

# **Response to Hearing Action Points**

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# Glossary

Term	Meaning
Applicant	Mona Offshore Wind Limited.
Bodelwyddan National Grid Substation	This is the Point of Interconnection (POI) selected by the National Grid for the Mona Offshore Wind Project.
Development Consent Order (DCO)	An order made under the Planning Act 2008 granting development consent for one or more Nationally Significant Infrastructure Project (NSIP).
Environmental Statement	The document presenting the results of the Environmental Impact Assessment (EIA) process for the Mona Offshore Wind Project.
Evidence Plan Process	The Evidence Plan process is a mechanism to agree upfront what information the Applicant needs to supply to the Planning Inspectorate as part of the Development Consent Order (DCO) applications for the Mona Offshore Wind Project.
Expert Working Group (EWG)	Expert working groups set up with relevant stakeholders as part of the Evidence Plan process.
Inter-array cables	Cables which connect the wind turbines to each other and to the offshore substation platforms. Inter-array cables will carry the electrical current produced by the wind turbines to the offshore substation platforms.
Interconnector cables	Cables that may be required to interconnect the Offshore Substation Platforms in order to provide redundancy in the case of cable failure elsewhere.
Intertidal access areas	The area from Mean High Water Springs (MHWS) to Mean Low Water Springs (MLWS) which will be used for access to the beach and construction related activities.
Intertidal area	The area between MHWS and MLWS.
Landfall	The area in which the offshore export cables make contact with land and the transitional area where the offshore cabling connects to the onshore cabling.
Local Authority	A body empowered by law to exercise various statutory functions for a particular area of the United Kingdom. This includes County Councils, District Councils and County Borough Councils.
Local Highway Authority	A body responsible for the public highways in a particular area of England and Wales, as defined in the Highways Act 1980.
Marine licence	The Marine and Coastal Access Act 2009 requires a marine licence to be obtained for licensable marine activities. Section 149A of the Planning Act 2008 allows an applicant for a DCO to apply for a 'deemed' marine licence as part of the DCO process. In addition, licensable activities within 12nm of the Welsh coast require a separate marine licence from Natural Resource Wales (NRW).
Maximum Design Scenario (MDS)	The scenario within the design envelope with the potential to result in the greatest impact on a particular topic receptor, and therefore the one that should be assessed for that topic receptor.
Mona 400kV Grid Connection Cable Corridor	The corridor from the Mona onshore substation to the National Grid substation at Bodelwyddan.
Mona Array Area	The area within which the wind turbines, foundations, inter-array cables, interconnector cables, offshore export cables and offshore



Term	Meaning
	substation platforms (OSPs) forming part of the Mona Offshore Wind Project will be located.
Mona Array Scoping Boundary	The Preferred Bidding Area that the Applicant was awarded by The Crown Estate as part of Offshore Wind Leasing Round 4.
Mona Offshore Cable Corridor	The corridor located between the Mona Array Area and the landfall up to MHWS, in which the offshore export cables will be located.
Mona Offshore Cable Corridor and Access Areas	The corridor located between the Mona Array Area and the landfall up to MHWS, in which the offshore export cables will be located and in which the intertidal access areas are located.
Mona Offshore Transmission Infrastructure Scoping Search Area	The area that was presented in the Mona Scoping Report as the area encompassing and located between the Mona Potential Array Area and the landfall up to MHWS, in which the offshore export cables will be located.
Mona Offshore Wind Project	The Mona Offshore Wind Project is comprised of both the generation assets, offshore and onshore transmission assets, and associated activities.
Mona Offshore Wind Project Boundary	The area containing all aspects of the Mona Offshore Wind Project, both offshore and onshore.
Mona Offshore Wind Project PEIR	The Mona Offshore Wind Project Preliminary Environmental Information Report (PEIR) that was submitted to The Planning Inspectorate (on behalf of the Secretary of State) and NRW for the Mona Offshore Wind Project.
Mona Offshore Wind Project Scoping Report	The Mona Scoping Report that was submitted to The Planning Inspectorate (on behalf of the Secretary of State) and NRW for the Mona Offshore Wind Project.
Mona Onshore Cable Corridor	The corridor between MHWS at the landfall and the Mona onshore substation, in which the onshore export cables will be located.
Mona Onshore Development Area	The area in which the landfall, onshore cable corridor, onshore substation, mitigation areas, temporary construction facilities (such as access roads and construction compounds), and the connection to National Grid substation will be located
Mona Onshore Transmission Infrastructure Scoping Search Area	The area that was presented in the Mona Scoping Report as the area located between MHWS at the landfall and the onshore National Grid substation, in which the onshore export cables, onshore substation and other associated onshore transmission infrastructure will be located.
Mona PEIR Offshore Cable Corridor	The corridor presented at PEIR that was consulted on during statutory consultation and has subsequently been refined for the application for Development Consent. It is located between the Mona Array Area and the landfall up to MHWS, in which the offshore export cables and the offshore booster substation will be located.
Mona PEIR Offshore Wind Project Boundary	The area presented at PEIR containing all aspects of the Mona Offshore Wind Project, both offshore and onshore. This area was the boundary consulted on during statutory consultation and subsequently refined for the application for Development Consent.
Mona Potential Array Area	The area that was presented in the Mona Scoping Report and in the PEIR as the area within which the wind turbines, foundations, meteorological mast, inter-array cables, interconnector cables, offshore export cables and OSPs forming part of the Mona Offshore Wind Project were likely to be located. This area was the boundary consulted



Term	Meaning
	on during statutory consultation and subsequently refined for the application for Development Consent.
Mona Proposed Onshore Development Area	The area presented at PEIR in which the landfall, onshore cable corridor, onshore substation, mitigation areas, temporary construction facilities (such as access roads and construction compounds), and the connection to National Grid infrastructure will be located. This area was the boundary consulted on during statutory consultation and subsequently refined for the application for Development Consent.
Mona Scoping Report	The Mona Scoping Report that was submitted to The Planning Inspectorate (on behalf of the Secretary of State) and NRW for the Mona Offshore Wind Project.
National Policy Statement (NPS)	The current national policy statements published by the Department for Energy Security & Net Zero in 2024.
Non-statutory consultee	Organisations that an applicant may choose to consult in relation to a project who are not designated in law but are likely to have an interest in the project.
Offshore Substation Platform (OSP)	The offshore substation platforms located within the Mona Array Area will transform the electricity generated by the wind turbines to a higher voltage allowing the power to be efficiently transmitted to shore.
Offshore Wind Leasing Round 4	The Crown Estate auction process which allocated developers preferred bidder status on areas of the seabed within Welsh and English waters and ends when the Agreements for Lease (AfLs) are signed.
Pre-construction site investigation surveys	Pre-construction geophysical and/or geotechnical surveys undertaken offshore and, or onshore to inform, amongst other things, the final design of the Mona Offshore Wind Project.
Point of Interconnection	The point of connection at which a project is connected to the grid. For the Mona Offshore Wind Project, this is the Bodelwyddan National Grid Substation.
Relevant Local Planning Authority	The Relevant Local Planning Authority is the Local Authority in respect of an area within which a project is situated, as set out in Section 173 of the Planning Act 2008. Relevant Local Planning Authorities may have responsibility for discharging requirements and some functions pursuant to the DCO, once made.
the Secretary of State for Business, Energy and Industrial Strategy	The decision maker with regards to the application for development consent for the Mona Offshore Wind Project.
Statutory consultee	Organisations that are required to be consulted by an applicant pursuant to the Planning Act 2008 in relation to an application for development consent. Not all consultees will be statutory consultees (see non-statutory consultee definition).
Wind turbines	The wind turbine generators, including the tower, nacelle and rotor.
The Planning Inspectorate	The agency responsible for operating the planning process for NSIPs.



# Acronyms

Description
Agreement for Lease
Department for Business, Energy and Industrial Strategy
Development Consent Order
Environmental Impact Assessment
Energie Baden-Württemberg AG
High Voltage Alternating Current
Institute for Environmental Management and Assessment
Information to support the Appropriate Assessment
Maximum Design Scenario
Mean High Water Springs
Mean Low Water Springs
Natural Resources Wales
Nationally Significant Infrastructure Project
Non-Technical Summary
Offshore Substation Platform
Project Design Envelope
Preliminary Environmental Information
Preliminary Environmental Information Report
Point of Interconnection
Statement of Community Consultation
The Crown Estate
Transition Joint Bay

# Units

Unit	Description
GW	Gigawatt
km	Kilometres
km <sup>2</sup>	Kilometres squared
kV	Kilovolt
MW	Megawatt
nm	Nautical miles



# **1** Applicant's response to Hearing Actions Points

## 1.1 Introduction

- 1.1.1.1 This document addresses the Hearing Action Points raised by the Examining Authority at the Preliminary Meeting on 16 July, Issue Specific Hearing 1 on 16 July and Issue Specific Hearing 2 on Wednesday 17 and Thursday 18 July.
- 1.1.1.2 The Hearing Action Points that will be addressed at Deadline 2 or Deadline 3 are in Table 1.1.
- 1.1.1.3 The Hearing Action Points that have been designated as delivery at Deadline 1 and have been addressed are in the Table 2.1 and the accompanying appendices.

