2 in 2022) and 18 from the array area (2022), a total of 28 samples (Annex 1 Figure 3). This is below the OSPAR guidelines on the management of dredged material 2014-06 updated 2024 which recommends 16-30 samples for 500,000-2,000,000m³ of dredged material, with an extra 10 per million cubic metres. Therefore 28 samples is slightly lower than would be anticipated for a dredge of around 2.5Mm³. However, the material across the array area ranged from gravelly sand to muddy sandy gravel with most samples classified as gravelly sand (section 1.4.2.2 characterisation report 8) and so this number of samples is acceptable given the nature of the seabed.</p>	
10	Cefas	<p>Question 2. Is the material suitable for disposal to sea</p> <p>20. Particle size analysis of the sediments within the Mona Offshore cable corridor show the material to be predominantly sand (80% with gravel (15%) and fine sediment (5%)) and classified predominantly gravelly sand across the array area.</p>	<p>The Applicant welcomes this comment and is pleased to note that Cefas agrees that the material is acceptable for disposal at sea.</p>
11	Cefas	<p>21. Response to S42 consultation (document cited at 8) for JNCC was that “material from sandwave clearance will be deposited in the vicinity of the clearance site. Additionally some of the sediment from the Mona Array Area may be removed from the system to be used as ballast for the gravity base foundations. Specifically, the dredging and site preparation associated with conical gravity base foundations may involve the use of up to 7,000 m³ of this material per foundation as ballast within the structure. The remaining material will be sidecast to a location adjacent to the foundation.” The proposed disposal site is therefore within the array area or cable corridor (Annex 1 figure 1).</p>	
12	Cefas	<p>Array area characterisation</p> <p>22. The array characterisation report section 1.4.2.3 summarised chemical contamination from analysis undertaken, which comprises trace heavy metals including arsenic, polyaromatic hydrocarbons (PAHS) and polychlorinated biphenyls (PCBs) by SOCOTEC UK Limited which is an</p>	

MONA OFFSHORE WIND PROJECT

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		<p>MMO validated laboratory for the analysis of dredge material, which is appropriate:</p> <p><i>“levels of chromium, copper, nickel, lead, mercury and zinc did not exceed the relevant Cefas (Centre for Environment, Fisheries and Aquaculture Science) Action Level 1 (AL1) or the Canadian Threshold Effect Level (TEL) in any of the samples. Concentrations of arsenic did however exceed Cefas AL1 at two sample stations in the Mona Array Area but were below the Cefas Action Level 2 (AL2). Additionally, the concentration of cadmium marginally exceeded the Cefas AL1 at a single station in the Mona Array Area. No samples exceeded Cefas ALs or the Canadian TEL or Probable Effect Level (PEL) for PCBs. Levels of PAHs did not exceed the relevant Canadian TEL or PEL thresholds. Concentrations of organotins were below the limit of detection at all stations ES Volume 6, Annex 2.1: Benthic subtidal and intertidal ecology technical report.”</i></p>	
13	Cefas	<p>23. Minor comment (No action): From this assessment I agree that the material is acceptable for disposal to sea. The conclusion in section 1.8.1.5 and 1.8.17 is that contamination of surrounding sediments is highly unlikely, and whilst this is true for the contaminants which have been assessed, this does not consider other determinands such as brominated flame retardants, which have not been analysed. However given the predominantly coarse nature of the material and location of the works (being well distanced from any significant sources of such contaminants), the risk of contamination from the release of sediments as a result of disturbance during construction within the array is likely to be low.</p>	
14	Cefas	<p>24. A greater risk is the potential longer-term impact of disposal/deposition of drill arisings on the seabed, which, due to the size of the sediment particles, are likely to remain in situ for long periods of time. No moderate or major adverse effects in terms of Environmental Impact Assessment were predicted in relation to relevant receptors (negligible to minor adverse were predicted). I leave these comments to the relevant nature conservation bodies and benthic ecologists as part of the ES assessment.</p>	<p>The Applicant notes this comment and has responded to points raised by the JNCC (Joint Nature Conservation Committee) in their response (see Row 88 of Table 1.6) regarding drill arisings.</p>

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
15	Cefas	<p>25. Minor comment (No action): I note that analysis of organochlorines are included on separate sample templates (excel workbook) however, these results do not appear to have been commented on within the characterisation report (document at 8), these would have been nice to have included. Levels of organochlorines were indicated to be below the limit of detection for all sites except ENV 40 and ENV50 but levels observed were around the level of detection and not of concern.</p>	<p>The Applicant notes this comment and welcomes confirmation that the levels of organochlorines in sediments within the Mona Array Area are at levels which are not of concern.</p>
16	Cefas	<p>Offshore cable corridor characterisation</p> <p>26. The characterisation report describes the contaminant levels for 18 sediment samples analysed by SOCOTEC UK Limited for particle size, trace heavy metals including arsenic, PAHs and PCBs. A summary provided section 1.4.2.4 states;</p> <p><i>“levels of cadmium, chromium, copper, nickel, lead, mercury and zinc did not exceed the relevant Cefas Action Level 1 (AL1) or the Canadian Threshold Effect Level (TEL) in any of the samples. Concentrations of arsenic did however exceed Cefas AL1 at three sample stations in the Mona Offshore Cable Corridor and 17 stations were above the Canadian TEL. Levels at all stations were, however, below Cefas Action Level (AL) 2 and the Canadian Probable Effect Level (PEL). No samples exceeded the relevant Cefas ALs or the Canadian TEL or PEL for PCBs. Levels of PAHs were below the relevant Canadian TEL and PEL levels. Concentrations of organotins were below the limit of detection at all stations (Volume 6, Annex 2.1: Benthic subtidal and intertidal ecology technical report of the ES).”</i></p>	<p>The Applicant notes this comment and welcomes confirmation that the levels of organochlorines in sediments within the Mona Offshore Cable Corridor are at levels which are not of concern.</p>
17	Cefas	<p>27. No effects of moderate or major adverse significance (i.e. significant in EIA terms) were identified in relation to sediment disposal, with only negligible to minor adverse effects predicted on relevant receptors. I defer to colleagues in statutory conservation bodies in regards to their comments and predicted effects within the ES as this is outside my remit. However, I agree with the comments in section 1.8.15 that deposition of sediment from disposal activities is predicted to only result in short term, spatially discrete impacts, and that the seabed material to be disposed of in situ is not heavily contaminated (as outlined in paragraph 1.4.2.4). This is supported by the sediment data, which have shown that contamination of surrounding sediments will be highly unlikely.</p>	

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
18	Cefas	28. Minor comment (No action): I note that analysis of organochlorines are included on separate sample templates (excel workbook) however, these results do not appear to have been commented on within the characterisation report (document at 9), these would have been nice to have included.	
19	Cefas	29. Results of the analysis provided on excel templates, indicate that levels for organochlorines observed were below the LOD with the exception of sample OCC143, although this level was close to the limit of detection.	
20	Cefas	<p>Question 3. Should a single site be designated to cover both array area disposal and the offshore cable corridor disposal or should these be separate designated sites?</p> <p>30. Bathymetry data used to identify sandwaves determined that up to 50% of the total length of the inter-array cables and 60% of the inter-connector cables would require sandwave clearance. Site-specific geophysical data from the Mona Array Area and bathymetry data also identified that up to 50% of foundation locations may require sandwave clearance. If dredging is required, it would be carried out by dredging vessels using suction hoppers or similar. Pin piles for the foundation are driven and/or drilled into the seabed. If drilling is required, spoil arising from the drilling will be disposed of within the vicinity of the source. Although the characterisation report suggests that spoil arising from drilling and trenching would be much lower than the volumes presented for sandwave clearance and that trenching generally places material to either side of the trench allowing for backfill thus no disposal site is considered necessary (document cited at point 8 section 1.2.2.2). The characterisation of the ECC (document cited at point 9) focuses on the material to be disturbed as a result of sandwave clearance. Due to the disturbance of the disturbance of the sediments and the regulations, therefore, require both the array and the cable corridor to be designated for disposal to be able to comply with the annual disposal return data requirements for the UKs signatory obligations under OSPAR and the London convention/London Protocol.</p>	
21	Cefas	31. The characterisation report for the array area after consideration of alternative options for dredge material concludes that the disposal in situ	

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
		remains the most viable option and has the advantage of retaining the sediment within the local sedimentary system and I agree with this assessment. There is no evidence to suggest that material from the cable corridor would be deliberately disposed of within the array area and vice versa, and where the array area meets the cable corridor some migration and deposition in either area may occur. Thus, it would seem pragmatic to designate one site for both areas. (area of the array- Annex 1 figure 1, and the area of the offshore cable corridor - Annex 1 figure 2).	
22	Cefas	32. Minor comment (Action): Plotting the area of the disposal sites from the co-ordinates provided in the shape file show the offshore cable corridor to be split into 3 areas (figure 3) however the figures in the characterisation reports (documents 8 and 9 figures 1 and 2 copied in Annex 1 below) show the area of the offshore cable corridor to be continuous, therefore I have assumed that the area to be designated would be continuous and the applicants shape file needs amended, unless there is a specific reason for the separation	The Applicant can confirm that the coordinates provided in the shapefile are correct and the disposal site proposed within the Mona Offshore Cable Corridor is split into three areas. This is because, as outlined in paragraph 1.1.1.5 of the Offshore Cable Corridor - Disposal Site Characterisation Report (J20), the entire Mona Offshore Cable Corridor is proposed to be licenced for disposal activities except for the areas of overlap with Constable Bank and the Menai Strait and Conwy Bay/Y Fenai a Bae Conwy Special Area of Conservation (SAC). These areas are therefore excluded from the shapefiles provided and are shown by the absence of purple hatching (indicating the disposal site) in the area of overlap with Constable Bank and the SAC in Figure 1.1. of the Offshore Cable Corridor - Disposal Site Characterisation Report (J20).
23	Cefas	Question 4. Are any further samples required for the duration of the licence to comply with signatory obligations for OSPAR and London Convention/London Protocol. 33. Minor comment (No action): No although it is expected practice to see justification of the sample analyses selected for the characterisation, such as use of OSPARs secondary list of contaminants within the reports for both the array and the Offshore cable corridor for completeness (please see point 23).	The Applicant notes the comments made by Cefas and would highlight that the statutory nature conservation bodies (NRW (A), JNCC and Natural England) were consulted on the scope of the benthic subtidal survey. The Applicant however welcomes the agreement that the number of samples collected is sufficient and no further samples are required.
24	Cefas	Any additional comments 34. I note the use of plastic/synthetics are applied for in point 8(a)(c) of the application form (cited at point 5). The works include rock protection, concrete mattresses, froned mattresses and rock bags as cable protection. However, the NRW should consider the risks of placing plastic infrastructure into the marine environment should they degrade.	The Applicant notes this comment.

MONA OFFSHORE WIND PROJECT

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		The final design of these frond mattresses will be detailed in the offshore construction method statement that will be submitted to and approved prior to commencement of development. This is secured within the draft DCO submitted with the application for consent.	
25	Cefas	35. I note (document cited at 8) in the June 2023 NRW S42 consultation NRW requested that the PAH data be checked as one station which seems to exceed a relevant threshold needs reporting. The applicant responded that PAH assessment data had been checked and confirmed that no relevant thresholds were exceeded (section 1.7.2 of Volume 2, Annex 2.1 Benthic subtidal and intertidal ecology of the ES) and thank the applicant for their response.	The Applicant notes this comment.
26	Cefas	36. Minor comment (Action): Whilst the impact on receptors is predicted to be negligible, there is potential for sediments around the piles to remain for some time depending on the particle size of the arisings. Consideration of the volume and height of residual sediments at the time of decommissioning should be included in licence conditions for the decommissioning process. This is because at end of life if piles are to be removed, excavation around the piles would be required to be able to cut the piles to below the seabed if being left in situ. This consideration should include potential for release of contaminants from the original drilling (drill fluids, dyes, cement and grout may have been used etc. chemicals like paints (especially avicides), coatings, rig wash or hydraulic fluids etc.) used during the operation and maintenance as well as the potential from other contaminants released/introduced to the marine environment from the cutting process. This is to help inform any characterisation of the site that may be required at that time for disposal/dispersal of the arisings/excavated material).	The Applicant notes this comment. It should, however, be noted that it is the Applicant's intention to secure decommissioning activities through a separate standalone marine licence at the relevant time and that the scope of the decommissioning works would be determined by the relevant legislation and guidance at that time. This would include the requirement for the designation of a disposal site for decommissioning activities, if relevant and required at the time.
27	Cefas	37. I note that the EMODnet data indicates that the Mona Offshore Cable Corridor is situated entirely within high intensity sandeel spawning grounds, with substrates mainly comprising gravelly sand and (gravelly) sand, which are preferred sandeel habitats. This was confirmed by the site-specific data PSA results, which indicated that most stations within the Mona Offshore Cable Corridor were classified as preferred habitat for sandeel spawning (section 1.2.4.8 characterisation report). I defer to	As outlined in section 3.9.2 of Volume 2, Chapter 3: Fish and shellfish ecology (F2.3), whilst there is an overlap between the Mona Offshore Wind Project and sandeel spawning grounds, the potential temporary impacts to these grounds as a result of the project are small in the context of the widespread nature of mapped spawning and habitation grounds for sandeel in the wider Mona fish and shellfish ecology study area (i.e. encompassing the east Irish Sea).

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
		specialist advisors with regard to fisheries and impacts for sandeel spawning, as a timing restriction may be required as a condition for use of the site for construction and maintenance if designated for disposal.	As such, effects of minor adverse significance, which are not significant in EIA (Environmental Impact Assessment) terms, are predicted for sandeel. The Applicant notes that NRW (A) have confirmed in their comments (Row 86 of the Responses to NRW (A) (S_NRWML_3)) that they are in agreement with the conclusions of the assessments presented in Volume 2, Chapter 3: Fish and shellfish ecology (F2.3).
28	Cefas	<p>Summary</p> <p>38. The data provided is sufficient to characterise the area for disposal of sediments arising at the array area and offshore cable corridor for Mona offshore Wind Farm. Although there are fewer samples collected and analysed than are recommended in the OSPAR agreement 2014-06 updated 2024 (Guidelines for the Management of Dredged Material at Sea) e.g. 16-30 for up to 2Mm³ with an extra 10 samples per million meters cubed, due to the coarse nature of the material over the site and likely low risk as contaminants (which generally are more likely to be observed in finer sediments) the number of samples is acceptable.</p>	The Applicant notes and welcomes the agreement that the number of samples collected is sufficient and no further samples are required.
29	Cefas	39. Levels of contaminants were such that the environmental risk from the release of contaminants from the sediments as a result of the construction or operation of Mona Offshore Wind Farm is likely to be low.	The Applicant notes and welcomes the agreement that the environmental risk from the release of contaminants from sediments as a result of the construction or operation and maintenance of the Mona Offshore Wind Project is likely to be low.
30	Cefas	40. If NRW determine require the array area and the export cable corridor designated although there is no clear advantage of either designating these together or separately, as the applicants intend to dispose of dredged material close to the extraction site and that both areas being adjacent may find some deposition from works adjacent to their site, for efficiency the suggestion is for one disposal area to be opened if required for the sole use of the construction and operation/maintenance works at Mona to be closed upon completion of the works. The disposal site shape file should be amended for the offshore cable corridor to be continuous (as per comment 32).	<p>The Applicant also notes Cefas' advice that it would be pragmatic to designate one disposal site covering for the Mona Array Area and Offshore Cable Corridor.</p> <p>The Applicant has provided a response to the point made by Cefas in relation to the shapefile in their response to Row 22 above. The Applicant can confirm that the shapefiles provided are correct and the disposal site for the Mona Offshore Cable Corridor is split into three areas in order to exclude the Constable Bank and the Menai Strait and Conwy Bay/Y Fenai a Bae Conwy SAC.</p>

1.4 Applicant's Response to Crown Estate's Representation

Table 1.3: Crown Estate

Ref No.	Question From	Comment	Applicant response
1	Crown Estate	The Crown Estate has no objection to the granting of a Marine Licence for works associated with the construction and maintenance of the transmission assets of the Mona Offshore Windfarm. This is subject to the condition that the applicant has obtained all relevant and necessary consents from The Crown Estate ahead of carrying out any of the proposed activities. This is subject to the condition that the applicant has obtained all relevant and necessary consents from The Crown Estate ahead of carrying out any of the proposed activities.	The Applicant is in communication with The Crown Estate (TCE) regarding the agreement for lease and will ensure that any additional consents which are required from TCE are secured before the relevant works take place.
2	Crown Estate	The Crown Estate is in the process of granting the applicant an Agreement for Lease for Mona Offshore Windfarm Transmission Assets, but this will not cover proposed activities such as UXO clearance, dredging and disposal of materials which are mentioned in the marine licence application. These are examples where additional consent could be required from The Crown Estate and it is the applicants responsibility to ensure they have obtain The Crown Estate's consent for all of the proposed activities and seek additional consent from The Crown Estate where these activities are not consented to or comply with the obligations on the applicant in the Transmission Asset Agreement for Lease and subsequent Transmission Asset Lease and/or are outside of the areas under these agreements for Mona Offshore Windfarm.	

1.5 Applicant's Response to Environmental Public Health Service in Wales' Representation

Table 1.4: Environmental Public Health Service in Wales

Ref No.	Question From	Comment	Applicant response
1	Environmental Public Health Service in Wales	<p>Overall Conclusion</p> <p>Our position is that any activity that can demonstrate full compliance with sector best practice to control emissions, presents a low risk to human health. We would expect the regulator to ensure the activity and construction works are well managed, maintained and remains in compliance with current sector guidance and does not give rise to any adverse impacts to human health, during or after works are carried out. We advise all environmental hazards and impacts on human receptors to be considered simultaneously throughout all stages of the proposed development.</p> <p>We support the project aims for the overall reduction of Green House Gases (GHGs) i.e. CO₂, due to their contribution to climate change which presents significant public health risks.</p>	<p>The Applicant notes and welcomes Environmental Public Health Service in Wales' position, and their support for the aims of the Mona Offshore Wind Project.</p>
2	Environmental Public Health Service in Wales	<p>Public Health Risk Assessment</p> <p>Risk assessing the health of individuals and/or populations is a complex process due to the variety of interactions with different determinants of health including but not limited to lifestyle and social, deprivation, cultural, economic and environmental factors. This public health risk assessment is based on the documentation provided and should be considered in the broadest possible sense to avoid human health harms – both physical and mental.</p> <p>A Human Health Assessment chapter has been provided in the application. It is noted that consideration has been made of air quality during the construction, maintenance and decommissioning phase. Air pollutants such as</p>	<p>Volume 4, Chapter 4: Human health assessment (F4.4) sets out the public health assessment, which takes a wider determinants of health approach.</p> <p>The health assessment has specific regard to non-threshold health effects in relation to air pollutants. The health assessment confirms that Operational nearshore effects (e.g. maintenance vehicle emissions) are not anticipated to be of a scale, even accounting for non-threshold effects, that could affect population health.</p> <p>The health assessment is informed by other technical assessments including Volume 3, Chapter 10: Air quality (F3.10), which confirms in paragraph 10.1.1.2 that given the nature of the Mona Offshore Wind Project, it is considered that only the onshore elements located within the Mona Onshore Development Area have the potential to impact on air quality. This is because there are no receptors offshore that are</p>

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
		<p>particulate matter (PM) and nitrogen dioxide (NO₂) are non-threshold pollutants meaning that health effects can be experienced by individuals at much lower levels than the standards set. Although the proposed development is offshore, dispersion of pollutants can affect populations elsewhere. It is important to mitigate and minimise these non-threshold air pollutants as much as possible, during all phases of the proposed activity, so as to not create, or further add to, health inequalities. We encourage this to be considered as part of the wider decarbonisation perspective.</p>	<p>sensitive to air quality. The air quality assessment confirms this is a scope agreed with NRW (A).</p> <p>The health assessment notes that The Health and Safety at Work etc Act 1974 places duties on employers to ensure, 'so far as is reasonably practicable': the health, safety and welfare at work of all their employees; and that persons not in their employment are not exposed to risks to their health or safety as a result of the activities undertaken.</p> <p>This statutory obligation, as well as the mitigations described in Volume 3, Chapter 10: Air quality (F3.10) are considered appropriate to avoid any potential for a significant adverse population health effects associated with air quality.</p>
3	Environmental Public Health Service in Wales	<p>Assessment of risks to water quality should ensure there are no adverse direct or indirect impacts on human health including any dedicated bathing locations. We recommend the regulator is satisfied with the proposed measures to avoid any onshore adverse impacts to human health associated with water quality.</p>	<p>Table 4.9 of Volume 4, Chapter 4: Human health assessment (F4.4) confirms the health determinant 'Water quality or availability' is scoped out as not having the potential for a likely significant population health effect. This includes in relation to bathing waters.</p> <p>As stated in Volume 3, Chapter 2: Hydrology and flood risk (F3.2), both onshore and nearshore the Mona Offshore Wind Project would adopt standard best practice spill avoidance and response measures. For instance a final Spillage and Emergency Response Plan will be approved by the local planning authority though the approval of the final Code of Construction Practice (CoCP) under Requirement 9 of the Draft Development Consent Order submitted with the DCO Application. Please see the outline Spillage and Emergency Response Plan (J26.1 F02) and Outline CoCP (J26 F03). Based on the effectiveness of such measures pollution risk issues to bathing water are scoped out of the human health assessment (Volume 4, Chapter 4 Human health assessment (F4.4)).</p>
4	Environmental Public Health Service in Wales	<p>Fish and shellfish that are to be harvested for human consumption have been considered in assessments. We recommend that Natural Resources Wales and/or the Food Standards Agency are satisfied with the assessment methodology and the conclusions drawn to avoid any impacts on human health.</p>	<p>Volume 2, Chapter 3: Fish and shellfish ecology (F2.3) considers disturbance/remobilisation of sediment-bound contaminants risks, concluding there would not be significant effects for marine species. Table 3.19 of Volume 2, Chapter 3: Fish and shellfish ecology (F2.3) confirms that offshore pollutant spills are scoped out of their assessment as these risks will be managed through development of, and adherence to, an offshore Environmental Management Plan including a Marine Pollution Contingency Plan which will include</p>

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
			<p>planning for accidental spills. As indicated in the Mitigation and Monitoring Schedule (J10 F04) and the Marine Licence Principles Document (J9 F04) the Applicant anticipates the standalone NRW Marine Licence will include a condition requiring the submission of an Environmental Management Plan including a Marine Pollution Contingency Plan to the Licencing Authority for approval. It will also set out industry good practice and OSPAR (OsloParis), International Maritime Organisation and MARPOL (International Convention for the Prevention of Pollution from Ships) guidelines for preventing pollution at sea.</p> <p>The Mona Offshore Wind Farm Environmental Statement - Volume 4, Chapter 4: Human health assessment (F4.4) Table 4.9 confirms the health determinant 'Diet and nutrition' is scoped out as not having the potential for a likely significant population health effect. This includes confirming that effects on diet due to impacts to commercial fisheries (notably shellfish harvesting) have been considered.</p>
5	Environmental Public Health Service in Wales	<p>There is the potential for noise and vibration effects from construction activities at the landfall and onshore elements as a result in changes to noise during the day and at night. Exposure to noise can lead to auditory and non-auditory effects on health. Noise is a nonspecific stressor that has been shown to have an adverse impact on human health, especially following long-term exposure. Therefore, we recommend that noise and vibration is considered for all phases of construction, operation and maintenance, and decommissioning. We recommend the regulator is satisfied with the proposed measures to avoid onshore adverse impacts to human health associated with noise and vibration.</p>	<p>Volume 4, Chapter 4: Human health assessment APP-078 (F4.4) section 4.8.7 sets out the assessment of population health effects associated with noise and vibration from offshore piling and the installation of the export cable at landfall during construction and decommissioning. The effects are considered to be of minor adverse significance, which is not significant in EIA terms.</p> <p>The health assessment is informed by other technical assessments including Volume 3, Chapter 9: Noise and vibration (F3.9).</p> <p>The health assessment notes that The Health and Safety at Work etc Act 1974 places duties on employers to ensure, 'so far as is reasonably practicable': the health, safety and welfare at work of all their employees; and that persons not in their employment are not exposed to risks to their health or safety as a result of the activities undertaken.</p> <p>This statutory obligation, as well as the mitigations described in Volume 3, Chapter 9: Noise and vibration (F3.9) are considered appropriate to avoid any potential for a significant adverse population health effects associated with noise and vibration.</p>

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
6	Environmental Public Health Service in Wales	In relation to flood risk, it is concluded in the application documents that there will be no significant effects arising from the Mona Offshore Wind Project during the construction, operations and maintenance or decommissioning phases once mitigation measures have been applied. We recommend the regulator is satisfied with assessments of all flood risks and that mitigation measures are put in place to avoid any increases in coastal flood risk and associated impacts on the onshore population.	The Applicant notes the comments. During further discussion with NRW (A), NRW (A) have confirmed their agreement with the hydrology and flood risk assessment (as presented in Volume 3, Chapter 2: Hydrology and flood risk (F3.2)) and the mitigation measures set out in outline Flood Management Plan (J26.7 F02).

1.6 Applicant's Response to Heneb - The Trust for Welsh Archaeology – Clwyd-Powys Region's Representation

Table 1.5: Heneb - The Trust for Welsh Archaeology – Clwyd-Powys Region

Ref No.	Question From	Comment	Applicant response
1	Heneb - The Trust for Welsh Archaeology – Clwyd-Powys Region	We have been involved with the DCO application and the preceding EIA assessments and some of this assessment is ongoing at the onshore substation area. Archaeological assessment of the landfall intertidal location at Llanddulas has taken place and we are content that mitigation will be in place for any archaeological features affected by the scheme and a Statement of Common Ground has been agreed. Due to the use of trenchless techniques at the intertidal landfall impacts to archaeology will be significantly minimised and negligible. We therefore have no additional requirements that would need to be added to the Marine Licence as they are already covered by the mitigation in the ES and DCO application.	The Applicant welcomes this comment and is pleased to note that Heneb agrees that landfall impacts to archaeology will be significantly minimised and negligible.

