

# MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

## Applicant's Response to additional IPs response to Examining Authority's Written Questions (ExAQ1)

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Image of an offshore wind farm

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### Glossary

Term	Meaning
Applicant	Morgan Offshore Wind Limited.
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 Morgan Offshore Wind Project.
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.
Morgan Array Area	The area within which the wind turbines, foundations, inter-array cables, interconnector cables, offshore export cables and offshore substation platforms (OSPs) forming part of the Morgan Offshore Wind Project will be located.
Morgan Offshore Wind Project: Generation Assets	This is the name given to the Morgan Generation Assets project as a whole (includes all infrastructure and activities associated with the project construction, operations and maintenance, and decommissioning).
Wind turbines	The wind turbine generators, including the tower, nacelle and rotor.

### Acronyms

Acronym	Description
CBRA	Cable Burial Risk Assessment
CMS	Construction Method Statement
CSIP	Cable Specification and Installation Plan
DCO	Development Consent Order
ExA	Examining Authority
MMO	Marine Management Organisation
OFLCP	Outline Fisheries Liaison Coexistence Plan
SFF	Scottish Fishermen's Federation
SMZ	Scallop Mitigation Zone
SoCG	Statement of Common Ground
UKHO	United Kingdom Hydrographic Office
VMS	Vessel Monitoring System
WCSP	West Coast Sea Products

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### Units

Unit	Description
m	Metre
km <sup>2</sup>	Kilometres squared
%	Percentage

# **1 Applicant's response to Examining Authority's Written Questions (ExAQ1)**

## **1.1 Introduction**

1.1.1.1 Following Deadline 4, Morgan Offshore Wind Limited (the Applicant), has taken the opportunity to review each of the Examining Authority's Written Questions (ExAQ1).

1.1.1.2 Details of the Applicant's response to each of the Examining Authority's Written Questions (ExAQ1) are set out in the subsequent sections of this document

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**1.2 Applicant’s responses to IP response to written Questions (ExQ1)**

**1.2.1 Scottish Fishermen’s Federation and West Cost Sea Products Ltd**

**Table 1.1: REP4-050: Response to Scottish Fishermen’s Federation and West Cost Sea Products Ltd ExAQ1 response.**

Reference	Question is addressed to	ExA Question	Scottish Fishermen’s Federation Response	Applicant’s response
REP4-050.1	West Coast Sea Products	<p>Section I SFF and WCSP responses to Examining Authority Questions ExQ1_CF Commercial Fisheries</p> <p>1. CF 1.2_ To: West Coast Sea Products Q &amp;A “Assessment of effects on the Queen Scallop Fishery:</p> <p>In [REP1-065] West Coast Sea Products (WCSP) maintains the adverse effect of the Proposed Development on the Queen Scallop Fishery as Moderate to Major for several receptors. Please could WCSP confirm:</p> <p>i) Whether this magnitude of effect applies to the Proposed</p>	<p>West Coast Sea Products’ Answer:</p> <p>The major assessment by WCSP relates to Morgan since as developer says themselves will have a 5-10% impact. The major assessment also relates to both Mona and Morgan in operation with a significant spatial squeeze having been introduced.</p>	<p>Noting that the Scottish Fishermen's Federation (SFF)/ West Coast Sea Products Ltd (WCSP) response makes reference to the 5-10% impact magnitude, the initial part of this response focusses on impacts assessed within Volume 2, Chapter 6: Commercial fisheries (APP-024). This is due to the fact that this is the chapter that used % reductions in value of landings as a definition of impact magnitude. More specifically, this response focuses on the ‘Loss or reduced access to fishing grounds’, impact, as this is the key impact within the commercial fisheries assessment.</p> <p>The Applicant recognises the concerns raised by the SFF/WCSP. As previously discussed, the basis of the assessment conclusion (Minor Adverse), is that the proposed mitigation measures will enable continued access to the majority of the Morgan Array Area. The Applicant is confident that these measures will provide access to the Array Area for all fishing vessels, resulting in only a low level (magnitude) of impact. However, in recognition of the fact that these measures are novel and untested for this receptor and target species, the Applicant has committed to annual review of landings and activity data in order to identify any notable reductions in value of landings within the Outline Fisheries and Liaison Co-Existence Plan (OFLCP (S_D5_13).</p> <p>Monitoring of scallop from an ecological perspective will also be undertaken (Commitments Register (S_D5_14) reference number: Co91).</p> <p>It is important to note, as outlined in Annex 5.3 to the Applicant’s Response to ExAQ2 CF 2.1 (S_D5_5.3), if adaptive monitoring provides compelling evidence that the long-term effects on scallop are significantly greater than predicted in the Environmental Statement, and these effects are unique to the Morgan Generation Assets, the Applicant will engage with the Marine Management Organisation (MMO) and relevant fisheries stakeholders to discuss further adaptive management.</p>

