



# Sheringham Shoal and Dudgeon Offshore Wind Farm Extension Projects

The Applicant's Comments on Responses to the  
Examining Authority's Third Written Questions

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## **1 The Applicant's Comments on Responses to the Examining Authority's Third Written Questions**

1. Following the issue of the Third Written Questions by the Examining Authority (ExA) to Equinor New Energy Limited (the Applicant) and other Interested Parties, the Applicant and Interested Parties have subsequently responded to each of those relevant questions. The Applicant has chosen to comment on the responses provided by Interested Parties, detailed in below.



*Table 1 The Applicant's comments on Broadland District Council's responses to the Examining Authority's Third Written Questions*

ID	Question	Broadland District Council Responses	Applicant's Comment
<b>Q3.17. Landscape and Visual Effects</b>			
<b>Q3.17.3 Effectiveness of mitigation proposals</b>			
Q3.17.3.2	<p><b>Removal of Existing Trees and Hedgerows, Replanting and Management</b></p> <p>Would it be acceptable for tree and hedgerow replacement, designed to mitigate for the loss of existing planting, to be carried out off site at a location outside of the Order limits?</p>	<p>The concern would be that a location outside the Order limits would be less easy to oversee, and that compliance with the approved details might be hard to achieve, especially if other parties are involved. If full mitigation cannot be achieved within the current Order limits, could the limits be extended to include suitable areas for the mitigation? If not, a robust mechanism needs to be in place to ensure full compliance and successful establishment and long-term management.</p>	<p>The Applicant acknowledges Broadland District Council's response. The Applicant refers to its response to Q3.17.3.1 and Q3.17.3.2 in <a href="#">The Applicant's response to the Examining Authority's Third Written Questions</a> [REP5-049].</p> <p>The Applicant is confident that mitigation can be achieved within the Order Limits.</p> <p>In addition, the Applicant is willing to explore, through landowner consultation whether there may be opportunity to secure individual agreements to undertake planting or other habitat enhancements outside the Order Limits which could form part of the evolving Biodiversity Net Gain Strategy. As set out within the Outline Biodiversity Net Gain Strategy <i>'actual enhancement of habitats will need to be agreed in detail with landowners and other stakeholders in the future, and once construction details are more clearly defined'</i> [REP3-048]. The Applicant is therefore unable to commit to any habitat enhancement outside the Order Limits at this stage.</p>
<b>Q3.20. Noise and Vibration</b>			
<b>Q3.20.1 Adequacy of the Assessments for Construction</b>			
Q3.20.1.1	<p><b>Main Construction Compound</b></p> <p>BDC and SNDC have set out [REP3-127, Q2.20.1.1] [REP3-121, Q2.20.1.1] that their</p>	<p>At this time the specifics of the compound and the equipment to be used within the compound is unknown as this will depend upon the</p>	<p>The Applicant acknowledges Broadland District Council's response. The Applicant refers to its response in <a href="#">The Applicant's response to the</a></p>

ID	Question	Broadland District Council Responses	Applicant's Comment
	<p>concerns in relation to the impacts of the main construction compound can be addressed through Section 61 agreements. The Applicant has provided a revised OCoCP [REP4-016] that includes this for the main and secondary compounds. Explain to the ExA why this is preferred, rather than securing appropriate mitigation as part of the DCO?</p>	<p>requirements of the appointed contractor. As such a requirement would not be able to be placed on the DCO as it would require variation at the time of the construction, whereas a Section 61 can be tailored to the requirements of the contractor and include specific mitigation measures required by the LA for each specific compound including consideration of any nearby vulnerable receptors.</p>	<p><b>Examining Authority's Third Written Questions</b> [REP5-049].</p> <p>The Applicant has reached agreement with Broadland District on its proposal to submit Section 61 applications. This agreement is captured in the Draft Statement of Common Ground with Broadland District Council (Revision B) [REP4-019, Table 13]</p>

*Table 2 The Applicant's comments on East Suffolk Council's responses to the Examining Authority's Third Written Questions*

ID	Question	East Suffolk Council Responses	Applicant's Comment
<b>Q3.14. Habitats Regulation Assessment</b>			
<b>Q3.14.1 Effect of the Proposed Development on its own and In-combination with Other Plans and Projects</b>			
Q3.14.1.7	<p><b>Kittiwake Tower</b></p> <p>The 'Review of 2022 Highly Pathogenic Avian Influenza (HPAI) outbreak on relevant UK seabird colonies' is purported [REP4-042] to have resulted in the death of 965 kittiwakes. It is recognised that HPAI is difficult to contain and prevent transmission.</p> <p>Nonetheless, the ExA are concerned regarding the HPAI and the efficacy of the proposed kittiwake tower as a compensatory measure.</p> <p>a) Would the clustering of nests together, as would be the case in the provision of a kittiwake tower, potentially increase the risk of infection compared to an open-air nesting environment?</p> <p>b) If the answer to a) is yes, are the predicted rates of breeding success likely to be overestimated, thus affecting the reliability of the measure delivering the necessary compensation?</p> <p>c) Is there any data regarding the artificial structures in Lowestoft to suggest whether or not the kittiwake accommodation there has been subject to higher, lower or similar levels of mortality?</p> <p>d) When the kittiwake tower designs get submitted at Deadline 5, set out how the</p>	<p>a) East Suffolk Council (ESC) defers to Natural England (NE) and other expert consultees.</p> <p>b) ESC defers to NE and other expert consultees.</p> <p>c) ESC does not have any data regarding whether the artificial nesting structures in Lowestoft have been subject to higher, lower or similar levels of mortality in response to this question. We therefore defer to NE and other expert consultees.</p> <p>d) ESC defers to NE and other expert consultees.</p>	<p>No response required.</p> <p>The Applicant refers the ExA and ESC to its response to this question in <a href="#">The Applicant's response to the Examining Authority's Third Written Questions</a> [REP5-049].</p>

ID	Question	East Suffolk Council Responses	Applicant's Comment
	design takes into account the health and well-being of the species.		