Ref.	Directed to	Action	Deadline
ISH1_1	Applicant	Revisit (Explanatory Memorandum) EM and ensure purpose and effect of every provision is fully explained. The justification should be proportionate to the novelty/controversy. Precedents from other made DCOs is not a sufficient justification on its own.	Deadline 2 (agreed updated from D1)
ISH1_2	Applicant	Supplement EM to explain how the swept area parameter in the Requirements prevents the larger number of taller turbines being constructed.	Deadline 2
ISH1_3	Applicant	Review whether all of the layout principles set out in Table 3.7 of [APP-050] are properly secured in the DCO or DML. Consider the production of a stand alone layout principles document with which Condition 18(1)(a) must accord	Deadline 2
ISH1_4	Applicant	Look closely at definition of further associated development (currently pages 48 & 49 of dDCO [PDA-003]) to:	Deadline 2
		- tighten up the drafting and ensure proper definition and limitation of works;	
		- remove duplication between further associated development and ancillary works;	
		- update references to materially new or materially different effects in the dDCO and any other instances of limiting works by ES worst case scenario (including Part 2 of Schedule 1 (ancillary works)	
ISH1_5	Applicant	Review drafting of Requirement 23 in light of discussion at ISH1 and ensure read across to Schedule 12 regarding fees for the discharge of Requirements that are subsequently amended.	Deadline 2
ISH1_6	Applicant	Review EM in respect of Requirement 1 – Time Limits and expand on rationale for it.	Deadline 2
ISH1_7	Applicant	Consider whether amended drafting to dDCO is needed in respect of Requirement 1 specifically in respect of definition of proceedings and how undertaker would notify parties of Requirement 1(2) having effect.	Deadline 2
ISH1_8	Applicant	Review Schedule 14 of the dDCO in respect of the definition of commencement of licensed marine activities & its relationship with the outline documents identified in Part 1(1) thereof.	Deadline 2

### Table 1-1: Hearing Action Points that will be addressed at Deadline 2.



Ref.	Directed to	Action	Deadline
ISH1_10	Applicant	Update mitigation and monitoring schedule [APP196] by specifying precisely how measures would be secured by dDCO/DML and consider whether the schedule could be a certified document in the dDCO	Deadline 2
ISH1_13	Applicant	Applicant to consider whether a provision could be included within the DML (and transmission assets Marine Licence (ML)) requiring that the undertaker notifies the licensing authority prior to commencement about whether Works 1c) and d) are being constructed under the DML or transmission assets ML	Deadline 2
ISH1_14	NRW MLT	Consider provision of a pictorial shape of Table 3 of the DML to delineate the co-ordinates within which the licenced marine activities set out in paragraph 2 must be located	Deadline 3
ISH_15	Applicant	Consider provision of a pictorial shape of Table 3 of the DML to delineate the co-ordinates within which the licenced marine activities set out in paragraph 2 must be located.	Deadline 2
ISH1_16	Applicant	Add definition of Temporary Construction Compounds (TCC) in Article 2 of the dDCO and update the description of the proposed Works in Schedule 1 of the dDCO to clarify the scope of works in TCCs.	Deadline 2 (agreed updated from D1)
ISH2_2	Applicant	Review Mona Licence Principles Document [PDA-005] in respect of detailed design.	Deadline 2 (agreed updated from D1)
ISH2_17	Applicant	Review wording of Requirement 14 and Outline Code of Construction Practice to ensure consistency between them.	Deadline 2 (updated from D1 – will be provided as part of dDCO)
ISH2_32	Applicant	Requirement 3(1): should the Civil Aviation Authority (CAA) be named? Refer consistently to Defence Infrastructure Organisation / Ministry of Defence. Requirement 3(2): should the CAA also be notified?	Deadline 2
ISH2_33	Applicant	Should DML condition 15(5) also apply in the event of damage to the authorised scheme, by reference to condition 13(12)?	Deadline 2
ISH2_35	Applicant	Review whether mitigation of the Proposed Development's seascape impact should be secured in the dDCO in addition to/as well as the DML	Deadline 2
ISH2_36	Applicant	Add lightning conductors to Figure 1.2 of Design Principles Document [APP-189] and visualisations.	Deadline 2
ISH2_39	Applicant	Review wording of Requirements 7 and 8 of the dDCO.	Deadline 2
ISH2_40	Applicant	Provide indicative dimensions (e.g., length, width) for the general arrangement of the substation layout.	Deadline 2
ISH2_43(1)	Applicant	Review Requirement 5 of dDCO in respect of its relationship with the proposed design guide.	Deadline 2 (agreed updated from D1)
ISH2_51	Applicant	Review when Requirement 9 takes effect.	Deadline 2 (agreed updated from D1)



# 2 **RESPONSES TO HEARING ACTION POINTS**

## 2.1 Applicant's response to Hearing Action Points due at Deadline 1

### Table 2-1: Applicants response to Hearing Action Points due at Deadline 1

Ref.	Directed to	Action	Applicant's response
HAP_PM_01	Applicant	Applicant to provide update/explanation of ES figures and application documents submitted at Procedural Deadline.	The Applicant has prepared a clarification note (Appendix to Response to Hearing Action Point: Onshore figure update clarification, S_D1_5.1) to explain that changes made to figures submitted at the procedural deadline.
HAP_ISH1_09	Applicant	Submit examples of indicative structure of a stage plan required under Requirement 4.	The Applicant has prepared an indicative structure of a stage plan, as required under Requirement 4 of the draft development consent order (PDA-003). An indicative Onshore Works Stages Plan has been submitted at Deadline 1. Please see Appendix to Response to Hearing Action Point: Indicative Staging Plan D1_5.2.
HAP_ISH1_11	Applicant	Resubmit version 2 of the Marine Licence Principles Document (MLPD) [PDA-005] showing tracked changes against version 1.	Please see Marine Licence Principles Document Comparison F01 to F02, S_D1_27 submitted at Deadline 1.
HAP_ISH1_12	Applicant	For any future versions of the MLPD, Applicant to mark-up changes from the previous version and if the rationale for any changes is not obvious, explain the rationale for them.	The Applicant confirms this will be done for future Examination deadlines (as required).
HAP_ISH2_01	Applicant	Review Table 3.37 of APP-050 in respect of construction programme to include pre- commencement activities, unexploded ordnance (UXO) and UXO clearance authorised under the deemed marine licence, and detailed design	The Applicant has submitted an updated Table 3.37 from the Project Description (APP-050), to include the pre-commencement activities authorised under the deemed marine licence, and detailed design. The updated table is included in Annex 1: HAP_ISH2_01 and HAP_ISH2_07.
HAP_ISH2_03	Applicant	Review APP-050 Glossary in respect of micrositing	The term 'micrositing' in the glossary of Volume 1, Chapter 3: Project description (APP-050) is defined as <i>"The final selection of the position of infrastructure which may move in the order of a few meters to avoid an obstruction"</i> . This meaning is incorrect as Principle 6 in Table 3.7 of APP-050 allows for the micrositing of up to one hundred metres and the definition of micrositing should be <i>"The final selection of the position of infrastructure which may move up to one hundred</i>



Ref.	Directed to	Action	Applicant's response
			<i>metres to avoid an obstruction.</i> " This clarification has been added to the errata (S_PD_1 F02).
HAP_ISH2_04	NRW Advisory	Advise on need for monitoring provision in respect of risk of exposure of landfall cables due to beach profile change, erosion of the backshore, short-term beach draw-down during storms.	A monitoring provision in respect of the risk of exposure of landfall cables is not required due to the Applicant's commitments to installing cables using the long trenchless technique options from onshore to seaward of mean low water (MLW) and to providing details of the depth of burial and detailed design of the installation (to avoid risk of cable exposure) in the final Landfall construction method statement (LCMS) prepared post-consent. This is set out in more detail below.
			At the Preliminary Environmental Information Report (PEIR) stage, the Applicant's proposal still retained the short trenchless techniques installation option which included open-cut trenching to a depth of up to three meters in the intertidal zone (as set out in Table 4.8 of Volume 1, Chapter 4: Site selection and consideration of alternatives (AS-016)). Concern was raised by stakeholders over the open-cut trenching element and risk of cable exposure (see Mon_054_024_010623 (page 101 of 609) in Consultation Report Appendices - Part 3 (D.25 to F) (APP-040)). In response to feedback on the PEIR, the Applicant made a commitment to only progressing the long trenchless techniques option as secured within the Outline LCMS (APP-226).
			The Natural Resources Wales (NRW) relevant representation (specifically RR- 011.52 in Applicant's Response to Relevant Representations (PDA-008)) advises that the design and installation of the cable to landfall should take account of the natural envelope of beach profile change and the future erosion of the backshore in order to minimise any future risk of exposure over the lifetime of the project. NRW further advise that that this information is to be gathered prior to determining the burial depth for the trenchless techniques installation cable landfall across the intertidal and should be included in the final LCMS.
			In response to the NRW relevant representation, the Applicant has highlighted that the Outline LCMS secures the commitment to further site investigation works to establish the depth of burial requirements for cables to avoid the risk of exposure. Furthermore, that these details will be provided within the final LCMS, which must be approved by the relevant planning authority following consultation with NRW (as required) as secured in Schedule 2, Requirement 9 of the draft development consent order (PDA-003).
HAP_ISH2_05	Applicant	Consider, review or highlight sequencing of works for the long borehole (trenchless) from landfall to subtidal.	The Applicant can confirm the below sequencing of works for the long borehole (trenchless cable installation) from the transition joint bays (TJB) in Work No.10