1.7 Applicant's response to Joint Nature Conservation Committee's Representation

Table 1.6: Joint Nature Conservation Committee

Ref No.	Question From	Comment	Applicant response
1	JNCC	<p>Marine Ornithology</p> <p>Overall Comments</p> <p>In our view, the potential impacts from the proposed works covered by this Marine Licence are limited to disturbance/displacement from vessels of red-throated diver and common scoter, both non-breeding qualifying features of the Liverpool Bay/Bae Lerpwl SPA. JNCC has and continues to engage with the Planning Inspectorate Examination process for the Mona OWF where we have provided comments on additional aspects of the EIA and HRA.</p>	<p>The Applicant notes the JNCC's comment. The Applicant confirms that the impacts of disturbance and displacement from the presence of vessels have been assessed for red-throated diver and common scoter in the Mona Offshore Cable Corridor and Access Areas, which overlap with the Liverpool Bay/Bae Lerpwl SPA (Special Protection Area). The results of, and conclusion, of these assessments are presented in section 5.7.2 of Volume 2, Chapter 5: Offshore ornithology (F2.5 F03).</p>
2	JNCC	<p>It should be noted that the Conservation Objectives for the non-breeding red-throated diver feature of the SPA has Restore/Minimise targets in some cases, and similarly the non-breeding common scoter feature of the SPA has a Minimise target for the Disturbance caused by human activity Conservation Objective. Particular attention therefore must be paid to avoiding impacts in order for Plans and Projects not to compromise the ability of the site to meet its Conservation Objectives for these features, and a conclusion of Adverse Effect on Site Integrity (AEOSI) to be ruled out.</p>	<p>The JNCC's comment is noted. The Applicant has considered the conservation objectives of red-throated diver and common scoter in the Liverpool Bay/Bae Lerpwl SPA HRA (Habitat Regulations Assessment) in section 1.6.2 of the Stage 2 Information to Support an Appropriate Assessment Part Three: Special Protection Areas and Ramsar sites Assessments (E1.3 F02) including the minimise target for disturbance caused by human activity.</p>
3	JNCC	<p>Overall, JNCC welcomes the proposed measures to minimise disturbance to the non-breeding red-throated diver and common scoter features of the Liverpool Bay/Bae Lerpwl SPA. However, in our view the details provided on the mitigation measures and how they apply, and how those measures will be secured in the Marine Licence are not currently sufficiently robust in order for a conclusion of AEOSI to be ruled out.</p> <p>We have the following detailed comments to make on offshore ornithology, including works associated with the export cable landfall.</p>	<p>JNCC's comment is noted. The Applicant has responded to specific comments below in Rows 6 to 9.</p>
4	JNCC	<p>Conservation Objectives</p> <p>The Conservation Objectives of the two features of the Liverpool Bay/Bae Lerpwl SPA of concern (non-breeding red-throated diver and</p>	<p>The JNCC's comment is noted. The Applicant agrees that these are the relevant conservation objectives has considered the conservation objectives of common scoter and red-throated diver in</p>

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
		<p>common scoter) are presented in Table 1.43 of Document E1.3 HRA Stage 2 Part 3. As highlighted above, the relevant Conservation Objectives and their associated targets are:</p> <p>Subject to natural change, maintain or restore the red-throated diver population, distribution and its supporting habitats in favourable condition:</p> <ul style="list-style-type: none"> • Non-breeding population: distribution. Restore the distribution of the feature; preventing further deterioration, and where possible, reduce any existing anthropogenic influences impacting feature distribution. • Disturbance caused by human activity. Minimise the frequency, duration and/or intensity of disturbance affecting the feature so that the population, its distribution within the site, or its use of the habitat is not significantly affected. • Supporting habitat: extent, distribution and quality of supporting habitat for the nonbreeding season. Restore the extent, distribution and availability of suitable habitat which supports the feature; preventing further deterioration, and where possible, reduce any existing anthropogenic influences impacting the extent and quality (including water quality). <p>Subject to natural change, maintain or restore the common scoter population, distribution and its supporting habitats in favourable condition.</p> <ul style="list-style-type: none"> • Non-breeding population: distribution. Maintain the distribution of the feature; the extent should not be reduced by anthropogenic factors. • Disturbance caused by human activity. Minimise the frequency, duration and/or intensity of disturbance affecting the feature so that the population, its distribution within the site, or its use of the habitat is not significantly affected. <p>Supporting habitat: extent, distribution, and quality of supporting habitat for the nonbreeding season. Maintain the extent, distribution and availability of suitable habitat which supports the feature; the quality and extent should not deteriorate by anthropogenic factors (including water quality).</p>	<p>Liverpool Bay/Bae Lerpwl SPA HRA in section 1.6.2 of the Stage 2 Information to Support an Appropriate Assessment Part Three: Special Protection Areas and Ramsar sites Assessments (E1.3 F02).</p>

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
5	JNCC	To support achievement of favourable condition for A feature as set out in the site's conservation objectives, JNCC advise restore or maintain objectives for feature attributes. Where evidence indicates a feature's attribute is being impacted, JNCC will advise a restore objective and that management should reduce/remove or prevent damaging activities, to facilitate restoration. Where a restore objective is advised, Plans and Projects must ensure that they do not impede the potential for feature restoration, either alone or in-combination, for an overall conclusion of no AEOSI to be reached.	The Applicant notes the JNCC's comment. In light of the mitigation measures proposed, the Applicant considers that the Mona Offshore Wind Project will not impede the conservation objectives of the designated sites considered in the Stage 2 Information to Support an Appropriate Assessment Part Three: Special Protection Areas and Ramsar sites Assessments (E1.3 F02) and thus a conclusion of no Adverse Effect on Site Integrity has been reached for all potential impacts and designated sites. This is the case for both the Mona Offshore Wind Project alone and in-combination with other plans and projects.
6	JNCC	<p>Measures to mitigate and avoid displacement by vessels of red-throated diver and common scoter in the Liverpool Bay/Bae Lerpwl SPA</p> <p>We welcome suggestions to minimise impacts to marine mammals and rafting birds in Document J17. However, as it currently stands it is unclear what measures relate to which activity or receptor, and when the measures are or are not applied. For example:</p> <p>Table 1.2 describes vessel activities and whether such measures will apply. It is unclear why measures would apply to vessels travelling to the Mona Offshore Cable Corridor and Array Area within and outside Liverpool Bay/Bae Lerpwl SPA, yet "<i>Vessels installing export cables outside the Liverpool Bay/Bae Lerpwl SPA</i>" and "<i>Vessels involved in intertidal trenchless installation within Liverpool Bay/Bae Lerpwl SPA</i>" are excluded from mitigation.</p>	<p>The Applicant notes the JNCC's comment requesting further clarity on which measures outlined in Measures to Minimise Disturbance to Marine Mammals and Rafting Birds from Transiting Vessels (J17 F02) are applicable to which vessel activity. As such an updated version of the Measures to Minimise Disturbance to Marine Mammals and Rafting Birds from Transiting Vessels (J17 F02) has been submitted into the standalone NRW Marine Licence process in order to clarify which measures are applicable to which vessel transit activity.</p> <p>With respect to vessels installing export cables inside the Liverpool Bay/Bae Lerpwl SPA, the principal measure to minimise disturbance to rafting birds and, specifically, common scoter and red-throated diver features of the SPA during the overwintering period is the commitment to no offshore export cable laying between 1 November and 31 March within the Liverpool Bay SPA. Outside of this period (i.e. between 1 April and 31 October), vessels installing export cables inside the Liverpool Bay/Bae Lerpwl SPA will be expected to comply with the key principles of the Wildlife Safe (WiSe) Scheme (noting the relevant exceptions outlined in paragraph 1.4.1.1 of Measures to Minimise Disturbance to Marine Mammals and Rafting Birds from Transiting Vessels (J17 F02)).</p> <p>All vessels travelling to and from the Mona Offshore Cable Corridor and Mona Array Area within and outside Liverpool Bay/Bae Lerpwl SPA during the construction and operational and maintenance phases) will also be expected to comply with the key principles of the WiSe Scheme where possible (noting the relevant exceptions</p>
7	JNCC	Related to this, no detail is given in this table as to which activities the measures fully apply to and which in part apply to, and where measures only apply in part, which measures would not be applied to which activities. No detail is provided on where cable installation vessels will travel from in order to reach the export cable corridor outside of the Liverpool Bay/Bae Lerpwl SPA. It is therefore possible that these vessels will transit across the SPA. Clarification should be provided as to why this activity is excluded from the proposed measures. It also isn't entirely clear what is actually being referred to as " <i>measures</i> " throughout the document. There are " <i>Proposed measures</i>	

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
		<p><i>applicable to marine wildlife</i>” and “<i>Proposed measures specific to rafting birds</i>”. When Table 1.2 references the measures which apply, which measures does this mean? Similarly, in section 1.4 exceptions to measures are described, but it is unclear which measures would not apply under these exceptions.</p>	<p>outlined in paragraph 1.4.1.1 of Measures to Minimise Disturbance to Marine Mammals and Rafting Birds from Transiting Vessels (J17 F02)).</p> <p>The drafting of the standalone NRW Marine Licence is entirely within NRW MLT’s control. However, it is the Applicant’s anticipation that a PEMP (Project Environmental Management Plan) will be secured in the standalone NRW Marine Licence as identified in the Marine Licence Principles Document (J9 F04), which is to include the following measures:</p>
8	JNCC	<p>Some statements appear to be contradictory. For example there appears to be a measure whereby cable installation activities in the Liverpool Bay/Bae Lerpwl SPA will not take place during 1st November to 31st March (section 1.3.1.1). It is also stated that where it is necessary for cable laying vessels to go outside of established navigational routes during transit to/from port and working areas, routes will be pre-selected to avoid locations where birds are known to aggregate (section 1.3.1.2). However, it is then suggested that there is an exception to the measures proposed, whereby the measures don’t apply to vessels actively laying cable in areas that coincide with known areas of bird aggregations (1.4.1.1). These statements appear to directly contradict one another. Furthermore, we question why there would be a need for an exception, such that the measures don’t apply to vessels actively laying cables in areas that coincide with known areas of bird aggregations. Neither Document J17 or J14 describe the ports and shipping routes to be used to transit to and from the array and cable corridor. Therefore, it is not entirely clear how a view has been formed that a seasonal restriction would only be required for export installation vessels within Liverpool Bay/Bae Lerpwl SPA. There is no evidence that vessels would not need to go outside of existing shipping routes in order to access the array or cable corridor during the winter.</p>	<p>• It is proposed that project vessels will use indicative vessel transit routes, as detailed in the updated outline Vessel Traffic Management Plan (J14 F02). Use of regular vessel transit routes which follow, where possible, established shipping routes within Liverpool Bay and/or, chartered approaches to ports and harbours will act to restrict the spatial distribution of such disturbance and minimise any potential disturbance as far as possible. The updated outline Vessel Traffic Management Plan (J14 F02) refers to the Measures to minimise disturbance to marine mammals and rafting birds from transiting vessels (J17 F02) as an associated document that may need to be considered in developing the final Vessel Traffic Management Plan (see paragraph 1.7.1.2 of the outline Vessel Traffic Management Plan (J14 F02)). The Applicant notes that this is referenced against the Offshore Environmental Management Plan which will be submitted for approval as part of the deemed Marine Licence (dML). The Applicant anticipates there will be an equivalent PEMP in the standalone NRW Marine Licence that will be submitted for approval, as indicated in the Marine Licence Principles Document (J9 F04), and that the position will therefore be the same.</p> <p>• Where it is necessary for vessels to go outside of established navigational routes during transit to/from port and working areas, routes will be pre-selected to avoid locations where birds are known to aggregate in accordance with the measures described in section 1.2 of Measures to Minimise Disturbance to Marine Mammals and Rafting Birds from Transiting Vessels (J17 F02). Vessel operators will be made aware of bird sensitivities</p>

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
			<p>associated with the Liverpool Bay/Bae Lerpwl SPA, and visible aggregations of rafting birds (inside or outside of the Liverpool Bay/Bae Lerpwl SPA) will be actively avoided within the limitations of vessel safety and manoeuvrability.</p>
9	JNCC	<p>Vessel movements at the landfall</p> <p>Table 1.1 of Document J17 appears to suggest that JNCC have deferred to NRW-A following EWG06, on the topic of vessel movements at the landfall to install the export cable which would not be subject to seasonal restrictions. However, JNCC does not have the same recollection of this position, and the minutes of EWG 06 also does not match this position. The landfall is within the Liverpool Bay/Bae Lerpwl SPA, for which JNCC has joint responsibility with NRW-A and NE. Our position in the agreement log, submitted by the Applicant to the Planning Inspectorate Mona Offshore Wind Farm - Examination Library (APP-042, D.9, item 22) is <i>“No justification is given for the need to do this during winter. It is also not clear what “vessel movements” actually means. For instance, how many and long [sic] will these vessels be in the SPA? More information is required before JNCC can fully agree to this approach.”</i>. The trenchless works on the intertidal zone including up to eight vessel movements at the landfall over the winter period (Document E1.3, sections 1.6.3.48 and 1.6.3.63), which is an exception to the seasonal restriction on cable installation works (see seasonal restriction details in Document J17, section 1.3.1.1). Any disturbance impact to features of the SPA will be temporary for the time of the vessel presence, therefore JNCC do not expect this temporary activity to result in an AEOSI. However, no justification is given for the need to do this during winter. It is also not clear what “vessel movements” actually means. For instance, how many and for how long will these vessels be in the SPA? Where will vessels transit to and from during these works? Clarification is required before JNCC can fully agree to this approach and make a definitive conclusion on AEOSI. JNCC raised these queries in response in the agreement log (APP-042, D.9, item 22), but we have yet to receive a direct response.</p>	<p>The Applicant notes the JNCC’s comment regarding the representation of JNCC’s position in Table 1.1 of Measures to Minimise Disturbance to Marine Mammals and Rafting Birds from Transiting Vessels (J17 F02) and agrees that this text does not accurately represent the minutes of the sixth expert working group which makes no reference to the JNCC deferring to NRW (A) on the topic of vessel movements associated with the installation of the offshore export cable at the landfall. This has been amended and an updated version of the Measures to Minimise Disturbance to Marine Mammals and Rafting Birds from Transiting Vessels has been submitted in the standalone NRW Marine Licence process (J17 F02).</p> <p>In response to the question of why the timing restriction on offshore export cable installation activities within the Liverpool Bay/Bae Lerpwl SPA will not apply to vessel movements at the landfall. Up to eight vessel movements in total associated with the construction works at the landfall may be required during the overwintering period. The commitment to no offshore export cable laying during the overwintering period (1 November – 31 March) within the Liverpool Bay SPA has reduced flexibility in the construction programme, and therefore the overall programme of works is more constrained. Prohibiting works at the trenchless techniques exit pits during the overwintering period would add further pressure to the installation window for offshore export cables and is not considered to be necessary or justified based on the small number of vessel movements and the disproportionate restriction this would place on the landfall works. This was discussed with NRW (A) and Natural England during pre-application monthly meetings and the Applicant notes NRW (A)’s comments in the meeting minutes for the sixth offshore ornithology EWG (Expert Working Group) meeting (Technical Engagement Plan Appendices - Part 1 (A to E) (E4.1))</p> <p>Given that: any disturbance impact to features of the SPA will be temporary for the time of the vessel presence; birds will be able to return once the vessel has gone; there will be other habitat available</p>

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
			<p>within the SPA to the birds for the time they are disturbed from the landfall area; up to eight movements across the key winter period of November - March represents a small proportion over this timescale; and a commitment to trenchless techniques at landfall has been made, NRW Advisory do not expect this temporary activity to result in an AEOSI'. The Applicant also notes an email dated 26/03/2024 Natural England stated that <i>"In line with NRW's comments on the 8 vessel movements within Liverpool Bay SPA, up to 8 movements across the key winter period of November-March represents a small proportion over this timescale; and a commitment to HDD for landfall has been made, therefore NE do not expect this temporary activity to result in an AEOSI"</i>.</p> <p>At this stage, no decision has been made regarding which port or ports will be used for the construction of the Mona Offshore Wind Project, and therefore, it is currently unknown where vessels will be transiting to and from. However, as outlined in paragraph 1.3.2.2 of Measures to Minimise Disturbance to Marine Mammals and Rafting Birds from Transiting Vessels (J17 F02), key vessels travelling to the Mona Offshore Cable Corridor and Array Area within and outside Liverpool Bay/Bae Lerpwl SPA will use regular vessel transit routes, as detailed in the outline Vessel Traffic Management Plan (J14 F02) which follow, where possible, established shipping routes within Liverpool Bay and, or chartered approaches to ports and harbours. This measure will restrict and minimise the spatial distribution of any disturbance to rafting birds.</p> <p>The Applicant welcomes the JNCC's view that disturbance to features of the SPA from vessel movements at the landfall over the winter period will be temporary and not expected to result in an adverse effect on integrity.</p>
10	JNCC	<p>Draft Marine Licence</p> <p>In addition, as currently drafted, the draft Development Consent Order (DCO) neither specifies the period during which relevant measures are required (November to March inclusive for red-throated diver and common scoter), nor does it require the agreement of the JNCC, which has joint responsibility for the Liverpool Bay/Bae Lerpwl SPA. We therefore request the draft DCO be amended as per our additions in</p>	<p>The Applicant presumes this comment is intended to refer to the standalone NRW Marine Licence (rather than the draft Development Consent Order). The drafting of the standalone NRW Marine Licence is entirely within NRW MLT's control. However, it is the Applicant's anticipation that a PEMP will be secured in the standalone NRW Marine Licence as identified in the Marine Licence Principles Document (J9 F04), which is to include the measures to minimise</p>

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
11	JNCC	<p>italics below. These amendments are in line with the advice we have given to the Examining Authority in respect to the draft DCO.</p> <p>18.— (1) No part of the authorised scheme may commence until the following (insofar as relevant to that activity or phase of activity) have been submitted to and approved in writing by NRW-<i>Licensing</i>, in consultation with the relevant statutory nature conservation bodies (<i>NRW Advisory and JNCC</i>), Trinity House and the MCA as appropriate—</p> <p>(e) an offshore environmental management plan covering the period of construction and operation to include details of—</p> <p>(vi) measures to minimise disturbance from transiting vessels to marine mammals, and rafting birds;</p> <p><i>(vii) works associated with the installation and/or protection of the cables will not be carried out within the Liverpool Bay/Bae Lerpwl SPA during the most sensitive time period of 1st November to the 31st March inclusive; and</i></p> <p>(vii) measures to minimise the potential spread of invasive non-native species;</p>	<p>disturbance to marine mammals and rafting birds (J17 F02). As set out in that document it is anticipated that a restriction on working from 1 November to 31 March within the Liverpool Bay/Bae Lerpwl SPA will therefore be delivered and secured as indicated in the Mitigation and Monitoring Schedule (J10 F04) and the Marine Licence Principles document (J9 F04).</p> <p>The Applicant can confirm that the seasonal restriction outlined in the Measures to Minimise Disturbance to Marine Mammals and Rafting Birds from Transiting Vessels (J17 F02) only covers export cable installation. This measure was suggested by NRW/JNCC/Natural England during the fourth Offshore Ornithology EWG meeting and no other activities were identified that would require a seasonal restriction (see section D.5 of Technical Engagement Plan Appendices Part 1 (A to E) (E4.1 F01)).</p> <p>All pre-construction works i.e. non- intrusive pre-construction surveys, unexploded ordnance (UXO) surveys and clearance of unexploded ordnance) within the Liverpool Bay/Bae Lerpwl SPA would therefore not be subject to the same seasonal restriction. Although it should be noted that activities during this season of the year are unlikely due to more challenging weather conditions the Applicant requires the flexibility to undertake pre-construction works at any time of year, as a seasonal restriction on such works could potentially and unnecessarily severely affect the project delivery programme.</p> <p>With regards to the exclusions described in section 1.4.1.1 of the Measures to Minimise Disturbance to Marine Mammals and Rafting Birds from Transiting Vessels (J17 F02) document, the Applicant confirms that the exclusion relating to ‘Vessels actively laying cable in areas that coincide with known areas of bird aggregations’ applies in the following scenarios: 1) when construction works are occurring within the SPA but outwith the seasonal timing restriction; and 2) at all times in areas outwith the SPA boundary.</p> <p>All other relevant measures (e.g. a Marine Pollution Contingency Plan, a Biosecurity Risk Assessment and an Invasive Non-Native Species Management Plan) have been committed to as set out in the Mitigation and Monitoring Schedule (J10 F04). The Mitigation and Monitoring Schedule and Marine Licence Principles Document</p>

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
			(J9 F04) demonstrate that the Applicant anticipates this commitment will be secured within the P but the specific drafting will be determined by NRW MLT.
12	JNCC	These advised amendments are in alignment with the DCOs for the approved East Anglia One North and East Anglia Two Offshore Wind Farms, and the proposed DCO for the refused Thanet Offshore Wind Farm Extension project.	The Applicant refers JNCC to its response to Row 10 above.
13	JNCC	The conservation objectives for the features of the Liverpool Bay/Bae Lerpwl SPA with the potential to be impacted have targets that require the proposed project not only to cause no harm itself (or in-combination with other plans or projects), but also to not impede restoration of the site to a favourable conservation status. We therefore welcome the proposed measure to avoid and minimise disturbance of birds, particularly the commitment to a seasonal restriction within the SPA. However, in our view the details provided on the mitigation measures and how they apply, and how those measures will be secured in the Marine Licence are not currently sufficiently robust in order for a conclusion of AEOSI to be ruled out.	<p>The Applicant notes the JNCC’s comment requesting further clarity on which measures outlined in Measures to Minimise Disturbance to Marine Mammals and Rafting Birds from Transiting Vessels (J17) are applicable to which vessel activity. As such an updated version of the Measures to Minimise Disturbance to Marine Mammals and Rafting Birds from Transiting Vessels has been submitted into the standalone NRW Marine Licence process (J17 F02) in order to clarify which measures are applicable to which vessel transit activity. As outlined in Rows 10 to 11, the seasonal restriction outlined in the Measures to Minimise Disturbance to Marine Mammals and Rafting Birds from transiting vessels (J17 F02) only covers export cable installation. All pre-construction works (i.e. non- intrusive pre-construction surveys, unexploded ordnance surveys and clearance of unexploded ordnance) within the Liverpool Bay/Bae Lerpwl SPA would therefore not be subject to the same seasonal restriction.</p> <p>The drafting of the standalone NRW Marine Licence is entirely within NRW MLT’s control. However, it is the Applicant’s anticipation that a PEMP will be secured in the standalone NRW Marine Licence as identified in the Marine Licence Principles Document (J9 F04), which is to include the measures to minimise disturbance to marine mammals and rafting birds (J17 F02). As set out in that document it is anticipated that a restriction on working from 1 November to 31 March within the Liverpool Bay/Bae Lerpwl SPA will therefore be delivered and secured as indicated in the Mitigation and Monitoring Schedule (J10 F04) and the Marine Licence Principles document (J9 F04). With consideration of this proposed mitigation measure, the Applicant has concluded no Adverse Effect on Site Integrity from the Mona Offshore Wind Project alone and in-combination with other plans and projects.</p>

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
14	JNCC	<p>Marine Mammals</p> <p>Overall comments</p> <p>Our key concerns with the DCO application also apply here. The following advice mirrors that we have provided the DCO Examination Authority. This includes reference to the draft DCO as they may be of relevance for the ML.</p>	<p>The Applicant notes the JNCC's comment and has responded in the table below in relation to the specific points raised.</p>
15	JNCC	<p>We disagree with a number of approaches being taken by the Applicant within the Environmental Statement and the HRA. The main point, being unexploded ordnance (UXO) clearance which is a topic that we have raised previously. We have stated previously that we do not agree with UXO clearance being included within the DCO and draft Marine Licence (dML), and here we provide our detailed reasons for this position.</p>	<p>The Applicant notes the JNCC's comment and has responded in the table below in relation to the specific points raised.</p>
16	JNCC	<p>Within our Written Representations, we have provided comments on the following areas of concern:</p> <ol style="list-style-type: none"> 1) The inclusion of unexploded ordnance (UXO) clearance within the assessment (paragraphs 16-22) 2) The use of 'scare charges' (Paragraph 23) 3) Due consideration of noise abatement (Paragraphs 31-36) 4) Marine mammal collision risk (Paragraphs 52-57) 5) Conclusions regarding the North Anglesey Marine SAC (Paragraphs 58-60) <p>We also provide comment on missing links and references within documents.</p>	<p>Please see Applicant's response to each specific point in the table below. Please see Row 17 below for inclusion of unexploded ordnance clearance within the assessment, Row 36 below for use of scare charges, Rows 45 to 52 below for consideration of noise abatement, Rows 66 to 71 below for marine mammal collision risk and Rows 72 to 74 below for conclusions regarding the North Anglesey SAC.</p>
17	JNCC	<p>Unexploded ordnance clearance</p> <p>JNCC have advised against including unexploded ordnance (UXO) clearance in the DCO and dML, in particular the option for high order clearance. We agree with including a high-level assessment of potential impacts from this activity in the Environmental Statement (ES), as this provides a holistic view of all potential impacts, however it also</p>	<p>The Applicant notes the JNCC's comment and welcomes agreement with regards to including a high-level assessment of potential impacts from unexploded ordnance clearance in the Environmental Statement, which is provided in Volume 2, Chapter 4: Marine mammals (F2.4). The Applicant notes the comments on the draft DCO and deemed marine licence; the draft DCO/dML is the subject of a separate consent application. UXO clearance is, however,</p>

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
		highlights how little is known at this stage about the requirements for UXO clearance.	<p>expected to be secured in the standalone NRW Marine Licence. The Applicant has responded to and considered all comments relevant to the standalone NRW Marine Licence within this submission.</p> <p>The Applicant refers the JNCC to the Applicant's UXO Clearance Position Statement (S_D4_56).</p>
18	JNCC	All construction sites are required to be certified safe from UXOs before construction can commence. Time limitations on ALARP (as low as reasonably practicable) certificates mean magnetometer surveys to identify potential UXOs, and subsequent investigative surveys to confirm which of these are UXO and whether they need clearance via detonation, must be undertaken in the months immediately prior to construction commencing.	The Applicant can confirm that detailed surveys for potential UXO are required at the locations where infrastructure will be installed. In addition, the survey for identifying potential UXO must be undertaken within approximately one year ahead of the start of construction. This is because UXO surveys and the ALARP (As Low as Reasonably Practicable) certificates issued against the surveys are only valid for one year due to the dynamic nature of the seabed and the potential for hydrodynamics to uncover UXO that may not have been detected in pre-application surveys.
19	JNCC	Historically clearance has been undertaken using a method referred to as high order clearance, where a donor charge (which can contain explosive material ranging between 1-20kg in net equivalent quantity (NEQ)) is detonated next to the UXO, causing both the donor and the UXO to explode. More recently, low noise alternatives have become commercially available and a Government Joint Position Statement ¹ requires these methods to be the primary method of clearance in commercial clearance campaigns. This statement has been signed by UK and devolved governments, marine regulators and SNCBs. This includes NRW (licensing and advisory) and JNCC.	A staged mitigation hierarchy has been committed to via the Outline Marine Mammal Mitigation Protocol (MMMP) (J21) with prioritisation of low order clearance methods and is detailed in the UXO Clearance Position Statement (S_D4_56).
20	JNCC	<p>JNCC advise against including UXO clearance in the DCO/dML for the following reasons:</p> <p>a) It is not known until the site investigative surveys what type/size of UXO require clearing or options available for clearing them. The only information available prior to this is based on historical records and data from nearby projects, if available. This desk-based data is used to estimate the number and type of UXO which may require clearance however the nature of the data means it may not always be accurate or complete. In addition, natural movement of the seabed can move UXOs to different locations making what records may be available incorrect. This lack of accurate information can</p>	The Applicant refer the JNCC to the Applicant's UXO Clearance Position Statement (S_D4_56).