*Table 3 The Applicant's comments on Environment Agency's responses to the Examining Authority's Third Written Questions*

ID	Question	Environment Agency Responses	Applicant's Comment
<b>Q3.24. Water quality and resources</b>			
<b>Q3.24.4 Effectiveness of Mitigation Measures</b>			
Q3.24.4.1	<b>Protective Provisions</b> Provide an update on discussions to finalise the protective provisions still under discussion [RE3-101, Q2.24.4.2].	The Environment Agency's revised and updated standard Protective Provisions were forwarded to the Applicant's legal representatives on 12 May 2023. The Applicant's representative has forwarded a response this morning (8 June 2023) to our legal team. Currently is not possible to comment until we have adequate time to consider these. We will advise the ExA of our position following review and further engagement with the Applicant's representatives.	Noted. No response required.

*Table 4 The Applicant's comments on Historic England's responses to the Examining Authority's Third Written Questions*

ID	Question	Historic England Responses	Applicant's Comment
<b>Q3.15. Historic Environment and Cultural Heritage</b>			
<b>Offshore Matters</b>			
<b>Q3.15.1 Adequacy of Baseline Surveys and Environmental Information</b>			
Q3.15.1.1	<p><b>Geotechnical Work</b></p> <p>Is the extent of geotechnical material that the Applicant has obtained and is obtaining pre consent and proposes to obtain post consent, if consent is granted, sufficiently clear at this stage?</p>	<p>We have reviewed Sheringham Shoal and Dudgeon Offshore Wind Farm Extension Projects Geoarchaeological Method Statement (Revision A; Deadline 3; May 2023; Document Reference: 16.29; APFP Regulation: 5(2)(q)) – PINs Examination Ref: REP3-119, which was produced by the Applicant in response to the submission we made at Second Questions to Q2.15.1.2.</p> <p>The above referenced document provides helpful clarity regarding the acquisition of geotechnical material to date and the commissioning of geotechnical survey campaigns to occur pre-consent, post-consent (subject to securing the required Development Consents) and before start of construction. We welcome the attention given to building on work conducted and completed in support of the EIA exercise required for this proposed project.</p> <p>The Geoarchaeological Method Statement helpfully describes completion of a "Stage 1" assessment on vibro-cores recovered in 2021, which identified "high potential status" and which merit on-going archaeological advice as necessary to complete geoarchaeological</p>	No response required.



ID	Question	Historic England Responses	Applicant's Comment
		<p>analysis and modelling as a viable mitigation strategy.</p> <p>We also acknowledge the attention given to the avoidance of presently identified Archaeological Exclusion Zones (AEZs), as it is important to distinguish between anomalies of known or possible archaeological/historic interest which relate to vessels, boats or aircraft for which mutual avoidance is accepted practice. However, the focus for palaeo-environmental analysis, should actively direct geotechnical survey to locations of interest to corroborate already acquired sub-bottom/seismic geophysical data. In doing so, good practice is followed to support sedimentary deposit modelling which is sufficient to complete geoarchaeological characterisation of the development area.</p> <p>We therefore confirm that through completion to the requisite professional standards the resulting technical reporting can make a positive contribution to our knowledge about changing prehistoric environmental conditions as essential context for understanding early human activity in now submerged and buried former riverine/estuarine areas as are known to have existed (see Section 2.4, paragraph 22).</p> <p>We agree with the recommendation that a "Stage 1" assessment on boreholes recovered in 2022 will be conducted. These data should</p>	

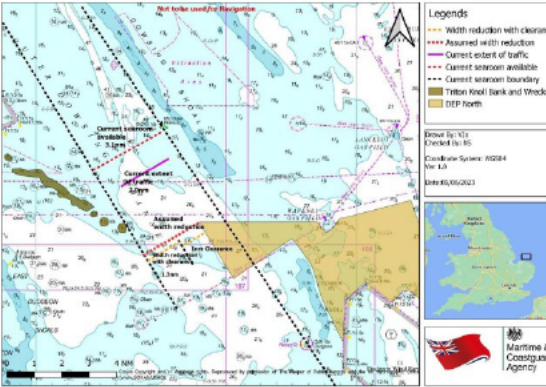
ID	Question	Historic England Responses	Applicant's Comment
		<p>then be integrated into a programme of assessment using a phased assessment programme of analysis through to eventual publication. In addition, we agree that vibro-cores to be collected during the 2023 geotechnical campaign, specifically for geoarchaeological work, should target deposits of interest as identified through the previous rounds of geotechnical and geophysical survey work, as described in Section 2.4. These cores will also be assessed using a defined staged programme of analysis, as described in Table 2 (we note a typo in the text which refers to a non-existent Table 3.1). We agree with this methodological approach.</p> <p>It is important to explain that the Outline Written Scheme of Investigation (Offshore) (PINs Examination Ref: APP-298) provides the overall framework for guiding all relevant techniques of marine survey work to assist archaeological analysis and interpretation. It is therefore a crucial means to ensure early stage planning and objective setting for survey work, as required to assist engineering design, is programmed to be inclusive of archaeology, for example as stated in Section 2.2, paragraph 10. This approach is necessary to ensure continuity and consistent advice in consideration of changes in geotechnical contractor, retained Archaeological Advice Services and geoarchaeological contractor(s) as may occur throughout the project.</p>	