Ref.	Directed to	Action	Applicant's response
			(as defined within Schedule 1 of the draft development consent order (PDA-003)) to the exit pit located seaward of mean low water springs within Work No.2:
			<ul> <li>Construction of access from the existing highway to Work No.10, including clearance of the visibility splays in Work No. 9, as outlined in the Outline Highways Access Management Plan (APP-228).</li> </ul>
			• Establishment within Work No.10 a secondary temporary construction compound (TCC) and TJB Compound as per Section 1.7.2 of the Outline Landfall Construction Method Statement (APP-226).
			<ul> <li>Construction of the TJBs, as per Section 1.8.2 of the Outline Landfall Construction Method Statement (APP-226).</li> </ul>
			<ul> <li>Fencing of the beach vehicle laydown area in Work No.7.</li> </ul>
			<ul> <li>Set up and execute trenchless technique from TJB compound as described in Section 1.8.3 of the Outline Landfall Construction Method Statement (APP-226).</li> </ul>
			<ul> <li>Dependant on the trenchless technique being adopted, the recovery of the tunnel boring machine, seaward of MLWS.</li> </ul>
			• To allow for export cable pull in, undertake boulder clearance and exit pit clearance, as required.
			<ul> <li>If Horizontal Directional Drilling (HDD) is selected as the trenchless technique, then there will be offshore activity at the exit pit within Work No. 2 to float and pull in the cable ducts.</li> </ul>
			• Set up of landfall installation vessel at the exit pit location (or as close as can be managed) within Work No. 2.
			<ul> <li>Installation of up to 4 export cables offshore including offshore jointing and cable burial including protection of the exit pit location within Work No. 2.</li> </ul>
			<ul> <li>Jointing of the onshore to the offshore export cable.</li> </ul>
			High Voltage testing of the onshore and offshore export cables
			Overall export cable system test.
			<ul> <li>Backfilling of TJBs, removal of compounds and reinstatement works, as outlined in Section 1.9.3 of the Outline Code of Construction Practice (APP-212)</li> </ul>
			The Outline Landfall Construction Method Statement (APP-226) will be updated at Deadline 2 to reflect this information.



Ref.	Directed to	Action	Applicant's response
HAP_ISH2_06	Applicant	Review Outline Written Scheme of Investigation [APP- 209] regarding any further surveys and/or archaeological work and provide clarity regarding temporary construction compounds and programming	Detailed archaeological investigation of land will be undertaken within the Mona onshore Order limits where the archaeological geophysical survey and trial trenching campaign undertaken by the Applicant during the pre-application phase of the Project indicates the possible presence of archaeological sites or features. The draft development consent order (PDA-003) specifies that pre- commencement archaeological surveys and investigations must be undertaken in accordance the applicable details set out in the outline onshore written scheme of investigation (see Requirement 11(3) of Schedule 2 of the draft development consent order).
			Detailed archaeological investigations do require some temporary welfare facilities to support the archaeological contractors. It is the Applicant's experience that these facilities do not require any works to be undertaken to the land, for example temporary hard standing is not required. Temporary construction compounds will therefore not be required for these investigations.
HAP_ISH2_07	Applicant	Explain the relationship of 'onshore site preparation works' and how it links into onshore construction activities identified in the construction programme.	Onshore site preparation works are defined in the Draft Development Consent Order (PDA-003) as site clearance, demolition, early planting of landscaping works, archaeological investigations, environmental surveys, ecological mitigation, investigations for the purpose of assessing ground conditions, remedial work in respect of any contamination or other adverse ground conditions, the diversion and laying of utilities and services, site security works, the erection of any temporary means of enclosure, the erection of temporary hard standing, the erection of welfare facilities, creation of site accesses and the temporary display of site notices or advertisements. The Applicant will undertake onshore site preparation works in advance of the discharge of the DCO Requirements to collect data to inform the detailed design and undertake minor activities to ensure full construction can take place as soon as possible. This will also improve the efficiency of construction activities following discharge of conditions, manage the impact of seasonal ecological constraints where possible and potentially reduce overall construction impacts. The Applicant has submitted an updated Table 3.37 from the Project Description (APP-50), to include the onshore site preparation works and how these relate to the onshore construction programme. The updated table is included in Annex 1: HAP_ISH2_01 and HAP_ISH2_07.
HAP_ISH2_08	Applicant	Figure 3.17 Indicative cross section of the onshore cable corridor [APP-050] – submit updated, annotated version including dimensions	The Applicant has submitted an updated, annotated Figure 3.17, from the Project Description (APP-50) to include dimensions of the indicative onshore cable corridor cross-section. The annotated figure is included in Appendix to Response



Ref.	Directed to	Action	Applicant's response
			to Hearing Action Point: Indicative onshore cable corridor cross section and trenchless technique crossing long-section (S_D1_5.6)
HAP_ISH2_09	Applicant	Provide indicative cross-section for trenchless works	The Applicant has submitted an indicative annotated trenchless technique crossing long-section. The indicative annotated figure is included in Appendix to Response to Hearing Action Point: Indicative onshore cable corridor cross section and trenchless technique crossing long-section (S_D1_5.6).
HAP_ISH2_10	Applicant	Crossing techniques showing location of obstacles shown as bullets (shown on figures 1.53-1.65 in PDA- 025) to be numbered and the table in the crossing schedule to include these numbers	Mapping reference numbers have been added to both the obstacle crossing register and associated figures in an updated Onshore Crossing Schedule (F5.4.3 F02) to help with cross referencing.
HAP_ISH2_11	Applicant	Sense check documentation, including APP 121, about the number of Temporary Construction Compounds	The Applicant notes that figures within Volume 7, Annex 3.1: Onshore ecology desk study technical report (APP-121) incorrectly identified three Temporary Construction Compounds at Penyrefail crossroads. The Applicant reviewed the other figures within the DCO application. The figures from APP-121 and other figures were updated and submitted at the Procedural Deadline. An explanation of the changes made to figures is provided in S_D1_5.1.
			The Applicant has submitted a clarification note to explain the number of Temporary Construction Compounds. The clarification note is included in ANNEX
HAP_ISH2_12	Applicant	Submit annotated Figure 1.2 for the onshore substation from Design Principles [APP-189] including orientation, lightning rods, indicative dimensions and clarification regarding "other buildings"	The Applicant has amended Figure 1.2 from the Design Principles (APP-189) to include the indicative locations for lightning rods, indicative dimensions of the onshore substation footprint and clarification of the other buildings within the footprint. The Applicant notes that the block labelled "Control and Storage" could potentially be storage containers or a building at 3m in height. The annotated drawing is included in Annex 3: HAP_ISH2_12 and will be included in an updated Design Principles document to be submitted at Deadline 2.
HAP_ISH2_13	Applicant	Submit information on quantities of materials and cut and fill that informed traffic and transport modelling	Vehicle movements associated with the construction of the onshore substation are set out in the table entitled 'Total vehicle movement requirements (Substation) – Mona Offshore Wind Farm' contained within Appendix A of Volume 7, Annex 8.5: Construction Vehicle Trip Generation Assumptions (APP-175). This includes information for two-way daily HGV movements for deliveries and removals of materials, welfare and construction plant. Quantities of materials and cut and fill information were calculated as part of the construction feasibility exercise (i.e. early engineering design work to establish the feasibility of the onshore substation site location) to inform the project design envelope and the