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Reference	Question is addressed to	ExA Question	Scottish Fishermen's Federation Response	Applicant's response
		Development alone or to cumulative effects.		
REP4-050.2	West Coast Sea Products	ii) What a 5 to 10% loss of landings revenue would represent in terms of percentage loss of after-tax earnings for the fishery as a whole.	West Coast Sea Products' Answer: The volume of landings and revenue are relative to one another. I.e. a 5-10% loss in lost landings shall mean a 5-10% in after tax earnings both for catching value, catcher earnings, processing turnover, employee earnings.	The Applicant notes this comment is directed to WCSP, and has nothing further to add at this deadline.
REP4-050.3	West Coast Sea Products	iii) How the 2023 vessel monitoring system data for the Proposed Development's sea area compares with the equivalent data for 2018	West Coast Sea Products' Answer: Please see the following plotter data screenshots: Figure 1: WCSP Queen Scallop Vessel Monitoring System (VMS) data for 2 Vessels 2018 Figure 2: WCSP Queen Scallop MVS data for 2 Vessels 2023	The Applicant acknowledges the plotter data provided by the SFF/WCSP in their response and notes that the 2023 queen scallop plotter data was presented by WCSP in REP1-065.4 and REP1-065.5 of REP2-005. The Applicant has already addressed the conclusions regarding the spatial extent of current queen scallop fishing based on the 2023 data and concurs with the observation depicted in WCSP's plotter data that the western part of the Morgan Array Area is an important fishing ground for queen and king scallops for vessels using dredges.  With reference to the observed spatial distribution of activity based on the 2018 and 2023 queen scallop plotter data provided, the Applicant notes that both figures support the conclusion that the western part of the Morgan Array Area is an important fishing ground for queen scallop. Additionally, the plotter data highlights that queen scallop fishing activity is also observed outside the Morgan Array Area. The observations depicted in the plotted figures provided by the SFF are consistent with the findings presented in Volume 4, Annex 6.1: Commercial Fisheries Technical Report (APP-059) for vessels utilising dredges.
REP4-050.4	West Coast Sea Products	iv) The number of vessels fishing simultaneously in the area of the Scallop Mitigation Zone (SMZ) of the	West Coast Sea Products' Answer: The volume of landings and revenue are relative to one another. I.e. a 5-10% loss in lost landings shall mean a 5-10% in after tax earnings both for	The Applicant notes this response from SFF/WCSP is duplicated and was provided for REP4-050.2 and assumes the response to REP4-050.4 has been provided by SFF/WCSP in REP4-050.5 below.



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Reference	Question is addressed to	ExA Question	Scottish Fishermen's Federation Response	Applicant's response
		Proposed Development during peak Queen Scallop fishing periods over the last 5 years.	catching value, catcher earnings, processing turnover, and employee earnings.	
REP4-050.5	West Coast Sea Products	v) The proportion of Queen Scallop spawning and nursery ground in geographic Europe which is overlapped by the Morgan and Mona proposed developments individually and cumulatively.	West Coast Sea Products' Answer: When yields are at their optimum during peak of the season there are usually 1-2 vessels operating within the proposal area of Morgan. If weather is poor, e.g. southwesterlies, then they shall fish in better shelter northeast of Anglesey, Liverpool Bay or south of Kirkcudbright closer to land.	The Applicant acknowledges the response and notes that the observations provided by the SFF/ WCSP with regard to the number of fishing vessels within the proposed SMZ (REP4-050.4) are consistent with the findings presented in Volume 4, Annex 6.1: Commercial fisheries technical report (APP-059).  The Applicant refers the SFF, WCSP and ExA to 'S D4 6.2 - Annex 6.2 to the Applicant's response to Written Representations from MMO at Deadline 3: Queen Scallop' (REP4-011), where the Applicant has identified the queen scallop fishing grounds throughout the Irish Sea, which supports WCSP response that fishing takes place elsewhere in the Irish Sea.
REP4-050.6	West Coast Sea Products	vi) Whether scallop dredging gear can be deployed reasonably efficiently so as to avoid intermittent cable protection (where plotted on charts made available to the fishing fleet)."	West Coast Sea Products answer: This question would be better directed at the scientific community if they hold this data, as it is a data poor fishery.	The Applicant acknowledges the response and refers the SFF, WCSP and ExA to the Applicant's response provided in REP4-050.7 regarding deployment of dredging gear.  The Applicant notes that this response from SFF/WCSP aligns with the ExA Question for REP4-050.5.
REP4-050.7	West Coast Sea Products	vii) Whether scallop dredging gear can be deployed reasonably efficiently so as to avoid intermittent	West Coast Sea Products answer: This depends on how comprehensive the data is available to fishermen; if full information is given from cable/asset owners then skippers of vessels can lift and deploy fishing gear to avoid. The	The Applicant acknowledges the SFF/WCSP position that, if comprehensive and accurate information regarding location of cable and associated protection is provided, skippers of scallop dredging vessels can efficiently adjust their operations to avoid areas of intermittent cable protection.  It is firstly important to highlight that as described within Volume 1, Chapter 3: Project description (APP-010) and noted within REP1-059.27 of REP2-005, all

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Reference	Question is addressed to	ExA Question	Scottish Fishermen's Federation Response	Applicant's response
		<p>cable protection (where plotted on charts made available to the fishing fleet)."</p>	<p>current experience of the Scallop fishing industry operating inside offshore windfarms and adjacent to telecom/power cables is that the information is data poor in terms of cable exposure and protection.</p>	<p>subsea cables will be buried below the seabed wherever possible. Where adequate burial is not achievable, cables will be protected with a hard-protective layer (such as rock or concrete mattresses).</p> <p>To ensure navigational safety and minimise risk of gear snagging, the Applicant has committed to developing and adhering to a cable specification and installation plan (CSIP) (in line with consent conditions) prior to installation of the Morgan Generation Assets within the OFLCP (REP4-021). An Outline of the CSIP was submitted at Deadline 4 (REP4-032). This will include a detailed cable laying plan, including geotechnical data, cable laying techniques, cable protection and monitoring of cables. The plan will be informed by a Cable Burial Risk Assessment (CBRA), which will include details on minimum target burial depths and take account of potential seabed change where possible.</p> <p>As committed to by the Applicant within the OFLCP (REP4-021), the coordinates of 'as-laid' cables and cable protection locations will be recorded and submitted to the UK Hydrographic Office (UKHO) and the KIS-ORCA service. These locations will also be marked on Admiralty Charts and fishermen's awareness charts, available in paper, electronic, and plotter formats. The Applicant is fully intending to provide comprehensive and accurate information regarding the location of cables and associated protection to fisheries stakeholders, once the final design plan is approved by the MMO.</p> <p>The Applicant acknowledges the comment regarding the challenges experienced by other UK offshore wind farm projects concerning cable burial reliability. However, it should be noted that the Applicant has proactively anticipated and accounted for potential reburial events within the Project Design Envelope. This is reflected in the draft Development Consent Order (DCO), ensuring that remedial actions can be taken if cable exposures occur.</p> <p>The Applicant is also committed to monitoring of cables and their burial status, as outlined in the Offshore Construction Management Plan (CMS), of which an Outline plan was submitted at Deadline 4 (REP4-032). Notifications regarding cable exposures on or above the seabed will be distributed to regional fisheries contacts within three days, while notifications of damage to the Morgan Generation Assets will be issued within 24 hours.</p> <p>Furthermore, within the OFLCP (REP4-021), the Applicant has committed to deploying regional guard vessels, where necessary, in the event of cable</p>