ID	Question	Historic England Responses	Applicant's Comment
		<p>The above referenced Geoarchaeological Method Statement is described as an "addendum" to the Outline Written Scheme of Investigation (WSI) and we have confirmed our agreement with the methodological approach presented in the Outline WSI during examination, see our Written Representation (PINs Examination Ref: REP1-112) and our response to Second Written Questions (PINs Examination Ref: REP3-130).</p>	
Q3.15.1.2	<p><b>Statement of Common Ground</b> Explain what factors are preventing the progress of a SoCG with the Applicant? In addition, set out how these factors will be resolved and provide a timeframe for the submission of a SoCG to the Examination.</p>	<p>Historic England is in discussion with the Applicant regarding the SoCG. We have provided the Applicant with comments on a draft SoCG for Onshore matters but have not, as far as we are aware, seen a draft of the a SoCG for Offshore matters. HE would prefer that Onshore and Offshore matters were combined into a single SoCG. It is unlikely at this stage that a combined SoCG can be produced and reviewed by Deadline 6 (20th June 2023), so submission would be of a final SoCG as soon as possible before Deadline 7 (10th July 2023).</p>	<p>The Applicant and Historic England are progressing a SoCG which will cover both onshore and offshore matters. A meeting was held on 19.06.2023 and a draft SoCG will be submitted at Deadline 7, with the final version submitted at Deadline 8.</p>

*Table 5 The Applicant's comments on Maritime and Coastguard Agency's responses to the Examining Authority's Third Written Questions*

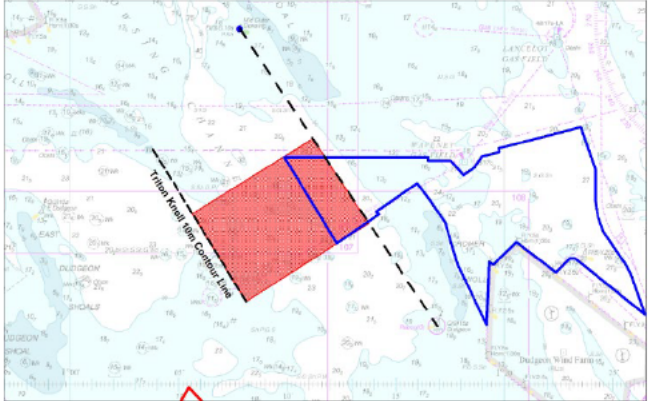
ID	Question	Maritime and Coastguard Agency Responses	Applicant's Comment
Q3.19.1.1	<p><b>Safety Zones</b></p> <p>The MCA has raised the issue of the temporary potential effect of safety zones of sea room for traffic [REP3-134]. How could safety zones on a temporary basis effect navigational safety, particularly west of DEP-North?</p>	<p>Where turbines are installed next to, or as close as possible to, the red line boundary, a safety zone during times of construction, major maintenance and decommissioning will create a 500m radius area (around the turbine) where third-party vessels may not enter. The safety zone would likely extend into the Outer Dowsing Channel beyond the red line boundary therefore reducing the sea room even further for passing traffic immediately to the west of the extension area.</p>	<p>The Applicant has noted the response provided by the Maritime and Coastguard Agency in their Deadline 5 submission [REP5-081]. The Applicant will address the points raised in the Maritime and Coastguard Agency's submission at Issue Specific Hearing 7 on 21<sup>st</sup> June 2023 and will provide further details (if required) in writing at Deadline 7.</p>
Q3.19.1.2	<p><b>Navigational Risk</b></p> <p>The Applicant, in the Navigational Safety Technical Note [REP3-031] has provided additional modelling of the northwest extent of DEP-North on collision risk for traffic within the Outer Dowsing Channel. This modelling showed a collision risk post windfarm development of 1 in 8.7 years.</p> <p>a) If you disagree with the Applicant's calculations, provide MCA calculations to show what the current collision rate would be compared to if DEP-North was built out as proposed.</p> <p>b) Provide your version of the Applicant's Figure 7.2 of the submitted Navigational Safety Technical Note [REP3- 031], showing anticipated remaining sea</p>	<p>a) The applicant's Navigational Technical Note [REP3-031] assessed the change of collision frequency to increase from 1 in 8.5 years to 1 in 8.7 and it is understood from the meeting with the applicant on 22 May 2023 that it applies to the entire study area, not just the area of concern off DEP North. The MCA does not disagree with the applicant's calculations of baseline collision risk (1 in 8.5 years) as we know the area is already high risk. MCA would expect the localised increase to be higher with the introduction of DEP North. During the meeting with the applicant on 8 June 2023, the applicant confirmed their assessment of the increase in collision risk in the area immediately west of the boundary would be 23% which appeared to confirm our concerns. However, it was noted this was collision risk only. It did not include the associated collision or</p>	<p>The Applicant has noted the response provided by the Maritime and Coastguard Agency in their Deadline 5 submission [REP5-081]. The Applicant will address the points raised in the Maritime and Coastguard Agency's submission at Issue Specific Hearing 7 on 21<sup>st</sup> June 2023 and will provide further details (if required) in writing at Deadline 7.</p> <p>The Applicant notes the Maritime and Coastguard Agency (MCA) reference a localised increase of risk of 23% in the area west of DEP North. The Applicant would like to provide the relevant context behind the number given that the detail has not yet been introduced to the Examining Authority. The Applicant notes that the value when considered in isolation does not provide sufficient detail to understand its meaning,</p>