Ref.	Directed to	Action	Applicant's response
			traffic model. However, this information is not reported explicitly within the Development Consent Order Application.
			The two-way daily HGV movements were based on the conclusions of the construction feasibility of the onshore substation (Work Nos: 22, 22A, 23, 24, 27, 28, 29 and 33 as per the Works Plans – Onshore (AS-003)), which included a consideration of material generated from indicative cut and fill calculations. The indicative cut and fill calculations considered the volumes of material to be generated from the creation of the onshore substation platform area, the attenuation pond and the onshore substation permanent access road; and this concluded that almost all excavated material would remain within the onshore substation area as a result of excess material from the cut and fill exercise being used for the creation of the Design Principles (APP-189)). The cut and fill calculations concluded that a surplus of topsoil may be generated where not all of the material is used in that way. The removal of any surplus topsoil has been included in the two-way daily HGV movements identified for the construction of the onshore substation Vehicle Trip Generation Assumptions (APP-175).
			These assumptions represent a realistic worst case scenario for the traffic assessment. In addition, the total vehicle movement requirements at the onshore substation also includes an uplift for miscellaneous allowances to ensure that the traffic assessment has considered a realistic worst case.
HAP_ISH2_14	Applicant	Provide construction workers' profile for the construction of the onshore substation.	The table entitled 'Total vehicle movement requirements (Substation) – Mona Offshore Wind Farm' contained within Appendix A of Volume 7, Annex 8.5: Construction Vehicle Trip Generation Assumptions (APP-175) provides a profile of the total employee two-way movements per day throughout the proposed period of construction of the onshore substation. The two-way daily employee movements were based on the conclusions of the construction feasibility of the onshore substation (Work Nos: 22, 22A, 23, 24, 27, 28, 29 and 33 as per the Works Plans – Onshore (AS-003)).
			These movements will be undertaken in cars or small vans and represent construction workers travelling to the site. The profile is linked to construction activities at the onshore substation and shows the number of worker traffic movements peaks during months 19 to 22 of the onshore substation construction programme. The peak aligns with the overlap of the civils/building work and the mechanical/electrical works at the onshore substation.



Ref.	Directed to	Action	Applicant's response
			The last row of the table entitled 'Total vehicle movement requirements (Substation) – Mona Offshore Wind Farm' contained within Appendix A of Volume 7, Annex 8.5: Construction Vehicle Trip Generation Assumptions (APP-175) also provides a profile of the total two-way movements per day throughout the proposed period of construction of the onshore substation – including move HGV movements and light vehicle movements. This also shows that total movements peak during months 19 to 22 of the onshore substation construction programme.
HAP_ISH2_15	Applicant	Supply overlay plan showing Mona and Awel y Mor Order Limits in area of approved and proposed sub- stations. Update this plan with National Grid Substation planning application	Please see Appendix to Response to Hearing Action Point: Mona Offshore Wind Project and Awel y Môr Offshore Wind Farm Works Plans Overlays S_D1_5.7 submitted at Deadline 1.
HAP_ISH2_16	Applicant	Review documentation to clarify proposed working hours for offshore works	The Applicant confirms that offshore working hours will be 24 hours. The Maximum Design Scenario (MDS) for impact assessments where offshore working hours are relevant captures this. For example, the MDS for 'underwater sound during the construction phase impacting fish and shellfish receptors' (Table 3.18 in Volume 2, Chapter 3: Fish and shellfish ecology (APP-055)) states "four piles installed per 24 hours per vessel" and reference to 24 hour offshore working hours is also included in the justification column of the MDS and within the text of the impact assessment (see paragraph 3.9.3.3 in APP-055). The MDS for marine mammals and offshore ornithology (Table 4.16 in Volume 2, Chapter 4: Marine mammals (APP-056) and Table 5.21 in Volume 2, Chapter 5: Offshore ornithology (APP-057) respectively) also make reference to 24-hour working hours where relevant.
HAP_ISH2_18	Applicant	Highlight where "concurrently" is defined in ES	See paragraph 3.5.8.7 of Volume 1, Chapter 3: Project Description (APP-050) which states 'up to two vessels may be piling and two other vessels drilling simultaneously, with concurrent piling being undertaken at a maximum distance of 15 km between locations'. This text should read 'up to two vessels may be piling or drilling simultaneously, with concurrent piling being undertaken at a maximum distance of 15 km between locations'. The Applicant confirmed that there will not be four installation vessels undertaking piling and drilling all at the same time. This clarification has been added to the errata (S_PD_1 F02).
			The Applicant confirms that 'concurrent piling' means that each phase of the piling sequence (soft start, ramp up, full power piling) would coincide at the two piling locations (for example soft start would happen at the same time at the two piling locations). This is the worst-case scenario for the purposes of the environmental impact assessment for marine mammals and has been used in the modelling of elevated underwater sound from piling (Volume 5, Annex 3.1:



Ref.	Directed to	Action	Applicant's response
			Underwater Sound Technical Report (APP-079)), but in reality, it is unlikely that the phases would be synchronised.
			Following a review of the use of the term 'concurrent' within the application, the Applicant notes that paragraph 4.9.2.39 of Volume 2, Chapter 4: Marine Mammals (APP-056) states that: ' <i>Modelling of concurrent piling assumes piling will occur at exactly the same time and strike piles simultaneously, whereas in reality this is highly unlikely and could lead to overestimates in the injury and/or disturbance ranges</i> '. The Applicant confirms that modelling of concurrent piling assumed that, whilst piling at concurrent locations is synchronised, the hammers would not need to fall at precisely the same time, and that, for clarity, the paragraph should be rephrased as ' <i>Modelling of concurrent piling assumes piling will occur at exactly the same time with each phase (soft start, ramp up, full power) coinciding, whereas in reality this is unlikely and could lead to overestimates in the injury and/or disturbance ranges.</i> ' This clarification has been added to the errata (S_PD_1 F02).
HAP_ISH2_19	Applicant	Address anomaly in the Environmental Statement regarding pilling days (up to 113 or 114 days).	Paragraph 4.9.3.38 of Volume 2, Chapter 4: Marine mammals (APP-056) includes ' <i>The duration of piling is up to 113 days, within a two-year piling programme (as defined in Table 4.22)</i> '. The Applicant identifies that this is a discrepancy; it should be 113.5 days, as per Table 4.22. This discrepancy has been corrected in the errata (S_PD_1 F02). This figure should be 113.5 days (not 114 days). The reference to 114 days in paragraph 4.9.3.11 in Volume 2, Chapter 4: Marine mammals (APP-056): ' <i>Piling would occur over a maximum of 113.5 days (rounded up to 114) using a single vessel (with the assumption of one foundation installed per 24 hours) (64 days for wind turbines, 12 days for Offshore Substation Platforms (OSPs) and 38 days for Gravity Based Foundations)</i> ' is intentional. The total number of piling days is calculated using the average duration of piling per pile as given in Table 4.16, leading to 64 days for wind turbines, 37.5 days for GBFs and 12 days for OSPs, with calculations provided per foundation type. The number of days (113.5) is rounded up to 114 for use in population modelling, which requires full days of piling (i.e., half days cannot be counted) as a precautionary approach (rounding down would underestimate piling days). This is stated in paragraph A.3.7.14 of Volume 2, Chapter 4: Marine mammals (APP-056): '113.5 piling days (Table 4.16) have been rounded to 114 days for the purposes of modelling'. This has also been included in the errata (S_PD_1 F02).
HAP_ISH2_20	JNCC & NRW	Confirm whether you are satisfied with the Applicant's approach to disturbance from elevated underwater	As per the Applicant's Response to Relevant Representations (PDA-008, row RR-011.28), the Applicant acknowledges the potential effect of Acoustic Deterrent



Ref.	Directed to	Action	Applicant's response
	Advisory	sound due to piling or do you think it is necessary to assess separately the effects of Acoustic Deterrent Devices	Devices (ADDs) themselves should not be overlooked and agrees that the reliance on ADDs as a primary mitigation tool should be considered carefully and on a case-by-case basis. The final ADD duration will be agreed post-consent in the final Marine Mammal Mitigation Protocol (MMMP) (as secured under Schedule 14, Condition 18(1)(i) within the draft development consent order (PDA-003)) which will be developed in accordance with the outline MMMP (APP-207), in consultation with NRW and relevant statutory stakeholders.
			Disturbance of marine mammals from ADD use was not assessed separately within Volume 2, Chapter 4: Marine mammals (APP-056) but the Applicant highlights that this approach is typical for offshore wind farm assessments. Further, this was not raised by NRW or any other stakeholders during the Expert Working Group consultation process or in the pre-application statutory consultation responses. As presented in the Applicant's Response to Relevant Representations (PDA-008), the assessment of disturbance effects due to elevated underwater sound from piling is, in any case, precautionary, as the population model assumes that for days on which there is piling activity (and therefore the same days on which the ADD is activated), marine mammals would be disturbed for the entire day on which piling occurred (24 hour period) plus the following day (therefore assuming disturbance for two full days), over the disturbance ranges predicted for piling (which are larger than those from ADD activation). Therefore, it is not considered necessary to consider disturbance from ADD use as a separate impact as it is essentially captured in the assessment of disturbance as part of the piling sequence.
HAP_ISH2_21	Applicant	Advise on whether there are any periods when vessel activity drops, and that activity background ambient sound level is not high	Figure 1.26 in Volume 6, Annex 7.1: Navigational Risk Assessment (APP-098) presents the vessel count per month through the Mona Array Area and within 10 nautical miles. Figure 1.26 demonstrates there is a constant level of shipping traffic across all months of the year, with some periods of higher activity in the summer months. Furthermore, as detailed in paragraphs D.1.1.1.4 to D.1.1.1.6 in Volume 6, Annex 7.1: Navigational Risk Assessment (APP-098), three vessel traffic surveys were undertaken in December 2021, June/July 2022 and October/November 2023 for the Application. Surveys were carried out day and night for 14 days per survey, collecting Automatic Identification System (AIS), radar and visual observation data, and surveys found very little variation by time of day. Ferry companies and commercial vessels travel in and out of Liverpool Bay 24 hours a day, and therefore periods of very quiet ambient sound are considered unlikely. Furthermore, in paragraph 4.9.5.16 of Volume 2, Chapter 4: Marine mammals (APP-056), the threshold used in the assessment of disturbance from vessel sound is a single fixed threshold of 120 dB re 1 μPa