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Reference	Question is addressed to	ExA Question	Scottish Fishermen's Federation Response	Applicant's response
REP4-050.8	Scottish Fishermen's Federation	CF 1.3 Impact on pelagic fisheries: Please explain why you state in [REP1-059] that pelagic vessels cannot operate within the Proposed Development array area; and to what extent specific data on loss of earnings from precedent fisheries can be made available and calibrated to be relevant to this Proposed Development.	2. CF 1.3 A. Scottish Fishermen's Federation's answer: The pelagic vessels cannot operate within Proposed Development array area for the following reasons: <ul style="list-style-type: none"> <li>• method of pelagic fishery (the pelagic vessels needs to chase a shoal of fish requiring manoeuvring for a long time until fish are caught by the net. This is not practical within windfarm with 1400 m spacing)</li> <li>• the size of the pelagic nets (e.g. a pelagic trawl can be around 200 metres wide and 150 m deep)</li> <li>• Size of pelagic vessels (modern pelagic vessels are 70 m+ long)</li> <li>• for the purse seine pelagic net, the drifting nature of pelagic vessels while taking fish on board from the net.</li> </ul> Please refer to below a description of three types of pelagic fishing gears for further information (Source, Seafish: Basic Fishing Methods).	exposures. This measure aims to ensure navigational safety and mitigate the risk of gear snagging until the exposed cables are appropriately addressed.  The Applicant disagrees with the SFF's view that pelagic vessels cannot operate within the Morgan Array Area. This matter was previously raised by the SFF in REP1-059.14 of REP2-005, to which the Applicant has already provided a detailed response. The Applicant refers the SFF and the ExA to that response for further information.  In respect of comments made by SFF regarding pelagic vessels, the Applicant can confirm that the methodologies raised are known and are considered within Volume 6, Annex 6.1: Commercial fisheries technical report (APP-059) and Volume 2, Chapter 6: Commercial fisheries (APP-024).  The spatial distribution of herring fishing activity, as derived from Vessel Monitoring System (VMS) data and supported by feedback from project-specific consultations and other sources (e.g. observations from Offshore Fisheries Liaison Officers and Marine Traffic Survey data), is presented in Volume 4, Annex 6.1: Commercial fisheries technical report (APP-059). This analysis indicates that only a relatively small northwest section of the Morgan Array Area overlaps with pelagic herring fishing activity.  Moreover, all available data confirms that there is no substantial pelagic fishery overlapping with the Morgan Array Area. The vast majority of herring fishing activity is concentrated outside of the Morgan Array Area, particularly within Isle of Man waters and the Douglas Bank herring fishery.
REP4-050.9	Scottish Fishermen's Federation	CF 1.3 (as above)	1. Pelagic Trawl (Mid-water single trawl) The trawl is spread horizontally by a set of pelagic trawl doors. The horizontal opening is dictated by a clump weight on the lower wing ends of the net and	The Applicant acknowledges the response and refers the SFF and ExA to the Applicant's response provided in REP4-050.8.

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Reference	Question is addressed to	ExA Question	Scottish Fishermen's Federation Response	Applicant's response
			<p>the rigging of the bridles between the net and trawl doors. By altering the vessel speed and/or changing the length of trawl warp between the vessel and the trawl doors, the position of the net in the water column can be altered to suit the depth where the shoal of fish are swimming at. The nets can be very large as big as 200 m wide and 150 m deep but the mesh size in the mouth of the trawl are huge sometimes as big as 50 m long.</p>	
REP4-050.10	Scottish Fishermen's Federation	CF 1.3 (as above)	<p>2. Pelagic Pair Trawl (Mid-Water Pair Trawl) This fishing method describes a trawl towed in mid-water between two vessels to target pelagic fish. The height of the net in the water column can be changed by altering vessel speed and length of wire out. The nets can be very large as big as 240 m wide and 160 m deep but the mesh size in the mouth of the trawl are huge sometimes as big as 50 m long.</p>	The Applicant acknowledges the response and refers the SFF and ExA to the Applicant's response provided in REP4-050.8.
REP4-050.11	Scottish Fishermen's Federation	CF 1.3 (as above)	<p>3. Purse Seine (ring net) A purse seine is a large net used to surround a shoal of pelagic fish. Once shot, the bottom of the net is drawn together by hauling in a long wire called the 'purse line' to form a huge cup shape of netting just below the surface of the water with the targeting fish inside. The net is gradually hauled onboard the vessel and the catch taken onboard the vessel.</p>	The Applicant acknowledges the response and refers the SFF and ExA to the Applicant's response provided in REP4-050.8.