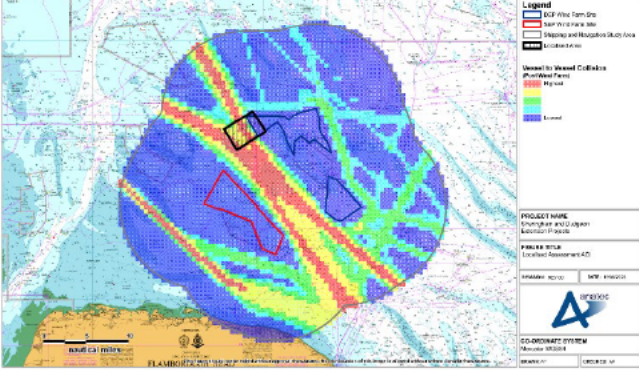
ID	Question	Maritime and Coastguard Agency Responses	Applicant's Comment
	<p>room for ships, including safety buffers necessary.</p> <p>c) the Navigational Risk Assessment [APP-198] assumed potential increases of 10 and 20% within the commercial traffic allision and collision modelling. Provide calculations for scenarios with and without DEP-North for this Outer Dowsing Channel incorporating a 10% and 20% increase in shipping traffic.</p> <p>d) With respect to NPS EN-3, Paragraph 2.6.165, please confirm whether you would consider any increased risk of vessel collision as an unacceptable risk, based on both the Applicants and the MCA figures.</p>	<p>grounding risk, nor did it include risks associated with merging traffic to the south.</p> <p>b) The image below (Figure 1) shows our assessment of the anticipated safe sea</p>  <p>room for vessels west of DEP North which includes a 1NM clearance from the boundary:</p> <p>Figure 1: Safe sea room assessment</p> <p>The Outer Dowsing Channel is used by various vessel types including tankers, passenger, cargo, dredgers, recreation, fishing and oil and gas support. The deeper draught</p>	<p>with a crucial piece of information being the return periods<sup>1</sup> associated with this 23% increase.</p> <p>At a meeting held on the 22<sup>nd</sup> May 2023, the MCA requested that the Applicant provided “localised” collision risk results in the area around DEP North. Anatec fulfilled this request on behalf of the Applicant, and the results were presented to the MCA in the subsequent 8<sup>th</sup> June 2023 meeting. The area of interest was defined as shown in Figure 1<sup>2</sup>. Navigational Risk Assessments (NRA) always assess collision risk within the entire study area in line with MGN 654 Annex 1, not just a localised area of concern, unless asked to do so by a stakeholder (which is unusual). The <b>draft Statement of Common Ground (SoCG) with the MCA (Revision B)</b> [REP3-079] noted that the methodology by which the Applicant’s NRA has been undertaken is agreed; this includes definition of the study area to be assessed.</p>

<sup>1</sup> The 23% is the change in collision risk within the localised area shown in Figure 1 between the post wind farm NRA [APP-198] modelling return period of 140 years and the sensitivity modelling (undertaken for deadline 3 [REP3-031]) return period of 172 years. The Applicant would like to make clear it is not directly linked to the return period of 8.5 years stated in the NRA and the MCA’s deadline 5 submission [REP5-081] which is the return period for the study area as a whole.

<sup>2</sup> Noted that MCA requested a wider area be considered on the 7<sup>th</sup> June via email. There was insufficient time to fulfil this request in advance of the 8<sup>th</sup> meeting.



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		<p>vessels are dependent on the available depths in the area and the NRA [APP-198] shows that vessels transit on the eastern side of the channel in the deeper water which will minimise the effects of sea state, particularly in adverse weather conditions. Vessels will passage plan to avoid areas of shallower water which includes the area with two wrecks in the channel that reduce depths to 14m and 14.5m and the area of 11.3m shallower water to the north. This is evidenced by Figures 14.9 and 14.10 in the NRA and Figure 7.1 in the Navigation Technical Note [REP3-031] which show where the DEP North boundary encroaches into the deep- water area where vessels navigate safely.</p> <p>MCA's assessment is that the prevailing traffic will also choose to avoid the 15.3m and 13.2m wrecks (controlling depths) southeast of the Triton Knoll Bank. Therefore, the western extent of safe navigable sea space is based on this controlling depth and not the 10m contour line, as shown in Figure 7.2 of the applicant's Navigational Technical Note. This is evidenced in Figure 7.2 which shows all the transits except one, passed east of the 15.3m wreck. Our assessment is that 10m water depth does not provide sufficient depths for vessels with larger draughts in heavier or adverse weather where deeper water is required to accommodate dynamic draught,</p>	 <p><i>Figure 1: Localised Collision Assessment Area of Interest</i></p> <p>It is noted that the localised results did not involve additional / new modelling. They were taken from the existing collision modelling undertaken for the <b>Environmental Statement (ES) Appendix 13.1 - Navigation Risk Assessment (NRA) [APP-198]</b> and <b>Navigation Safety Technical Note [REP3-031]</b>. This is illustrated in Figure 2 which shows the post wind farm collision modelling results from the NRA relative to the study area as a whole and the localised Area of Interest.</p>