Ref.	<b>Directed to</b>	Action	Applicant's response
			(rms) (the Level B harassment threshold, NMFS (2005)). Effectively, sound exceeding this threshold has the potential to significantly disturb the exposed animal, and maximum disturbance ranges are based upon sound levels being greater than 120 dB re 1 $\mu$ Pa (rms), allowing for the calculation of the number of affected individuals. This criterion is very precautionary as it does not consider or account for background ambient sound levels and assumes a quiet background sound level. In reality, it is likely that ambient sound levels in the area could well be as high as the 120 dB re 1 $\mu$ Pa (SPLrms) threshold and even exceed this value (Xodus, 2014; Farcas <i>et al.</i> 2020) (paragraph 4.9.5.17 of Volume 2, Chapter 4: Marine mammals (APP-056)). It can, therefore, be assumed that marine mammals occurring within the marine mammal regional study area will be sensitised to this ambient sound level. Furthermore, as detailed in paragraph 4.9.5.20 of Volume 2, Chapter 4: Marine mammals (APP-056), there is no dose response available for disturbance from vessel sound (as there is with piling), and therefore the threshold represents an 'all-or-none' approach, whereas it is more likely animals show a proportional response (i.e. not all animals will be disturbed to the same extent). This adds further precaution to the assessment as it may overestimate the number of animals disturbed by vessel noise. Therefore, combining the assumption of no background sound level alongside worst case assumptions made in the modelling (detailed in Volume 5, Annex 3.1: Underwater sound technical report of the Environmental Statement (APP-079)) and the single threshold approach means disturbance ranges are highly precautionary.]
HAP_ISH2_	_22 Applicant	Made it explicit in ES as to what proposed construction hours are for offshore works.	Please see the Applicant's response to HAP_ISH2_16.
HAP_ISH2_	_23 Applicant	Highlight how speed thresholds of 14knots has been secured in the control documents	Paragraph 4.9.5.4 of Volume 2, Chapter 4: Marine mammals (APP-056) states 'vessels travelling at 7 m/s (or 14 knots) or faster are those most likely to cause death or serious injury to marine mammals (Laist <i>et al.</i> , 2001; Wilson <i>et al.</i> , 2007)'. Furthermore, as outlined in paragraphs 4.9.5.42 and 4.9.6.4, 'vessels involved in the construction phase are likely to be travelling at a speed slower than 14 knots'. This information is included to provide important context to how slowing of vessels can reduce the potential impact on marine mammals and that faster vessels are unlikely to be involved in the construction of the Mona Offshore Wind Project. It does not, however, represent a commitment to a speed limit of 14 knots for construction vessels. The Applicant has committed to the development of and adherence to an offshore environmental management plan. This will include details of Measures To



Ref.	Directed to	Action	Applicant's response
			Vessels (APP-203) as set out within Schedule 14 Condition 18(1)(e)(vi) of the draft development consent order (PDA-003). The Measures To Minimise Disturbance To Marine Mammals And Rafting Birds From Transiting Vessels confirms that key principles from the Wildlife Safe (WiSe) Scheme will be followed, unless otherwise agreed with the statutory nature conservation bodies. These comprise: appropriate craft-handling around wild animals (such as avoiding sudden changes in speed and avoiding over revving of engines); codes of conduct; information on local and national laws relating to wildlife; and information on each of the species that are commonly encountered. The site induction process will be used to ensure that key personnel are aware of the need to follow these principles.
			The WiSe Scheme is referenced and endorsed in other relevant codes of conduct for water users, including those produced by both Defra (Defra, 2023) and NatureScot (NatureScot, 2023). Incorporating key principles from the WiSe Scheme will reduce the disturbance of vessel transits on marine mammals and rafting birds visible at the water surface.
HAP_ISH2_24	JNCC & NRW Advisory	JNCC and NRW(A) to confirm their positions to ADD following Applicant response to Relevant Representations Disturbance from elevated underwater sound due to piling	Paragraph 4.9.5.4 of Volume 2, Chapter 4: Marine mammals (APP-056) states 'vessels travelling at 7 m/s (or 14 knots) or faster are those most likely to cause death or serious injury to marine mammals (Laist <i>et al.</i> , 2001; Wilson <i>et al.</i> , 2007)'. Furthermore, as outlined in paragraphs 4.9.5.42 and 4.9.6.4, 'vessels involved in the construction phase are likely to be travelling at a speed slower than 14 knots'. This information is included to provide important context to how slowing of vessels can reduce the potential impact on marine mammals and that faster vessels are unlikely to be involved in the construction of the Mona Offshore Wind Project. It does not, however, represent a commitment to a speed limit of 14 knots for construction vessels.
			The Applicant has committed to the development of and adherence to an offshore environmental management plan. This will include details of Measures To Minimise Disturbance To Marine Mammals And Rafting Birds From Transiting Vessels (APP-203) as set out within Schedule 14 Condition 18(1)(e)(vi) of the draft development consent order (PDA-003). The Measures To Minimise Disturbance To Marine Mammals And Rafting Birds From Transiting Vessels confirms that key principles from the Wildlife Safe (WiSe) Scheme will be followed, unless otherwise agreed with the statutory nature conservation bodies. These comprise: appropriate craft-handling around wild animals (such as avoiding sudden changes in speed and avoiding over revving of engines); codes of conduct; information on local and national laws relating to wildlife; and information on each of the species that are commonly encountered. The site



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			induction process will be used to ensure that key personnel are aware of the need to follow these principles.
			The WiSe Scheme is referenced and endorsed in other relevant codes of conduct for water users, including those produced by both Defra (Defra, 2023) and NatureScot (NatureScot, 2023). Incorporating key principles from the WiSe Scheme will reduce the disturbance of vessel transits on marine mammals and rafting birds visible at the water surface.
HAP_ISH2_25	JNCC & NRW Advisory	Advise on your position on magnitude for disturbance to marine mammals from elevated underwater sound due to vessel use and other (non-piling) sound producing activities	As per the response to the Relevant Representation from Natural Resources Wales (NRW): Vessel Use (PDA-009), the Applicant upholds its overall conclusion of low magnitude presented in Volume 2, Chapter 4: Marine mammals (APP-056). The Applicant has used scientific peer-reviewed studies on harbour porpoise responses alongside project-specific underwater sound modelling ranges to estimate the number of animals potentially affected, with the literature-based disturbance ranges considered being greater than those from the sound modelling report (Volume 3, Annex 1: Underwater Sound Technical Report (APP-079)). As described in detail in the Applicant's Relevant Representation response (PDA-009) and Volume 2, Chapter 4: Marine mammals (APP-056), the regional marine mammal study area already experiences high levels of vessel traffic, and there is evidence that marine mammals have some tolerance to elevated underwater sound due to vessel use. The assessment of disturbance from elevated underwater sound due to vessel use is precautionary, based on a maximum design scenario in terms of numbers and types of vessels for both the project alone and cumulative projects, and the 120 dB re 1 $\mu$ Pa (SPLrms) threshold does not account for existing ambient sound levels in the linsh and Celtic Sea (which could well exceed this value (Xodus, 2014; Farcas <i>et al.</i> , 2020; Nedwell <i>et al.</i> , 2007)). Therefore, the Applicant considers there is adequate justification provided for the assessment of the Mona Offshore Wind Project alone or in-combination with other projects and for the determination of low magnitude effects.
HAP_ISH2_26	Applicant	Advise on difference, including time-scales, between the outline offshore environmental management plan and the Project Environmental Management Plan referred to in Offshore In-Principle Monitoring Plan [APP201].	The Applicant is unable to find reference to a 'Project Environmental Management Plan' in the Offshore In-Principle Monitoring Plan (APP-201). In the Marine Licence Principles Document [PDA-005] within row "Activity Specific Conditions" is reference to a Project Environmental Management Plan as needing to be submitted to NRW. This is the term which the standard NRW licence uses and what is anticipated to be included within the standalone NRW marine licence for the transmission assets. The draft development consent order (PDA-003) refers to an "offshore environmental management plan" which is secured in Condition 18(1)(e) of Schedule 14. The Applicant considers these documents to