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Reference	Question is addressed to	ExA Question	Scottish Fishermen's Federation Response	Applicant's response
REP4-050.12	West Coast Sea Products or Scottish Fishermen's Federation	CF 1.4 Context for Queen Scallop plotter data: West Coast Sea Products are asked to submit a figure illustrating Queen Scallop fishery plotter data giving context in relation to the whole of the Proposed Development and information on dates, period, and numbers of vessels.	3. CF 1.4 West Coast Sea Products' Answer: Please see the following screenshot – not the most up-to-date footprint for some of these but gives the general Queen Scallop plotter data for Queen Scallop fishermen. Figure 4: BA4 2015-2021_Queen Scallop fishing Morgan	The Applicant notes that the figure provided by the SFF/WCSP supports the conclusion that the western part of the Morgan Array Area is an important fishing ground for queen scallop. Additionally, queen scallop fishing activity is observed outside the Morgan Array Area. The Applicant can confirm that the observations depicted in the figure provided by the SFF/WCSP are consistent with findings presented in Volume 4, Annex 6.1: Commercial fisheries technical report (APP-059) for vessels utilising dredges.
REP4-050.13	West Coast Sea Products Scottish Fishermen's Federation Isle of Man Government Territorial Seas Committee	CF 1.5 Applicant's Response to REP1-059 regarding fishing through the SMZ: Confirm if you are satisfied with the Applicant's Responses in [REP2-005], specifically to [REP1-059.4], [REP1-059.6], [REP1-059.11], REP1-059.14 and REP1-059.27 (and any other subsections upon which you may wish to comment)	4. CF 1.5 West Coast Sea Products and SFF's answer: The Scottish Fishermen's Federation and West Coast Sea Products are not satisfied with the Applicant's Response in [REP2-005] regarding Queen Scallop fishery, the SMZ and inter-array cabling; for the following reasons.	The Applicant has responded to specific points raised by WCSP/SFF in REP4-050.14 to REP4-050.18.

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Reference	Question is addressed to	ExA Question	Scottish Fishermen's Federation Response	Applicant's response
		regarding Queen Scallop fishery, the SMZ and inter-array cabling; and if not, clarify why not, point-by-point and supported by evidence where possible.		
REP4-050.14	West Coast Sea Products Scottish Fishermen's Federation Isle of Man Government Territorial Seas Committee	Are West Coast Sea Products and SFF satisfied with the Applicant's Responses in REP1-059.4?	<p>Answer: NO.</p> <p>The Applicant's argument for publicly available data is irrelevant. SFF &amp; member WCSP have made their assessment of perceived impact on recent fishing data which is relevant to them as an affected stakeholder of the development. The argument by WCSP is that over 50% of Queen Scallop fishing will be in the vicinity of OWF infrastructure which was previously untouched prior to the potential of Mona and Morgan OWF. SFF/WCSP acknowledge that there will be over a 50% increase in skippers having to fish in relation to neighbouring OWF infrastructure which may or may not have an effect on the habitat.</p>	<p>The Applicant acknowledges the key point raised by the SFF/WCSP regarding the uncertainty of the potential effects, stating that "it may or may not have an effect." While the Applicant is confident in its assessment of the impacts on the scallop fishery, in order to contribute to the evidence base for commercial fishing activity and offshore wind, the OFLCP (REP4-021) includes the commitment to undertake monitoring of VMS, inshore VMS (i-VMS) and landings data from the commercial fisheries study area annually for the first five years of the operations and maintenance phase. The exact specification of this monitoring will be specified within the final FLCP, which will be developed via further consultation with commercial fisheries stakeholders. It is expected that specific details of objectives; review cycles and potential to amend the monitoring, will be developed via these discussions. The Applicant has committed to undertaking this monitoring within the OFLCP (REP4-021), with which the final FLCP must accord.</p> <p>As detailed in row REP4-050.1 above, the Applicant recognises the concerns raised by the SFF. The basis of the assessment conclusion (Minor Adverse) is that the proposed mitigation measures will enable continued access to the majority of the Morgan Array Area. The Applicant is confident that these measures will provide access to the Array Area for all fishing vessels, resulting in only a low level (magnitude) of impact. However, in recognition of the fact that these measures are novel and untested for this receptor and target species, the Applicant has committed to annual review of landings and activity data in order to identify any notable reductions in value of landings within the OFLCP (S_D5_13).</p>
REP4-050.15	West Coast Sea Products Scottish	Are West Coast Sea Products and SFF satisfied with the	<p>Answer: NO.</p> <p>It is more reassuring that the Applicant has noted there will only be a single</p>	<p>The Applicant acknowledges the SFF/WCSP's query regarding the potential for cable exposure and refers to its detailed response in REP4-050.7, noting that the CBRA will be a post-consent document. The relevant commitments in</p>

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	Fishermen's Federation Isle of Man Government Territorial Seas Committee	Applicant's Responses in REP1-059.6?	<p>row of turbines. The response by the Applicant however does not address the perimeter concerns and speaks of other irrelevant details we already agree with (i.e. 1400 m spacing). We cannot support the principle of the SMZ on the basis of it being bound by turbines with no guarantee of burial. Our view may be lessened in terms of impact if we knew the CBRA which is not publicly available, therefore with the expectation of minimal burial with high exposure likelihood at a highly dynamic seabed environment we anticipate a high level of impact.</p>	<p>the OFLCP have been updated to allow for consideration of seabed level change in relation to cable burial and protection, where possible.</p> <p>The Applicant acknowledges the SFF/WCSP's reassurance regarding the placement of a single row of turbines along the perimeter of the SMZ. As noted in REP1-059.6 of REP2-005, the Applicant has stated that, should the final array layout require turbines around the perimeter of the SMZ, only a single row of turbines would be placed along this boundary, spaced a minimum of 1,400 m apart, subject to micro-siting and in line with the layout principles.</p> <p>Furthermore, the Applicant is cognisant of the request from fisheries and the MMO to formalise the SMZ. Therefore, the Applicant has updated the OFLCP (at Deadline 5 Reference S_D5_13) to reflect the two potential design scenarios with regard to the SMZ.</p> <p>In a final design scenario where the wind farm has perimeter turbines in the western part of the Array, the area of the SMZ will be 34 km<sup>2</sup>. In a final design scenario where there are no perimeter turbines, the SMZ will be 37 km<sup>2</sup>.</p> <p>The Applicant has made clear (see REP4-006) that it is not able to be more definitive at this stage with regard to the final scheme design as it will be dependent upon the outcome of the pre-construction detailed Site Investigation works and also the project key component selection and procurement processes. The Applicant notes this design envelope approach is entirely in keeping with standard industry practice.</p> <p>The Applicant considers the 1,400 m spacing between wind turbines is relevant in this context, as this spacing is deemed sufficient to allow fishing vessels to access the SMZ (in the event that there are perimeter turbines) and carry out fishing activities effectively.</p> <p>Furthermore, the Applicant notes that scallop fishing has resumed within the Moray East Offshore Wind Farm, where turbines are spaced 1,128 m apart along the north-south axis and 1,547 m apart along the east-west axis, without the need for a dedicated SMZ. This demonstrates that appropriate spacing can facilitate continued fishing activity in areas within offshore wind farms.</p>
REP4-050.16	West Coast Sea Products Scottish Fishermen's	Are West Coast Sea Products and SFF satisfied with the Applicant's	<p>Answer: NO.</p> <p>SFF note the Applicant's statement that whilst the construction phase of both the Morgan and Mona projects may</p>	<p>The Applicant acknowledges the SFF's concerns regarding potential impacts during the construction phase, particularly the experience shared about cable burial and rock protection challenges leading to reduced fishing effort in other developments. However, the Applicant reiterates its commitment to ensuring</p>