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		<p>nor does it allow for the controlling depths as described above.</p> <p>MCA raised concerns at Deadline 1 in our Written Representation that the area already has high collision risk which would only increase when navigating west of the DEP North array. When a safety buffer of 1NM is applied to the DEP North boundary, our assessment is that vessels will be constricted into a channel 1.3NM wide. This is a reduction of 58% from the current navigable sea room. It should be noted that this only applies to the operational phase. During the construction phase construction buoys will be deployed and the available sea room will be less than 1.3NM. An estimation of the sea room in this instance will not be possible until the positions of the construction buoys are known.</p> <p>At Deadline 3 we explained that the frequency of encounter (head on and converging traffic) will increase, and the constriction of sea room will affect vessels' ability to take early and substantial action in accordance with the International Regulations for Preventing Collisions at Sea, 1972, as amended (known as the Collision Regulations or COLREG). The proposals will likely result in a departure from COLREG or alteration of course either towards the</p>	 <p><i>Figure 2 – Localised Area of Interest relative to Study Area</i></p> <p>The localised results showed collision return periods as follows:</p> <ul style="list-style-type: none"> <li>• 140 years within the original NRA [APP-198] modelling i.e., if DEP North is fully built out.</li> <li>• 172 years within the sensitivity analysis [REP3-031] i.e., if DEP North is not fully built out.</li> </ul> <p>The 23% value the MCA reference is then the difference between the 172 year return period and the 140 year return period. Assuming an operational lifespan of 40 years, the modelling indicates a collision incident would not be expected during the project lifespan in this localised area in either scenario. This makes the DEP North area lower risk than the wider area on an absolute basis.</p>

ID	Question	Maritime and Coastguard Agency Responses	Applicant's Comment
		<p>windfarm red line boundary thus increasing the risk of allision, or towards the shallows thus increasing the risk of grounding. This is particularly relevant for southbound traffic merging with the traffic transiting south of Triton Knoll windfarm, avoiding northbound traffic, avoiding active fishing vessels that may have restricted manoeuvrability and construction/maintenance vessels.</p> <p>c) The MCA is not resourced to provide statistical modelling figures, the necessity of which would apply in equal measure to all UK offshore renewable energy installation projects. Instead, our qualitative assessment is based on the professional and expert judgement of MCA mariners using their knowledge and understanding of seamanship and safe seafaring practices. The concerns are regarding the interpretation of the significance of the risk at current traffic levels and the statistical modelling results do not correlate with our interpretation of future traffic behaviour and good seamanship practices for collision and allision avoidance. The potential increases of traffic volume by 10% and 20% would</p>	<p>Whilst it is noted that the MCA also state that they would expect 'the localised increase to be higher with the introduction of DEP North' it is important to understand probabilities when considering increase in risk. The Applicant demonstrated in the meeting on the 8<sup>th</sup> June 2023 the frequency of two or more commercial vessels being within the same half an hour period within a localised area of the Outer Dowsing channel was less than 3.5% during 2019 (based on the 12 months of AIS data)<sup>3</sup>. This indicates the probability in a future case scenario of two or more commercial vessels encountering each other is low, when then considering historical incident data the probability of one of those encounters resulting in a collision (noting the application of mitigations) is very low. Therefore, loss of sea room does not directly result in a high collision frequency if the probability of an encounter is low which is indicated by the return period of 1 every 140 years.</p>

<sup>3</sup> Assessment undertaken to address MCA queries on traffic patterns around the DEP North Area. The assessment looked at how many vessels per distinct half hour period across 2019 were present at the entrance to the Outer Dowsing Channel. Analysis considered commercial vessels in both directions.