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
		<p>have implications for licensing. For example, a wind farm project in Scotland recently had to apply for three marine licenses: the first with a number to be cleared and range of UXO types based on the desk study; the second to increase this number to more than double that originally requested as more than expected were confirmed; and a third to clear a device which was not expected as it was not identified as a risk in the desk study. This demonstrates how the scenario presented in the Mona ES may not be realistic and could underestimate the risks to marine mammals.</p>	
21	JNCC	<p>b) Paragraph 4.9.4.5 (page 146) of (F.2.4), estimates that up to 22 devices will need to be cleared from within the array area and cable corridor. To support the impact assessment, it is assumed the commonest type of UXO will contain 130kg NEQ of explosive material however it could range between 25kg and 907kg. Until the investigative surveys are completed it is unknown whether this estimate is realistic. Without more accurate information, JNCC must assume the worst-case scenario, i.e. 22 x 907kg devices when providing advice and this could result in over-precautionary mitigation requirements which should be secured in the DCO. Alternatively, if this estimate is under-precautionary (i.e. investigation surveys identify more devices than predicted by the ES), conclusions within the ES become invalid and this will have implications for HRA (see paragraph 19e).</p> <p>We note it is not stated within this paragraph on what these estimates are based, however for the purpose of our advice we have assumed a desk-based study was undertaken as it is routine practice.</p>	<p>Regarding point 'b', the Applicant notes the JNCC's comment however, does not agree that the Application underestimates the risks to marine mammals, as the assessment has been based upon the Maximum Design Scenario (MDS) of a 907 kg high order clearance which is considered to be the absolute maximum UXO size (with the most likely (common) maximum size at 130 kg) and it is therefore considered that the assessment is highly precautionary. The Applicant highlights that the MDS has been developed on the basis of the best available information to capture the worst-case scenario such that the number and sizes of UXO are expected to fall within the envelope assessed.</p> <p>The Applicant confirms a site-specific desktop study was commissioned specifically for the Mona Offshore Wind Project and undertaken to estimate potential UXO to be cleared (as set out under section 3.5.3.1 of Volume 1, Chapter 3: Project description (F1.3)) and refers JNCC to the Applicant's UXO Clearance Position Statement (S_D4_56) for further information on UXO clearance.</p> <p>The drafting of the standalone NRW Marine Licence is entirely within NRW MLT's control. However, it is the Applicant's anticipation that the standalone NRW Marine Licence will secure the details of proposed UXO clearance activity in the same manner as the deemed Marine Licence as indicated in the Marine Licence Principles Document (J9 F04).</p>
22	JNCC	<p>c) It is not known at this stage what method of low noise clearance will be used or whether any devices identified will require high order clearance. The method of low noise clearance currently supported by evidence is referred to as low order deflagration. This still</p>	<p>The Applicant agrees that it is not possible to know what clearance approach will be required at this point; however, as the assessment was based on high order detonation of the largest UXO (up to 907 kg), this exceeds any smaller charge sizes required for low order</p>

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
		<p>requires a donor charge containing explosives, but the volume is much smaller e.g. the first commercial campaign to successfully use a low order deflagration used 150-250g². The applicant has assumed a low order donor charge of 80g when predicting injury to marine mammals from this method in the impact assessment (Table 1.27, page 54 in F.5.3.1, and referred to in paragraph 4.9.4.5, page 146 of (F.2.4)). It is not known at this stage who will undertake the work and what clearance tools they will have access to. Should a contractor use a low noise tool that uses a larger volume of explosive material, e.g. 150-250g, the injury ranges provided in the ES are not valid. Not only will a new assessment be required, but this has implications for the outline marine mammal mitigation plan (J21) as predicted injury ranges could be larger than provided in the ES.</p>	<p>clearance. Volume 2, Chapter 4: Marine mammals (F2.4) concluded that clearance of UXOs up to the realistic worst case of 130 kg could be mitigated effectively with soft start and Acoustic Deterrent Devices (ADDs) and therefore Applicant is confident that smaller charges as required for low order clearance can also be fully mitigated through such measures (most likely without the requirement for soft start) detailed in the MMMP (J21).</p> <p>Should UXO clearance surveys reveal UXOs larger than 130 kg are present, the undertaker can rely on the measures in the Underwater Sound Management Strategy (J16) for mitigation. As detailed in paragraph 1.6.2.4 of the Outline Underwater Sound Management Strategy (UWSMS) (J16), 'for UXO sizes larger than 130 kg (e.g. for the maximum UXO size of 907 kg) the use of further sound abatement measures (such as Noise Abatement Systems (NAS)) may be considered as an option (if required) and refined post-consent as a part of the Final UWSMS'. It is, therefore, not necessary to know the exact size of the clearance charge sizes at this point, and this will be determined as more detailed information becomes available post-consent following further UXO clearance surveys. The Applicant highlights that the Final MMMP and UWSMS which will detail the specific mitigation measures to be applied (following confirmation of the UXO clearance activities) will be developed post-consent by NRW MLT.</p> <p>Please also see Row 44 below for detailed discussion on modelling of charge weights and use of donor charges.</p>
23	JNCC	<p>d) Paragraph 4.9.4.3 of (F.2.4) refers to Robinson et al 2020³ as evidence that low order deflagration results in lower sound levels than equivalent high order clearance. While this is appropriate evidence, the results are specific to a particular tool, and it is unknown at this stage whether similar tools developed by other companies will provide the same level of noise reduction. In addition, no evidence is provided to support claims of reduced noise levels by the low-yield method referred to in this same paragraph, or information as to what this method is or how this method defers from deflagration. For example, the Table 4.31 allows for multiple low yield charges. It is not clear why these additional charges are needed or if they will be deployed at the</p>	<p>Volume 2, Chapter 4: Marine mammals (F2.4) assessed a range of UXO clearance options to demonstrate possible scenarios for both high order and low order clearance. The Applicant acknowledges that the final clearance method and size of donor charge cannot be determined at this point. To capture the range of UXOs, the assessment considered options from single donor charges up to multiple charges (see paragraph 4.9.4.5 and Tables 4.31, 4.32 and 4.33 of Volume 2, Chapter 4: Marine mammals (F2.4)), which may be required for clearance of larger UXOs.</p> <p>The Applicant does not agree that 'no evidence is provided to support claims', as paragraph 4.9.4.3 of Volume 2, Chapter 4:</p>

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
		<p>same time. Without knowing what low-noise method will be used and the levels of sound reduction (compared to high order clearance) that can be expected, it is not possible to be confident that the outline marine mammal mitigation plan (J21 will be sufficient to reduce the risk of injury to marine mammals.</p>	<p>Marine mammals (F2.4) specifically references Robinson <i>et al.</i> (2020), a peer-reviewed scientific paper with robust methodology and detailed information on charge sizes. The Applicant acknowledges it did not present additional detail on the Robinson <i>et al.</i> (2020) study in Volume 2, Chapter 4: Marine mammals (F2.4) further to the reference but considers it important to consider balancing proportionate detail for the reader. Robinson <i>et al.</i> (2020) detonated four 10 kg shells and four 5 kg shells, which simulated real UXOs, with two of each size undergoing deflagration. The study demonstrated a substantial reduction over high order detonation, with the peak sound pressure level and sound exposure level being more than 20 dB lower for the deflagration, and the acoustic output depending only on the size of the shaped charge (rather than the size of the UXO). Therefore, the Applicant considers the study to be robust evidence for the statement made in paragraph 4.9.4.3 of Volume 2, Chapter 4: Marine mammals (F2.4).</p> <p>Table 4.31 in Volume 2, Chapter 4: Marine mammals (F2.4) presents an example range of low order and low yield charge configurations available for the clearance of UXO (as detailed in Table 1.15 in Volume 5, Annex 3.1: Underwater Sound Technical Report (F5.3.1)), to illustrate the potential impact of different clearance techniques and UXO sizes. Paragraphs 1.7.3.16 to 1.7.3.21 in Volume 5, Annex 3.1: Underwater Sound Technical Report (F5.3.1) discuss in further detail the possible clearance techniques, with paragraph 1.7.3.19 stating ‘a low-yield clearance technique could be utilised for UXOs utilising two 750 g donor charges, or four 750 g donor charges in the case of German ground mines.</p> <p>The Applicant also refers the JNCC to the Applicant’s UXO Clearance Position Statement (S_D4_56) for further information on the mitigation hierarchy.</p> <p>The drafting of the standalone NRW Marine Licence is entirely within NRW MLT’s control. However, it is the Applicant’s anticipation that the standalone NRW Marine Licence will secure the details of proposed UXO clearance activity in the same manner as the deemed Marine Licence as indicated in the Marine Licence Principles Document (J9 F04).</p>

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
24	JNCC	<p>We also note no reference is provided regarding the potential to have to undertake multiple attempts when clearing individual devices (for any of the clearance methods) e.g. if the first attempt fails or it does not clear all the explosive material. In the past, it has been common practice for clearance companies to be allowed up to three attempts of high order clearance on a single device. The campaign detailed in Footnote 2 used multiple deflagration charges on some of the larger devices to ensure all explosive material was burned and none required recovery and disposal onshore. While this does not change the predicted injury ranges in the ES or subsequent mitigation requirements, it could extend the number of days on which detonations occur, prolonging the risk of injury and disturbance. This could have implications for HRA (see paragraph 19e) and protections afforded to European Protected Species (paragraph 26).</p>	<p>The Applicant also refers the JNCC to the Applicant's UXO Clearance Position Statement (S_D4_56) on the mitigation hierarchy.</p> <p>Whilst it may be necessary to make multiple attempts at clearing UXOs, the Applicant highlights that such attempts are expected to be made within the same clearance operation and that appropriate mitigation measures will be in place to ensure animals are outside the injury zone throughout the clearance process. Therefore, it is unlikely that the number of days on which detonations could occur would be extended (highlighting also that each event results in a very short term (1 second) elevated sound pressure field).</p>
25	JNCC	<p>e) Assuming a worst-case scenario that all devices would be cleared using high order could have implications for HRA. The project array area is 23.67km from the North Anglesey Marine SAC, designated for harbour porpoise (Table 4.11, page 50 of (F.2.4)). One of the conservation objectives for this site is no significant disturbance of the species. A noise management approach is implemented for this site to reduce the risk of disturbance to harbour porpoise^{4 5}, which requires daily and seasonal thresholds not to be breached. When assessing compliance with these thresholds, JNCC advocate the use of Effective Deterrent Ranges (EDRs). These are fixed disturbance ranges for different activities based on empirical evidence oppose to distances predicted from noise modelling. The current EDR for high order UXO clearance is 26km, meaning disturbance from high order clearance in the array area could impact this harbour porpoise site. The daily threshold considers the spatial area from which harbour porpoise are excluded because of the noisy event, and the seasonal threshold the number of days on which the disturbance will occur. While the area of overlap should be small (see Paragraphs 61-63 of this advice), clarity is required on whether additional attempts to clear individual devices will increase the number of days on which clearance could occur, or if required, can additional attempts be completed within the same</p>	<p>The Applicant confirms that Effective Deterrent Ranges (EDRs) have been used alongside a fixed threshold approach in Part Two: Special Areas of Conservation (SACs) Assessments (E1.2) to assess behavioural disturbance. The Applicant highlights that behavioural disturbance is not as much of a concern compared to injurious effects from UXO clearance as the magnitude of the impact is of very short duration (1 second) for each clearance event. Therefore, any behavioural disturbance to animals is likely to be limited to 'a short-lived startle reaction' (see paragraph 4.9.4.31 in Volume 2, Chapter 4: Marine mammals (F2.4)). In addition, applying the 26 km EDR, the spatial extent of overlap with the North Anglesey Marine/Gogledd Môn Forol SAC is very small (2.03% of the total area) and temporally is limited to 22 days (based on the precautionary worst case assumption of a single clearance activity per day) (see paragraph 1.7.3.135 of Part Two: Special Areas of Conservation (SACs) Assessments (E1.2)), noting that clearance operations involving multiple attempts are expected to be completed in one day.</p>

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
		day. Both need to be considered in-combination with other noisy activities occurring within the site at the same time.	
26	JNCC	In conclusion, we advise there is a risk of injury or death to marine mammals from UXO clearance. There is currently insufficient information available to be able to robustly assess the scale of this risk or its impacts to marine mammals or confirm appropriate mitigation measures to reduce the risk of injury. We strongly advise against UXO clearance being included as a licensed activity in the DCO and dML, and request that a separate marine license is applied for post-consent, once more accurate information is available.	<p>The JNCC's comment is noted and refers JNCC to the Applicant's UXO Clearance Position Statement (S_D4_56) for their position on the inclusion of UXO clearance within the standalone NRW Marine Licence.</p> <p>The Applicant maintains that the Maximum Design Scenario for UXO assessed in Volume 2, Chapter 4: Marine mammals (F2.4) presents sufficient information to inform the assessment of UXO clearance for the Mona Offshore Wind Project and that measures provided in the outline MMMP (J21) and UWSMS (J16) will be sufficient to reduce the risk of injury for all marine mammal species to not significant in EIA terms (Volume 2, Chapter 4: Marine mammals (F2.4)).</p> <p>The drafting of the standalone NRW Marine Licence is entirely within NRW MLT's control. However, it is the Applicant's anticipation that the standalone NRW Marine Licence will secure the details of proposed UXO clearance activity in the same manner as the deemed Marine Licence as indicated in the Marine Licence Principles Document (J9 F04).</p>
27	JNCC	If high order clearance was removed from the potential clearance methods, we would reconsider this position. However, we would expect to see this clearly stated in the DCO e.g. a commitment not to undertake high order clearance and to apply for a separate ML if it was deemed necessary.	<p>The JNCC's comment is noted and refers JNCC to the Applicant's UXO Clearance Position Statement (S_D4_56) for their position on the inclusion of UXO clearance within the standalone NRW Marine Licence.</p> <p>The drafting of the standalone NRW Marine Licence is entirely within NRW MLT's control. However, it is the Applicant's anticipation that the standalone NRW Marine Licence will secure the details of proposed UXO clearance activity in the same manner as the deemed Marine Licence as indicated in the Marine Licence Principles Document (J9 F04). This includes the suitable mitigation in place within the outline MMMP (J21) and outline UWSMS (J16).</p>
28	JNCC	If UXO clearance were to remain in the DCO, we provide the following advice regarding Section 21 of the draft DCO (C1), which relates to UXO clearance:	The Applicant notes the comments on the draft DCO, the draft DCO is the subject of a separate consent application to the Planning Inspectorate. The Applicant has responded to and considered all

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
		<p>f) Sub-section (1) states no removal will take place until a method statement has been approved by NRW and the relevant SNCBs, and that this document will be submitted to NRW at least three months prior to the date on which clearance activities are intended to begin. The wording suggests a single document will be submitted which includes methodologies for identification and clearance of potential UXO targets as well as clearance methods. This suggests the document will be submitted prior to the investigation surveys being undertaken, meaning no more information will be available than is currently presented in the ES. As the statutory advisor for offshore waters, if high order clearance is permitted in the DCO and is included as a potential option in this method statement, JNCC will have to base their advice when reviewing this document on the worst-case scenario, that is all devices will be cleared using high order clearance. The predicted injury range for harbour porpoise from such a clearance is more than 15km ((F.2.4), Paragraph 1.8.2.2) - this cannot be mitigated.</p>	<p>comments relevant to the standalone NRW Marine Licence application.</p> <p>The Applicant refer the JNCC to the Applicant's UXO Clearance Position Statement (S_D4_56) for detail on the timing of the method statement and MMMP.</p> <p>The drafting of the standalone NRW Marine Licence is entirely within NRW MLT's control. However, it is the Applicant's anticipation that the standalone NRW Marine Licence will secure the details of proposed UXO clearance activity in the same manner as the deemed Marine Licence as indicated in the Marine Licence Principles Document (J9 F04).</p> <p>The Applicant has submitted an updated Table 3.37 (indicative construction programme) from Volume 1, Chapter 3: Project description (F1.3) which includes pre-commencement activities and detailed design and is presented in Appendix A. It is expected that the method statement and MMMP would be submitted for approval to the licencing authority in consultation with JNCC after completion of the surveys to identify potential UXO. Therefore, the pre-commencement documents required as part of the standalone NRW Marine Licence will be more detailed and based the results of the site-specific surveys.</p> <p>Paragraph 4.9.1.15 in Volume 2, Chapter 4: Marine mammals (F2.4) states where 'low order/low yield measures are not possible there is a maximum risk of injury (predicted for harbour porpoise) out to 15 km for a 907 kg UXO (absolute maximum) and 8 km for a 130 kg UXO (most likely (common) maximum)' and agrees that the injury ranges are considerably larger than the standard 1,000 m mitigation zone recommended for UXO clearance (paragraph 4.9.4.16 in Volume 2, Chapter 4: Marine mammals (F2.4)). As such, 'tertiary mitigation will therefore also include the use of ADDs and potentially scare charges to deter animals from the injury zone' (paragraph 4.9.4.16 in Volume 2, Chapter 4: Marine mammals (F2.4)). The Applicant highlights the details of appropriate tertiary mitigation are set out in the Outline MMMP (J21) which will be discussed and agreed with stakeholders including JNCC post-consent when further details of the size and type of potential UXOs are understood.</p>

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
			The Applicant highlights that the outline UWSMS (J16) is a consent compliance document that provides the strategy to reduce the magnitude of impacts from elevated underwater sound from the Mona Offshore Wind Project to a non-significant level, and the final UWSMS will set out the secondary mitigation options, if required, in order to reduce the magnitude of impacts from elevated underwater sound from the Mona Offshore Wind Project, such that there is no significant effect on fish or marine mammals. Therefore, the Applicant is clearly committing to mitigating the injury range for harbour porpoise to a non-significant level, through the measures in the outline MMMP (J21) and the outline UWSMS (J16).
29	JNCC	g) The ES (Paragraph 4.9.4.5 (page 146), (F.2.4)) has assumed a maximum of 22 devices will be cleared and the same number is used to define the maximum design scenario in the outline marine mammal mitigation plan (J21). However, no maximum number is provided within the draft DCO. A maximum number of devices to be cleared should be stated in the DCO, and this should match that used in the ES when assessing potential impacts i.e. 22. If more than this number is found once the investigative surveys have been completed, a variation or separate marine licence should be required.	<p>The Applicant notes the comments on the draft DCO, the draft DCO is the subject of a separate consent application to the Planning Inspectorate. The Applicant has responded to and considered all comments relevant to the standalone NRW Marine Licence application.</p> <p>The Applicant refer the JNCC to the Applicant's UXO Clearance Position Statement (S_D4_56).</p>
30	JNCC	h) The applicant has committed to following a mitigation hierarchy when clearing UXOs within the EA and marine mammal mitigation plan, there is no reference to this in the DCO. There is no commitment within the DCO to prioritise low noise methods of clearance, as required by the Government Position Statement on UXOs. We recommend that only low noise methods of clearance are allowed and a commitment in the DCO that if high order clearance is required, it will be requested via a separate marine licence application.	<p>The Applicant notes the comments on the draft DCO, the draft DCO is the subject of a separate consent application to the Planning Inspectorate. The Applicant has responded to and considered all comments relevant to the standalone NRW Marine Licence application.</p> <p>The drafting of the standalone NRW Marine Licence is entirely within NRW MLT's control. However, it is the Applicant's anticipation that the standalone NRW Marine Licence will secure the details of proposed UXO clearance activity in the same manner as the deemed Marine Licence as indicated in the Marine Licence Principles Document (J9 F04). This includes the commitment to prioritising low order clearance as described in the outline MMMP (J21) (in paragraph 1.4.3.1 and Table 1.2) and the outline UWSMS (J16) (in paragraphs 1.6.2.2 and 1.8.3.1). This also includes primary and tertiary measures for mitigating the effects of underwater sound</p>

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
			<p>from clearance of UXOs of up to a size of 130 kg, described in the Outline MMMP (J21), but for higher charge sizes additional secondary mitigation measures may be required (as stated in paragraph 1.8.3.3 of the Outline UWSMS (J16)).</p>
31	JNCC	<p>Section (1b) of the draft DCO states a marine mammal mitigation protocol will also be submitted to NRW, in accordance with the outline marine mammal mitigation protocol (J21). We expand on our comments on the outline plan in our RR below, and were relevant, how it interacts with the DCO:</p> <p>i) Section 1.4.3 UXO clearance maximum design scenario (MDS): The MDS defined in Table 1.7 states that high order donor charges will be either 1.2kg or 3.5kg of explosive material (assumed to be NEQ although not stated), a low order clearance charge will use 80g and low yield clearance 750g. This reflects the metrics used in the impact assessment. While this outline plan would be updated prior to clearance activities commencing, it is currently not known what clearance methods will be used therefore these metrics could change. Should they differ, the conclusions within the ES and this mitigation plan may become invalid. JNCC are not assured these metrics represent the maximum that could be used; therefore, we are unable to advise the mitigation measures included in the plan for UXO clearance will reduce the risk of injury. Should UXO clearance remain in the DCO, we recommend Section (1b) clarifies what the MDS is or confirms that it remains as defined in the outline document submitted during examination.</p>	<p>The Applicant notes the comments on the draft DCO, the draft DCO is the subject of a separate consent application to the Planning Inspectorate. The Applicant has responded to and considered all comments relevant to the standalone NRW Marine Licence application.</p> <p>Please see the Applicant's response in Row 21.</p> <p>The Applicant disagrees that the conclusions of the marine mammal impact assessment (Volume 2, Chapter 4: Marine mammals (F2.4)) could become invalid if the size of the donor or clearance charges changes. This is because the assessment has considered the MDS, which is for high order clearance, and therefore any smaller charges would be captured in the worst case assessed within the assessment. It is therefore not necessary to know the exact size of the clearance charge sizes at this point and this will be determined as more detailed information becomes available following site-investigation surveys.</p>
32	JNCC	<p>j) Section 1.6.1: The mitigation zone should be defined as the area within which injury could occur, as defined in the impact assessment. Depending on the radius of this zone, it may be possible to visually search the entire area, however for many UXO clearances, the area within which injury could occur (and subsequently the mitigation zone) will be larger than can be visually searched. In such cases the area within the mitigation zone which will be visually searched should be identified i.e. a 1km radius around the device. In line with JNCC mitigation guidelines6, the</p>	<p>The Applicant notes the comments on the draft DCO, the draft DCO is the subject of a separate consent application to the Planning Inspectorate. The Applicant has responded to and considered all comments relevant to the standalone NRW Marine Licence application.</p> <p>The Applicant notes JNCC's comment. The drafting of the standalone NRW Marine Licence is entirely within NRW MLT's control. However, it is the Applicant's anticipation that a minimum</p>

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
		minimum the mitigation zone should be is 1km, regardless of the predicted injury range.	mitigation zone of 1 km will be applied in respect of UXO clearance, as detailed in paragraph 1.6.1.2 of the Outline MMMP (J21).
33	JNCC	Section 1.6.3 Passive Acoustic Monitoring (PAM) operators: We highlight that PAM operators should also have undertaken a JNCC approved training course in addition to MMOs, as the purpose of these courses is to understand how to implement the JNCC mitigation guidelines and record the effort.	<p>The Applicant notes the comments on the draft DCO, the draft DCO is the subject of a separate consent application to the Planning Inspectorate. The Applicant has responded to and considered all comments relevant to the standalone NRW Marine Licence application.</p> <p>The Applicant notes JNCCs response and highlights that paragraph 1.6.3.6 of the Outline MMMP (J21), states ‘The PAM Operator will be suitably trained in passive acoustic monitoring and the use of PAM Guard software, with training having been provided by an appropriate organisation. PAM Operators will also have an appropriate level of field experience (i.e. a minimum of one year PAM experience on offshore projects) and must be familiar with the UK regulatory procedures pertaining to managing risk to marine mammals and marine turtles from underwater sound’. The Applicant confirms that all MMOs (Marine Mammal Observers) will have completed a JNCC-accredited training course, and PAM operators will be trained through the appropriate training course for the particular PAM software employed by the mitigation team.</p> <p>The drafting of the standalone NRW Marine Licence is entirely within NRW MLT’s control. However, it is the Applicant’s anticipation that this detail will be added to the Final MMMP.</p>
34	JNCC	Section 1.8. UXO clearance: We note that noise abatement for UXOs will be considered for devices larger than 130kg (Figure 1.3 and paragraph 1.8.2.3, J21). We agree the need for NAS can be considered once more information on clearance requirements is available however, we question why it will only be considered for devices larger than 130kg. The harbour porpoise injury range for a 130kg high order clearance is predicted to be just over 8km; this distance cannot currently be mitigated. We also note the Marine Management Organisation routinely includes a consent condition in marine licenses for UXO clearance requiring noise abatement for all UXOs containing more than 50kg of explosive material (NEQ). Justification of this approach will be required.	<p>The Applicant notes the comments on the draft DCO, the draft DCO is the subject of a separate consent application to the Planning Inspectorate. The Applicant has responded to and considered all comments relevant to the standalone NRW Marine Licence application.</p> <p>The final UWSMS will include a justification of approach for any use of NAS in Section 1.8 and will be agreed with NRW post consent as part of the discharge process for the Final UWSMS. The measures proposed in the outline MMMP (J21) suggest that injury to harbour porpoise (and other marine mammals) can be fully mitigated for a high order clearance of UXO up to 130 kg as it has been demonstrated that an animal can swim beyond 8 km during the</p>

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
			<p>mitigation (i.e. 60 minutes of ADD plus soft start) (as detailed in the Outline MMMP (J21)).</p> <p>The drafting of the standalone NRW Marine Licence is entirely within NRW MLT's control. However, it is the Applicant's anticipation that the standalone NRW Marine Licence will secure the details of proposed UXO clearance activity in the same manner as the deemed Marine Licence as indicated in the Marine Licence Principles Document (J9 F04). It is the Applicant's intention to continue to consult with JNCC throughout the development of the final UWSMS.</p> <p>For further information on UXO clearance please see the UXO Clearance Position Statement (S_D4_56).</p>
35	JNCC	Section 1.8.4 discusses how PAM will be the only way of performing a pre-detonation search during periods of limited visibility including nighttime (paragraph 1.8.4.2.). This implies that UXO detonation will occur 24-hours a day. JNCC do not recommend that UXO clearance is undertaken in periods when a visual search can be undertaken, including at night.	The Applicant can confirm that UXO clearance will occur in daylight hours only (as stated in paragraph 1.8.3.1 of the outline MMMP (J21)) and that both MMOs and PAM operators will be employed to ensure effective mitigation.
36	JNCC	A soft start procedure in the form of 'scare charges' is included in the protocol for high order clearance (Figure 1.3 and Section 1.8.6, J21). JNCC do not advocate the use of these charges as a soft start for UXO as their scaring effect is not proven (Lewis 19967, Keevin and Hempen 19978), and would result in unnecessary additional noise being emitted into the environment. We note the applicant's response to our Relevant Representation on this (RR-033.57 and RR-033.65, PDA-008); we agree this element of the mitigation plan could be discussed further when the mitigation plan is finalised as it involves taking something out rather than putting something in, however, we do not anticipate our stance changing on this. This advice should also be considered when justifying why noise abatement is only proposed for devices greater than 130kg in weight.	<p>The Applicant notes the comments on the draft DCO, the draft DCO is the subject of a separate consent application to the Planning Inspectorate. The Applicant has responded to and considered all comments relevant to the standalone NRW Marine Licence application.</p> <p>The Applicant notes JNCC's concerns and recommendations regarding the use of scare charges and accepts that mitigation tools such as these (as well as ADDs) represent additional noise in the marine environment. The Applicant highlights that the outline MMMP (J21) was developed to include measures which would minimise the introduction of additional noise into the marine environment whilst also ensuring that the risk of injury can be mitigated. The proposed scare charges are very small in size (between 50 to 200 g) and the introduced noise from the charges (up to six in total) would result in an extremely short term (1 second each) elevation in sound. Such charges have been routinely used in UXO clearance activities to ensure marine mammals are deterred from areas where the risk of</p>

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
			<p>injury could occur. Therefore, on balance the additional noise (up to 6 seconds per UXO) from the scare charges is considered to outweigh the risk of a marine mammal experiencing a permanent hearing injury.</p> <p>The Applicant welcomes the agreement that the use of scare charges (or discussions of alternatives) can be finalised post consent.</p>
37	JNCC	JNCC currently advise that a visual search is undertaken prior to activating ADDs and visual searches should be adapted to accommodate this. Modelling undertaken for McGarry et al 20229 suggests injury could occur if animals are within 100m of an ADD when it is switched on. To reduce this risk, observers should ensure no animals are nearby before switching devices on.	<p>The Applicant notes the advice that a visual search is undertaken prior to activating ADDs and will incorporate this in the final MMMP and UWSMS, in consultation with relevant stakeholders, including JNCC. The Applicant highlights in the outline MMMP (J21) paragraph 1.7.5.1 details that ADDs will be used alongside visual and/or acoustic monitoring and not as a replacement for these methods.</p> <p>The drafting of the standalone NRW Marine Licence is entirely within NRW MLT's control. However, it is the Applicant's anticipation that the standalone NRW Marine Licence will secure the details of proposed UXO clearance activity in the same manner as the deemed Marine Licence as indicated in the Marine Licence Principles Document (J9 F04). It is the Applicant's intention to continue to consult with JNCC throughout the development of the final MMMP.</p> <p>For further information on UXO clearance please see the UXO Clearance Position Statement (S_D4_56).</p>
38	JNCC	Generally, this outline document is not practical for use in the field. We question why so much detail is required on the outputs of the ES assessment, and if it is to remain in the final document, recommend it is done so as an annex. This would enable to mitigation personnel to more effectively find the information they need to perform the mitigation.	The Applicant notes JNCCs response and will consider revising the level of detail on the outputs of Volume 2, Chapter 4: Marine mammals (F2.4) in the Final MMMP, in accordance with the outline MMMP (J21).
39	JNCC	Unexploded ordnance clearance: Other comments The ES ((F2.4)) claims the UXO most likely to be found will contain 130kg explosive (para 4.9.4.5 in F2.4). The impact assessment (Table 4.33 in F2.4) predicts injury to harbour porpoise for such a device could	The Applicant notes the JNCC's response and highlights that as set out in response to Rows 19 and 21, the outline MMMP (J21) suitably secures mitigation for high order clearance up to and including a UXO of 130 kg. The Applicant has provided a detailed response