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	Federation Isle of Man Government Territorial Seas Committee	Responses in REP1-059.11?	<p>take up to 4 years, the Applicant has committed to not closing either of the Array areas during construction, therefore enabling fishing activity to continue, in/around any relevant safety zones and/or voluntary exclusion zones.</p> <p>However, the SFF's comment here is based on the experience from other developers that had problem with cable burial and rock protection which resulted in over reduction of effort and annual grossing by 53% in the Array area. Therefore, we have proposed that the magnitude of impact on the receptor should be escalated for the construction phase from low to medium since there is possibility of further delay in cable burial and protection timeframe the exclude fishers from the fishing grounds. The SFF realise that, in practice, none of the developers has totally closed the array area during the construction to the fishers.</p> <p>In addition, the Applicant acknowledges that the cumulative assessment has concluded that there will not be a reduction of more than 10% of the annual value of landings, due to the temporary and intermittent nature of the works and the likelihood that there will be rolling safety zones during the construction phases of these wind farms. The SFF is of the view the 10% reduction in a fishing business landing/revenue is massive and the magnitude therefore on the receptor should be escalated for the</p>	<p>that the Morgan Array Area remains accessible to fishing activity throughout the construction, operations and maintenance phases, except in localised areas subject to safety zones or voluntary exclusion zones.</p> <p>The Applicant maintains that the magnitude of impact during the construction phase has been appropriately assessed as low, reflecting the limited spatial and temporal nature of exclusions and the continued access to fishing grounds.</p>



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REP4-050.17	West Coast Sea Products Scottish Fishermen's Federation Isle of Man Government Territorial Seas Committee	Are SFF satisfied with the Applicant's Responses in REP1-59.14?	<p>construction phase from low to medium.</p> <p>Answer: NO. Please refer to the SFF's response to ExA Question to SFF (CF 1.3_To: Scottish Fishermen's Federation). To reiterate SFF's concern, the pelagic vessels cannot operate within Proposed Development array area for the following reasons:</p> <ul style="list-style-type: none"> <li>• Method of pelagic fishery (the pelagic vessels needs to chase a shoal of fish requiring manoeuvring for a long time until fish are caught by the net. This is not practical within windfarm with 1400 m spacing)</li> <li>• The size of the pelagic nets (e.g. a pelagic trawl can be around 200 m wide and 150 m deep)</li> <li>• Size of pelagic vessels (modern pelagic vessels are 70 m+ long)</li> <li>• For the purse seine pelagic net, the drifting nature of pelagic vessels while taking fish on board from the net.</li> </ul> <p>As the Applicant accepts the existence pelagic fisher within the array area supported by the following screenshot of pelagic fishery plotter data; therefore, we have proposed that the magnitude of impact to be raised from negligible to high. (see figure).</p>	The Applicant notes that this comment directly relates to REP4-050.8 and refers to its response in that section for further details.

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Reference	Question is addressed to	ExA Question	Scottish Fishermen's Federation Response	Applicant's response
REP4-050.18	West Coast Sea Products Scottish Fishermen's Federation Isle of Man Government Territorial Seas Committee	Are West Coast Sea Products and SFF satisfied with the Applicant's Responses in REP1-059.27?	Answer: NO. The Applicant again relies upon the CBRA and really does not address our concern.	The Applicant notes that this section is relevant to cable burial and potential for cable exposure. The Applicant acknowledges the SFF/WCSP's position regarding this and refers to its detailed response in REP4-050.7, where this issue is discussed in detail.
REP4-050.19			f. Other subsections The SFF, in terms of other subsections, still reiterate concerns raised in our initial comments to Morgan OWF license application in relation to Fisheries Liaisons and Co-existence Plan (FLCP) mitigation measures (e.g. use of turbine at western corner of SMZ perimeter, extension of inter-array cable through SMZ and possibility of cable protection). SFF reiterate that we are still not satisfied with the Applicant's response in relation to the developments impact on Queen Scallops and herring larvae and excluding Queen Scallop from Underwater Noise Control Strategy. We are of the view that Mona and Morgan are the first windfarms that are being built on Queen Scallop fishing grounds and therefore there is significant lack of science re OWF impacts on Queen Scallop. It should also be noted that the Applicant has referred numerous times to Statement of Comment Ground (SoCG) with fishing industry. However, the main points which are important to	The Applicant thanks the SFF/WCSP for their comments and notes that all specific queries and concerns raised have been addressed in detail by the Applicant.