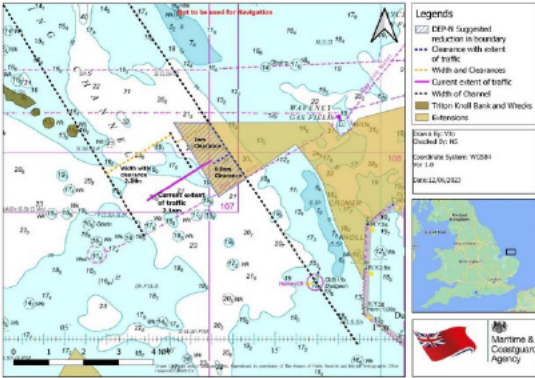


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		<p>naturally increase the risks, and our concerns, even further.</p> <p>d) The MCA considers the increase in collision risk in the DEP North area to be unacceptable. This takes into consideration the local effect of the DEP North extension and the already high collision risk associated with the naturally confined waters of this part of the North Sea.</p>	
Q3.19.1.4	<p><b>Mitigation against risk</b></p> <p>If the route past DEP-North would pose an unacceptable risk post windfarm development then is there other mitigation or measures available to address this, other than the omission of turbines close to this route to keep the sea room as existing? For example, could this route be avoided or recommended against for vessels traversing this area, using an alternative route instead?</p>	<p>MCA has considered IMO-adopted ship routing and it is not considered appropriate in this instance due to the narrow sea room available. The area is too confined for a Traffic Separation Scheme (TSS) and a Precautionary Area would do very little to address the issue of reduced sea room at the northern part of the extension. Head on traffic may be mitigated with a recommended route or a two-way route but it would effectively reduce the widths of both northbound and southbound routes where there would be insufficient sea room to take avoiding action in other close quarter situations such as crossing and overtaking. A cautionary note on the navigational chart has also been considered but it would only alert the mariners' attention, not reduce the risk or increase sea room. The only acceptable mitigation measure available is to reduce the red line boundary to ensure the available sea room is maintained.</p>	<p>The Applicant has noted the response provided by the Maritime and Coastguard Agency in their Deadline 5 submission [REP5-081]. The Applicant will address the points raised in the Maritime and Coastguard Agency's submission at Issue Specific Hearing 7 on 21<sup>st</sup> June 2023 and will provide further details (if required) in writing at Deadline 7.</p>

ID	Question	Maritime and Coastguard Agency Responses	Applicant's Comment
		<p>If vessels are recommended to take alternative routes, for example south of Sheringham Shoal wind farm or south of Triton Knoll wind farm, this would only increase the traffic volume in these areas and therefore increase the risks for these navigationally constrained routes.</p>	
Q3.19.1.6	<p><b>Disruption or Economic Loss</b> Would the Proposed Development location avoid or minimise disruption or adverse transit time changes, including economic loss to the shipping and navigation industries, with particular regard to approaches to ports and to strategic routes essential to regional, national and international trade, lifeline Ferries, or recreational users of the sea?</p>	<p>The development itself does not directly restrict or block port entrances but diversions around the proposed development of SEP and DEP may be required due to the reduced safe sea room at DEP North. The proposed infrastructure will exert further restriction to the safe area of navigable water, and as a result, some operators will likely decide to avoid the area due to the presence of the infrastructure. In this case these vessels would have to reroute either to the south of Triton Knoll wind farm or east of the Dudgeon wind farm before re-joining the passage. This will lead to increased navigational risk along these routes, increased transit times and operating costs (fuel and emissions) between ports, and therefore economic loss would be unavoidable.</p>	<p>The Applicant has noted the response provided by the Maritime and Coastguard Agency in their Deadline 5 submission [REP5-081]. The Applicant will address the points raised in the Maritime and Coastguard Agency's submission at Issue Specific Hearing 7 on 21<sup>st</sup> June 2023 and will provide further details (if required) in writing at Deadline 7.</p>
Q3.19.1.8	<p><b>Sea room between SEP and DEP</b> Please confirm that it is only the loss of sea room to the west of the northern section of the DEP array that the MCA is concerned with, with no objections to the width of sea room that would remain between SEP and DEP?</p>	<p>MCA's concern is the loss of sea room to the west of the northern section of the DEP array that will constrict the two-way traffic into a channel with less than half of the current sea space. MCA is content with the width of sea room between SEP and DEP to the south.</p>	<p>The Applicant has noted the response provided by the Maritime and Coastguard Agency in their Deadline 5 submission [REP5-081]. The Applicant will address the points raised in the Maritime and Coastguard Agency's submission at Issue Specific Hearing 7 on 21<sup>st</sup> June 2023 and will provide further details (if required) in writing at Deadline 7.</p>



ID	Question	Maritime and Coastguard Agency Responses	Applicant's Comment
Q3.19.1.8	<p><b>Safety Zone Widths</b></p> <p>Does the Navigational Safety Technical Note [REP3-031, Figure 6.2] demonstrate that vessels are content with passing approximately 1 nautical mile from windfarms?</p>	<p>It is important to note the difference between a safety buffer distance and clearance, although the terms are used interchangeably. A safety buffer will provide the space that vessels may use in case of a collision avoidance manoeuvre, whereas clearance is the minimum distance vessels might intend to keep at all times from a wind farm boundary, in accordance with an operator's Safety Management System. The safety of the vessel and any parameters associated with passage planning will, ultimately, lie with the Master of the vessel. The applicant's Navigational Technical Note (REP3-031), Figure 6.2 shows that a majority of vessels pass at 1NM or further. The presence of other restrictions in the area such as shallow banks and wrecks (which reduce the safe navigable depth) are also considered, along with weather, sea conditions, vessel type and vessel manoeuvrability. These factors will be under consideration when passage planning and the perceived safe passing distances may be greater than 1NM. We cannot agree that 'vessels are content with passing approximately 1NM from windfarms' as shipping operators and vessel Masters may have requirements for wider passing distances (i.e on a location and vessel specific basis). However, we have used a 1NM clearance as a minimum which, from the data presented in the NRA (APP-198) and Navigational Technical Note (REP3-031), is consistent and reasonable.</p>	<p>The Applicant has noted the response provided by the Maritime and Coastguard Agency in their Deadline 5 submission [REP5-081]. The Applicant will address the points raised in the Maritime and Coastguard Agency's submission at Issue Specific Hearing 7 on 21<sup>st</sup> June 2023 and will provide further details (if required) in writing at Deadline 7.</p>