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
		<p>occur out to 8km using high order clearance. This is greater than can be currently mitigated for injury therefore a European Protected Species License for injury will likely be required. This application process requires three tests to be passed:</p> <ul style="list-style-type: none"> • Whether the activity fits one of the purposes specified in the Regulations. • Whether there are no satisfactory alternatives to the activity proposed (that would not incur the risk of offence); and • That licensing the activity will not result in a negative impact on the species'/population's Favourable Conservation Status (FCS). 	<p>regarding this approach to the JNCC in Row 31 and reiterates that discussion on the appropriate deterrence measures can be discussed and agreed post-consent.</p> <p>The Applicant notes the JNCC advice regarding the requirement for an European Protected Species (EPS) licence and intends to submit a licence application for any activities which have the potential to impact marine mammals as per the Conservation of Habitats and Species Regulations 2017 ('the Regulations'). An additional document (an EPS supporting information document) will be produced to support an EPS licence application which will provide an assessment against the three tests.</p>
40	JNCC	We do not believe sufficient information is provided in the ES to robustly pass these tests.	<p>The potential risk to EPS is highlighted within the Environmental Statement, with specific discussion of EPS in paragraphs 4.2.1.3; 4.5.2.2 and 4.5.3.1 and Table 4.10 of Volume 2, Chapter 4: Marine mammals (F2.4). The information provided in Volume 2, Chapter 4: Marine mammals (F2.4) will be used to underpin the EPS supporting information document. The Applicant considers that the detail provided therein is sufficient based on information currently known, and this detail will be built on using information gathered through UXO clearance surveys post consent. The Applicant emphasises a specific EPS risk assessment will be carried out post consent, which will be refined following specific UXO surveys, and mitigation will be developed and agreed based on the actual UXO sizes identified.</p>
41	JNCC	Regarding disturbance to EPS, this will depend on the duration over which the clearance will occur. SNCB guidance ¹⁰ considers noisy activities lasting more than four to six weeks as causing an offence. If it is assumed clearance will take 22 days (one device per day), this campaign would take four weeks. Clarification would be needed on whether contingency attempts to clear individual devices would extend this duration, or if all devices can be cleared in a single day even with additional attempts. This will help determine whether a licence should also include disturbance.	<p>The information provided by the Applicant in the Environmental Statement is considered comprehensive and robust and can be relied upon to inform an EPS licence application. For example, Volume 6, Annex 4.1: Marine Mammal Technical Report (F6.4.1) and section 4.5 in Volume 2, Chapter 4: Marine mammals (F2.4) provides information on species baseline, section 4.5.4 in Volume 2, Chapter 4: Marine mammals (F2.4) states the favourable conservation status (FCS) of EPS in UK waters and section 4.9 in Volume 2, Chapter 4: Marine mammals (F2.4) provides the quantitative information for those activities which require consideration under the EPS licence.</p> <p>The Applicant highlights that 22 days of UXO clearance would be under four weeks if undertaken consecutively but acknowledges the resulting potential risk of injury and disturbance and highlights the Applicant's commitment to the UWSMS (J16) which will provide</p>

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
			<p>measures to reduce the potential for significant effects in respect of elevated underwater sound from a range of activities including UXO, if required post consent following further information on the UXO's to be cleared. The Applicant highlights that behavioural disturbance may not be as much of a concern compared to injurious effects for UXO clearance as the magnitude of the impact is of very short duration (one second) for each clearance event and therefore any behavioural disturbance to animals is likely to be limited to 'a short-lived startle reaction' (see paragraph 4.9.4.31 in Volume 2, Chapter 4: Marine mammals (F2.4)); however, this will be fully considered within the risk assessment in the EPS supporting information document accordingly.</p>
42	JNCC	<p>Updates to the government Joint Position Statement on UXO clearance and release of a Defra noise policy paper referred to in our Relevant Representation have been delayed due to the recent election and change of government. We note that Natural Resources Wales - Licensing were at the workshop in which this was discussed.</p>	<p>Whilst the Applicant is aware of the Defra noise policy paper, at this point guidance is not in the public domain. The Applicant will consider any guidance on UXO clearance or noise policy when it is published and align accordingly through the final MMMP and final UWSMS, both of which are anticipated to be secured in the standalone NRW Marine Licence.</p>
43	JNCC	<p>Paragraph 4.9.4.8 (page 146) of (F2.4) advises caution when interpreting large injury ranges such as those predicted for high order clearance. This is because the sound is unlikely to maintain its impulsive character as it travels away from the point of detonation. The references provided to support this hypothesis (Hastie et al 2019) refers to seismic airguns and pile-driving, both of which involve repeated pulses of noise resulting in prolong sound duration over, usually, several hours. This is not, however, the case for UXO clearance which involves a single pulse of noise. We request evidence is provided to confirm this theory can be applied to UXO clearance in the same manner as for piling and seismic surveys.</p>	<p>The transition from impulsive to non-impulsive sound is an effect which occurs during the propagation of sound. This propagation effect is due to non-linear dispersion and high frequency absorption and occurs for all impulsive (and indeed non-impulsive) sound sources. The resulting effect is an elongation of the pulse length for each individual pulse and a change to the shape of the waveform. In the case of seismic and piling sound there are multiple pulses which experience this same effect, whereas in the case of UXO clearance it is a single pulse which experiences this effect. A useful analogy would be hearing thunder at close range vs at a larger distance of several miles: at more distant ranges the thunder can be heard as a "rumble" rather than a "crack" at closer ranges. This effect is clearly demonstrated in noise monitoring data for UXO clearance and other underwater explosive use where more distant measurements consistently show an elongation of the pulse length, loss of high frequency energy and reduction in other measures of impulsivity such as kurtosis. Example reports which clearly demonstrate this effect for UXO clearance include the noise monitoring reports for</p>

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
			Seagreen and Moray West (e.g. Cook <i>et al.</i> , 2021, Lee <i>et al.</i> , 2023a and 2023b and Stephenson <i>et al.</i> , 2024).
44	JNCC	Underwater sound technical report (F.5.3.1), Table 1.29, potential impact ranges for high order clearance of UXOs: these results have assumed three weights of UXO however it is not clear whether this includes the donor charge or is just the weight of the UXO itself. If the latter the injury ranges could potentially be larger.	For the assessment of a potential “high order” detonation the modelling has been based on the size of the UXO NEQ (Unexploded Ordnance Net Explosive Quantity). Typically, the “donor” charge sizes used for UXO clearance (whether high order or low order clearance techniques are used) are in the order of a few hundred grams of explosive, compared to several kilograms NEQ for the UXO. Any contribution from the donor charge is insignificant compared to the main UXO charge size in these calculations and any increase in calculated sound level is well below the inherent uncertainty of the noise modelling methodology. For example, adding a donor charge weight of 500 g to a UXO NEQ of 907 kg results in an increase in the received sound level by 0.0018 dB (based on calculations using the methodology as set out in Volume 5, Annex 3.1: Underwater Noise Technical Report (F5.3.1)), which does not affect the calculated PTS (Permanent Threshold Shift) or TTS (Temporary Threshold Shift) ranges. It is only when the UXO NEQ is of a similar size to the donor charge that the received sound level and injury ranges are affected significantly. For example, if the donor charge is of equal size to the UXO NEQ then the received sound level increases by 2.3 dB, reducing to a 0.3 dB increase if the donor charge is one-tenth of the weight of the UXO NEQ. It can therefore be concluded that in the case of the UXO NEQs assessed for the Mona Offshore Wind Project the increase in received sound level and PTS/TTS range would be negligible if the donor charge NEQ was added to that of the UXO.
45	JNCC	<p>Construction piling</p> <p>Section 4.9.3 of the ES ((F.2.4)) considers injury and disturbance from piling noise.</p> <p>When commenting on the PEIR (E3.1), JNCC requested the inclusion of noise abatement technologies in the outline marine mammal mitigation plan due to the large injury ranges predicted for minke whale when using the cumulative SEL metric (7.4km, Table 4.26 respectively</p>	The Applicant highlights an errata in Table 1.2 of the Outline MMMP (section 1.2.20 of the Errata Sheet (S_NRWML_5)) that the use of NAS should have been referred to as ‘secondary measures’ rather than ‘tertiary measures’. Tertiary measures are those considered to be standard industry practice, whilst secondary measures are those that are considered additional mitigation and include the use of NAS. The final UWSMS will encompass all mitigation measures to be

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
		(F.2.4)). This was added to the current submissions (J21) and is referred to in the impact assessment, however, we believe it has not been given sufficient consideration.	adopted by the project and will be supported by the final MMMP in respect of the tertiary measures.
46	JNCC	Table 1.2 of the outline MMMP (J21) describes the measures to be adopted as part of this project; the use of noise abatement is included under the heading of Tertiary measures. This table describes noise abatement as something that will be considered in the Underwater Sound Management Strategy (J16), 'if it is required as an option'.	<p>Whilst the Applicant is aware of ongoing discussion surrounding commitment to NAS as highlighted at the MMO noise abatement workshop in March 2024, at this point statutory guidance has not been released in the public domain.</p> <p>The Applicant has not ruled out NAS and has agreed to considering it as part of a holistic approach to ensure no significant effects from underwater sound on marine mammals. The Applicant reiterates that NAS will be considered as part of the development of the final UWSMS (as detailed in Volume 2, Chapter 4: Marine mammals (F2.4)), demonstrating the commitment to using best endeavours to deliver noise reductions on developments with any mitigation tailored to the final design. Whilst recognising that the project is located in Welsh waters and therefore does not fall under the MMO's remit as a licensing authority, the Applicant is committed to reviewing this guidance when it is published and aligning accordingly (see paragraphs 4.11.2.53/54, 4.11.2.83/83 for example in Volume 2, Chapter 4: Marine mammals (F2.4)).</p>
47	JNCC	The Marine Management Organisation held a noise abatement workshop in March 2024, which in part aimed to forewarn industry that from 2025, they should expect to see changes in how noise from piling is managed in English waters. This was due to the expected increase in noise levels in coming years and the increasing need for developers to demonstrate they have used best endeavours to deliver noise reductions on their developments.	<p>The Applicant disagrees that the document or Volume 2, Chapter 4: Marine mammals (F2.4) does not commit to measures which will avoid or reduce noise levels; Table 4.17 in Volume 2, Chapter 4: Marine mammals (F2.4) details measures such as piling soft start, gradual ramp up of hammer energy, limits to maximum hammer energies where concurrent piling may be employed. Table 4.17 in Volume 2, Chapter 4: Marine mammals (F2.4) states consideration of NAS will be made as part of a stepped strategy post consent and following the mitigation hierarchy - avoid, reduce, mitigate.</p>
48	JNCC	This workshop was attended by NRW - Licensing, although a copy of the minutes are available on request if required. It was considered industry-wide adoption of noise reduction systems during piling will be the only way developments can continue to be authorised. Reference was made to a verbal announcement in January 2024 that the MMO would require all projects piling in 2025 to use noise abatement, and they will be expecting a thorough review of potential noise abatement options and its potential use for piling activities. This includes an expectation that industry will provide thorough justification why noise abatement can't be used, should that be the case.	<p>The Applicant acknowledges the reference to other projects being progressed and specifically the proximity of Morgan Generation Assets and Morecambe Generation Assets both within Liverpool Bay (noting that Morven is located in the Firth of Forth region on the east coast of Scotland and therefore has not been considered in the cumulative assessment). The Applicant highlights that Morgan Generation Assets has committed to an UWSMS to manage underwater sound and both Morgan Generation Assets and</p>
49	JNCC	JNCC support this approach and agree the use of noise abatement will be crucial in managing underwater noise levels from piling in the future. While this development is not in English waters, the Mona wind farm array area borders English waters and noise from piling will travel across this border. We feel it is not unrealistic to expect all developers to demonstrate how they will avoid or reduce noise levels in their applications, regardless of project location. The Mona outline mitigation plan (J21) repeatedly refers to a mitigation hierarchy of avoid, reduce, mitigate, however this document (nor the ES) does not commit to any measures which it will avoid or reduce noise levels produced during	

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
		piling. Instead, it focusses on the mitigation option and reducing the risk of injury. The outline Underwater Sound Management Strategy (J16) does describe noise abatement as a potential secondary measure and briefly describes options currently available however, there is no commitment to use it.	Morecambe Generation Assets have committed to a MMMP to mitigate injury to marine mammals. Therefore, there is project-specific commitments to mitigate the effects of subsea sound on marine mammals and as such the potential for cumulative effects would be reduced to a non-significant level (in EIA terms).
50	JNCC	We are also aware of another three wind farm projects being progressed in the Liverpool Bay area: Morecombe (8.9km from Mona array area), Morgan (11km) and Morven (357km). The construction of all these projects is expected to overlap with construction at Mona (Section 1.8, F5.5.1). Managing the cumulative noise from so many projects within a relatively small area will be extremely difficult, particularly if noise abatement is not committed to in the marine mammal mitigation plans of each project. These other projects are in English waters so given the MMO announcement, we can anticipate them using noise abatement, but we do not foresee this as justification for Mona not to.	
51	JNCC	At this same workshop, Defra announced they would be publishing a noise policy paper. This was anticipated to be published end Q2 2024, however this has been delayed due to the recent change in government. The policy was described as providing Defra's priorities for underwater noise across the UK in coming years, including an expectation that industry has strong consideration of noise reduction methods on projects. A presentation was also provided detailing the outputs of a Defra commissioned project investigating the feasibility of introducing an underwater piling decibel limit in UK waters, which if introduced would require the use of noise reduction methods.	The Applicant is aware of the Defra feasibility project and consideration of piling decibel limit in UK waters and will consider the guidance and limits when in the public domain.
52	JNCC	A clearer commitment to reducing noise levels would also support future European Protected Species (EPS) licence applications which may be required and are usually applied for post-DCO consent. This process requires three tests to be passed (see paragraph 24). Currently we do not believe sufficient evidence is provided to support compliance with test 2.	The Applicant notes JNCC advice regarding the requirement for an EPS and intends to submit a licence application for any activities which have the potential to impact marine mammals as per the Conservation of Habitats and Species Regulations 2017 ('the Regulations'). See the Applicant's response to Rows 39 to 41 which signposts to where in the Application the relevant information was provided to support the EPS licence application. The Applicant highlights that this information will be compiled in an EPS supporting

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
			information document which considers the compliance with the three EPS tests.
53	JNCC	<p>Other comments</p> <p>Section 18(i) of the draft DCO (C1) lists a marine mammal mitigation plan as being a required document if piling is to occur. However, there is no link in the text to the Underwater Sound Management Strategy (Section 20), the outline version of which states this mitigation plan will form an annex of (Section 1.1.3, J16). Neither does it mention UXO clearance, as Section 21 of the DCO claims to use the same document. This makes the current wording contradictory as Section 18 implies the plan will only be developed if piling occurs. We also recommend links are made to vessel movement strategies to reduce collision risk in both the DCO and mitigation plan (see paragraphs 55-60 below)</p>	<p>The Applicant notes the comments on the draft DCO, the draft DCO is the subject of a separate consent application to the Planning Inspectorate and is being developed in consultation with NRW. The Applicant has responded to and considered all comments relevant to the standalone NRW Marine Licence application.</p> <p>The drafting of the standalone NRW Marine Licence is entirely within NRW MLT's control. However, it is the Applicant's anticipation that a PEMP will be secured in the standalone NRW Marine Licence as identified in the Marine Licence Principles Document (J9 F04), which is to include the measures to minimise disturbance to marine mammals and rafting birds (J17 F02). This includes the commitment that the site induction processes will incorporate the principles of the WiSe Scheme to ensure that key personnel are aware of the need to follow the principles of the WiSe Code of Conduct. The WiSe Scheme is a UK national training scheme for minimising disturbance to marine life and will aid in minimising the potential for collision with marine mammals.</p> <p>The Applicant highlights that the outline Vessel Traffic Management Plan (J14 F02) is a separate document to both the outline UWSMS (J16) and outline MMMP (J21). The purpose of the Vessel Traffic Management Plan relates to improve safety of navigation and reduce risk of accidents occurring at sea and therefore, the updated outline Vessel Traffic Management Plan (J14 F02) refers to the Measures to minimise disturbance to marine mammals and rafting birds from transiting vessels (J17 F02) as an associated document that may need to be considered in developing the final Vessel Traffic Management Plan (see paragraph 1.7.1.2 of the outline Vessel Traffic Management Plan (J14 F02)). The Applicant notes that this is referenced against the Offshore Environmental Management Plan which will be submitted for approval as part of the dML. The Applicant anticipates there will be an equivalent PEMP in the standalone NRW Marine Licence that will be submitted for approval, as indicated in the Marine Licence Principles Document (J9 F04), and that the position will therefore be the same.</p>

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
54	JNCC	We return to our comment on the PEIR regarding the assumption that the extent of disturbance from piling is likely to be over-estimated due to noise losing its impulsive characteristics with range [referenced in both (F.2.4) and E1.2]. Our original comment was based on the disturbance assessment being undertaken using a dose response curve, which was generated based on field observations collected up to several km from the piling activity, and that animals will have reacted to the noise they received at that location.	<p>The Applicant notes JNCCs response on the application of the dose-response curve and highlights that, in their response to the Applicant's response to relevant representations on the DCO, the Applicant stated that at these larger ranges (compared to the smaller ranges at Beatrice offshore Wind Farm), most of the sound within the peak hearing sensitivity of harbour porpoise will have dissipated, leaving primarily low frequency sound, which they are less sensitive to and may not even be able to hear. Therefore, at Beatrice, where ranges were much smaller, the sound may have retained its impulsive high-frequency characteristics for the entire range, whilst at Mona the contours are much larger and may have transitioned to low frequency sound. The Beatrice study which established the dose-response curve was based on the sounds encountered at the ranges for that study and therefore if the ranges (e.g. at Mona Offshore Wind Project) extend beyond that for Beatrice, then the frequency content and sound characteristics will naturally differ, and it is well established that sound loses high frequency content over larger ranges.</p> <p>As stated in paragraph 4.9.2.39 of Volume 2, Chapter 4: Marine mammals (F2.4) defining this transition range is an active area of research and scientific debate, with several other potential methods being investigated, and therefore comparison of dose response at different ranges is still limited and the Applicant has used the best available evidence in informing their assessment.</p>
55	JNCC	We note the applicant's response to a similar comment from NRW-A on this matter (RR-011.34, PDA-008). We agree that the characteristics of the sound source should not be ignored, however, as the dose response curve is based on field observations, it already accounts for differences in behaviour relative to an individual's distance from the noise source and any differences in the characteristics of the sound at that distance.	
56	JNCC	We also note the applicants response that 'these ranges [single strike sound exposure level] predicted for Mona are much larger than the ranges measured in the Beatrice study (which was used to develop the dose-response curve). This means that the frequency spectrum of sound used to derive the dose-response for Beatrice will differ and, for the same sound level (measured as SELs), the proportion of animals affected would likely be greater at closer distances compared to larger distances as the pulse characteristics of the sound are less dispersed. Thus, a proportional response curve from a study predicting smaller ranges will be more conservative when applied to a study predicting larger ranges'. This statement requires evidence to support it, and if not available, it should be made clear this is the applicants opinion/interpretation.	
57	JNCC	We also agree that this is a topic which requires further study to establish ranges at which impulsive noise sources lose their impulsiveness.	
58	JNCC	JNCC confirm they are satisfied with the applicant's approach to disturbance from piling noise and how the use of Acoustic Deterrent	

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
		Devices (ADDs) has been incorporated into the assessment, which reflects assessments undertaken for other wind farm developments.	noise and how the use of ADDs has been incorporated into the assessment, which reflects assessments undertaken for other wind farm developments.
59	JNCC	<p>McGarry et al (202211) undertook simple modelling to ascertain whether ADDs in isolation could cause injury to marine mammals. This concluded that risks were low, with no injury predicted at greater than 130m from the devices modelled. Ensuring the pre-piling mitigation search (see J21) commences before the ADD is switched on will mitigate this risk i.e. the ADD is only switched on if the marine mammal observer confirms there are no animals near the device. Subsequently we do not think it is necessary to model the impacts of the ADD separately as:</p> <ul style="list-style-type: none"> - the ADD will only be used immediately prior to piling, - the duration of that deployment will be controlled with activation times defined in the mitigation plan, - and the risk of injury from the ADD alone will be low and can be mitigated. 	The Applicant is aware of the ADD review and will consider the updated ADD guidance when published. The Applicant welcomes confirmation that the pre-piling mitigation search in the outline MMMP (J21) will mitigate the risk of injury from ADD. The Applicant welcomes confirmation that it is not necessary to separately model the impacts of ADDs.
60	JNCC	We highlight that an updated version of McGarry et al is underway which provides a review of evidence supporting the effectiveness of different models of ADD currently available. This should be published before the end of this year, and so will be available to support development of the final mitigation plan.	
61	JNCC	We were aware of comments made by NRW-A in their Relevant Representation on the DCO regarding disturbance from Acoustic Deterrents (RR-011.28, PDA-008), which stated that the additional disturbance caused by large-scale ADD use has not been considered, especially considering the disturbance effects on harbour porpoises beyond the intended mitigation zone. The Applicant acknowledged these comments (RR-011.28, PDA-008) and agreed that the potential effect of ADDs should not be overlooked but argued that it did not change the outcome of the assessment, and that the approach taken (which involves modelling the piling both with and without the use of an ADD for a period of 30 minutes (Table 4.5, (F.2.4)) was typical for offshore wind assessments. In addition, the Applicant stated that the disturbances ranges for ADD use are smaller than those for piling and	<p>The Applicant welcomes JNCC's comments on ADDs, and the recognition that the type of ADD to be deployed is yet to be chosen. The Applicant also welcomes the written agreement from JNCC that the current assessment is typical for offshore wind projects that the approach is satisfactory.</p> <p>The Applicant highlights they agree with the JNCC that the reliance on ADDs as a primary mitigation tool should be considered carefully and on a case-by-case basis. The Applicant understands the need for proportionate and judicious application of ADDs, and this will be considered carefully when finalising the ADD deployment duration post consent. The Application highlights that the 30-minute activation period (as presented in the outline MMMP (J21)) is not a fixed time</p>

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
		that it is captured within the disturbance from piling assessment. Finally, the Applicant confirmed that they will carefully consider the need for a proportionate application of ADDs.	period and the final ADD duration will be agreed post-consent in the final MMMP.
62	JNCC	JNCC agree with NRW-A's point but also recognise the type of ADD to be deployed is yet to be chosen. JNCC also agree the current assessment is typical for offshore wind projects and are of the opinion that the approach is satisfactory.	The drafting of the standalone NRW Marine Licence is entirely within NRW MLT's control. However, it is the Applicant's intention to continue to consult with relevant stakeholders including JNCC throughout the development of the final MMMP.
63	JNCC	We do, however, recommend careful consideration is given to the effective range of different ADDs when choosing a device to deploy, to minimise unnecessary disturbance at greater distances, e.g. at distances greater than the predicted injury ranges for piling. Further consideration of this issue and how this will be dealt with should be provided in the outline Underwater Sound Management Strategy (J16 and outline Marine Mammal Mitigation Plan (J21). This should provide confidence that unnecessary disturbance will be minimised when choosing which type of ADD to deploy.	The Applicant notes the advice from the JNCC on careful consideration of the effective range of different ADDs and will incorporate this in the final MMMP and UWSMS.
64	JNCC	The updated McGarry report will provide an overview of evidence supporting the effectiveness of currently available ADDs and should be available to support the development of these documents.	
65	JNCC	Elevated underwater noise levels from sources other than piling and UXO clearance Please refer to our response to Action Point 25 from ISH2 (EV3-006a) regarding underwater noise from construction and operational vessel movements. We agree with NRW-A's Relevant Representation (PDA-008, Unique Reference Identifier RR-011.27) that, "there is inadequate justification for an overall conclusion of low magnitude. We note that the estimated numbers of animals disturbed by vessels and any subsequent conclusions are based on static impact radii. Given the known sensitivity of harbour porpoise, in particular to vessel noise, and the increase in the number of vessels in the area compared to baseline vessel traffic, we advise that the assessment is revised and quantified both for the project alone and in-combination with other projects." We note that the Applicant's response (PDA-009) gives examples of the studies used within the Environmental Statement ((F.2.4)); however these are often based on either a single vessel, or a single type of	In further consultation with NRW (A), NRW (A) reiterated their concerns regarding the methodology to underpin the vessel noise assessment, the Applicant has subsequently provided additional information as suggested by NRW (A) which included: 1) presenting numbers for the 4.08 km modelled radius to compare to the 7 km radius used in the assessment and 2) considering a dose response approach. Further to these the Applicant demonstrated that the radius of effect applied in the assessment based on empirical evidence resulted in a more conservative quantitative assessment compared to just simply applying the modelled ranges. See Table 1 below.