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Reference	Question is addressed to	ExA Question	Scottish Fishermen's Federation Response	Applicant's response
			<p>fishing industry e.g. mitigation measures (SMZ), and routine monitoring (every 5 years) have not been agreed and are still 'ongoing points for discussion'. Regarding suitability of the Development Array Area for spawning of herring we would like to refer it to the Frost and Diele paper (Essential spawning grounds of Scottish herring: current knowledge and future challenges - Figure 3 below). (see Fig 3.)</p>	

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**1.2.2 West Coast Sea Products Ltd**

**Table 1.2: REP4-052: Response to West Coast Sea Products Ltd ExAQ1 response.**

Reference	Question is addressed to	ExA Question	West Coast Sea Products Response	Applicant's response
REP4-052.1	West Coast Sea Products	<p><b>CF 1.2</b> Assessment of effects on the Queen Scallop Fishery: In [REP1-065] West Coast Sea Products (WCSP) maintains the adverse effect of the Proposed Development on the Queen Scallop Fishery as Moderate to Major for several receptors. Please could WCSP confirm:</p> <p>i) Whether this magnitude of effect applies to the Proposed Development alone or to cumulative effects.</p>	<p><b>CF 1.2</b> 1. The major assessment by WCSP relates to Morgan since as developer says themselves will have a 5-10% impact. The major assessment also relates to both Mona and Morgan in operation with a significant spatial squeeze having been introduced.</p>	<p>Noting that the West Coast Sea Products Ltd (WCSP) /Scottish Fishermen's Federation (SFF) response makes reference to the 5-10% impact magnitude, the initial part of this response focusses on impacts assessed within Volume 2, Chapter 6: Commercial fisheries (APP-024). This is due to the fact that this is the chapter that used % reductions in value of landings as a definition of impact magnitude. More specifically, this response focuses on the "Loss or reduced access to fishing grounds", impact, as this is the key impact within the commercial fisheries assessment.</p> <p>The Applicant recognises the concerns raised by the SFF. As previously discussed, the basis of our assessment conclusion (Minor Adverse), is that the proposed mitigation measures will enable continued access to the majority of the Morgan Array Area. The Applicant is confident that these measures will provide access to the Array Area for all fishing vessels, resulting in only a low level (magnitude) of impact. However, in recognition of the fact that these measures are novel and untested for this receptor and target species, the Applicant has committed to annual review of landings and activity data in order to identify any notable reductions in value of landings within the Outline Fisheries and Liaison Co-Existence Plan (OFLCP (S_D5_13).</p>

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Reference	Question is addressed to	ExA Question	West Coast Sea Products Response	Applicant's response
				<p>Monitoring of scallops from an ecological perspective will also be undertaken (Commitment Register reference number: Co91).</p> <p>It is important to note, as outlined in Annex 5.3 to the Applicant's Response to ExAQ2 CF 2.1 (S_D5_5.3), if adaptive monitoring provides compelling evidence that the long-term effects on scallop are significantly greater than predicted in the ES, and these effects are unique to the Morgan Generation Assets, the Applicant will engage with the Marine Management Organisation (MMO) and relevant fisheries stakeholders to discuss further adaptive management</p>
REP4-052.2	West Coast Sea Products	ii) What a 5 to 10% loss of landings revenue would represent in terms of percentage loss of after-tax earnings for the fishery as a whole.	2. The volume of landings and revenue are relative to one another. I.e. a 5-10% loss in lost landings shall mean a 5-10% in after tax earnings both for catching value, catcher earnings, processing turnover, employee earnings.	The Applicant notes this comment is directed to WCSP, and has nothing further to add at this deadline.
REP4-052.3	West Coast Sea Products	iii) How the 2023 vessel monitoring system data for the Proposed Development's sea area compares with the equivalent data for 2018.	3. Please see attached	The Applicant acknowledges the plotter data provided by the SFF/WCSP in their response and notes that the 2023 queen scallop plotter data was presented by WCSP in REP1-065.4 and REP1-065.5 of REP2-005. The Applicant has already addressed the conclusions regarding the spatial extent of current queen scallop fishing based on the 2023 data and concurs with the observation depicted in WCSP's plotter data that the western part of the Morgan Array Area is an important fishing ground for queen and king scallops for vessels using dredges.

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Reference	Question is addressed to	ExA Question	West Coast Sea Products Response	Applicant's response
				<p>With reference to the observed spatial distribution of activity based on the 2018 and 2023 queen scallop plotter data provided, the Applicant notes that both figures support the conclusion that the western part of the Morgan Array Area is an important fishing ground for queen scallop. Additionally, the plotter data highlights that queen scallop fishing activity is also observed outside the Morgan Array Area. The observations depicted in the plotted figures provided by the SFF are consistent with the findings presented in Volume 4, Annex 6.1: Commercial Fisheries Technical Report (APP-059) for vessels utilising dredges.</p>
REP4-052.4	West Coast Sea Products	iv) The number of vessels fishing simultaneously in the area of the Scallop Mitigation Zone (SMZ) of the Proposed Development during peak Queen Scallop fishing periods over the last 5 years.	4. When yields are at their optimum during peak of the season there are usually 1-2 vessels operating within the proposal area of Morgan. If weather is poor, e.g. southwesterlies, then they shall fish in better shelter northeast of Anglesey, Liverpool Bay or south of Kirkcudbright closer to land.	<p>The Applicant acknowledges the response and notes that the observations provided by the WCSP are consistent with the findings presented in Volume 4, Annex 6.1: Commercial Fisheries Technical Report (APP-059).</p> <p>The Applicant refers the SFF, WCSP and ExA to 'S D4 6.2 - Annex 6.2 to the Applicant's response to Written Representations from MMO at Deadline 3: Queen Scallop' (REP4-011), where the Applicant has identified the queen scallop fishing grounds throughout the Irish Sea, which supports WCSP response that fishing takes place elsewhere in the Irish Sea.</p>
REP4- 052.5	West Coast Sea Products	v) The proportion of Queen Scallop spawning and nursery ground in geographic Europe which is overlapped by the Morgan and Mona proposed developments individually and cumulatively	5. This question would be better directed at the scientific community if they hold this data, as it is a data poor fishery.	<p>The Applicant refers WSCP and the ExA to S_D4 6.2 - Annex 6.2 to the Applicant's response to Written Representations from MMO at Deadline 3: Queen Scallop (REP4-011), where the Applicant has identified the queen scallop fishing grounds throughout the Irish Sea.</p>