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			cover the same content but the draft development consent order has been drafted to align with what would typically be seen within a <i>deemed</i> marine licence. That is the reason for the different terms used. Similarly, the deemed marine licence Condition 18 refers to the offshore environmental management plan being submitted four months prior to commencement of the authorised scheme. This is to align the drafting with precedents set by other offshore wind farm DCOs, whereas the standard NRW licence wording requires submission of the Project Environmental Management Plan at least six weeks prior to commencement of the authorised scheme. That is the reason for the difference in timescales.
HAP_ISH2_27	Applicant	plicant Submit any views on the lack of provision for marine mammal monitoring to test the predictions made within the impact assessment? (Para 4.9.10.1 of Marine Mammals [APP-056])	The Applicant has not proposed monitoring for marine mammals on the basis that no significant effects from the Mona Offshore Wind Project alone are anticipated to arise in relation to sensitive marine mammal and fish receptors from piling.
			The Applicant has committed to developing a Marine Mammal Mitigation Protocol (MMMP) and Underwater Sound Management Strategy (UWSMS); therefore, underwater sound impacts on marine mammals will be reduced such that there are no significant effects from the Mona Offshore Wind Project alone, and this mitigation will also reduce the Mona Offshore Wind Project's contributions to the cumulative assessment such that there will be no significant effects arising from an in-combination perspective either.
			A final MMMP will be developed post-consent in accordance with the outline mammal mitigation protocol (APP-203) in consultation with Natural Resources Wales (NRW) and relevant statutory nature conservation bodies. This is secured in Schedule 14, Condition 18(1)(i) and Condition 21 of the draft development consent order (PDA-003)). Measures in the final MMMP will be implemented in accordance with the final MMMP.
			The final UWSMS will be developed post-consent in accordance with the outline UWSMS (APP-202) in consultation with NRW and relevant statutory nature conservation bodies. This is secured in Schedule 14, Condition 20 of the draft development consent order (PDA-003).
			The Applicant is confident that the final UWSMS and final MMMP will be suitable mechanisms for reducing the magnitude to a level such that any residual effects on sensitive marine mammal and fish receptors can be concluded as non-significant in the context of EIA.
			The Applicant highlights that the Mona Offshore Wind Project alone has concluded that piling would not lead to a significant effect on marine mammals and that the focus of the UWSMS will be on reducing the Mona Offshore Wind Project's contribution to potential significant cumulative effects. This does not



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			preclude noise monitoring of the first four piled foundations, which is required for submission to the Marine Noise Registry (secured in Schedule 14 Condition 25(4) of the draft development consent order (PDA-003)), and which allows comparison of received sound levels against modelled predictions as presented in Volume 5, Annex 3.1: Underwater Sound Technical Report (APP-079) to demonstrate that sound levels do not exceed those predicted in the Environmental Statement.
HAP_ISH2_28	Isle of Man Government	Submit any views on the assessment in ES Chapter on Commercial Fisheries [APP-058] which notes that the displacement of fishing activity into other areas where other vessels are active having an impact, would result in no significance effects.	The potential impact of displacement of fishing vessels during the construction, operations and maintenance, and decommissioning phases of the Mona Array Area and Mona Offshore Cable Corridor was assessed and is set out within Section 6.8.3 of Volume 2, Chapter 6: Commercial fisheries (APP-058). This assessment considered that during the construction and decommissioning phases, the magnitude of impact via displacement for all receptor groups would be negligible, primarily due to fishing being enabled to continue in the majority of the construction area, other than a series of 500 m safety zones and/or advisory exclusion zones around construction vessels. Coupled with receptor sensitivity, this resulted in conclusions of negligible impact (not significant in EIA terms), during the construction/decommissioning phases for all receptor groups assessed.
			For the operational phase, the magnitude of impact via displacement for all receptor groups was also concluded to be negligible. This conclusion was based on a combination of measures aimed at limiting the scope for displacement of the key receptor groups active in the Mona Array Area. These included creation of a Scallop Mitigation Zone (an area free of wind turbine generators and offshore substation platforms); spacing of turbines (1,400 metres between each turbine and row of turbines); a roughly north-south alignment of wind turbine generators; and a commitment to bury cables where possible and protect them where cable burial to target depth is not achieved. Assuming the successful implementation of these measures, the assessment concluded that the majority vessels would be able to continue to fish within the Mona Array Area, therefore, limiting the amount of displacement onto adjacent grounds.
			The assessment also highlighted other specific aspects related to potential displacement, including the London Fisheries Convention 1964 and the Isle of Man Scallop Long Term Management Plan, which limit the scope for displacement of vessels into Isle of Man waters. Therefore, coupled with receptor sensitivity, this resulted in conclusions of negligible impact (not significant in EIA terms), during the operational phases for all receptor groups assessed.



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HAP_ISH2_29	NRW Advisory	Advise if you have any remaining issues (pg 43) on the Proposed Development's impact on Cod following the Applicant's response to your Relevant Representation [PDA-008, RR 011.41]	The Applicant's position remains consistent with that presented within Volume 2, Chapter 3: Fish and shellfish ecology (APP-055) and in PDA-008 in response to NRW (A) relevant representation (RR-011). In the context of available spawning habitat for cod within the Irish Sea, combined with the short-term, intermittent and reversible nature of the impact from underwater sound from piling, the magnitude of impact for the Mona Offshore Wind Project alone is considered low, and the overall significance of effect is considered minor adverse which is not significant in EIA terms.
			Furthermore, due to the predicted significant cumulative effect to cod from underwater sound due to piling activities for the Mona Offshore Wind Project alongside other projects and plans, the Applicant has proposed the development of an Underwater Sound Management Strategy (UWSMS) in accordance with the outline UWSMS (APP-202). This is secured within Schedule 14 of the draft development consent order (PDA-003) and is expected to be included within the standalone NRW Marine Licence (see the draft Marine Licence Principles Document; PDA-005). The final UWSMS will manage the Mona Offshore Wind Project's contribution to cumulative underwater sound impacts from piling so that any residual cumulative effects can be concluded as non-significant in the context of EIA. Mitigation measures implemented as part of the UWSMS to manage the cumulative effects on cod will also further reduce the minor adverse effects predicted as a result of the Mona Offshore Wind Project alone.
HAP_ISH2_30	Applicant	Confirm current size of Scallops area within the OL and compare with size of scallops mitigation area	The indicative scallop mitigation zone presented in figure 1.3 of the Outline Fisheries Liaison and Co-Existence Plan (APP-199) is approximately 57 km <sup>2</sup> . The indicative scallop mitigation zone has been placed within the core scallop grounds in the Mona Array Area that were identified through pre-application engagement with fishers. These core scallop grounds are presented in figure 1.56 of the Volume 6, Annex 6.1: Commercial Fisheries Technical Report (APP-097). The indicative scallop mitigation zone covers nearly 20% of the Mona Array Area and over 35% of the core scallop grounds. As presented in the Outline Fisheries Liaison and Co-Existence Plan (APP-199), it should be noted that the final location of the scallop mitigation zones may be subject to refinement through the final project design post-consent.
HAP_ISH2_31	Applicant	Review positive longitude co-ordinates in Table 1.3 of the Outline Fisheries Liaison and CoExistence Plan	The format of the co-ordinates provided in Table 3 of Schedule 14 of the draft development consent order (PDA-003) are 'decimal degrees' (DD). The format of co-ordinates provided in Table 1.3 of the Outline fisheries liaison and co-existence plan (APP-199) is 'degrees, decimal minutes' (DDM) (the format