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response																																								
		vessel, whereas there would likely be a range of vessels (or other noise sources) occurring simultaneously. We recognise it is impractical to determine the impact ranges of all vessels that may be present. We therefore agree with the suggestion being put forward in advice from NRW-A of assuming a single track for all vessels from port to the array area (e.g. the centre of the array), and using an impact radius taken from the literature to the estimated ensonified area.	<p>Table 1: Number of animals disturbed for the 7 km radius used in Volume 2, Chapter 4: Marine mammals (F2.4), compared to the number of animals disturbed using the 4.08 km modelled radius.</p> <table border="1"> <thead> <tr> <th>Species</th> <th>No. of animals disturbed (7 km)</th> <th>% of MU</th> <th>No. of animals disturbed (4.08 km)</th> <th>% of MU</th> </tr> </thead> <tbody> <tr> <td>Harbour porpoise</td> <td>43</td> <td>0.07%</td> <td>15</td> <td>0.02%</td> </tr> <tr> <td>Bottlenose dolphin</td> <td>1</td> <td>0.09%</td> <td>1</td> <td>0.03%</td> </tr> <tr> <td>Short-beaked common dolphin</td> <td>1</td> <td>0.0001%</td> <td>1</td> <td>0.00003%</td> </tr> <tr> <td>Risso's dolphin</td> <td>5</td> <td>0.04%</td> <td>2</td> <td>0.01%</td> </tr> <tr> <td>Minke whale</td> <td>3</td> <td>0.01%</td> <td>1</td> <td>0.004%</td> </tr> <tr> <td>Grey seal</td> <td>28</td> <td>0.21%</td> <td>10</td> <td>0.07%</td> </tr> <tr> <td>Harbour seal</td> <td>1</td> <td>0.01%</td> <td>1</td> <td>0.004%</td> </tr> </tbody> </table> <p>In addition, the dose response approach is also less conservative as it would result in no animals impacted beyond 4 km. This provided further justification of a magnitude of 'low' and neither approach changed the conclusions of the impact assessment. The Applicant now considers this matter to be resolved with NRW (A) and subsequently considers it can be resolved with JNCC.</p>	Species	No. of animals disturbed (7 km)	% of MU	No. of animals disturbed (4.08 km)	% of MU	Harbour porpoise	43	0.07%	15	0.02%	Bottlenose dolphin	1	0.09%	1	0.03%	Short-beaked common dolphin	1	0.0001%	1	0.00003%	Risso's dolphin	5	0.04%	2	0.01%	Minke whale	3	0.01%	1	0.004%	Grey seal	28	0.21%	10	0.07%	Harbour seal	1	0.01%	1	0.004%
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66	JNCC	Collision risk to marine mammals from construction and operational vessels JNCC did not provide comment on this potential risk in their Relevant Representation as they had no major concerns with the assessment or its conclusions. We provide the following information for clarity of our position noting aspects of this assessment were raised at the ISH2 (EV3-004a).	The Applicant welcomes JNCC's response and confirmation of no major concerns with collision risk for marine mammals.																																								
67	JNCC	JNCC agree that vessels travelling at faster speeds pose a greater risk of collision, as does erratically moving vessels, such as those associated with recreational activities. We also agree evidence is available demonstrating that reducing or restricting vessel speeds can	The Applicant confirms that the outline MMMP (J21) will be considered when developing the final Vessel Traffic Management Plan (in accordance with the outline MMMP (J21)). The Outline MMMP (J21) focuses on mitigating injury from underwater sound in																																								

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
		reduce the risk of collision for marine mammals (for example, those provided in Section 4.9.6 of (F.2.4)).	accordance with JNCC guidance, and it is not standard approach to include collision risk in a MMMP.
68	JNCC	<p>The applicant has submitted an outline Vessel Traffic Management Plan (J14) which is of relevance to this discussion. Measures proposed within this plan include:</p> <ul style="list-style-type: none"> - Advance planning, scheduling and coordination of vessel operations to de-conflict and minimise simultaneous operation (SIMOPS). - Limitations on fuel types or vessel speeds to meet emissions requirements. - Passage planning and indicative transit routes. 	<p>The drafting of the standalone NRW Marine Licence is entirely within NRW MLT's control. However, it is the Applicant's anticipation that a PEMP will be secured in the standalone NRW Marine Licence as identified in the Marine Licence Principles Document (J9 F04), which is to include the measures to minimise disturbance to marine mammals and rafting birds (J17 F02). This includes the commitment that the site induction processes will incorporate the principles of the WiSe Scheme to ensure that key personnel are aware of the need to follow the principles of the WiSe Code of Conduct. The WiSe Scheme is a UK national training scheme for minimising disturbance to marine life and will aid in minimising the potential for collision with marine mammals. For these reasons, the Applicant therefore does not consider a speed restriction for marine vessels is required.</p>
69	JNCC	All the above will help reduce collision risk for marine mammals however, there is no reference to this in the Environmental Limits sections for either the construction or operational stages. This is despite Section 1.7 stating the Marine Mammal Mitigation Protocol may need to be considered with developing the final version of this vessel plan. We also note the outline Marine Mammal Mitigation Plan makes no reference to measures to reduce collision risk or the Vessel Management Plan.	<p>The Applicant highlights that the outline Vessel Traffic Management Plan (J14 F02) is a separate document to both the outline UWSMS (J16) and outline MMMP (J21). The purpose of the Vessel Traffic Management Plan relates to improve safety of navigation and reduce risk of accidents occurring at sea and therefore, the updated outline Vessel Traffic Management Plan (J14 F02) refers to the Measures to minimise disturbance to marine mammals and rafting birds from transiting vessels (J17 F02) as an associated document that may need to be considered in developing the final Vessel Traffic Management Plan (see paragraph 1.7.1.2 of the outline Vessel Traffic Management Plan (J14 F02)). The Applicant notes that this is referenced against the Offshore Environmental Management Plan which will be submitted for approval as part of the dML. The Applicant anticipates there will be an equivalent PEMP in the standalone NRW Marine Licence that will be submitted for approval, as indicated in the Marine Licence Principles Document (J9 F04), and that the position will therefore be the same.</p>
70	JNCC	While we are in agreement with the ES conclusions, connectivity between these plans is required and clarity provided to support the conclusions in the ES of where measures being implemented will also reduce the risk of collision. We do not anticipate additional measures above what is currently proposed being required, rather acknowledgement of all the benefits. Given the conclusions of the assessment assume that not all collisions are lethal (paragraph 4.9.6.13, (F.2.4)), and this is related to vessel size and transit speed (paragraph 4.9.6.8, (F.2.4)), we advise that speed restrictions are imposed.	.
71	JNCC	We also note the measures proposed to minimise disturbance to marine mammals and birds from transiting vessels (J17). We highlight that Table 1.1 claims to summarise issues raised during consultation,	The Applicant will review whether the inclusion of the Wildlife Safe Scheme in the final Vessel Traffic Management Plan (in accordance with the Outline Vessel Traffic Management Plan (J14 F02)) is

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
		<p>however this document was not presented to the marine mammal EWG, as illustrated by Table 1.1. We do, however, note the commitment to comply with the Wildlife Safe Scheme or similar, to reduce potential disturbance impacts from vessel movements. It would be beneficial if this was also stated in the Vessel Traffic Management Plan.</p>	<p>appropriate (given the purpose of the Vessel Traffic Management Plan relates to improve safety of navigation and reduce risk of accidents occurring at sea).</p>
72	JNCC	<p>North Anglesey Marine SAC The North Anglesey Marine SAC lies 17.5km away from the Mona Offshore Cable Corridor and Access Area (paragraph 1.7.2.2, E1.2). We note that the noise assessments to determine the impact on the site from UXO clearance have been done for the array area, but do not appear to have been assessed for the transmission assets. In our Relevant Representation on the DCO (RR-033.48, PDA-008), we confirmed we agreed with the conclusion of no LSE to this site from piling and low order UXO clearance noise due to the distance of the project array area to this site. However, given the closer proximity of the cable corridor to the site than the array area, we would require a modelling assessment to be carried out from the closest point of the cable corridor to the SAC.</p>	<p>The Applicant notes the JNCCs response and considers that, even with the assessment using precautionary figures for the MDS (i.e. high order 907 kg x 22 UXOs detonated at a precautionary one detonation per day), disturbance associated with UXO detonation would not exceed the daily 20% disturbance threshold or the 10% threshold of the relevant area of the site over the season. Even at the closest distance of 17.5 km away from the Mona Offshore Cable Corridor and Access Areas, the level of overlap with the North Anglesey SAC is less from the Mona Offshore Cable Corridor and Access Areas (45.60 km²) than that from the Array (66.06 km²) using the 26 km EDR range (see Appendix B), and therefore it will not exceed the daily 20% disturbance threshold or the 10% threshold of the relevant area of the site over the season. Injury ranges are smaller than those from disturbance (up to 15.37 km) and do not overlap with the North Anglesey SAC (as the Mona Offshore Cable Corridor and Access Area lies 17.5 km from the SAC). Furthermore, in reality, detonation of UXO would represent a very short term (i.e. seconds) increase in underwater sound leading to disturbance and the assessment presented in the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: Special Areas of Conservation (SACs) Assessments (E1.2) has been highly precautionary in assuming one high-order UXO clearance event on a single day.</p>
73	JNCC	<p>Given that we do not agree with the conclusion of no LSE on the SAC for high order clearances as the proposed array area is within 26km (the current effective deterrent range (EDR) for this activity) of this site, there is no doubt that we would reach a similar conclusion for the transmission assets.</p>	<p>As stated in paragraph 4.9.4.45 of Volume 2, Chapter 4: Marine mammals (F2.4), a more detailed assessment of mitigation will be undertaken post-consent as further information on the number, condition, and type of UXOs becomes available through pre-construction UXO clearance surveys to inform the development of the Final MMMP and Final UWSMS. Therefore, the Applicant acknowledges this will be reviewed nearer to the time, in line with JNCCs request.</p>

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
74	JNCC	We agree that the current EDR for pin piles (15km) does not overlap with this site and highlight JNCC is about to commission a contract to review the harbour porpoise EDRs.	The Applicant notes the JNCCs response and will consider the new EDR guidance when it is available in the public domain, noting the agreement that there is no potential for overlap with the North Anglesey Marine/Gogledd Môn Forol SAC.
75		Additional comments on the draft DCO: Section 18.-1(e): we question why the Marine Mammal Mitigation Plan is not listed here, noting our previous comments on how it is referenced within the draft DCO.	The Applicant refers to Rows 10 to 12 above. The Applicant notes the comments on the draft DCO and deemed marine licence; the draft DCO/dML is the subject of a separate consent application to the Planning Inspectorate. The Applicant has responded to and considered all comments relevant to the standalone NRW Marine Licence within this submission. The drafting of the standalone NRW Marine Licence is entirely within NRW MLT's control. However, it is the Applicant's anticipation that an MMMP will be secured in the standalone NRW Marine Licence, as identified in the Marine Licence Principles Document (J9 F04).
76		Section 29, Marine Noise Registry (MNR): The MNR has been developed by JNCC on behalf of Department for Environment, Food and Rural Affairs (DEFRA) and the UK devolved administrations to record human activities in UK seas that produce loud, low to medium frequency (10Hz – 10kHz) impulsive noise, and supports commitments made in the UK Marine Strategy. The DCO only commits to submitting data for piling and UXO clearance. Geophysical surveys will be conducted during the construction of this project may use equipment that falls within the range of data to be collected by the MNR. While these surveys do not require to be licenced, we request this data is voluntarily submitted by the applicant. A commitment to do so in the DCO would be beneficial.	The Applicant notes the JNCC's comment and refers to Rows 10 to 12 above. The Applicant will consider submission of additional information to the Marine Noise Registry at the relevant time during construction.
77	JNCC	Minor comments Digital aerial survey methodology: JNCC were not consulted on the design of the marine mammal surveys prior to them commencing. The methodology was discussed by the EWG however these commenced after the surveys began. During these discussions, JNCC did not agree the methodology was suitably designed for marine mammals and	The Applicant welcomes confirmation that JNCC agreed that additional data sources could be used to inform the marine mammal assessment, and final species-specific densities were identified and agreed with the JNCC and other stakeholders, and used in the marine mammal assessment. The Applicant highlights that the aerial survey methodology was well designed, robust and aligns with the

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
		<p>highlighted they were unlikely to provide sufficient data. This is evident in the poor data attained in the surveys. However, it was subsequently agreed with the EWG that additional data sources could be used to inform the marine mammal assessment, and species-specific densities were identified and agreed.</p>	<p>approach taken for other UK offshore wind farms, including other Round 4 developments. Indeed, the low number of sightings is not a reflection of 'poor data' quality but a reflection of low densities in this area during the surveys. The use of site-specific densities was discussed during the EWG process and, in response to consultee feedback, the Applicant adopted the more precautionary density estimates from the Welsh Marine Mammal Atlas that became available during drafting of the final marine mammal EIA (Volume 2, Chapter 4: Marine mammals (F2.4)).</p>
78	JNCC	<p>Impacts scoped in/out of the assessment: JNCC agreed with the potential impacts scoped in and out of the impact assessment for marine mammals.</p>	<p>The Applicant welcomes confirmation that the JNCC agree with the potential impacts scoped in and out of the impact assessment for marine mammals.</p>
79	JNCC	<p>Future monitoring: Except for UXO clearance on harbour porpoise, it was concluded in the ES ((F.2.4)) there would be no significant impacts from the Mona Offshore Wind Project, either alone or cumulatively (Section 4.15, (F.2.4)) and that “<i>No marine mammal monitoring to test the predictions made within the impact assessment is considered necessary</i>”. During the DCO PEIR process, JNCC asked for further justification to support this approach, but no additional evidence was provided in the ES. We maintain our opinion that further justification is required e.g. by relating this approach to caveats associated with the assessment methods and subsequent confidence that can be attributed to modelling that underpins these conclusions.</p>	<p>The Applicant wishes to clarify that in light of its commitment to developing an UWSMS that will reduce the underwater sound impacts on marine mammal ecology to an acceptable level (i.e. no significant residual effect), no future monitoring is considered to be required. As such, no current or future commitment to monitor marine mammals is made within the application or deemed necessary to test the predictions made within the impact assessment.</p> <p>The Applicant notes that in further consultation with NRW (A), NRW (A) confirmed marine mammal monitoring to test the predictions made within the impact assessment would not be required from a consenting perspective.</p>
80	JNCC	<p>Benthic Ecology</p> <p>The following advice relates to the offshore environment, extending out from the 12nm limit. For benthic ecology advice within 12nm, we defer to NRW-A.</p> <p>Overall comments</p> <p>JNCC are of the opinion that not all seabed impacts have been fully considered and it is not always clear that the correct footprint values have been utilised within the analysis or between chapters as such we are unable to fully conclude the significance of impacts to offshore benthic ecology. Further detail of this is provided in the below sections.</p>	<p>The Applicant notes the JNCC's comment. Please see the Applicant's response to Rows 81 through to 103 below.</p>

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
81	JNCC	<p>JNCC do not agree with the values attributed within the assessment of significant effects, covered in Sections 2.9, page 92, and 2.11, page 235, of Volume 2, Chapter 2: Benthic subtidal and intertidal ecology. The magnitude of impact has been assessed too low, incorrect assumptions of feature sensitivity have been applied to the seapens and burrowing megafauna communities Important Ecological Features (IEF), and the subsequent adverse significance has been under-represented. As an example, taking the ‘as is’ situation with a ‘Low’ magnitude of impact and a ‘High’ sensitivity, the adverse significance would be ‘Minor or Moderate’, as detailed on page 17 of Volume 1, Chapter 5: Environmental Impact Assessment methodology, but has been reported as ‘Minor’. We believe it would be more appropriate to take the worst-case scenario and apply a ‘Moderate’ adverse significance. We would therefore recommend that, as a minimum, all significance of effects be reassessed taking into account the worst-case scenario. In Section 5.3.6.8 and Table 5.4, page 14, of Volume 1 Chapter 5: Environmental Impact Assessment methodology, the spatial extent of the impact is defined as “<i>Geographical area over which the impact may occur</i>”. Including the whole licence area as the spatial extent is not proportionate to the identified impact pathway especially if the whole area has no opportunity to be impacted. This then gives an unrealistic percentage of impact area and subsequently a magnitude of impact that is not representative. Some more detailed examples are covered for specific sections below but we would recommend that all magnitude of impacts are re-assessed taking this into account.</p>	<p>The Applicant has responded to the comments made by the JNCC in relation to the sensitivity of the seapens and burrowing megafauna communities important ecological feature (IEF) in Row 98 and the magnitude of the impacts and percentage of area impacted in Row 100.</p> <p>With regards to the comments made regarding the assessment of significance and how the EIA methodology (as detailed in Volume 1, Chapter 5: Environmental Impact Assessment methodology (F1.5)) has been applied in Volume 2, Chapter 2: Benthic subtidal and intertidal ecology, where a range is suggested for the significance of effect, there remains the possibility that this may span the significance threshold (i.e. the range is given as minor to moderate). In such cases, the final significance is based upon the topic expert's professional judgement as to which outcome delineates the most likely effect, with an explanation as to why this is the case. Where this has been undertaken in Volume 2, Chapter 2: Benthic subtidal and intertidal ecology (F2.2), explanations are provided in the text to support the conclusions. This approach is supported by the general approach described in the Design Manual for Roads and Bridges, which suggests an evidence-based approach when reviewing the multiple outcomes presented in the conclusion of the effects matrix, as applied in this scenario regarding the lack of seapens identified in the site-specific surveys. This approach has been applied throughout Volume 2, Chapter 2: Benthic subtidal and intertidal ecology (F2.2). For example, in paragraph 2.9.2.47, for the littoral sand and muddy sand supporting infaunal communities IEF, the low magnitude and high sensitivity resulted in a minor or moderate result in the significance matrix. A conclusion of minor adverse significance was determined due to the small scale of the work in the intertidal zone.</p>
82	JNCC	<p>Throughout the Environmental Statement and other documentation there is little distinction between inshore and offshore, distinguished by the 12nm/territorial waters limit. Given the remit of Statutory Nature Conservation Bodies (SNCBs) is divided based on this factor it would be helpful to have impacts, activities, and habitats broken down into these remits to allow JNCC to provide an accurate assessment. In particular, it would have been useful to have this delineation identified on all the maps provided and for benthic habitats and impacts that span</p>	<p>The Applicant has considered the Mona Offshore Wind Project as a whole and has not divided any part of the project description, or elements of the project design, by geography or stakeholder remit. A maximum design scenario approach has been adopted because many of the final parameters, including those for sandwave clearance, will be determined following pre-construction surveys and final detailed design, and so cannot be provided with certainty (particularly in relation to specific areas covering different</p>

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
		<p>the offshore and inshore to be assessed based on their offshore/inshore location. JNCC were unable to accurately assess benthic impact of the operations within the offshore environment due to impacts not being attributed directly to the offshore area (extending out from 12nm). This is of particular concern in relation to the export cables and the impacts on sandwave clearance.</p>	<p>stakeholder remits) at this stage in the consenting process. As such the assessments of impacts have not been split by stakeholder remit or geography for any receptor group. The Applicant considers that to attempt to divide the assessments by stakeholder remit or geography would risk potentially over or underestimating the impact for the inshore and offshore waters.</p> <p>Following a meeting between the Applicant and the JNCC on 04 September 2024, the Applicant understands that JNCC's primary concerns relate to sandwave clearance within the Mona Offshore Cable Corridor. To facilitate the JNCC's understanding of the potential maximum design scenario associated with this element of the Mona Offshore Wind Project, the Applicant has provided some indicative numbers for the temporary habitat disturbance associated with sandwave clearance within the Mona Offshore Cable Corridor. The Applicant would caveat that the figures provided below are indicative and should be viewed as estimates as they are based on proportions of offshore export cables found within inshore and offshore waters and not detailed pre-construction survey or design information.</p> <p>Approximately 39.3 km of the Mona Offshore Cable Corridor is within inshore waters (i.e. within 12 nm) (i.e. 44% of the total 90 km length per export cable). Based on this percentage, the Applicant estimates that of the overall maximum design scenario of 8,640,000 m² of temporary habitat disturbance predicted to arise from export cable installation, including sandwave clearance, approximately 3,801,600 m² of disturbance may occur within inshore waters as a result of this activity and the remainder (approximately 4,838,400 m² of temporary disturbance) may occur within offshore waters (i.e. beyond 12 nm). These numbers are however only indicative to assist JNCC in understanding the potential impact in offshore waters and the Applicant maintains that the maximum design scenario presented in Table 2.18 of Volume 2, Chapter 2: Benthic, subtidal and intertidal ecology (F2.2) is the most accurate representation of the impacts associated with the Mona Offshore Wind Project. Furthermore, the Applicant is confident that the impacts from sandwave clearance, both within offshore and inshore waters, are not significant in EIA terms.</p>

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
83	JNCC	<p>JNCC have concerns around the expected decommissioning of the infrastructure, in particular around the decommissioning of gravity-based infrastructure and the full removal of all cables. Lessons learnt from the oil and gas industry have shown that the decommissioning of gravity-based infrastructure is not always feasible, or possible, leading to permanent habitat change. The impacts of this scenario should be considered if gravity-based structures are to remain with the project envelope. JNCC welcomes the proposal to remove all cabling from the Array Area and Cable Corridor. Based on our current experience, this is not always possible, especially when the cable is buried. Leaving buried cables <i>in situ</i> and removing un-buried sections would normally include protection of the cut end with rock dump increasing the final footprint of the project. Although JNCC acknowledge future advancement of decommissioning technology may solve this issue, this scenario has not been considered.</p>	<p>The Applicant notes this response and highlights that this is an industry wide, rather than a project specific, concern. Notwithstanding this, the Applicant wishes to highlight that the Rochdale Envelope approach adopted for the Mona Offshore Wind Project has been undertaken in accordance with industry good practice with respect to Environmental Impact Assessments and has included an assessment of the impacts of the decommissioning phase. As outlined in paragraph 3.13.1.1 of Volume 1, Chapter 3: Project description (F1.3), 'no offshore decommissioning works will take place until a written decommissioning programme has been approved by the Secretary of State for the Department for Energy Security and Net Zero (formerly the Department for BEIS), a draft of which will be submitted prior to the construction of the Mona Offshore Wind Project.</p> <p>As assessment of the decommissioning phase of the Mona Offshore Wind Project, based on a maximum design scenario approach, has been undertaken for all the relevant receptor groups including benthic subtidal and intertidal ecology in Volume 2, Chapter 2: Benthic subtidal and intertidal ecology (F2.2). It should, however, be noted that it is the Applicant's intention to secure decommissioning activities through a separate standalone Marine Licence at the relevant time and that the scope of the decommissioning works would be determined by the relevant legislation and guidance at that time. Therefore, any deviation from the scenarios assessed in the Environmental Statement would be assessed at that stage.</p> <p>With regards to JNCC's comment on cabling, the maximum design scenario for temporary habitat disturbance has assessed the removal of all cables, which could require the use of similar equipment as used to install the cables as set out in section 3.13.2 of Volume 1, Chapter 3: Project description (F1.3). However, the Applicant has not committed to the removal of cables in the decommissioning phase and the decision on whether to remove offshore cables will be taken at the time of decommissioning in consultation with the relevant stakeholders.</p> <p>The installation of rock protection at cut ends during the decommissioning phase has not been assessed in Volume 2, Chapter 2: Benthic subtidal and intertidal ecology (F2.2) because it is</p>

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
			<p>not included in the project design, as the Applicant does is not currently anticipate that it will be required. Any deviation from this would be considered and assessed as part of the decommissioning programme and separate standalone marine licence applications for decommissioning works.</p> <p>The Applicant is confident that all activities with the potential to result in permanent habitat loss, post-decommissioning, have been assessed in section 2.9.5 of Volume 2, Chapter 2: Benthic subtidal and intertidal ecology (F2.2) and that no significant effects, in EIA terms, are expected.</p>
84	JNCC	<p>Volume 1, Chapter 3: Project Description Section 3.5.4.3, page 10 <i>If Mona infrastructure crosses any out of service cables, these will be removed where feasible.</i> It is not clear if any remediation (i.e. rock dump for protection) will be carried out on the cut ends of the out of service cables left on the seabed.</p>	<p>The installation of remediation, such as, for example, rock dump for protection at cut ends during the removal of out-of-service cables (during the construction phase), has not been assessed separately in Volume 2, Chapter 2: Benthic subtidal and intertidal ecology (F2.2). The Applicant acknowledges related remediation might be required; however, it is assumed that this might happen in a few cases only and with a comparably small footprint compared to the total cable protection required for the Mona Offshore Wind Project. Should it be required, any such remediation would fall within the maximum design scenario for cable protection, as assessed for inter-array cables and interconnector cables and offshore export cables. The impact of this on benthic receptors has therefore been assessed in the assessment of long-term habitat loss during the construction and operation and maintenance phases in section 2.9.5 of Volume 2, Chapter 2: Benthic subtidal and intertidal ecology (F2.2).</p>
85	JNCC	<p>Table 3.4, page 12 As the cable corridor includes both the inshore and offshore (outside 12nm) waters, it is not possible to determine the maximum design parameters for sandwave clearance in the offshore. We assume that the majority of sandwave clearance within this area will be inshore. However, this assumption may underestimate the actual impact on sandwaves located outside the 12nm territorial limit. Detailed information on the impact of activities on the offshore environment (occurring outside 12nm) is essential to allow for a full assessment of those impacts.</p>	<p>The Applicant has responded to this point on their response to Row 82.</p>

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response																																								
86	JNCC	<p>Table 3.12, Table 3.15, and Table 3.17, pages 25 to 28</p> <p>Values for the maximum seabed area (total foundations and scour protection for all foundations) were found to be incorrect in all of the above listed tables (and additional tables relating to wind turbines but not assessed here). Assuming the values for the maximum seabed area per foundation and scour protection per foundation are correct, the total foundations and scour protection for all foundations values were found to be significantly underestimated (see table below). By our calculations, the following totals should be:</p> <table border="1"> <thead> <tr> <th>Table</th> <th>Original total (m²)</th> <th>Corrected total (m²)*</th> <th>Underestimated difference (m²)</th> </tr> </thead> <tbody> <tr> <td>Table 3.12</td> <td>10,745</td> <td>35,336</td> <td>24,591</td> </tr> <tr> <td>Table 3.15</td> <td>24,964</td> <td>60,116</td> <td>35,152</td> </tr> <tr> <td>Table 3.17</td> <td>24,941</td> <td>74,508</td> <td>49,567</td> </tr> </tbody> </table> <p>* This is based on our interpretation of the data within the ES, notwithstanding our comments above on the numerous numerical errors throughout the ES.</p>	Table	Original total (m ²)	Corrected total (m ²)*	Underestimated difference (m ²)	Table 3.12	10,745	35,336	24,591	Table 3.15	24,964	60,116	35,152	Table 3.17	24,941	74,508	49,567	<p>Volume 1, Chapter 3: Project description (F1.3) presents the maximum physical dimensions for each individual project design parameter (e.g. number of OSPs or area of foundation footprint). These maximums have been selected from different design and construction options, not all of which have been presented in Volume 1, Chapter 3: Project description (F1.3).</p> <p>To provide greater clarity to the JNCC on this point, the Applicant has presented an example, in the table below, of the range of options from which the maximum design scenario for suction bucket 4-legged jacket foundations for wind turbines, as presented in Table 3.14 of Volume 1, Chapter 3: Project description (F1.3), has been calculated. The same principle applies to foundations for OSPs.</p> <p>These scenarios have been chosen as they represent the scenario with the smallest, most numerous wind turbines (scenario 1), and the scenario with the largest, least numerous wind turbines (scenario 2), but it should be noted that the final number of turbines installed could be between these two scenarios.</p> <table border="1"> <thead> <tr> <th>Suction bucket 4-legged jacket foundations</th> <th>Option 1</th> <th>Option 2</th> </tr> </thead> <tbody> <tr> <td colspan="3">Dimensions</td> </tr> <tr> <td>Maximum number of foundations</td> <td>96</td> <td>68</td> </tr> <tr> <td>Number of legs per foundation</td> <td>4</td> <td>4</td> </tr> <tr> <td>Bucket diameter (m)</td> <td>13</td> <td>16</td> </tr> <tr> <td colspan="3">Seabed footprint</td> </tr> <tr> <td>Seabed footprint per foundation (i.e. for four legs) (m²)</td> <td>531</td> <td>804</td> </tr> <tr> <td>Scour protection footprint per suction bucket jacket (SBJ) foundation (m²)</td> <td>5,631</td> <td>10,012</td> </tr> </tbody> </table>	Suction bucket 4-legged jacket foundations	Option 1	Option 2	Dimensions			Maximum number of foundations	96	68	Number of legs per foundation	4	4	Bucket diameter (m)	13	16	Seabed footprint			Seabed footprint per foundation (i.e. for four legs) (m ²)	531	804	Scour protection footprint per suction bucket jacket (SBJ) foundation (m ²)	5,631	10,012
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87	JNCC	<p>An underestimation of the maximum footprint area will result in an underestimation of the total impact of the project on the benthic marine environment.</p>																																									

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response		
			Total seabed footprint per foundation (scour + foundation) (m ²)	6,162	10,816
			Total seabed footprint for Mona Offshore Wind Project (m ²)	591,576	735,488
88	JNCC	<p>Section 3.5.8.7, page 23</p> <p>Drill arisings from drilling of pin piles will create cuttings piles. A maximum seabed impact area should be calculated for these as cutting piles will impact the local environment and should be considered in more detail. Cuttings piles can be considered as temporary or permanent impacts depending on local conditions and drill arisings</p>	<p>As shown in the table above, the individual parameters for the maximum number of foundations (96) and the maximum foundation/scour footprint per foundation (10,816 m²) have not been multiplied together to generate the maximum design scenario for the maximum seabed area. This is because the individual parameters (e.g. suction bucket diameter) and the individual footprints (e.g. foundation and scour protection footprints) are specific to each option and are informed by the individual technical specification of each foundation size option. The table above clarifies that all maximum values for each individual design parameter would not occur together in any viable final design for the Mona Offshore Wind Project. This example explains why the installation of 96 wind turbines would not have an individual footprint of 10,816 m². The individual footprint of 10,816 m² is specific to the technical specification for the larger and less numerous turbines (i.e. if 68 turbines were installed). In summary, the size (i.e. the seabed footprint) of the less numerous higher capacity turbines (i.e. the 68 wind turbines) is larger than the size (i.e. the seabed footprint) of the smaller capacity and more numerous turbine option (i.e. 96 wind turbines). The same principle applies to foundations for OSPs.</p> <p>The Applicant can confirm that the maximum design scenario has been assessed.</p> <p>The Mona Offshore Wind Project has adopted a maximum design scenario approach which allows the EIA process to be conducted on the basis on a realistic 'worst case' scenario (i.e. the maximum project design parameters) which is selected from different design and construction scenarios. Seabed preparation works prior to suction bucket jacket installation represents the maximum design scenario, with respect to spatial extent for temporary habitat loss</p>		