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Reference	Question is addressed to	ExA Question	West Coast Sea Products Response	Applicant's response
REP4-052.6	West Coast Sea Products	vi) Whether scallop dredging gear can be deployed reasonably efficiently so as to avoid intermittent cable protection (where plotted on charts made available to the fishing fleet)."	<p>6. This depends on how comprehensive the data is available to fishermen; if full information is given from cable/asset owners then skippers of vessels can lift and deploy fishing gear to avoid. The current experience of the Scallop fishing industry operating inside offshore windfarms and adjacent to telecom/power cables is that the information is data poor in terms of cable exposure and protection.</p>	<p>The Applicant acknowledges the SFF/WCSP position that, if comprehensive and accurate information regarding location of cable and associated protection is provided, skippers of scallop dredging vessels can efficiently adjust their operations to avoid areas of intermittent cable protection.</p> <p>It is firstly important to highlight that as described within Volume 1, Chapter 3: Project Description (APP-010) and noted within REP1-059.27 of REP2-005, all subsea cables will be buried below the seabed wherever possible. Where adequate burial is not achievable, cables will be protected with a hard-protective layer (such as rock or concrete mattresses).</p> <p>To ensure navigational safety and minimise risk of gear snagging, the Applicant has committed to developing and adhering to a cable specification and installation plan (CSIP) (in line with consent conditions) prior to installation of the Morgan Generation Assets within the OFLCP (REP4-021). An Outline of the CSIP was submitted at Deadline 4 (REP4-032). This will include a detailed cable laying plan, including geotechnical data, cable laying techniques, cable protection and monitoring of cables. The plan will be informed by a Cable Burial Risk Assessment (CBRA), which will include details on minimum target burial depths and take account of potential seabed change where possible.</p> <p>As committed to by the Applicant within the OFLCP (REP4-021), the coordinates of 'as-laid' cables and cable protection locations will be recorded and submitted to the UK</p>

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Reference	Question is addressed to	ExA Question	West Coast Sea Products Response	Applicant's response
				<p>Hydrographic Office (UKHO) and the KIS-ORCA service. These locations will also be marked on Admiralty Charts and fishermen's awareness charts, available in paper, electronic, and plotter formats. The Applicant is fully intending to provide comprehensive and accurate information regarding the location of cables and associated protection to fisheries stakeholders, once the final design plan is approved by the MMO.</p> <p>The Applicant acknowledges the comment regarding the challenges experienced by other UK offshore wind farm projects concerning cable burial reliability. However, it should be noted that the Applicant has proactively anticipated and accounted for potential reburial events within the Project Design Envelope. This is reflected in the draft DCO, ensuring that remedial actions can be taken if cable exposures occur.</p> <p>The Applicant is also committed to monitoring of cables and their burial status, as outlined in the Offshore Construction Management Plan (CMS), of which an Outline plan was submitted at Deadline 4 (REP4-032). Notifications regarding cable exposures on or above the seabed will be distributed to regional fisheries contacts within three days, while notifications of damage to the Morgan Generation Assets will be issued within 24 hours.</p> <p>Furthermore, within the OFLCP (REP4-021), the Applicant has committed to deploying regional guard vessels, where necessary, in the event of cable exposures. This measure aims to ensure navigational safety and</p>



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Reference	Question is addressed to	ExA Question	West Coast Sea Products Response	Applicant's response
REP4-052.7	<b>West Coast Sea Products or Scottish Fishermen's Federation</b>	<p><b>CF 1.4</b></p> <p><b>Context for Queen Scallop plotter data:</b> West Coast Sea Products are asked to submit a figure illustrating Queen Scallop fishery plotter data giving context in relation to the whole of the Proposed Development and information on dates, period, and numbers of vessels</p>	<p><b>CF 1.4</b></p> <p>Attached – not the most up-to-date footprint for some of these but gives the general Queen Scallop plotter data for 3 Queen Scallop career fishermen.</p>	<p>mitigate the risk of gear snagging until the exposed cables are appropriately addressed.</p> <p>The Applicant notes that the figure provided by WCSP supports the conclusion that the western part of the Morgan Array Area is an important fishing ground for queen scallop. Additionally, queen scallop fishing activity is observed outside the Morgan Array Area. The Applicant can confirm that the observations depicted in the figure provided by the WCSP are consistent with findings presented in Volume 4, Annex 6.1: Commercial Fisheries Technical Report (APP-059) for vessels utilising dredges.</p>
REP4-052.8	West Coast Sea Products Scottish Fishermen's Federation Isle of Man Government Territorial Seas Committee	<p><b>CF 1.5</b></p> <p><b>Applicant's Response to REP1-059 regarding fishing through the SMZ:</b> Confirm if you are satisfied with the Applicant's Responses in [REP2-005], specifically to [REP1-059.4], [REP1-059.6], [REP1-059.11, REP1-059.14 and REP1-059.27 (and any other subsections upon which you may wish to comment) regarding Queen Scallop fishery, the SMZ and inter-array cabling; and if not, clarify why not, point-by-point and supported by evidence where possible.</p> <p>Are West Coast Sea Products and SFF satisfied with the Applicant's Responses in REP1-059.4?</p>	<p><b>CF 1.5</b></p> <p>REP1-059.4: NO The argument for publicly available data is irrelevant. SFF &amp; member WCSP have made their assessment of perceived impact on recent fishing data which is relevant to them as an affected stakeholder of the development. The argument by WCSP is that over 50% of Queen Scallop fishing will be in the vicinity of OWF infrastructure which was previously untouched prior to the potential of Mona and Morgan OWF. SFF/WCSP acknowledge that there will be over a 50% increase in skippers having to fish in relation to neighbouring OWF infrastructure which may or</p>	<p>The Applicant acknowledges the key point raised by the WCSP regarding the uncertainty of the potential effects, stating that "it may or may not have an effect." While the Applicant is confident in its assessment of the impacts on the scallop fishery, in order to contribute to the evidence base for commercial fishing activity and offshore wind, the OFLCP (REP4-021) includes the commitment to undertake monitoring of VMS, inshore VMS (i-VMS) and landings data from the commercial fisheries study area annually for the first five years of the operations and maintenance phase. The exact specification of this monitoring will be specified within the final FLCP, which will be developed via further consultation with commercial fisheries stakeholders. It is expected that specific details of objectives; review cycles and potential to amend the monitoring, will be developed via these discussions. The Applicant has committed to undertaking this monitoring within the OFLCP</p>