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		[APP-199] with those in Table 3 in the DML which are negative.	requested by commercial fisheries stakeholders). Under DDM, 'west' or 'W' is negative. Therefore, the longitude value is 'negative' in both tables. However, to ensure alignment with the draft development consent order, Table 1.3 in APP-199 will be updated to give co-ordinates in both DD and DDM when it is next updated, which is anticipated to be at Deadline 3.
HAP_ISH2_34	Applicant	Update the seascape assessment and seascape methodology document with the correct blade tip height for the zone of theoretical visibility and undertake a consistency check on the other relevant documents to the seascape assessment.	The Applicant confirmed it has included the errata (S_PD_1 F02) attached to the Environmental Statement - Volume 2, Chapter 8: Seascape and visual resources (APP-060) and Environmental Statement - Volume 6, Annex 8.4: Seascape, landscape and Visual Resources Impact Assessment Methodology (APP-104) which confirms that the height provided in paragraph A.1.1.1.2 of (APP-104) and Figure A.4 of (APP-060) incorrectly states 324m and this should be 364m.
HAP_ISH2_37	Applicant	Explain the reference to "darkness" in Landscape Assessment regarding the proposed sub-station site.	The Applicant notes that Table 6.2 of Volume 3, Chapter 6: Landscape and visual resources (APP-069) currently states that ' <i>During the construction phase no work will be undertaken during the hours of darkness</i> '. This text was included in error and has been added to the errata (S_PD_1 F02). The core working hours (as set out Requirement 14 of the draft development consent order (PDA-003)) may require working during hours of darkness, particularly during the winter months. Task lighting for onshore construction activities during the hours of darkness has been included in the assessment as reported in Volume 3, Chapter 6: Landscape and visual resources (APP-069).
HAP_ISH2_38	Applicant	Review/explain how Representative Viewpoint 2 [PDA- 034] and the other representative viewpoints in the vicinity of the onshore substation, site show the landscaping mitigations at Year 15, and how these mitigations work to reduce visual impacts.	The Applicant has prepared annotated visualisations from two of the closest representative viewpoints to the onshore substation [PDA34]. These have been annotated to indicate the areas (or 'land parcels') where landscape mitigation will be provided. The annotated visualisations should be read alongside the Outline Landscape and Ecological Management Plan (APP-208) which describes the type of planting that will be provided. The final landscape mitigation planting will be agreed with the local planning authority post consent with reference to the Outline Landscape and Ecological Management Plan as secured in Requirement 7 (see Schedule 2 of the draft development consent order (PDA-003)). The annotated visualisations are included in Appendix to Response to Hearing Action Point: Annotated landscape mitigation plans for onshore substation (S_D1_5.3). The landscape and ecology as set out in the Design Principles (APP-189). The mitigation principles complement the existing landscape structure by providing a woodland context for the Mona Onshore Substation; greater connectivity between the existing woodlands, retained hedgerows and field boundary trees; and provides visual screening to residential properties, road users and walkers.



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			Further information on how the landscape mitigation work to enhance landscape character and reduce visual impacts is set out in the Design Principles (APP-189) and section 6.9.2 of Volume 3, Chapter 6: Landscape and Visual Resources (APP-069).
HAP_ISH2_41	Applicant	Submit indicative facade treatments, including colour palettes, for the onshore substation.	The Applicant notes that the colour and materials used for the Mona Onshore Substation buildings will be determined during detailed design in accordance with the principles set out in the Design Principles (APP-189) and approved with Denbighshire County Council. This is secured through Requirement 5(1) of the draft development consent order (PDA-003).
			As noted in the Design Principles (APP-189), a Façade Options Report (or equivalent) will be prepared during detailed design and will be used to determine the best colours/colour treatment for the different elements of the Mona Onshore Substation. The process to identify the colour options for the Mona Onshore Substation will follow the guidance in Natural Resources Wales (NRW) 'Environmental Colour Assessment: benefits process and application' as well as with reference to the Landscape Institute Technical Information Note 04/2018 Environmental Colour Assessment (2018).
			NRW's Environmental Colour Assessment has been included in Appendix to Response to Hearing Action Point: NRW Environmental Colour Assessment: benefits, process and application (S_D1_5.4) to provide example colour charts. However, a colour palette for a "typical" onshore substation in a rural setting has not been included as the palette has to be specific to the features, tonality and colours of the site and the detailed design of the buildings.
HAP_ISH2_42	Applicant	Review and explain composition and role of the Design Panel and its relationship with the Design Champion	The Applicant has reviewed its approach to the development of the design for the onshore substation and will implement a Design Review Panel, to review, comment and advise on the Mona Onshore Substation design as it develops through the design guide and then detailed design. The panel will consider the National Infrastructure Commission framework of "climate, people, places and value" and will ensure that good quality sustainable design and integration of the proposed Mona Onshore Substation into the landscape is achieved.
			The Design Review Panel will be a multi-disciplinary team, independent from the project team, who are informed by the relevant national and local policies, guidance and standards applicable to substation design. The Panel will be led by the project Technical Advisory Group that consists of experts from across the joint venture organisations (bp and Energie Baden-Württemberg), to ensure past experience and lessons learned from previous projects' design work is reviewed and utilised in the Mona Onshore Substation design. Subject matter experts from



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			external contractors and consultants can also be brought in to provide an external viewpoint and to offer experience and lessons that complement the Applicant's experience.					
			The Design Champion will not be part of the Design Review Panel but will be responsible for ensuring that recommendations from the Design Review Panel are acted upon, through incorporation within the design.					
			The Design Principles (APP-189) will be updated at Deadline 2 to incorporate this information and align the document with the updates made to the draft development consent order.					
HAP_ISH2_43 (2)	Applicant	Signpost where clawdd boundaries' habitat has been included and assessed in the ES and advise on the features considered.	Clawdd boundaries are a type of field boundary typical to North Wales and generally comprise an earth bank with a drystone wall on either side. The Volume 7, Annex 5.3: Onshore Geophysical Survey Report (APP-145) identifies a number of linear anomalies within the Mona Onshore Development Area. The report considers that the anomalies represent the possible location of historic clawdd boundaries. However, the cloddiau do not correspond with any above ground mapped historical field boundaries or any above ground boundary features in the ecology surveys and therefore, have no ecological or landscape value. Boundary features were identified during the Phase 1 habitat survey (and recorded in Volume 7, Annex 3.2: Extended Phase 1 habitat survey technical					
HAP_ISH2_45	Applicant	Applicant to consult with its Land Agent about engagement with local residents if (survey) work is being undertaken during hours of darkness.	Dalcour Maclaren, on behalf of the Applicant, will continue to engage with landowners and others with an interest in the land as well as their appointed agents regarding any surveys due to take place on their land holding(s). This will include a summary of surveys that can be expected to take place in the hours of darkness. The Applicant will also notify local communities in which the surveys are due to take place by means of an email notification sent to the relevant community council. Individual households or businesses may also request to be notified in this way and the Applicant will include them in any communications relating to upcoming surveys.					
HAP_ISH2_46	Conwy County Borough Council & Denbighshire County Council	Advise on whether they are satisfied with the Applicant's onshore ecology baseline data.	Conwy County Borough Council and Denbighshire County Council have attended a number of Onshore Ecology and Onshore and Intertidal Ornithology Expert Topic Working Group meetings where survey methodologies and baseline data collection have been discussed, see the Technical Engagement Plan [APP-041]. The Applicant continues to engage with Conwy County Borough Council and					



Ref.	Directed to	Action	Applicant's response
			Denbighshire County Council on Statements of Common Ground to reach agreement on this issue.
HAP_ISH2_47	Applicant	Applicant to review and, where necessary, amended Table 3.34 of the ES onshore ecology [APP-066] to address significance of effects and residual effects anomalies	The Applicant has reviewed Table 3.34 and Table 3.35 of Volume 3, Chapter 3: Onshore Ecology (APP-066) against the assessment of significant effects and the cumulative effects assessment. The updated tables are provided in Appendix to Response to Hearing Action Point: Onshore Ecology summary table (S_D1_5.5). This clarification has also been added to the errata (S_PD_1 F02).
HAP_ISH2_48	Applicant	Submit clarification note to differentiate between historic hedgerows and important hedgerows	The Applicant has prepared a clarification note (Appendix to Response to Hearing Action Point: Hedgerow Clarification Note S_D1_5.8) to explain how 'important' hedgerows have been defined in the Application with reference to the criteria in the Hedgerow Regulations 1997 and what is meant by 'historic' hedgerows.
HAP_ISH2_49	Applicant	Cross check between Schedule 11, Part 2 of the dDCO and ES Figures for onshore crossing schedule for hedgerows to be removed.	The Onshore Crossing Schedule (F5.4.3_Mona_ES_Onshore Crossing Schedule F02) identifies obstacles, including hedgerows, to be crossed by the onshore export cables and 400kV grid connection cables. This indicates the method by which the Applicant proposes to cross those obstacles. Crossing hedgerows using trenchless techniques does not necessarily mean that powers contained in the draft development consent order (PDA-003) (Draft DCO) (see Article 35 and Schedule 11) should not apply to those hedgerows as there may be circumstances in which removals are still required, for example in the event the haul road requires a section of hedgerow to be removed but the rest of the hedgerow will be retained in situ through the use of trenchless crossing techniques. There are also some hedgerows listed in Schedule 11 which will not appear on the Onshore Crossing Schedule for example within Mona Onshore Substation where there are no cable crossings.
			The Applicant is undertaking a review of the hedgerows described in Schedule 11 and will provide any necessary updates to the Schedule at Deadline 2.
HAP_ISH2_50	Applicant	Submit details of crossing details at wildlife corridor at Nant Fawr/Nant Ganol shown on Figure 1.14 Extended phase 1 habitat results sheet 12 [APP-122]	In accordance with the Onshore Crossing Schedule (F.5.43 F02) the watercourse and hedgerow in this area will be crossed with a trenchless technique. In order to minimise impacts, the haul road will follow the route of an existing access track to the west of the onshore cable corridor. This track will be upgraded to the same specification as the proposed onshore cable corridor haul road. The access track will be fenced using the approved demarcation fencing in accordance with the Outline Construction Fencing Plan (APP-217), topsoil will be stripped and stockpiled adjacent to the track in accordance with the Outline Soil Management Plan (APP-220), and the haul road will be constructed in line with the specification



Ref.	Directed to	Action	Applicant's response
			presented in the Outline Onshore Construction Method Statement (APP-227). The maximum design scenario assessed throughout the Environmental Statement includes the use of additional culverts, comprised appropriately sized pre-cast flume pipes, in this location for the haul road to cross over the watercourse, these would be installed in line with the methodology presented in section 1.11 of Outline Onshore Construction Method Statement (APP-227).