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
		<p>themselves. Dispersion modelling of the drill arisings will detail the extent of potential impact on the benthic environment and provide more detailed information on the quantity and extent of smothering impact.</p>	<p>accounting for 16,833,242 m² of disturbance (as a result of 8,416,621 m³ of sediment deposited at a depth of 0.5 m). The temporary habitat loss associated with drill arisings resulting from jacket foundation installation is considered to fall within the area of disturbance described for seabed preparation for the suction bucket jacket foundations. Additionally, paragraph 1.9.2.8 of Volume 2, Chapter 1: Physical Processes (F2.1) highlights that sedimentation beyond the immediate drilling location will be indiscernible. The Mona Offshore Wind Project has committed to depositing material arising from drilling in close proximity to the works (Table 2.19 of Volume 2, Chapter 2: Benthic subtidal and intertidal ecology (F2.2)). The Applicant has committed to this as set out in the Mitigation and Monitoring Schedule (J10 F04). The Mitigation and Monitoring Schedule and Marine Licence Principles Document (J9 F04) demonstrate that the Applicant anticipates this commitment will be secured within the standalone NRW Marine Licence as part of the Offshore Construction Method Statement.</p>
89	JNCC	<p>Section 3.13.2.3, page 80</p> <p>Wording in relation to cable decommissioning was found to be inconsistent between documents. This section suggests cables “<i>may be retrieved</i>” at decommissioning while Volume 2, Chapter 2, ‘Mona ES Benthic subtidal and intertidal ecology’ (Table 2.18, page 79) states all cables “<i>will be removed</i>” at decommissioning. JNCC assume all cables will be removed at decommissioning but this needs to be clarified by the applicant.</p>	<p>As outlined in section 3.13 of Volume 1, Chapter 3: Project description (F1.3), it is anticipated that all structures above the seabed or ground level will be completely removed where feasible and practical and this has been assessed as the maximum design scenario in Volume 2, Chapter 2: Benthic subtidal and intertidal ecology (F2.2). The project position is that cable and scour protection will preferably be left <i>in situ</i> and that all inter-array and interconnector cables may be retrieved. In addition to this, offshore export cables may be retrieved up to the exit pits (seaward of MLWS (Mean Low Water Springs)) for cables installed under the intertidal area.</p> <p>The Applicant has not committed to the removal of cables in the decommissioning phase and the decision on whether to remove offshore cables will be taken at the time of decommissioning in consultation with the relevant stakeholders. The Applicant has, however, adopted a maximum design scenario approach and given that there is the possibility that all cables may be removed, as outlined in Volume 1, Chapter 3: Project description (F1.3), this has been assessed as the maximum design scenario for relevant impacts such as temporary habitat disturbance in Volume 2, Chapter</p>

Ref No.	Question From	Comment	Applicant response
			<p>2: Benthic subtidal and intertidal ecology (F2.2). The Applicant maintains that the relevant maximum design scenario for each impact pathway relevant to decommissioning has been assessed in Volume 2, Chapter 2: Benthic subtidal and intertidal ecology (F2.2) based on the following key decommissioning principles outlined in Volume 1, Chapter 3: Project description (F1.3):</p> <ul style="list-style-type: none"> • all structures above the seabed or ground level will be completely removed where feasible and practical (removal of foundations has been assessed as the maximum design scenario for all impact pathways); and • cables, cable protection and scour protection may be removed <u>or</u> may be left <i>in situ</i> (the relevant scenario has been assessed as appropriate for relevant impact pathways). <p>An assessment of the decommissioning phase of the Mona Offshore Wind Project has been undertaken for benthic subtidal and intertidal ecology in Volume 2, Chapter 2: Benthic subtidal and intertidal ecology (F2.2) in line with these key decommissioning principles. It should, however, be noted that as outlined in Table 1.1 of the Marine Licence Principles Document (J9 F04), that the Applicant is not seeking to licence decommissioning activities within the dML or the standalone NRW Marine Licence and separate marine licences would be applied for at the relevant time and the scope of the decommissioning works would be determined by the relevant legislation and guidance at that time. Therefore, any deviation from the scenario assessed in the Environmental Statement would be assessed at that stage.</p>
90	JNCC	<p>Section 3.13.2.4, page 80 JNCC would expect all mattresses (concrete and frond) and rock bags used for cable protection to be removed at decommissioning. Not removing these will constitute a permanent habitat loss. The permanent introduction of hard substrates into a soft sediment environment would be a permanent habitat loss that leads to a regime shift of that habitat.</p>	<p>As outlined in section 3.13 of Volume 1, Chapter 3: Project description (F1.3), the project position is that cable protection will preferably be left <i>in situ</i>, but removal has been assessed where this represents the maximum design scenario for relevant impacts for benthic receptors (e.g. removal of hard substrates). Conversely, where leaving cable protection <i>in situ</i> represents the maximum design scenario this has been assessed for relevant impacts (e.g. long term habitat loss in the decommissioning phase where it is considered permanent habitat loss, section 2.9.5 of Volume 2, Chapter 2: Benthic subtidal and intertidal ecology (F2.2)).</p>

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
			The decision on whether to remove cable protection at the end of the project lifetime will be made at the point of decommissioning based on the relevant legislation and guidance at that time. Whilst decommissioning activities have been assessed in the Environmental Statement, decommissioning would be licenced through a separate standalone marine licence at the relevant time (i.e. prior to decommissioning).
91	JNCC	<p>Section 3.13.2.5, page 81</p> <p>We would agree that the cable installation and removal impacts would have the same temporary impact. However, if cables were left <i>in situ</i> and required protection through rock dump (for example through cut ends or free spans), this would increase the permanent impact to the seabed and should be considered further. These impacts are part of the development, albeit during decommissioning. If the impacts are not considered prior to installation, then the final impact to the marine benthic environment will be significantly underestimated.</p>	<p>The installation of rock protection at cut ends during the decommissioning phase has not been assessed in Volume 2, Chapter 2: Benthic subtidal and intertidal ecology (F2.2) because it is not included in the Mona Offshore Wind Project design, as the Applicant does not currently anticipate that it will be required. Any change to the maximum design scenario considered for decommissioning would be considered and assessed as part of the decommissioning programme and separate standalone marine licence applications for decommissioning works.</p> <p>The Applicant is confident that all decommissioning activities with the potential to result in permanent habitat loss have been assessed in section 2.9.5 of Volume 2, Chapter 2: Benthic subtidal and intertidal ecology (F2.2) and that no significant effects, in EIA terms, are expected.</p>
92	JNCC	<p>Volume 2, Chapter 1: Physical Processes</p> <p>Section 1.9.5.10, page 83</p> <p>We believe that the total Offshore Substation Platforms (OSP) footprint should be 20,180m² and not 19,500m² as detailed in comments above regarding the tables in Volume 1, Chapter 3: Project description. Note, the calculations detailed here are based on our interpretation of the data within the ES, notwithstanding our comments above from Volume 1, Chapter 3: Project description on the numerous numerical errors throughout the ES. An underestimation of the maximum footprint area will result in an underestimation of the total impact of the project on the benthic marine environment.</p>	The Applicant has responded to this point on their response to Row 86.
93	JNCC	<p>Volume 2, Chapter 2: Benthic subtidal and intertidal ecology</p> <p>Table 2.8, page 31</p>	The Applicant can confirm that it does not anticipate a requirement for rock dumping to stabilise jack-up operations and this has

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
		We agree that Jack up vessel events on their own would be a temporary habitat loss/disturbance. However, jack up events regularly require extra stabilisation through rock dumping, particularly in softer seabed environments and/or within high dynamic environments. The extra rock dump required for jack up events has not been accounted for and should be considered a permanent impact and be included within the long-term habitat loss/habitat alteration impact during construction, operation and maintenance, and also during decommissioning.	therefore not been assessed within Volume 2, Chapter 2: Benthic subtidal and intertidal ecology (F2.2).
94	JNCC	Foundation removal does not address gravity-based structures for turbines or OSPs. If these are not possible to decommission (see comments above), they should be treated as a permanent habitat change.	The Applicant has responded to this point on their response to Row 83.
95	JNCC	Introduction of additional rock protection has not been considered. For example, at cable cut ends if not fully removed, at cable free spans, jack up vessel stabilisation (as discussed above), cable crossings and protection, or scour protection.	The Applicant has responded to these points in their response to Rows 83, 84, 91 and 93.
96	JNCC	Table 2.18, page 84 We welcome the suggested removal of all scour protection, cable protection, and crossing protection. However, the detail provided within this table contradicts details provided in Volume1, Chapter 3: Project description, Section 3.13.2.4, page 80 (see previous comment relating to Table 2.8, page 31 of Volume1, Chapter 3: Project description). Furthermore, if rock dump were to be used for protection, it is highly unlikely that the rock will be able to be removed and would therefore remain a permanent impact.	The Applicant has responded to this point on their response to Row 89.
97	JNCC	Table 2.18, page 85 Changes in physical processes will occur at all three phases, not just the operation and maintenance phase. Decommissioning will affect physical processes, although at a much smaller scale, with the addition of rock dump and infrastructure that will be permanently left <i>in situ</i> .	The Applicant notes this response and considers that their position and approach aligns with that requested by the JNCC. The potential for cable/scour protection to affect physical processes has been assessed across all phases of the Mona Offshore Wind Project, including the decommissioning phase. The drafting of the standalone NRW Marine Licence is entirely within NRW MLT's control. However, it is the Applicant's anticipation that (as noted in Volume 2, Chapter 1: Physical processes (F2.1) and Table 2.19 of Volume 2, Chapter 2: Benthic subtidal and intertidal

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
			<p>ecology (F2.2)) the standalone NRW Marine Licence will secure a cable specification and installation plan including the commitment to no more than a 5% reduction in water depth in the same manner as the deemed Marine Licence as indicated in the Marine Licence Principles Document (J9 F04). This will ensure that any cable protection will be of sufficiently low profile to cause minimal changes to wave, tide and sediment transport.</p> <p>With regards to the JNCC's residual concerns relating to gravity-based foundations being removed and the requirement for additional cable protection at cut ends during the decommissioning phase, please see the Applicant's responses to Row 83. In summary, the Applicant is confident that based on its currently anticipated decommissioning activities there are no additional routes to impact on physical processes which may arise during the decommissioning phase which have not been assessed.</p>
98	JNCC	<p>Section 2.9.2.27, page 103</p> <p>We would not agree with a reduction in the sensitivity of the sea pens and burrowing megafauna communities from 'High' to 'Medium'. We acknowledge that sea pens have not been recorded within the site-specific surveys to date but sea pens do not have to be present to define this OSPAR T&D habitat, as also acknowledged within this section. For this reasoning, it would not be appropriate to reduce the sensitivity to 'Medium' and it should remain as 'High'. This would also apply to all subsequent sections (e.g. Section 2.9.2.32).</p>	<p>The assessments presented in Volume 2, Chapter 2: Benthic subtidal and intertidal ecology (F2.2) have been undertaken to ensure the most precautionary sensitivity is applied when combining pressures.</p> <p>The site-specific benthic surveys identified very few burrows at stations where soft sediment was dominant. In combination with an absence of seapens and the predominantly gravelly sediment, it was concluded that these areas only had a negligible resemblance to the 'seapens and burrowing megafauna communities' habitat. Therefore, a precautionary approach was adopted for stations where burrows were observed at an average SACFOR (Superabundant, Abundant, Common, Frequent, Occasional and Rare) of 'frequent', and these stations were, for the purposes of the assessment, assumed to represent the 'seapens and burrowing megafauna communities' habitat.</p> <p>The sensitivity allocated to the seapens and burrowing megafauna communities IEF was based on the high sensitivity allocated in the Marine Evidence based Sensitivity Assessment (MarESA) to the relevant impacts (abrasion/disturbance at the seabed, penetration of the substratum subsurface and heavy smothering). This sensitivity rating is primarily driven by the fragile nature of seapens as an</p>

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
			<p>epifaunal species. The site-specific surveys identified few burrows and no seapens within the Mona Offshore Wind Project therefore, the sensitivity associated with this habitat was reduced to medium.</p> <p>An example of expert judgement being applied in regard to sensitivity is in the environmental statement for the consented Awel y Môr Offshore Wind Farm. The benthic subtidal and intertidal ecology chapter for this project (Awel y Môr Offshore Wind Farm Ltd., 2022) states that the infralittoral mixed sediment habitats were deemed [by the MarESA] to have a medium sensitivity to abrasion and disturbance. However based on the widespread distribution of the identified habitats and communities around the UK the sensitivity of the infralittoral mixed sediment habitats was amended to low for the purposes of the assessment. Both JNCC and NRW were consulted throughout the development of the Awel y Môr Offshore Wind Farm Environmental Statement and throughout the Examination of the project, and as far as the Applicant is aware, and neither organisation raised any concerns regarding this approach to adapting the sensitivity used for the assessment.</p> <p>Therefore, the Applicant considers that the assessment of the 'seapens and burrowing megafauna communities' habitat is sufficiently precautionary in this regard. Furthermore, to have adopted the full MarESA sensitivities, without amending for the particular sensitivity of seapens, would have over-estimated the impact to the specific habitat present in the Mona Offshore Wind Project. The Applicant is confident that the impacts to the seapens and burrowing megafauna communities Important Ecological Features will be no greater than minor adverse significance and are therefore not significant in EIA terms (Volume 2, Chapter 2: Benthic subtidal and intertidal ecology (F2.2)).</p> <p>If, as the JNCC suggests, a sensitivity of high were to be applied to the seapens and burrowing megafauna communities IEF this, combined with the assigned magnitude of low associated with the impact of temporary habitat loss/disturbance would, according to the matrix in Table 2.17 of Volume 2, Chapter 2: Benthic subtidal and intertidal ecology (F2.2), result in a range of significance of minor to moderate adverse. In accordance with the methodology outlined in section 5.3.6 of Volume 1, Chapter 5: Environmental Impact</p>

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
			Assessment methodology (F1.5), where a range is suggested for the significance of effect, the final significance is based upon the topic expert's professional judgement as to which outcome delineates the most likely effect, with an explanation as to why this is the case. In this instance the Applicant would conclude that, on the basis of the intermittent nature of the impact over the four year construction phase, together with the predicted resilience (i.e. recovery) of the key part of the community recorded in the Mona Array Area (i.e. the burrowing megafauna component of the habitat) which the MarESA states is medium, the significance would remain as minor adverse and so not significant in EIA terms.
99	JNCC	<p>Section 2.9.2.51, page 110</p> <p>We agree that the seabed will recover after the removal of the jack-up vessel's spud cans but only when no rock dump has been used for stabilisation or scour protection of the spud cans (see comment on Table 2.8 above).</p>	The Applicant refers the JNCC to the response in Row 93. The Applicant can confirm that it does not anticipate requirements for rock dumping to stabilise jack-up operations.
100	JNCC	<p>Section 2.9.5.10, page 146</p> <p>JNCC do not agree with a low magnitude of impact, considering over two million square meters (Section 2.9.5.7) of seabed will be permanently impacted/changed by these works. Section 2.9.5.7 highlights the impact area and gives a percentage of that compared with the Mona benthic subtidal and intertidal ecology study area (0.17%). This is not helpful as those areas include large portions that will not be directly impacted by the operations. A more useful area comparison for calculating the impact percentage would be of the total direct and indirect (temporary) impact areas. Combining the Long-term habitat loss and Temporary habitat loss areas would provide a more meaningful impact percentage and subsequent meaningful magnitude.</p>	<p>Table 5.4, of Volume 1, Chapter 5: Environmental Impact Assessment methodology (F1.5) explains that topic-specific definitions for the magnitude categories are provided in each of the topic chapters. The definitions relevant to the assessment of magnitude for benthic subtidal and intertidal ecology are as outlined in Table 2.14 of Volume 2, Chapter 2: Benthic subtidal and intertidal ecology (F2.2). The Applicant considers that the assessments of magnitude made in Volume 2, Chapter 2: Benthic subtidal and intertidal ecology (F2.2) are correct and aligned with the definitions relevant to the assessment of magnitude for benthic subtidal and intertidal ecology as outlined in Table 2.14 of Volume 2, Chapter 2: Benthic subtidal and intertidal ecology (F2.2).</p> <p>The Applicant would also clarify the magnitude of the long term habitat loss predicted as a result of the Mona Offshore Wind Project has been presented as a proportion of the Mona benthic subtidal and intertidal ecology study area which, as defined in section 2.4.3 of Volume 2, Chapter 2: Benthic subtidal and intertidal ecology (F2.2), is the area encompassed by the Mona Array Area and Offshore Cable Corridor together with the zone of influence (Zol) around the Mona Array Area (i.e. one tidal excursion). Therefore, the context</p>

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
			<p>within which the maximum design scenario of long-term habitat loss is presented in section 2.9.5 of Volume 2, Chapter 2: Benthic subtidal and intertidal ecology (F2.2) of 2,192,412 m² (i.e. 0.17% of the Mona benthic subtidal and intertidal ecology study area) is the project area and the ZoI around the Mona Array Area.</p> <p>However, to provide greater clarity to the JNCC, if the ZoI is excluded from the Mona benthic subtidal and intertidal ecology study area, the maximum design scenario for long term habitat loss predicted within section 2.9.5 of Volume 2, Chapter 2: Benthic subtidal and intertidal ecology (F2.2) of 2,192,412 m² would equate to 1.72% of the area encompassed by the Mona Array Area and Mona Offshore Cable Corridor alone (i.e. only the areas potentially directly impacted). The Applicant maintains that this is consistent with the definition of low magnitude as outlined in Table 2.14 of Volume 2, Chapter 2: Benthic subtidal and intertidal ecology (F2.2) and does not consider that the magnitude of impacts should be re-assessed.</p> <p>With respect to combining areas associated with long-term habitat loss and temporary habitat loss/disturbance, the Applicant notes that the JNCC did not raise this in their Section 42 consultation response or during the Expert Working Group process. The Applicant does not consider that this would not be appropriate given the differing nature of the impacts and that full recovery of the seabed and communities is predicted in the years following temporary habitat loss/disturbance but that recovery is not relevant during the lifetime of the Mona Offshore Wind Project for long term loss. The Applicant notes, however, that the numbers are clearly outlined in Table 2.18 of Volume 2, Chapter 2: Benthic subtidal and intertidal ecology (F2.2) and that if the JNCC wishes to sum the total predicted temporary habitat loss/disturbance (i.e. 60.51 km²) and long term habitat loss (i.e. 2.19 km²) this would equate to 62.7 km². The Applicant considers that this is consistent with the definition of low magnitude, as outlined in Table 2.14 of Volume 2, Chapter 2: Benthic subtidal and intertidal ecology (F2.2) (i.e. some measurable change in attributes, quality or vulnerability, minor loss or, or alteration to, one (maybe more) key characteristics, features or elements (Adverse)). The Applicant does not therefore consider that summing the values</p>

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
			changes the magnitude of low assigned to both temporary habitat loss/disturbance and long term habitat loss.
101	JNCC	<p>Section 2.9.5.22, page 150</p> <p>JNCC do not agree with the suggestion that the permanent presence of cable and scour protection should be considered as permanent habitat alteration rather than permanent habitat loss. The permanent introduction of hard substrates into a soft sediment environment would be a permanent habitat loss that leads to a regime shift of that habitat (i.e. a permanent habitat alteration). It should therefore be considered as permanent habitat loss. This should be taken into account when re-assessing the magnitude of impact (Section 2.9.5.23, page 151).</p>	<p>The Applicant would highlight that the assessment of the potential for cable and scour protection to remain in situ post-decommissioning has been assessed in relation to its potential to contribute to permanent habitat loss as well as habitat alteration (see paragraphs 2.9.5.22 to 2.9.5.32 of Volume 2, Chapter 2: Benthic subtidal and intertidal ecology (F2.2)).</p> <p>The Applicant also note that, as outlined in paragraph 2.9.5.2 of Volume 2, Chapter 2: Benthic subtidal and intertidal ecology (F2.2), the relevant MarESA pressure and benchmark which has used to inform this impact assessment is “Physical change (to another seabed type): the benchmark for which is change in sediment type by one Folk class (based on UK SeaMap simplified classification (Long, 2006)) and change from sedimentary or soft rock substrata to hard rock or artificial substrata or vice-versa.” The assessment acknowledges that where infrastructure is not removed from the soft sediment environment, it would result in permanent habitat change. This approach recognises the loss of the original soft-sediment habitat but also that the new hard substrate habitat may have ecological value.</p>
102	JNCC	<p>Section 2.9.6.6, page 153</p> <p>JNCC recognise that settlement and subsequent recruitment on clean artificial structures is very complex. It should not be expected that colonisation will consist entirely of already present flora and fauna. Opportunistic colonisation will occur from flora and fauna that would not normally be recorded in the area due to the clean artificial surfaces allowing for opportunistic settlement. This has the potential to alter subsequent settlement and recruitment that can lead to a different final community composition.</p>	<p>The assessment of the effects associated with the introduction of artificial structures, presented in section 2.9.6 of Volume 2, Chapter 2: Benthic subtidal and intertidal ecology (F2.2), has drawn upon the latest published studies and research papers. The assessment considers the complexities of this impact, addressing both the potential impacts of the introduction of infrastructure on biodiversity and also the potential for adverse effects on the wider soft sediment environment. The Applicant is confident that the effects associated with this impact pathway will be no greater than minor adverse significance and are therefore not significant in EIA terms. The Applicant also considers that the approach to assessing the introduction of artificial structures and their subsequent colonisation, as presented in section 2.9.6 of Volume 2, Chapter 2: Benthic subtidal and intertidal ecology (F2.2), aligns with the approach recommended by the JNCC.</p>

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
103	JNCC	Additionally, temporal variation will also determine the final community composition (e.g. studies have shown different community composition depending on the time of year when the artificial structure was introduced).	Please see the Applicant's response to Row 102 above. The assessment of the effects associated with the introduction of artificial structures, presented in section 2.9.6 of Volume 2, Chapter 2: Benthic subtidal and intertidal ecology (F2.2) has drawn on the latest research. The assessment discusses the communities which may colonise artificial structures and acknowledges that it is likely to differ from the current soft sediment environment. This will be true regardless of the time of year the infrastructure is installed.

1.8 Applicant's Response to Maritime and Coastguard Agency's Representation

Table 1.7: Maritime and Coastguard Agency

Ref No.	Question From	Comment	Applicant response
1	Maritime and Coastguard Agency	The Shipping and Navigation chapter of the Environmental Statement (Volume 2, Chapter 7), along with the Navigation Risk Assessment (NRA) (Volume 6, Annex 7.1) have been considered by representatives of UK Technical Services Navigation. The MCA has an interest in the works associated with the marine environment, and the potential impact on shipping, safe navigation, access to ports and harbours, and any impact on our search and rescue obligations.	The Applicant notes this response and confirms that these impacts have been fully assessed within Volume 2, Chapter 7: Shipping and navigation (F2.7).
2	Maritime and Coastguard Agency	We note guard vessels will be employed to work alongside the installation vessels during the construction period who will alert third party vessels to the presence of the installation activity and provide assistance in the event of an emergency. Whilst the documentation does not specifically confirm if a guard vessel will be used during cable installation it would be useful if the applicant could provide confirmation of this in their post-consent plans.	The Applicant confirms, as per Table 7.17 of Volume 2, Chapter 7: Shipping and navigation (F2.7), that information relevant to any vessels employed on work during the construction period will be promulgated to the MCA (Maritime and Coastguard Agency) prior to deployment. The drafting of the standalone NRW Marine Licence is entirely within NRW MLT's control. However, the Mitigation and Monitoring Schedule (J10 F04) and Marine Licence Principles Document (J9 F04) demonstrate that the Applicant anticipates this commitment will be secured within the standalone NRW Marine Licence.
3	Maritime and Coastguard Agency	We note that the cables are expected to be buried to a target depth between 0.5m and 3m as per and that target burial depth should be achieved for 80% of the entire cable route. Any consented cable protection works must ensure existing and future safe navigation is not compromised. If cable protection measures are required e.g., rock bags or concrete mattresses, the MCA would accept a maximum of 5% reduction in surrounding depth referenced to Chart Datum. This will be particularly relevant where depths are decreasing towards shore and potential impacts on navigable water increase, such as at the HDD location.	The Applicant notes this response and has committed to an Offshore Construction Method Statement, which includes a Cable Specification and Installation Plan and cable burial risk assessment (see Table 7.17 of Volume 2, Chapter 7: Shipping and navigation (F2.7)), as set out in the Mitigation and Monitoring Schedule (J10 F04). The Mitigation and Monitoring Schedule and Marine Licence Principles Document (J9 F04) demonstrate that the Applicant anticipates this commitment will be secured within the standalone NRW Marine Licence. It is expected that a final Cable Specification and Installation Plan will be prepared and submitted to the licencing authority for approval in consultation with the MCA. This commitment limits the height of cable protection exceeding five percent navigable depth as it is also anticipated that the relevant standalone NRW Marine Licence condition will prevent that

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
			from occurring without prior written approval from the Licensing Authority in consultation with the MCA.
4	Maritime and Coastguard Agency	We will expect a post lay cable burial survey to be carried out to confirm where the target depths have or have not been met. Any locations where the cable remains as either surface laid or shallow buried should be reassessed, considering the traffic levels and types of vessel activity in that area as further risk mitigation may be required, such as an anchor penetration study. This should be discussed further once the final installation techniques have been identified, with relevant navigation stakeholders.	The Applicant notes this response and confirms that an Offshore Construction Method Statement which includes a Cable Specification and Installation Plan and cable burial risk assessment (see Table 7.17 of Volume 2, Chapter 7: Shipping and navigation (F2.7)) will be prepared and submitted to the licencing authority for approval in consultation with the MCA. The Applicant has committed to this as set out in the Mitigation and Monitoring Schedule (J10 F04). The Mitigation and Monitoring Schedule (J10 F04) and Marine Licence Principles Document (J9 F04) demonstrate that the Applicant anticipates this commitment will be secured within the standalone NRW Marine Licence.
5	Maritime and Coastguard Agency	We will expect a hydrographic survey of the export cable route in accordance with MGN 654 Annex 4 supporting document titled 'Hydrographic Guidelines for Offshore Developers', available on our website: https://www.gov.uk/guidance/offshore-renewable-energy-installations-impact-on-shipping . We would like to highlight the need to provide the data in either GSF or CARIS format and that Total Vertical and Horizontal Uncertainty (TVU & THU) calculations are provided.	The Applicant notes this response with Table 7.17 of Volume 2, Chapter 7: Shipping and navigation (F2.7) noting this commitment that the required hydrographic surveys will be undertaken. The Applicant has committed to this as set out in the Mitigation and Monitoring Schedule (J10 F04). The Mitigation and Monitoring Schedule (J10 F04) and Marine Licence Principles Document (J9 F04) demonstrate that the Applicant anticipates this commitment will be secured within the standalone NRW Marine Licence.
6	Maritime and Coastguard Agency	Should HVDC cables be installed, consideration must be given to the effect of electromagnetic deviation on ships' compasses. The MCA would be willing to accept a three-degree deviation for 95% of the cable route. For the remaining 5% of the cable route no more than five degrees will be attained. We would expect the applicant undertake a desk based compass deviation study based on the specifications of the cable lay proposed and assess the effect of EMF on ship's compasses. MCA may request for a deviation survey post cable installation which will confirm conformity with the consent condition. The applicant should then provide this data to UKHO via a hydrographic note	The cable envelope for inter-array, interconnector and export cables only includes for High Voltage Alternating Current (HVAC) cables, High Voltage Direct Current (HVDC) cables will not be installed.

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
		(H102), as they may want a precautionary notation on the appropriate Admiralty Charts (actions at a later stage depending upon the desk-based study and post installation deviation survey).	
7	Maritime and Coastguard Agency	Table 7.40 proposes a number of risk mitigation options for both the generation and transmission assets to reduce the risk to the safety of navigation to As Low As Reasonably Practicable (ALARP). The MCA would expect these recommendations to be adopted in full. In this regard, the MCA has no objections to the marine licence being granted, on the understanding that all maritime safety legislation is followed, and that the following conditions and advisories are applied:	The Applicant notes this response and confirms that the findings of Volume 6, Annex 7.1: Navigational Risk Assessment (F6.7.1) have been agreed with the MCA through wider consultation.
8	Maritime and Coastguard Agency	<p><u>Conditions</u></p> <p>1. The Licencee must ensure that local mariners and fishermen's organisations are made fully aware of the activity through local notices to mariners at least 14 days prior to commencement, for inclusion in the Kingfisher Fortnightly Bulletin and offshore hazard awareness data.</p>	The drafting of the standalone NRW Marine Licence is entirely within NRW MLT's control. However, it is the Applicant's anticipation that notifications to mariners, as suggested, will be secured in the standalone NRW Marine Licence as identified in the Marine Licence Principles Document (J9 F04), Row 'Notification of commencement'.
9	Maritime and Coastguard Agency	2. The Licencee must ensure that HM Coastguard, in this case zone31@hmcg.gov.uk is made aware of the works at least 14 days prior to commencement.	The drafting of the standalone NRW Marine Licence is entirely within NRW MLT's control. However, it is the Applicant's anticipation that notifications to mariners will be secured in the standalone NRW Marine Licence as identified in the Marine Licence Principles Document (J9 F04), Row 'Notification of commencement'. It is understood that notifications to mariners also go to the HM Coastguard so it would not be necessary to include a specific reference to them.
10	Maritime and Coastguard Agency	3. The Licencee must notify the UK Hydrographic Office to permit the promulgation of maritime safety information and updating of nautical charts and publications through the national Notice to Mariners system.	The drafting of the standalone NRW Marine Licence is entirely within NRW MLT's control. However, it is the Applicant's anticipation that notifications the UK Hydrographic Office, as suggested, will be secured in the standalone NRW Marine Licence as identified in the Marine Licence Principles Document (J9 F04), Row 'Navigation Monitoring Specification'.