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Reference	Question is addressed to	ExA Question	West Coast Sea Products Response	Applicant's response
			<p>may not have an effect on the habitat.</p>	<p>(REP4-021), with which the final FLCP must accord.</p> <p>As detailed in row REP4-052.1 above, the Applicant recognises the concerns raised by the WCSP. The basis of the assessment conclusion (Minor Adverse) is that the proposed mitigation measures will enable continued access to the majority of the Morgan Array Area. The Applicant is confident that these measures will provide access to the Array Area for all fishing vessels, resulting in only a low level (magnitude) of impact. However, in recognition of the fact that these measures are novel and untested for this receptor and target species, the Applicant has committed to annual review of landings and activity data in order to identify any notable reductions in value of landings within the OFLCP (S_D5_13).</p>
<p>REP4-052.9</p>	<p>West Coast Sea Products Scottish Fishermen's Federation Isle of Man Government Territorial Seas Committee</p>	<p>Are West Coast Sea Products and SFF satisfied with the Applicant's Responses in REP1-059.6?</p>	<p>REP1-059.6: NO It is more reassuring that the applicant has noted there will only be a single row of turbines. The response by the applicant however does not address the perimeter concerns and speaks of other irrelevant details we already agree with (i.e. 1400m spacing). We cannot support the principle of the SMZ on the basis of it being bound by turbines with no guarantee of burial. Our view may be lessened in terms of impact if we knew the CBRA which is not publicly available, therefore with the expectation</p>	<p>The Applicant acknowledges the WCSP's query regarding the potential for cable exposure and refers to its detailed response in REP4-052.6, where this issue is addressed, noting that the CBRA will be a post-consent document. The relevant commitments in the OFLCP have been updated to allow for consideration of seabed level change in relation to cable burial and protection, where possible.</p> <p>The Applicant acknowledges WCSP's reassurance regarding the placement of a single row of turbines along the perimeter of the SMZ. As noted in REP1-059.6 of REP2-005, the Applicant has stated that, should the final array layout require turbines around the perimeter of the SMZ, only a single row of</p>

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Reference	Question is addressed to	ExA Question	West Coast Sea Products Response	Applicant's response
			<p>of minimal burial with high exposure likelihood at a highly dynamic seabed environment we anticipate a high level of impact.</p>	<p>turbines would be placed along this boundary, spaced a minimum of 1,400 meters apart, subject to micro-siting and in line with the layout principles.</p> <p>Furthermore, the Applicant is cognisant of the request from fisheries and the MMO to formalise the SMZ. Therefore, the Applicant has updated the OFLCP (at Deadline 5 Reference S_D5_13) to reflect the two potential design scenarios with regard to the SMZ.</p> <p>In a final design scenario where the wind farm has perimeter turbines in the western part of the Array, the area of the SMZ will be 34 km<sup>2</sup>. In a final design scenario where there are no perimeter turbines, the SMZ will be 37 km<sup>2</sup>.</p> <p>The Applicant has made clear (see REP4-006) that it is not able to be more definitive at this stage with regard to the final scheme design as it will be dependent upon the outcome of the pre-construction detailed Site Investigation works and also the project key component selection and procurement processes. The Applicant notes this design envelope approach is entirely in keeping with standard industry practice.</p> <p>The Applicant considers 1,400m spacing between WTGs is relevant in this context, as this spacing is deemed sufficient to allow fishing vessels to access the SMZ (in the event that there are perimeter turbines) and carry out fishing activities effectively.</p> <p>Furthermore, the Applicant notes that scallop fishing has resumed within the Moray East Offshore Wind Farm, where turbines are spaced 1,128 meters apart along the north-south axis and 1,547 meters apart along the</p>

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Reference	Question is addressed to	ExA Question	West Coast Sea Products Response	Applicant's response
				east-west axis, without the need for a dedicated SMZ. This demonstrates that appropriate spacing can facilitate continued fishing activity in areas with offshore wind farms.
REP4-052.10	West Coast Sea Products Scottish Fishermen's Federation Isle of Man Government Territorial Seas Committee	Are West Coast Sea Products and SFF satisfied with the Applicant's Responses in REP1-059.11	REP1-059.11: NO PARTICULAR COMMENTS	This is noted by the Applicant with thanks.
REP4-052.11	West Coast Sea Products Scottish Fishermen's Federation Isle of Man Government Territorial Seas Committee	Are West Coast Sea Products and SFF satisfied with the Applicant's Responses in REP1-059.27?	REP1-059.27: NO The applicant again relies upon the CBRA and really does not address our concern.	The Applicant notes that this section is relevant to cable burial and potential for cable exposure. The Applicant acknowledges WCSP's position regarding this and refers to its detailed response in REP4-052.6 where this issue is discussed in detail.