ID	Question	Maritime and Coastguard Agency Responses	Applicant's Comment
Q3.19.1.10	<p><b>Details of Obstacle/Turbine Free Areas</b></p> <p>If the MCA considers that the only solution to address the concern about navigational safety to the west of the proposed DEP-N windfarm site is to have a turbine/obstacle free area, can this be clearly shown on a map/chart of the area within the DEP-N boundary that this would need to relate to.</p>	<p>The image below (Figure 2) shows a line running through the Mid-Outer Dowsing buoy and Dudgeon buoy and MCA recommends the boundary is reduced to this line, as a</p>  <p>minimum:</p> <p>Figure 2: Recommended boundary amendment</p> <p>There would still be a reduction of safe navigable sea room to the current availability when safety clearances are implemented. Figure 2 shows the current extent of traffic (magenta line), and the distance between this shipping route and the amended turbine boundary would be 0.5NM which is the minimum recommended distance in MCA guidance MGN654 Annex 2 'Wind Farm Shipping Route Template'. This reduced boundary would increase the safe navigable</p>	<p>The Applicant has noted the response provided by the Maritime and Coastguard Agency in their Deadline 5 submission [REP5-081]. The Applicant will address the points raised in the Maritime and Coastguard Agency's submission at Issue Specific Hearing 7 on 21<sup>st</sup> June 2023 and will provide further details (if required) in writing at Deadline 7.</p>

ID	Question	Maritime and Coastguard Agency Responses	Applicant's Comment
		sea room to 2.2NM when a 1NM clearance distance is applied.	
Q3.19.1.11	<p><b>Implications of MCA position</b></p> <p>In line with NPS EN-3, particularly Paragraph 2.6.165, what is the implication of the MCA current position for the recommendation that can be made to the SoS?</p>	<p>The current extension at the northern section of DEP North as previously highlighted, poses an unacceptable risk to navigation due the reduction of safe and available navigable sea room in an already constricted area. As this area has pre-existing navigational constraints and is a commercially important route, any intentional introduction of hazards (turbines) that cannot be safely mitigated, will not be supported by the MCA. The implication is that MCA recommends that consent should not be granted for the current proposed boundary of the northern section of DEP North. Instead, the MCA recommends a reduction to the red line boundary to a line between the Mid-Outer Dowsing buoy and the Dudgeon buoy as per Figure 2 above.</p>	<p>The Applicant has noted the response provided by the Maritime and Coastguard Agency in their Deadline 5 submission [REP5-081]. The Applicant will address the points raised in the Maritime and Coastguard Agency's submission at Issue Specific Hearing 7 on 21<sup>st</sup> June 2023 and will provide further details (if required) in writing at Deadline 7.</p>
Q3.19.1.12	<p><b>Joint Position Statement</b></p> <p>ExA requires a joint position statement from both parties to set out what is a mutually agreeable position to alleviate any navigational risk to ALARP.</p>	<p>The MCA and the applicant had a meeting on 8 June 2023 to discuss the concerns around the DEP North array but unfortunately a resolution was not reached. The Statement of Common Ground has been updated to confirm MCA's position on the whole project where positions of disagreement are confirmed.</p>	<p>The Applicant has noted the response provided by the Maritime and Coastguard Agency in their Deadline 5 submission [REP5-081]. The Applicant will address the points raised in the Maritime and Coastguard Agency's submission at Issue Specific Hearing 7 on 21<sup>st</sup> June 2023 and will provide further details (if required) in writing at Deadline 7.</p>

**Table 6 The Applicant's comments on Marine Management Organisation's responses to the Examining Authority's Third Written Questions**

ID	Question	MMO Responses	Applicant's Comment
Q3.1.1.1	<p>Marine Plan Policy Review.</p> <p>In the SoCG with the MMO [EL ref], the ExA notes an entry stating that a more in-depth review of marine planning policy may be undertaken.</p> <ul style="list-style-type: none"> <li>a) Provide further information on the review and anticipated timescales.</li> <li>b) What, if any, would be the implications for this application, and this Examination?</li> </ul>	<p>The MMO have reviewed the Applicant's Marine Plan Policy Review [REP1-060] and is satisfied that it is adequate. The MMO would have preferred to have consideration of each marine plan policy considered within the document, rather than signposting to relevant sections of the ES, however, the MMO considers further modifications are not required.</p>	<p>The Applicant welcomes this position and notes that it is reflected in the <a href="#">Draft SoCG with the MMO (Revision C)</a> [document reference 12.11].</p>
Q3.3.1.2	<p>Noise - Fish and Shellfish.</p> <p>Is there any concern with regards fish and shellfish receptors?</p>	<p>The MMO have no further concerns which are not already highlighted within the SoCG or this response.</p>	<p>The Applicant notes the minor MMO comments regarding underwater noise modelling and is intending to update <a href="#">Appendix 10.2 Underwater Noise Modelling Report</a> [APP-192] at Deadline 7 to address these.</p>
Q3.3.1.3	<p>Electro-Magnetic Fields.</p> <p>If cables were to be buried, but not at a depth of 1.5m and with no cable protection used, would there be an adverse impact from electro-magnetic fields on fish, shellfish or other forms of benthic ecology?</p>	<p>The MMO would like to reiterate our comments from REP3-133 regarding comments relating to electro-magnetic fields. The MMO consider that burial to 1.5m+ should prevent adverse impacts to benthic ecology receptors via electromagnetic field and/or heating. The MMO defer to Natural England, as the lead statutory consultee for the Cromer Shoal Chalk Beds Marine Conservation Zone (CSCB MCZ), to comment further on the appropriateness of buried cables in relation to any impacts on MCZ features.</p>	<p>The Applicant will make reasonable endeavours to bury offshore cables, minimising EMF effects and the requirement for external cable protection. The Applicant anticipates that across most of the cable routes, burial depths of between 0.5m and 1.5m will be achieved. Where sufficient cable burial depths are not achieved, the use of external cable protection will be considered.</p> <p>With specific reference to export cables in the nearshore areas, these will be buried where the substrate allows burial to a target burial depth of 1.0m, with 0.6m or greater being acceptable in chalk. Furthermore, as described in the <a href="#">Export Cable Burial Risk Assessment</a> [APP-293] and <a href="#">Outline CSCB MCZ CSIMP</a> [APP-</p>