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
11	Maritime and Coastguard Agency	4. A study should be undertaken to establish the electromagnetic deviation, affecting ship compasses and other navigating systems, of the cable route to the satisfaction of the MCA. On receipt of the study, the MCA reserves the right to request a deviation survey of the cable route post installation.	The Applicant notes this response with Table 7.17 of Volume 2, Chapter 7: Shipping and navigation (F2.7) noting this commitment through a Cable Specification and Installation Plan and cable burial risk assessment. The Applicant has committed to this as set out in the Mitigation and Monitoring Schedule (J10 F04). The Mitigation and Monitoring Schedule and Marine Licence Principles Document (J9 F04) demonstrate that the Applicant anticipates this commitment will be secured within the standalone NRW Marine Licence. The Applicant also notes that the cable envelope for inter-array, interconnector and export cables only includes for HVAC cables, HVDC cables will not be installed and therefore the electromagnetic deviation will be negligible.
12	Maritime and Coastguard Agency	5. A detailed cable laying plan for the licenced works, incorporating a burial risk assessment encompassing the identification of any cable protection that exceeds 5% of navigable depth referenced to chart datum and, in the event that any area of cable protection exceeding 5% of navigable depth is identified, details of any steps (to be determined following consultation with the MCA and Trinity House) to be taken to ensure existing and future safe navigation is not compromised or such similar assessment to ascertain suitable burial depths and cable laying techniques, including cable protection.	The drafting of the standalone NRW Marine Licence is entirely within NRW MLT's control. However, it is the Applicant's anticipation that cable laying controls, as suggested, will be secured in the standalone NRW Marine Licence as identified in the Marine Licence Principles Document (J9 F04), Row 'Cable Specification and Installation Plan'.
13	Maritime and Coastguard Agency	6. In case of damage to, or destruction or decay of, the authorised project seaward of MHWS or any part thereof, excluding the exposure of cables, the undertaker shall as soon as reasonably practicable and no later than 24 hours following the undertaker becoming aware of any such damage, destruction or decay, notify MCA, Trinity House, UKHO, the Kingfisher Information Service of Seafish and regional fisheries contacts.	The drafting of the standalone NRW Marine Licence is entirely within NRW MLT's control. However, it is the Applicant's anticipation that notifications of damage, destruction or decay will be secured in the standalone NRW Marine Licence as identified in the Marine Licence Principles Document J9 F04), Row 'Navigational Safety'.
14	Maritime and Coastguard Agency	7. In case of buried cables becoming exposed on or above the seabed, the undertaker must within three days following identification of a cable	The drafting of the standalone NRW Marine Licence is entirely within NRW MLT's control. However, it is the Applicant's anticipation that notifications of exposure will be secured in the standalone NRW

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
		exposure, notify mariners, regional fisheries contacts and the Kingfisher Information Service of Seafish of the location and extent of exposure. Copies of all notices must be provided to the MCA, Trinity House, and the UKHO within 5 days.	Marine Licence as identified in the Marine Licence Principles Document (J9 F04), Row 'Navigational Safety'.
15	Maritime and Coastguard Agency	8. A swath bathymetric survey to IHO Order 1a of the area within the export cable route must be undertaken and fulfil the requirements of MGN654 and its supporting 'Hydrographic Guidelines for Offshore Renewable Energy Developers', which includes the requirement for the full density data and reports to be delivered to the MCA and the UKHO for the update of nautical charts and publications. This must be submitted as soon as possible.	The drafting of the standalone NRW Marine Licence is entirely within NRW MLT's control. However, it is the Applicant's anticipation that a swath bathymetric survey will be secured in the standalone NRW Marine Licence as identified in the Marine Licence Principles Document (J9 F04), Row 'Navigational Monitoring Specification'. It is anticipated that this will be submitted on the timescales agreed within the final monitoring plan.
16	Maritime and Coastguard Agency	9. A close out report must be submitted to the MCA and UKHO within three months of the date of completion of construction, and must confirm: <ul style="list-style-type: none"> a. the date of completion of construction b. latitude and longitude coordinates of the centre point of the location for each offshore platform, provided as Geographical Information System data referenced to WGS84 datum. c. latitude and longitude coordinates of the inter array and export cable routes; provided as Geographical Information System data referenced to WGS84 datum. 	The drafting of the standalone NRW Marine Licence is entirely within NRW MLT's control. However, it is the Applicant's anticipation that a close out report will be secured in the standalone NRW Marine Licence as identified in the Marine Licence Principles Document (J9 F04), Row 'Installed Cable Report'.
17	Maritime and Coastguard Agency	10. The licence holder must notify HM Coastguard (HMCG) seven days in advance of any proposed Unexploded Ordnance (UXO) works, in this case to zone31@hmcg.gov.uk and to include emergency contact information for the vessel and the expected timescale of operation. Verbal communication should be made directly with HMCG at the start of the UXO works, and	The drafting of the standalone NRW Marine Licence is entirely within NRW MLT's control. However, it is the Applicant's anticipation that notifications to mariners including prior to UXO clearance will be secured in the standalone NRW Marine Licence as identified in the Marine Licence Principles Document (J9 F04), Row 'Notification of commencement'. It is understood that notifications to mariners also go to the HM Coastguard so it would not be necessary to include a specific reference to them.

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
		again to notify the end of the clearance. This can be established either using the appropriate radio channels/frequencies or via telephone in this case to Holyhead MRCC on 01407 762051.	
18	Maritime and Coastguard Agency	<p><u>Advisories</u></p> <p>1. The licensee should ensure suitable bunding, storage facilities are employed to prevent the release of fuel oils, lubricating fluids associated with the plant and equipment into the marine environment.</p>	The MCA's comment is noted.
19	Maritime and Coastguard Agency	<p>2. Any jack up barges / vessels utilised during the works/laying of the cable, when jacked up, should exhibit signals in accordance with the UK Standard Marking Schedule for Offshore Installations.</p>	The MCA's comment is noted.
20	Maritime and Coastguard Agency	<p>3. If in the opinion of the Secretary of State the assistance of a Government Department, including the broadcast of navigational warnings, is required in connection with the works or to deal with any emergency arising from the failure to mark and light the works as required by the consent or to maintain the works in good order or from the drifting or wreck of the works, the owner of the works shall be liable for any expense incurred in securing such assistance.</p>	The MCA's comment is noted.
21	Maritime and Coastguard Agency	<p>4. Licensees are reminded of their legal obligation, under part 9 of the Merchant Shipping Act 1995, to report all recoveries of wreck material to the Receiver of Wreck. This must be done within 28 days of recovery. Failure to report the recovery of wreck material to the Receiver is a criminal offence. Additional information and a report of wreck and salvage form can be found at www.gov.uk/guidance/wreck-and-salvage-law.</p>	The MCA's comment is noted.

1.9 Applicant's Response to MOD Safeguarding's Representation

Table 1.8: MOD Safeguarding

Ref No.	Question From	Comment	Applicant response
1	MOD Safeguarding	Thank you for your email below regarding the application from Mona Offshore Wind Farm Limited for construction and maintenance of the transmission assets for the Mona Offshore Wind Farm Project. From the information provided I can confirm that MOD Safeguarding have no objection to this activity.	The Applicant acknowledges that the MOD Safeguarding have no objections to the standalone NRW Marine Licence application.

1.10 Applicant's Response to North Western IFCA's Representation

Table 1.9: North Western IFCA

Ref No.	Question From	Comment	Applicant response
1	North Western IFCA	The North Western Inshore Fisheries and Conservation Authority has reviewed the associated documents for Transmission Assets of Mona Offshore Windfarm (ORML2429T) and has no comments to make.	The Applicant acknowledges that the North Western Inshore Fisheries and Conservation Authority has reviewed the associated documents for the standalone NRW Marine Licence application and has no comments to make.

1.11 Applicant's Response to Port of Mostyn's Representation

Table 1.10: Port of Mostyn

Ref No.	Question From	Comment	Applicant response
1	Port of Mostyn	The Port of Mostyn have no comments to offer	The Applicant acknowledges that the Port of Mostyn has no comments to offer on the standalone NRW Marine Licence application.

1.12 Applicant's Response to Royal Commission on the Ancient and Historical Monuments of Wales' Representation

Table 1.11: Royal Commission on the Ancient and Historical Monuments of Wales

Ref No.	Question From	Comment	Applicant response
1	Royal Commission on the Ancient and Historical Monuments of Wales	I can confirm that RCAHMW is happy to support the application for a marine licence for ORML2429T from an overall perspective. The work to outline archaeological impact, mitigation, etc. is all inline with expected best practice and current guidance. In locating and researching several previously unknown archaeological remains of shipwrecks, and undertaking fresh surveys of existing known wreck the scheme has also contributed to knowledge enhancement of Wales' marine historic environment.	The Applicant is pleased to note that RCAHMW are happy to support the application for a standalone NRW Marine Licence for the Mona Offshore Wind Project and confirm their approval that the supporting information provided by the applicant is in line with best practise and current guidance.
2	Royal Commission on the Ancient and Historical Monuments of Wales	The WSI and PAD will be critical pieces of the archaeological mitigation during the construction phase of the scheme, and it is excellent to see them included at this stage, prior to consent, rather than having to be reviewed afterwards. I do have two small amendments that will be required to the WSI as follows: 1. Para 1.2.1.9 Archaeological Curators. Alongside Cadw, RCAHMW is an archaeological curator for the inshore/offshore zone of the Welsh National Marine Plan because our remit extends to the outer limit of the marine plan area. We are also the only organisation within Wales with marine archaeological expertise. So just adding our initials to that paragraph to be consistent with Table 1.1 would be helpful.	The Applicant confirms that the Outline WSI and PAD (J18 F02) has been updated as part of the Mona DCO Examination process to refer to RCAHMW as an archaeological curator at paragraphs 1.2.1.9, 1.2.1.11 and Table 1.1.
3	Royal Commission on the Ancient and Historical Monuments of Wales	2. Section 1.8.5 Archiving. The RCAHMW maintains the National Archive within Wales, and so any archaeologically related project material that requires archiving as set out in the	The Applicant confirms that the Outline WSI and PAD (J18 F02) has been updated as part of the Mona DCO Examination process with reference to RCAHMW's role as MEDIN DAC within Wales and

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
		WSI can come to us, from where it will also get associated with the relevant sites within the National Monuments Record. We are the MEDIN DAC for heritage purposes within Wales (para 1.8.5.3) and so archiving with us fulfills any MEDIN obligations.	curator of the National Archive within Wales at paragraphs 1.8.5.2 and 1.8.5.4.
4	Royal Commission on the Ancient and Historical Monuments of Wales	It is also worth recording that I have already made the same minor comments on that Outline WSI and PAD as part of the planning inspectorate consultation, and in relation to the marine licence application for RML2444. This has arisen because the Outline WSI and PAD are being used across the scheme as part of a variety of applications. I have been in communication with the consultants and the above comments should be addressed and altered at the next review stage. But until such time as they have been incorporated into the document, and a revised document circulated they will remain as comments.	The Applicant has addressed these comments in the revised Outline Offshore WSI and PAD (J18 F02).
5	Royal Commission on the Ancient and Historical Monuments of Wales	So in terms of ORML2429T, as stated above, we have no objection to the overall proposal, but would require that the noted alterations are made to the WSI and PAD and signed off prior to the work commencing	The Applicant acknowledges that RCAHMW have no objection and confirm that the revised Outline WSI and PAD (J18 F02) has been submitted for RCAHMW to review and approve.

1.13 Applicant's Response to Royal Yachting Association's Representation

Table 1.12: Royal Yachting Association

Ref No.	Question From	Comment	Applicant response
1	Royal Yachting Association	<p>In response to the above Marine Licence Application, our concerns regarding transmission assets are usually confined to the landfall, and to reduction of charted depths. In this case:</p> <p>There is low to moderate recreational boating activity from the perspective of yachts in the area, as indicated in the Navigation Risk Assessment. It is not clear what work has been undertaken to assess impacts close inshore for the cable route, such as consultation with local sailing clubs and training centres.</p>	<p>The Shipping and Navigation Chapter has considered the impact on recreational vessel passage and navigational safety close inshore within Section 7.9.10 and Section 7.9.12 of Volume 2, Chapter 7: Shipping and navigation (F2.7). This assessment included collection of vessel traffic data and consultation with recreational bodies such as the RYA (Royal Yachting Association) and Cruising Association.</p> <p>Whilst the Mona Array Area has a low intensity of recreational activity, it is noted that the RYA define the sea near to landfall as a general boating area with moderate recreational vessel intensity (as shown within Volume 6, Annex 7.1: Navigation Risk Assessment (F6.7.1)). There are no sailing clubs and training centres within two nautical miles of the Mona Offshore Cable Corridor.</p>
2	Royal Yachting Association	<ul style="list-style-type: none"> We note the Navigation Risk Assessment adequately accounts for the RYA's comments made during previous consultation in terms of the impacts of the wider project 	<p>The Applicant notes this response.</p>
3	Royal Yachting Association	<ul style="list-style-type: none"> The main focus of the navigation risk assessment is the offshore assets rather than the landfall of the cable. We are concerned about the reduction in under keel clearance should cable burial not be possible close to shore. The assessment is not clear on the method of cable protection close inshore, and states that up to 3m of protection will be required. Other similar projects have committed to directional drilling to avoid reduction in under keel clearance out to 500m from shore. We recommend that this approach is adopted for this project. 	<p>The Applicant notes this response and has committed to an Offshore Construction Method Statement, which includes a Cable Specification and Installation Plan and cable burial risk assessment (see Table 7.17 of Volume 2, Chapter 7: Shipping and navigation (F2.7)), as set out in the Mitigation and Monitoring Schedule (J10 F04).</p> <p>The drafting of the standalone NRW Marine Licence is entirely within NRW MLT's control. However, it is the Applicant's anticipation that the standalone NRW Marine Licence will secure the details of the commitment to no more than a 5% reduction in water depth in the same manner as the deemed Marine Licence as indicated in the Marine Licence Principles Document (J9 F04), which will consider the potential impacts on recreational vessel routes and navigation safety.</p> <p>The Shipping and Navigation Chapter concluded that the impact on under keel clearance would be negligible adverse given compliance with this mitigation (section 7.9.12 of Volume 2, Chapter 7: Shipping and navigation (F2.7)).</p>

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
4	Royal Yachting Association	<ul style="list-style-type: none"> We recommend that the Applicant ensures that local sailing clubs and training centres are kept informed of construction activity in the area and that, where relevant, guard boats are deployed to ensure there is no interaction between recreational boaters and the installation vessels. 	<p>The drafting of the standalone NRW Marine Licence is a matter for NRW MLT. However, it is the Applicant's anticipation that notifications to mariners, as suggested, will be secured in the standalone NRW Marine Licence as identified in the Marine Licence Principles Document (J9 F04), Row 'Notification of commencement'.</p> <p>Table 7.17 of Volume 2, Chapter 7: Shipping and navigation (F2.7) confirms the use of guard vessels during construction and is secured through the project environmental management plan that includes a Fisheries Liaison And Co-Existence Plan, in line with the outline Fisheries Liaison And Co-Existence Plan (J13 F02).</p>

MONA OFFSHORE WIND PROJECT

1.14 Applicant's Response to RSPB's Representation

Table 1.13: RSPB

Ref No.	Question From	Comment	Applicant response
1	RSPB	<p>INTRODUCTION</p> <p>The UK is of outstanding international importance for its breeding seabirds and wintering marine birds. As with all Annex I and regularly migratory species, the UK has a particular responsibility under the Birds Directive to secure their conservation. Their survival and productivity rates can be impacted by offshore windfarms directly (i.e. collision) and indirectly (e.g. displacement from foraging areas, additional energy expenditure, potential impacts on forage fish and wider ecosystem impacts such as changes in stratification).</p>	The Applicant notes RSPB's comment.
2	RSPB	The RSPB supports the deployment of renewable energy projects, providing that they are sited in appropriate places and designed to avoid potential adverse impacts on wildlife. We are grateful for the constructive pre-application discussions that have taken place with Mona Offshore Wind Farm Limited in respect of this proposal, particularly through the Evidence Plan process.	The Applicant notes RSPB's comments and welcomes acknowledgement that constructive pre-application discussions have occurred through the Evidence Plan Process. Regarding uncertainty within environmental assessments for marine developments, the application for the Mona Offshore Wind Project has been conducted following current best practice (Natural England guidance, Parker <i>et al.</i> (2022a-d)) and the latest advice from all relevant stakeholders and Statutory Nature Conservation Bodies (SNCBs).
3	RSPB	As set out in Searle et al (2023) ¹ , assessing impacts of offshore windfarms and other renewables developments is inherently uncertain. This uncertainty is propagated throughout the impact assessments, as there are not only direct impacts, but ecosystem wide impacts that can change, for example, the abundance and availability of prey. Multiple data sources and modelling techniques are used to capture a simplified version of reality. They do not fully capture the complexity of seabird behavioural or	<p>The assessments presented within the application (EIA and HRA) are considered precautionary, robust and scientifically valid. Each of the models used to inform the assessments come with inherent uncertainty but are nonetheless, all advocated by the SNCBs as the best available assessment methods (Natural England guidance, Parker <i>et al.</i> (2022)).</p> <p>The Applicant has undertaken an assessment of inter-related effects to determine the potential for wider ecosystem impacts. Volume 2, Chapter 5: Offshore ornithology (F2.5 F03) assesses inter-related offshore effects between different phases of the development, impact pathways, and receptor groups. A broader inter-related effects</p>

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
		<p>demographic processes in a dynamic marine environment.</p> <p>Not recognising these uncertainties risks poorly informed decisions being made. Furthermore, an underestimation of impacts will have repercussions when consenting later offshore wind development. If a precautionary approach is taken from the beginning, the likelihood of irreversible damage occurring is reduced even whilst our knowledge base is incomplete, and modelling improves.</p>	<p>assessment covering potential interactions between offshore topics is presented within Volume 2, Chapter 11: Inter-related effects - offshore (F2.11).</p> <p>The Applicant wholly agrees with RPSB that underestimating impacts within assessments can lead to repercussions for species and the environment. However, the Applicant considers the assessments presented are sufficiently precautionary, robust and scientifically valid.</p>
4	RSPB	<p>The precautionary principle requires the Applicant to demonstrate with scientific certainty that something would not be harmful. The concept of something being overly precautionary dismisses the inherent uncertainty in modelling and overlooks the simplistic version of reality that the modelling captures.</p>	
5	RSPB	<p>While methodological concerns remain, progress towards resolving a number of issues was made during the pre-application discussions for this project. We continue to have significant concerns relating to the project's in-combination and cumulative collision risk and displacement impacts including their assessment.</p>	<p>The Applicant acknowledges RSPB's comment and welcomes future engagement. The Applicant has considered each of the specific points raised by RSPB, and responses are provided below. In particular, see Row 16 below for the Applicant's response to RSPB's specific concern regarding the Mona Offshore Wind Project's in-combination and cumulative impact assessments.</p>
6	RSPB	<p>The RSPB has engaged with the Applicant throughout the pre-application stage to provide our constructive advice as the Applicant has developed its project. We will continue, as far as practicable, to seek to engage with the Applicant throughout the Examination period.</p>	
7	RSPB	<p>However, due to the number of offshore wind farm project applications coming forward during 2024 we will face significant demands on our limited capacity. As a consequence, we will not be able to engage with any hearings associated with this application and will engage through written</p>	

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
		communications only and limited to when capacity allows.	
8	RSPB	<p>OFFSHORE ORNITHOLOGY IMPACTS - SUMMARY OF RSPB POSITION</p> <p>We have significant concerns regarding the findings of some of the impact assessments. As a result of the methodological concerns, set out below, the RSPB considers that the impacts have not been adequately assessed and, as such consider Adverse Effect on Integrity (AEOI) cannot be ruled out beyond reasonable scientific doubt for collision impacts arising through the project alone and in combination with other projects for Manx shearwater at the following Special Protected Areas:</p> <ul style="list-style-type: none"> • Copeland Islands SPA • Irish Sea Front SPA • Rum SPA • St Kilda SPA • Glannau Aberdaron ac Ynys Enlli/Aberdaron Coast and Bardsey Island SPA • Skomer, Skokholm and the Seas off Pembrokeshire/Sgomer, Sgogwm a Moroedd Penfro SPA 	<p>The Applicant notes RPSB's comment but considers that sufficient evidence and information has been presented in the application (HRA Stage 2 Information to Support an Appropriate Assessment Part Three: Special Protection Areas and Ramsar sites assessments (E1.3 F02)) to be confident that AEOI can be ruled out beyond reasonable scientific doubt for all the sites and features identified by RSPB. The Applicant is confident that the evidence presented in the application provides a robust assessment of the impact on Manx shearwater breeding at the multiple SPA colonies within the foraging range of the Mona Offshore Wind Project. The Applicant has engaged with both the JNCC and NRW on this matter and for Manx shearwater, given the limitations of the existing evidence base, both JNCC and NRW(A) are "satisfied that the collision risk model is as robust as it currently can be". All parameters used within the Manx shearwater collision risk modelling and distributional impacts (disturbance and displacement) utilised SNCBs recommended parameters (such as avoidance rate, mortality rate, displacement rate, nocturnal activity factor, flight speed, and flight height). These parameters were agreed with the SNCBs during the second, third and fourth EWG meetings (and technical notes provided for the second meeting) during the pre-application phase (as presented in section D.3 of the Technical Engagement Plan Appendices - Part 1 (A to E) (E4.1).</p>
9	RSPB	AEOI cannot be ruled out beyond reasonable scientific doubt for impacts arising through collision and distributional change arising through the project in combination with other projects on a range of species/SPA combinations	
10	RSPB	We also consider that the Assessment has not fully considered Ecosystem impacts arising from the proposed development and has not properly accounted for potential for population scale impacts	The Applicant has acknowledged the uncertainty around the potential for population-scale impacts of Highly Pathogenic Avian Influenza (HPAI) in paragraph 5.3.11.3 of Volume 2, Chapter 5: Offshore ornithology (F2.5 F03). The baseline digital aerial survey (DAS) data was collected prior to the HPAI outbreak. However, as determined by

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
		to be magnified through effects of Highly Pathogenic Avian Influenza.	<p>Natural England guidance on HPAI in relation to baseline characterisation of offshore renewable projects (Natural England, 2022), the baseline data for the Mona Offshore Wind Project were all collected prior to summer 2022 (surveys commenced in March 2020 and were completed in February 2022), and therefore the assessments within Volume 2, Chapter 5: Offshore ornithology (F2.5 F03) remain a valid representation of typical seabird distribution and density. JNCC, NRW and Natural England agreed to the approach to baseline characterisation for offshore ornithology through the Evidence Plan Process (Table 1.12 of Technical Engagement Plan (E4)).</p> <p>The Applicant considers that in cases where there have been declines in the abundance of certain species, the impact assessments presented would proportionally decrease in line with a smaller population (where applicable). This aligns with the advice provided in Natural England's guidance on HPAI in relation to baseline characterisation of offshore renewable projects (Natural England, 2022).</p> <p>Impacts at the ecosystem level are assessed in Volume 2, Chapter 11: Inter-related effects (offshore) (F2.11). Where an impact is likely to have a synergistic impact on multiple receptors within the environs of the Mona Offshore Wind Project, the impact has been assessed.</p> <p>Consideration of the potential wider ecosystem impacts that may arise from the presence of Mona Offshore Wind Project have been presented in the Application documents. This includes for example, consideration of the potential impacts of ocean stratification and prey species (fish), as illustrated below:</p> <p>Impact on prey species (fish)</p> <p>The potential effects on fish species and their habitats have been assessed in full in Volume 2, Chapter 3: Fish and shellfish ecology of the Environmental Statement (F2.3). Section 5.7 of Volume 2, Chapter 5: Offshore ornithology (F2.5 F03) assesses the potential effects on seabirds in the context of how seabird prey species may be impacted through underwater sound and temporary habitat loss/disturbance and increased suspended sediment. The assessment has concluded the effect to be of minor adverse significance (which is not significant in EIA terms) for temporary habitat loss/disturbance and increased suspended sediment concentrations (SSCs). The assessment</p>

Ref No.	Question From	Comment	Applicant response
			<p>concluded the effect to be of minor adverse effect for indirect impacts from underwater sound affecting prey species. Furthermore, the assessment presented in HRA Stage 1 Screening Report (E1.4 F02) and the HRA Stage 2 Information to Support an Appropriate Assessment Part Three: Special Protection Areas and Ramsar sites Assessments (E1.3 F02) concluded of no AEoI.</p> <p><u>Ocean stratification (Irish sea)</u></p> <p>Impacts to temperature and salinity stratification due to the presence of Infrastructure was assessed in Volume 2, Chapter 1: Physical Processes (F2.1). The modelling studies undertaken for the Mona Offshore Wind Project detailed in Volume 6, Annex 1.1: Physical processes technical report of the Environmental Statement (F6.1.1) demonstrated that potential changes in tidal currents and wave climate do not extend into areas located beyond the physical processes study area (Figure 1.2 Volume 2, Chapter 1: Physical Processes (F2.1)), therefore there will be no impact on water density and thermal stratification in the east Irish Sea. As the physical processes assessment concluded no impact on ocean stratification, there is no pathway for indirect effects to ornithology and thus, no need to assess this impact pathway within the ornithological assessment in the Environmental Statement and HRA.</p> <p>The Applicant acknowledges that there are currently initiatives such as the Ecological Consequences of Offshore Wind research programme (ECOWind) in progress to improve understanding of ecosystem resilience to the development of offshore wind. For example, the Applicant is a partner of the ECOWind-ACCELERATE project in the east Irish Sea (other members include NRW, JNCC and RSPB) which is examining the ecological implications of accelerated seabed mobility around windfarms. Whilst it is acknowledged these types of projects are in progress, the Applicant considers that the assessment presented in has been undertaken in line with current SNCB guidance and industry best practices.</p>
11	RSPB	<p>Manx shearwater <i>Baseline characterisation</i> Manx shearwater can be active throughout the day and night, with different levels of activity at different times. Such activity is variable, for example, for</p>	<p>During the site-specific DAS survey, 2,544 individual Manx shearwater were detected in 11 out of the 24 months of surveying (Volume 6, Annex 5.1: Offshore ornithology baseline characterisation technical report (F6.5.1). This species was, therefore, detected regularly during the surveys during the months in which the species is known to be</p>