# A. Annexes

# A1.1 Annex1: HAP\_ISH2\_01 and HAP\_ISH2\_07

		Pre- commencement			Year 1 of construction			Year 2 of construction				Year3 of construction				Year 4 of construction				
Activity (time in brackets is time taken for completion, colouring denotes window)	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)																				
Landiall																				
Onshore Site Preparation Works Landfall trenchless install. (6 months)																				
Landfall trenchless installation (9 months)																				
Offshore																				
Site Investigation Surveys including UXO Surveys (6 months)																				
UXOClearance (3 months)																				
Seabed preparation activities (9 months)																				
Foundation installation (12 months)																				
OSP installation and commissioning (9 months)																				
Offshore export cables installation (15 months)																				
Interconnector cables installation (4 months)																				
Inter-array cables seabed preparation (3months)																				
Inter-array cables installation (12 months)																				
Wind turbine installation (9 months)																				
Wind turbine commissioning (9 months)																				
Pre-commencement activities and onshore site preparation works					1															
Construction																				





## A.1.2 Annex 2: HAP\_ISH2\_11

### A.1.2.1 Introduction

- A.1.2.1.1 This document has been prepared in response to a question raised by the Examining Authority (ExA) during Issue Specific Hearing 2 Onshore and Offshore Environmental Matters and dDCO which was held on 17 July 2024 in respect of the Mona Offshore Wind Project.
- A.1.2.1.2 The question requested further clarification on the number and type of Temporary Construction Compounds (TCC) that would be required during construction of the Mona Offshore Wind Project.

### A.1.2.2 Response

### Number and type of Construction Compounds

- A.1.2.2.1 As set out in Table 3.33 of Volume 1, Chapter 3: Project Description (APP-050) one primary Temporary Construction Compound (TCC) and up to four secondary TCCs will be needed for the construction of the onshore cable corridor of the Mona Offshore Wind Project. These TCCs are defined as follows:
  - Primary TCC means a temporary construction compound and laydown area of up to 22,500 m<sup>2</sup> used to store equipment, materials and site accommodation during the construction of the authorised development.
  - Secondary TCC means up to four temporary construction compounds and laydown areas of up to 15,000 m<sup>2</sup> used to store equipment, materials and site accommodation during the construction of the authorised development.
- A.1.2.2.2 TCCs will also be needed for the construction of the landfall and onshore substation. These TCCs are defined as:
  - Onshore Substation TCC means a temporary construction compound and laydown area of up to 150,000 m<sup>2</sup> used to store equipment, materials and site accommodation during the construction of the onshore substation.
  - Transition Joint Bay TCC means a temporary construction compound and laydown area of up to 15,000 m<sup>2</sup> used to store equipment and materials during the construction of the Transition Joint Bays for the authorised development.

#### Table A1: TCCs installed for the Mona Offshore Wind Project

Work No.	Size	TCC Category	Activities			
Work No 10	Up to 30,000 m <sup>2</sup> comprising: 15,000 m <sup>2</sup>	Secondary TCC	Temporary construction compound Temporary construction compound for			
	15,000 m²	Transition Joint Bay compound	the transition joint bays			



Work No.	Size	TCC Category	Activities
Work No.13	Up to 37,500 m <sup>2</sup> comprising: 22,500 m <sup>2</sup> 15,000 m <sup>2</sup>	One Primary TCC One Secondary TCC	Primary temporary construction compound and secondary temporary construction compound
Work No. 16	Up to 22,500 m <sup>2</sup>	Option for Primary or Secondary TCC	Primary temporary construction compound OR secondary temporary construction compound
Work No. 18	Up to 22,500 m <sup>2</sup>	Option for Primary or Secondary TCC	Primary temporary construction compound OR secondary temporary construction compound
Work No, 23 and 24	Up to 150,000 m <sup>2</sup>	Onshore substation TCC	Temporary construction compound for the onshore substation
Work No. 28	Up to 7,100 m <sup>2</sup>	Onshore substation construction access TCC	Laydown of materials, spoil storage and parking of vehicles for the construction of the Onshore Substation temporary access road

### A.1.2.3 Temporary laydown areas

A.1.2.3.1 In addition to the TCCs, a beach vehicle laydown area means a fenced area of up to 800 m<sup>2</sup> will be used to provide parking area for construction support vehicles during the installation of the offshore export cables.

 Table A2: Temporary laydown areas

Work No.	Size	Purpose
Work No 7	Up to 800 m <sup>2</sup>	Parking for construction support vehicles and emergency vehicles during the construction of the landfall

- A.1.2.3.2 The Maximum Design Scenario assessed by all environmental topics in the Environmental Statement is based on the installation of the TCCs and laydown areas described in Table A1 and Table A2. The location of these compounds is shown on Figure 3.19 of Volume 1, Chapter 3: Project Description (APP-050).
- A.1.2.3.3 The dDCO (doc ref) will be updated at Deadline 2 to include additional wording in relation to the number and type of TCCs and laydown areas explained above.

### A.1.2.4 Other clarifications

A.1.2.4.1 During Issue Specific Hearing 2, the Examining Authority also requested clarifications on the number of joint bay locations along the onshore cable corridor and if the assessment had considered the traffic movements required for the installation of the joint bays.

## Joint bay locations and cable lengths

A.1.2.4.2 Joint bays will be constructed along the onshore cable route to provide a dry environment for jointing sections of the onshore export cables together. The process of identifying the location of the joint bays and cable lengths is not set out in Volume 1, Chapter 3: Project Description (APP-050). However, as noted in the summary of Issue Specific Hearing 2, the location of the joint bays (and



the length of the cable between joint bays) will be determined during detailed design as the cable design will define the lengths of cable section between joint bays. The aim of the cable design will be to maximise the lengths of the cable and minimise the number of joints and associated joint bays. This process will be informed by multiple factors including overall transmission system electrical design, limitations on cable drum sizes due to transport and weight, cable pulling loads (which increase with cable length), horizontal alignment of the cable duct system and the physical aspects of the site (i.e. locating joint bays close to field boundaries, away from watercourses and close to operational access locations).

A.1.2.4.3 The dimensions of the joint bays and parameters for the distance between joint bays (minimum distance 750 m and maximum distance 1,750 m) are set out in Volume 1, Chapter 3: Project Description (APP-050). The minimum distance between each joint bay represents the maximum design scenario for each environmental topic in the Environmental Statement as it results in the greatest number of joint bays and land take required. The maximum number of joint bays that has been assessed in the Environmental Statement is 80: this is based on a joint bay every 750 m on each of the four cable circuits.

### Joint bay laydown areas and haul road

- A.1.2.4.4 Joint bay laydown areas will be required during construction within the onshore cable corridor to support the pulling of cables between the joint bays by providing temporary areas for cable drum vehicles. These laydown areas will be located alongside the joint bays and will be required for the duration of the cable pulling activity.
- A.1.2.4.5 The joint bay laydown areas will be constructed using stone and matting following similar principles to the onshore cable corridor haul road within the onshore cable corridor. Assumptions have been made on the volume of stone required for the construction of the onshore cable corridor haul road based on the length and width of the onshore cable corridor haul road and the depth of stone. These assumptions are set out in the table entitled 'Construction vehicle movements by cable route section' within Appendix A of Volume 7, Annex 8.5: Construction Vehicle Trip Generation Assumptions (APP-175) and have been used to calculate the peak daily construction traffic generation numbers. The construction of the joint bay laydown areas is not identified as a separate construction activity for the purpose of calculating those numbers, however a contingency has been included for miscellaneous activities that will cover the construction of the joint bay laydown areas (see Total vehicle movement requirements HGV sheet of Volume 7, Annex 8.5: Construction Vehicle Trip Generation Assumptions (APP-175).
- A.1.2.4.6 Therefore, the peak daily traffic generation and traffic assessment have taken account of the construction of the joint bay laydown areas and onshore cable corridor haul road.



## A.1.3 Annex 3: HAP\_ISH2\_12