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
		<p>birds tracked from Skomer, diving occurred during the day and peaked in the evening (Shoji et al., 20162), while nocturnal foraging was observed from tracking of birds from High Island, Ireland (Kane et al., 20203). These diel variations in activity mean that the somewhat limited amount of time digital aerial surveys (DAS) were carried out is unlikely to properly characterise the activity of Manx shearwater at the Application site, (only one of the 24 survey flights for the baseline characterisation started before 0700). For these reasons the RSPB does 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.</p>	<p>present in the area. Best practice survey techniques were employed but cannot be undertaken at night which is an inherent limitation of the survey methodology. However, using other data sources (e.g. tagging data from local colonies) reduces some of the potential uncertainty regarding nighttime activity.</p> <p>Available tracking data from Skomer, Skokholm, Lundy, Rum, and Copeland Island such as that provided in Guilford et al. (2008), Dean et al. (2010), Dean (2012), Padget et al. (2019) and Richards et al. (2019), indicates there is limited activity by Manx shearwater within the footprint of the Mona Offshore Wind Project. Only a few foraging trips have been recorded near and across the Mona Offshore Wind Project, suggesting that Manx shearwater does not regularly use this area (Guilford et al., 2008; Dean et al., 2010, Dean, 2012; Richards et al., 2019).</p>
12	RSPB	<p>Issues of detectability are not only whether the nocturnal and crepuscular nature of some of the at-sea behaviours means that they are not captured by the survey flights but also whether the size and flight characteristics of the species make them harder to detect. Evidence that the surveys are recording Manx Shearwaters should not be taken as evidence that <i>all</i> of this species occurrence within the footprint during surveys has been detected. Deakin et al., 20234 highlight a need for experimental validation of these potential biases in aerial survey methods, including detectability, identification and diel variation. Without addressing these concerns, we are unable to rely on the densities of Manx Shearwater presented in the assessment and therefore unable to reach conclusions as to the significance of adverse impacts.</p>	<p>The baseline presented within Volume 6, Annex 5.1: Offshore ornithology baseline characterisation technical report (F6.5.1) draws upon multiple data sources and is therefore robust. JNCC, NRW and Natural England agreed to a broad approach to aerial surveys for offshore ornithology through the Evidence Plan Process (Table 1.12 of Technical Engagement Plan (E4)). The Applicant has engaged with both the JNCC and NRW on this matter, and both parties have confirmed that they are “satisfied that the distribution identified in the site-specific DAS surveys is likely to be representative of the use of the area”.</p> <p>The low numbers recorded during DAS, supplemented by the tracking data indicate sporadic usage within the footprint of the Mona Offshore Wind Project. This, coupled with the low sensitivity of Manx Shearwaters to potential impacts (owing to the large foraging range of this species and low flying behaviour, for example, Johnston et al. (2014) showed that no birds flew above 20 m), means that the Applicant is confident in the assessments presented and the conclusions drawn.</p>
13	RSPB	<p><i>Potential impacts arising through collision</i></p> <p>In respect of Manx shearwater, the Applicant has concluded no adverse impact arising through collision with rotating turbines. We disagree that</p>	<p>The standalone NRW Marine Licence applies to the offshore cable corridor and offshore substation platforms only and thus the risk of collision due to illuminations is of limited relevance. Marking, lighting and aids to navigation will be employed during the construction,</p>

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
		such a conclusion can be reached because the manner in which the calculations have been carried out do not reflect potential behaviour in the vicinity of turbines. Fundamental to the consideration of collision risk for this species is the extent to which nocturnally active seabirds, such as Manx shearwaters, may be attracted to the illuminations required for turbines, support vessels and the construction or expansion of ports. Such attraction will cause behaviour change, which could in turn increase collision risk, for example if birds fly higher when attracted to lights.	operation and maintenance, and decommissioning phases, as appropriate to ensure the safety of all parties. Wind turbines are required to be illuminated in accordance with marine navigation regulations and subject to this the Applicant has committed to operating those lights at the lowest permissible level asset out within Requirement 3, Schedule 2 of the Draft Development Consent. The review by Deakin <i>et al.</i> (2022) which the Applicant believes to be the information source for the light-induced disorientation evidence referred to by RSPB, identifies critical knowledge gaps relating to light attraction and disorientation. Specific aspects include: the range over which light attraction of nocturnal species may occur (and therefore the size of the light catch basin for wind farms and related activities or infrastructure); the extent to which light attraction is exacerbated by particular meteorological conditions (e.g. fog, rain); the influence of wavelength and pattern of illumination (flashing/steady); the extent to which light attraction differentially affects adults and juveniles, and for how long after fledging juveniles may remain particularly susceptible to light attraction.
14	RSPB	There is abundant evidence of light-induced disorientation of Manx shearwaters. This evidence includes the grounding of fledglings in lit areas (Miles <i>et al.</i> , 20105) and collision with lighthouses and other illuminated structures (Guilford <i>et al.</i> , 20196, Archer <i>et al.</i> , 20157). If light-induced disorientation leads to individual birds circling the navigation lights on the nacelle or tower of turbines for protracted periods (as has been reported for birds disorientated by lighthouses or gas flares) the probability of collision with turbine blades or other surfaces is vastly increased.	Positive and negative phototaxis is more likely to occur where birds are exposed to intense white lighting (Syposz <i>et al.</i> , 2021, and Deakin <i>et al.</i> , 2022). Offshore light from the Mona Offshore Wind Project will be less powerful than that from other illuminated structures such as lighthouses and, therefore, are unlikely to trigger the same level of response (Deakin <i>et al.</i> , 2022). Furthermore, with respect to aviation lighting, it must be noted that low to medium intensity lights are operated on wind turbines to minimise effects to aviation flight and as above, subject to the marine navigation regulations will be operated at the lowest permissible level.
15	RSPB	Alongside this increased collision risk, the energetic costs of attraction and disorientation may be sufficient to impact on long term survival and the ability to successfully rear young.	In light of this information, the Applicant considers the assessment presented within Volume 2, Chapter 5: Offshore ornithology (F2.5 F03) and HRA Stage 2 Information to Support an Appropriate Assessment Part Three: Special Protection Areas and Ramsar sites assessments (E1.3 F02) to be scientifically valid and robust. The Applicant has engaged with both the JNCC and NRW (A) on this concern and for Manx shearwater, given the limitations of the existing evidence base, both JNCC and NRW (A) are “satisfied that the collision risk model is as robust as it currently can be”.

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
16	RSPB	<p>Methodology for Assessment of Cumulative/In-Combination Impacts</p> <p>The RSPB recognise the difficulties with carrying out a full in combination assessment for a number of species SPA combinations because of the difficulties in obtaining historical data and the limitations in how it was collected and analyses. Regardless of these difficulties, it is important that such an assessment is carried out with consideration of these sites and Natural England have produced what we consider to be a practical and pragmatic solution, while fully acknowledging that it is imperfect; less so for displacement than collision risk but both are to a greater or lesser extent indicative of the potential scale rather than absolute quantification of impact. While it is acceptable for the Applicant to present alternative methodologies, it would be preferable for the outputs to be presented alongside those obtained following the recommendations of the Statutory Agencies.</p>	<p>The Applicant welcomes the RPSB response and can confirm that a meeting was held on 29 August 2024 between the Applicant, NRW, Natural England and the JNCC regarding a 'gap-filling' exercise to consider historic offshore wind projects in accordance with SNCBs advice. The approach presented by the Applicant was broadly welcomed.</p> <p>An Offshore Ornithology Cumulative Effects Assessment and In-combination Gap-filling Historical Projects Technical Note (S_D3_12 F02), which details the Applicant's approach and indicative impact estimates for historical offshore wind farms, has been submitted alongside this response. This document includes a consultation table (Table 1.1) outlining how comments received during and after the SNCB meeting have been considered.</p> <p>The Offshore Ornithology Cumulative Effects Assessment and In-combination Gap-filling Historical Projects Technical Note (S_D3_12 F02) concludes that with the addition of indicative numbers for historical offshore wind projects, there is no potential for significant effects or adverse effects on site integrity from the Mona Offshore Wind Project in-combination with other projects and plans.</p>
17	RSPB	<p>The RSPB are particularly concerned in regard to in combination impacts in relation to Great Black-backed Gull at the Isles of Scilly SPA. Great Black-backed Gull breeding numbers (AON) declined by 52% in the UK between the Seabirds 2000 and Seabirds Count censuses (Lewis, 2023), although the majority of decline happened in Scottish colonies. However, a further decline was recorded by surveys carried out in response to the outbreak of Highly Pathogenic Avian Influenza (HPAI) Tremlett, <i>et al.</i>, 20248. The total number of Great Black-backed Gull AONs recorded across all sites surveyed in 2023 decreased by 20% compared with the pre-HPAI baseline count for these sites, and a 32% decline was recorded in the Isles of Scilly SPA.</p>	<p>The Applicant notes RSPB's concern about recent declines in great black-backed gull in response to Highly Pathogenic Avian Influenza. The baseline DAS data was collected prior to the HPAI outbreak. However, as determined by Natural England's guidance on HPAI in relation to baseline characterisation of offshore renewable projects (Natural England, 2022), the baseline data for the Mona Offshore Wind Project were all collected prior to summer 2022 (surveys commenced in March 2020 and were completed in February 2022). Therefore, the assessments within Volume 2, Chapter 5: Offshore ornithology (F2.5 F03) remain a valid representation of typical seabird distribution and density. The Applicant considers in cases where there have been declines in the abundance of certain species that the impact assessments presented would proportionally decrease in line with a smaller population (where applicable).</p>

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
18	RSPB	<p>Ecosystem Impacts</p> <p>RSPB Cymru would welcome an inclusion consideration of the potential wider ecosystem impacts that may arise through the construction and operation of the wind farm⁹. These could occur, for example, through changes in water column stratification arising from the presence of the wind farm ultimately altering the availability of prey to seabirds.</p>	The Applicant refers RSPB to its response to Row 10 above.
19	RSPB	<p>Highly Pathogenic Avian Influenza</p> <p>The current H5N1 strain of Highly Pathogenic Avian Influenza (HPAI) has affected UK wild bird populations on an unprecedented scale since it was first recorded in the country in Great Skuas in summer 2021, with seabirds and waterfowl particularly affected. The extent of reported mortalities attributed to HPAI in the UK and across Europe in 2022 demonstrated that HPAI had become one of the biggest immediate conservation threats faced by multiple seabird species, including some for which the UK population is of global importance. Many species impacted by HPAI are of conservation concern in the UK, and the outbreak comes on top of widespread declines reported by the latest seabird census¹⁰.</p>	<p>As outlined in Volume 2, Chapter 5: Offshore Ornithology (F2.5 F03) and Volume 6, Annex 5.1: Offshore Ornithology Baseline Characterisation Technical Report (F6.5.1), the baseline DAS data was collected prior to the HPAI outbreak. However, as determined by Natural England's guidance on HPAI in relation to baseline characterisation of offshore renewable projects (Natural England, 2022), the baseline data for the Mona Offshore Wind Project were all collected prior to summer 2022 (surveys commenced in March 2020 and were completed in February 2022), therefore the assessments within Volume 2, Chapter 5: Offshore ornithology (F2.5 F03) remain a valid representation of typical seabird distribution and density.</p> <p>It is acknowledged that, in the short term at least, HPAI is likely to influence changes in seabird populations. However, it is considered that the most appropriate information to use in the Mona applications is the baseline DAS data, and the most recent colony counts (pre-HPAI) used within the assessment inform the impact assessments taken from Burnell <i>et al.</i> (2023). This is due to the temporal overlap between the site-specific DAS and the colony counts for Seabirds Count (Burnell <i>et al.</i>, 2023).</p>
20	RSPB	<p>It is currently unclear what the population scale impacts of the outbreak will be, but it is likely that they will be severe. This scale of impact means that seabird populations will be much less robust to any additional mortality arising from offshore wind farm developments. It also means that there may need to be a reassessment of whether SPA populations are in Favourable Conservation Status. With such uncertainty as to the future of these populations, there is the need for a high level of precaution to be</p>	<p>In addition, the Applicant considers that in cases where there have been declines in the abundance of certain species, the impact assessments presented would proportionally decrease in line with a smaller population (where applicable). This aligns with the advice provided in Natural England's guidance on HPAI in relation to baseline characterisation of offshore renewable projects (Natural England, 2022).</p>

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
		<p>included in examination of impacts arising from the proposed development.</p> <p>The RSPB do not consider that these concerns have been adequately considered in the Assessment.</p>	
21	RSPB	<p>Finally, the RSPB reserves the right to add to and/or amend its position in light of changes to or any new information submitted by the Applicant.</p>	<p>The Applicant notes RSPB's response.</p>

1.15 Applicant's Response to Trinity House's Representation

Table 1.14: Trinity House

Ref No.	Question From	Comment	Applicant response
1	Trinity House	<p>With reference to the application below, Trinity House has no objections to these works, subject to the following conditions:</p> <p>Notices to mariners must be issued at least 14 days prior to the commencement of any offshore works and relevant updates issued accordingly and copied to navigation@trinityhouse.co.uk.</p>	<p>The drafting of the standalone NRW Marine Licence is entirely within NRW MLT's control. However, it is the Applicant's anticipation that notifications to mariners, as suggested, will be secured in the standalone ML as identified in the Marine Licence Principles Document (J9 F04), Row 'Notification of commencement'.</p>
2	Trinity House	<p>A plan to be agreed in writing with the NRW following appropriate consultation with Trinity House, the MCA and UKHO, setting out proposed details of the licenced works, including the:</p> <p>a) number, dimensions, specification, foundation type(s) and depth for each OSP;</p> <p>b) the grid coordinates of the centre point of the proposed location for each OSP; and</p> <p>c) proposed layout of all cables;</p>	<p>The drafting of the standalone NRW Marine Licence is entirely within NRW MLT's control. However, it is the Applicant's anticipation that a design plan, as suggested, will be secured in the standalone NRW Marine Licence as identified in the Marine Licence Principles Document (J9 F04), Row 'Notification of commencement'. It is for NRW MLT to determine which entities should be consulted in relation to the discharge of conditions.</p>
3	Trinity House	<p>A construction method statement in accordance with the construction methods assessed in the environmental statement and including details of –</p> <p>i) Cable specification, installation and monitoring, to include:</p> <p>a) technical specification of offshore cables below MHWS;</p> <p>b) a detailed cable laying plan for the Order limits, incorporating a burial risk assessment encompassing the identification of any cable protection that exceeds 5% of navigable depth referenced to chart datum and, in the event that any area of cable protection exceeding 5% of navigable depth is identified, details of any steps (to be determined following consultation with the MCA and</p>	<p>The drafting of the standalone NRW Marine Licence is entirely within NRW MLT's control. However, it is the Applicant's anticipation that a design plan, as suggested, will be secured in the standalone NRW Marine Licence as identified in the Marine Licence Principles Document (J9 F04), Row 'Offshore Construction Method Statement'. It is for NRW MLT to determine which entities should be consulted in relation to the discharge of conditions.</p>

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
		<p>Trinity House) to be taken to ensure existing and future safe navigation is not compromised or such similar assessment to ascertain suitable burial depths and cable laying techniques, including cable protection; and</p> <p>c) proposals for monitoring offshore cables including cable protection during the operational lifetime of the licenced works which includes a risk based approach to the management of unburied or shallow buried cables.</p>	
4	Trinity House	<p>An Aids to Navigation Management Plan to be agreed in writing by NRW following appropriate consultation with Trinity House specifying how the undertaker will ensure compliance with conditions (1) to (4) of 'Aids to Navigation' (detailed below) from the commencement of construction of the licenced works to the completion of decommissioning.</p>	<p>The drafting of the standalone NRW Marine Licence is entirely within NRW MLT's control. However, it is the Applicant's anticipation that an Aids to Navigation Management Plan, as suggested, will be secured in the standalone NRW Marine Licence as identified in the Marine Licence Principles Document (J9 F04), Row 'Lighting and Marking'. It is anticipated that details of the provision of reports and any applicable timescales will be set out in the final management plan.</p>
5	Trinity House	<p>Aids to Navigation:</p> <p>1) The undertaker shall during the whole period from the commencement of construction of the licenced works to the completion of decommissioning exhibit such lights, marks, sounds, signals and other aids to navigation, and to take such other steps for the prevention of danger to navigation as Trinity House may from time to time direct.</p>	
6	Trinity House	<p>2) The undertaker must during the whole period from the commencement of construction of the licenced works to the completion of decommissioning keep Trinity House and the NRW informed of progress of the licenced works including;</p> <p>a. notice of commencement of construction of the licenced works within 24 hours of commencement having occurred;</p>	

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
		<p>b. notice within 24 hours of any aids to navigation being established by the undertaker; and</p> <p>c. notice within 5 days of completion of construction of the licenced works.</p>	
7	Trinity House	3) The undertaker must provide reports to Trinity House on the availability of aids to navigation in accordance with the frequencies set out in the aids to navigation management plan, using the reporting system provided by Trinity House.	
8	Trinity House	4) The undertaker must during the whole period from the commencement of construction of the licenced works to the completion of decommissioning notify Trinity House and the NRW of any failure of the aids to navigation and the timescales and plans for remedying such failures, as soon as possible and no later than 24 hours following the undertaker becoming aware of any such failure.	
9	Trinity House	Except as otherwise required by Trinity House the undertaker must paint all structures forming part of the licenced works yellow (colour code RAL 1023) from at least HAT to a height as directed by Trinity House. Unless the NRW otherwise directs, the undertaker must paint the remainder of the structures grey (colour code RAL 7035).	The drafting of the standalone NRW Marine Licence is entirely within NRW MLT's control. However, it is the Applicant's anticipation that controls on colour, as suggested, will be secured in the standalone NRW Marine Licence as identified in the Marine Licence Principles Document (J9 F04), Row 'Colouring of Infrastructure'.
10	Trinity House	In case of damage to, or destruction or decay of, the licenced works seaward of MHWS or any part thereof, excluding the exposure of cables, the undertaker shall as soon as reasonably practicable and no later than 24 hours following the undertaker becoming aware of any such damage, destruction or decay, notify NRW, MCA, Trinity House, UKHO, the Kingfisher Information Service of Seafish and regional fisheries contacts.	The drafting of the standalone NRW Marine Licence is entirely within NRW MLT's control. However, it is the Applicant's anticipation that notifications of damage, destruction or decay will be secured in the standalone NRW Marine Licence as identified in the Marine Licence Principles Document (J9 F04), Row 'Navigational Safety'.

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
11	Trinity House	In case of buried cables becoming exposed on or above the seabed, the undertaker must within three days following identification of a cable exposure, notify mariners, regional fisheries contacts and the Kingfisher Information Service of Seafish of the location and extent of exposure. Copies of all notices must be provided to the NRW, MCA, Trinity House, and the UKHO within 5 days.	The drafting of the standalone NRW Marine Licence is entirely within NRW MLT's control. However, it is the Applicant's anticipation that notifications of exposure will be secured in the standalone NRW Marine Licence as identified in the Marine Licence Principles Document (J9 F04), Row 'Navigational Safety'.

1.16 Applicant's Response to UK Hydrographic Office's Representation

Table 1.15: UK Hydrographic Office

Ref No.	Question From	Comment	Applicant response
1	UK Hydrographic Office	<p>Many thanks for forwarding a copy of the Marine Licence application to us. Please could you remind Mona Offshore Wind Limited that we require updates during offshore construction phase to ensure our charts and services are maintained:</p> <p>The UKHO requires FIVE WEEKS advance notice of offshore installation activities to allow preparation of Admiralty Notices to Mariners. Please send notifications and correspondence to SDR@ukho.gov.uk</p>	<p>The drafting of the standalone NRW Marine Licence is entirely within NRW MLT's control. However, it is the Applicant's anticipation that notifications to mariners, as suggested, will be secured in the standalone NRW Marine Licence as identified in the Marine Licence Principles Document (J9 F04), Row 'Notification of commencement'.</p>
2	UK Hydrographic Office	<p>The operator should also be advised to contact our Radio Navigation Warnings section 24 hours before offshore work is due to commence, Email: NavWarnings@UKHO.gov.uk, Tel: 01823 353448 (direct line) Fax: 01823 322352.</p>	<p>The Applicant notes this response.</p>
3	UK Hydrographic Office	<p>The UKHO should be notified of any changes to the existing installations as offshore work progresses (e.g. structure height changes, new/altered aids to navigation). Please send notifications and correspondence to SDR@ukho.gov.uk.</p>	<p>The Applicant notes this response.</p>
4	UK Hydrographic Office	<p>The information supplied must include the start date and end date, a description of the works, positions of the work area and structures (referred to WGS84 datum), and details of any marking arrangements. Copies of any bathymetric survey data should be provided to sdr@ukho.gov.uk Copies of all local notice to mariners must be provided to the UKHO within 5 days.</p>	<p>The Applicant notes this response with Table 7.17 of Volume 2, Chapter 7: Shipping and navigation (F2.7) noting this commitment which the Applicant expects to be secured in the standalone NRW Marine Licence in line with the Marine Licence Principles Document (J9 F04). The Applicant confirms that they would supply the information in the requested format.</p>

1.17 Applicant's Response to Welsh Government - Fisheries Enforcement and Marine Licence Compliance's Representation

Table 1.16: Welsh Government- Fisheries Enforcement and Marine Licence Compliance

Ref No.	Question From	Comment	Applicant response
1	Welsh Government - Fisheries Enforcement and Marine Licence Compliance	<p>Having reviewed the documents for the consultation, we would make the following observations.</p> <p>We are responding as the Fisheries Enforcement, and Marine Licence Compliance team within Welsh Government.</p> <p>We note in various documents that discussions have taken place with Welsh Government at different times. We have no reference as to with whom these took place, and therefore have no knowledge of the background to the topics discussed.</p>	<p>The Fisheries Enforcement and Marine Licence Compliance team within Welsh Government should refer to meeting minutes specific to commercial fisheries, which are included in Appendix H of the Technical Engagement Plan Appendices – Part 2 (E4.2). These minutes provide detailed records of the discussions and consultations that took place with Welsh Government. While background knowledge of discussions between the Applicant and Welsh Government are noted, the omission of names of those who attended within the minutes ensures confidentiality and aligns with standard privacy protocols.</p>
2	Welsh Government - Fisheries Enforcement and Marine Licence Compliance	<p>It is noted that the reports acknowledge a lack of data for <15m, and <10m vessels. The majority of the fishing fleet in North Wales fall within this category. We also note, and would expect, that there has been liaison with the relevant Fishing Associations, and local Fishers to understand their activity in more detail.</p>	<p>Volume 2, Chapter 6: Commercial fisheries (F2.6) and Volume 6, Annex 6.1: Commercial fisheries technical report (F6.6.1) acknowledge a lack of available Vessel Monitoring Systems (VMS) data for smaller (≤ 12 m) vessels. This is due to these smaller vessels, at present, not being required by law to operate a VMS satellite-based system that exhibit spatial distribution of fishing activity data. It is also acknowledged within Volume 2, Chapter 6: Commercial fisheries (F2.6) and Volume 6, Annex 6.1: Commercial Fisheries Technical Report (F6.6.1) that Marine Management Organisation (MMO) landings statistics data by International Council for the Exploration of the Sea (ICES) Rectangle may under-represent smaller (≤ 12 m) vessels, as these vessels are not required to complete logbooks that inform such data. Volume 2, Chapter 6: Commercial fisheries (F2.6) and Volume 6, Annex 6.1: Commercial fisheries technical report (F6.6.1) note and consider a range of different limitations and assumptions associated with the data (including those highlighted above). A confidence level has been assigned to each dataset, which is informed by the assessment team's expert judgment and based on</p>

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
			<p>the various data limitations (e.g. age of dataset, spatial resolution, size of vessels included).</p> <p>Feedback from consultation has been used to supplement the official datasets, particularly where there are recognised data limitations. The Applicant also obtained data from Welsh Government on estimated relative fishing activity within Welsh waters. The maps produced are purely indicative in nature but have been used to supplement the VMS data which does not capture smaller fishing vessels operating in the inshore region of the Mona Offshore Cable Corridor. This data has been interpreted with care due to the low-medium confidence assigned and has been cross referenced with knowledge of the local fleets, based on feedback from informal consultations.</p> <p>Early engagement was established with commercial fisheries stakeholders in June 2021 to understand stakeholder spatial distribution of fishing activity and requirements for co-existence, as summarised in Table 6.5 of Volume 2, Chapter 6: Commercial fisheries (F2.6) and detailed in Appendix H of the Technical Engagement Plan Appendices – Part 2 (E4.2). Meetings have been held on numerous occasions with individual fisheries stakeholders from Conwy, the Welsh Fishermen’s Association (WFA) and National Federation of Fishermen’s Organisation (NFFO). The NFFO represents the interests of over 500 commercial fishing businesses in England and Wales. The WFA represents over 200 commercial fishing businesses in Wales. Engagement will continue with commercial fisheries stakeholders throughout the lifetime of the project.</p> <p>Consultation with commercial fisheries stakeholders will continue post-consent through the development of the Fisheries Liaison and Coexistence Plan.</p>
3	Welsh Government - Fisheries Enforcement and Marine Licence Compliance	<p>Environmental Statement Volume 2, Chapter 6, Commercial Fisheries, mentions that the effect of the works on Inshore Static Gear Vessels is negligible.</p> <p>This may have been determined by looking at statistics as a whole, but in some individual fisher’s case the effects may be significant.</p>	<p>The Applicant recognises the importance of the inshore static gear fleet and has engaged with individual fishermen from Conwy, the WFA and NFFO since 2021 to establish the spatial extent of fishing activity in the inshore region of Welsh waters. Data provided by Welsh Government, supported by feedback from project-specific consultation and MMO landing statistics data, highlighted that smaller (≤ 12 m) static gear vessels active across the inshore region of Welsh waters</p>

MONA OFFSHORE WIND PROJECT

Ref No.	Question From	Comment	Applicant response
4	Welsh Government - Fisheries Enforcement and Marine Licence Compliance	An example of where this may be the case is the inshore area around the cable corridor. This is an active whelk fishery area, but is not shown on Drawing MASP-TR-CF-011-01, Figure 1.59 Indicative Fishing Areas Within Welsh Waters , contained within Volume 6, Annex 6.1, Commercial Fisheries Technical Report.	<p>(between 0 to 12 nm), are predominantly local Welsh vessels that mostly target whelk, lobster and crab (as presented in section 1.4 of Volume 6, Annex 6.1: Commercial Fisheries Technical Report (F6.6.1)).</p> <p>A Fisheries Liaison and Coexistence Plan will be developed based on the Outline Fisheries Liaison And Co-Existence Plan (J13 F02). The Applicant has committed to this as set out in the Mitigation and Monitoring Schedule (J10 F04). The Mitigation and Monitoring Schedule and Marine Licence Principles Document (J9 F04) demonstrate that the Applicant anticipates this commitment will be secured within the standalone NRW Marine Licence.</p>
5	Welsh Government - Fisheries Enforcement and Marine Licence Compliance	There may also be implications for other vessels targeting different species in the same area.	<p>The Outline Fisheries Liaison And Co-Existence Plan (J13 F02) includes a commitment to not close the entire development area during the construction phase. Fishing will be permitted within those parts of the Mona Offshore Cable Corridor where construction activities are not taking place. This will be achieved via the use of rolling advisory exclusion zones of 500 m around vessels installing export cables and will avoid the entire Mona Offshore Cable Corridor being closed to fishing vessels during the construction phase. Additionally, the use of 500 m rolling advisory exclusion zones will apply to the installation of inter-array and interconnector cables.</p> <p>In light of the commitments to the preceding mitigation and on the basis that fishing will be able to continue within the Mona Offshore Cable Corridor during the construction phase, the assessment in section 6.8.2 of Volume 2, Chapter 6: Commercial fisheries (F2.6) concluded a negligible significance of effect (which is not significant in EIA terms) on 'loss or restricted access to fishing grounds' for the inshore static gear fleet.</p>

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MONA OFFSHORE WIND PROJECT

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Appendix A Updated indicative construction programme for the Mona Offshore Wind Project

Activity (time in brackets is time taken for completion, colouring denotes window)	Pre-commencement				Year 1 of construction				Year 2 of construction				Year 3 of construction				Year 4 of construction			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Onshore																				
Onshore Site Preparation Works Onshore Substation (12 months)																				
Onshore Substation construction and installation (including restoration) (33 months)																				
Onshore Substation testing and commissioning (10 months)																				
Onshore Site Preparation Works Onshore Export Cables (6 months)																				
Onshore export cables construction and installation (including Mona 400 kV Grid Connection Cable Corridor) (33 months)																				
Landfall																				
Onshore Site Preparation Works Landfall trenchless install. (6 months)																				
Landfall trenchless installation (9 months)																				
Offshore																				
Site Investigation Surveys including UXO Surveys (6 months)																				
UXO Clearance (3 months)																				
Seabed preparation activities (9 months)																				
Foundation installation (12 months)																				
OSP installation and commissioning (9 months)																				

MONA OFFSHORE WIND PROJECT

Activity (time in brackets is time taken for completion, colouring denotes window)	Pre-commencement				Year 1 of construction				Year 2 of construction				Year 3 of construction				Year 4 of construction			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Offshore export cables installation (15 months)																				
Interconnector cables installation (4 months)																				
Inter-array cables seabed preparation (3 months)																				
Inter-array cables installation (12 months)																				
Wind turbine installation (9 months)																				
Wind turbine commissioning (9 months)																				

Appendix B Figure for Row 72 – North Anglesey Marine/Gogledd Môn Forol SAC