ID	Question	MMO Responses	Applicant's Comment
			291], reduced burial depths (0.3m) may be accepted in order to avoid the need for external cable protection in the MCZ. Acceptance of burial depths is something that will be decided between the Applicant and the export cable installation contractor at the time of the cable installation. Should the required depths not be achieved, the necessary remedial action would be discussed with the MMO and Natural England at the time.
Q3.3.3.3	<p>Coastal Erosion Impacts</p> <p>Is the point where the HDD exit is proposed at landside set sufficiently far back from the coast to ensure against impact from coastal erosion for the lifetime of the development?</p>	The MMO have no concerns regarding coastal erosion impacting the proposed HDD exit point at landside.	The Applicant welcomes this position.
Q3.3.4.5	<p>Jack-Up Vessel use in MCZ</p> <p>The Applicant has explained [REP3-107] that the use of a jack-up vessel would only be required at the HDD exit pit for construction. The Applicant has also stated that due to the position of the exit-pits there would be no impact to sub-cropping chalk. NE, respond to these points with an assessment of the potential impacts from this jack-up vessel in this approximate location.</p>	The MMO note that this point is directed at Natural England. The MMO defer to Natural England regarding impacts to CSCB MCZ from the use of a jack-up vessel.	No response required.
Q3.12.2.1	<p>Scientific Advisors</p> <p>Are there any comments from your advisors, CEFAS, that remain outstanding and may be of a material consequence for the Examination?</p>	The MMO have no further concerns which are not already highlighted within the SoCG or this response.	See the <a href="#">Draft SOCG with the MMO (Revision C)</a> [document reference 12.11] and <a href="#">The Applicant's comments on Marine Management Organisation's Deadline 5 Submission</a> [document reference 20.3].
Q3.12.2.2	PTS and TTS. The Applicant has responded to your concerns regarding the screening out/ in of	It is the MMO's understanding that PTS is screened out from the Cumulative Impact	The Applicant notes that the MMO assertion that <i>However, this is reliant on other</i>

ID	Question	MMO Responses	Applicant's Comment
	<p>these effects [REP4-037, ID5] including citation of a number of recent DCOs that share a similar approach being used in the assessments for the Proposed Development. In light of this response, are you content with the approach to PTS and TTS? Explain with reasons.</p>	<p>Assessment (CIA) on that basis that since PTS is expected to occur relatively near to operations, particularly pile driving, PTS is addressed at the level of the EIA, whereas the CIA is looking at the broader impacts of combined windfarms, which are more likely to combine in terms of disturbance (since this can occur at much greater distances).</p> <p>Point 13 in 10.3.2.1 of the CIA Screening states that <i>"if there is the potential for any PTS, from any project, suitable mitigation would be put in place to reduce any risk to marine mammals"</i>. However, this is reliant on other developments actually having appropriate mitigation in place to reduce the risk of PTS, which may not necessarily be the case.</p> <p>The MMO still have reservations with the justification presented, specifically the statement that <i>"other activities such as dredging, drilling, rock placement, vessel activity, operational windfarms, oil and gas installations or wave and tidal sites will <i>"emit broadband noise in lower frequencies and PTS from these activities is very unlikely"</i> (see point 13 in 10.3.2.1 of the CIA Screening). The risk of PTS depends on several factors such as the noise levels emitted, the duration of the activity and exposure of the animal. Thus, it is the opinion of the MMO that the justification presented should be more robust.</i></p> <p>Overall, cumulative effects are very difficult to assess, and EIA-based cumulative effects assessments (CEAs) led by developers of individual projects have clear shortcomings</p>	<p><i>developments actually having appropriate mitigation in place to reduce the risk of PTS, which may not necessarily be the case.</i>' is incorrect because each offshore wind project, UXO clearance campaign, and oil and gas seismic survey will have to implement a MMMP, the purpose of which is to prevent PTS. Geophysical surveys are also required to follow standard mitigation procedures in order to mitigate for the potential for injury. Due to this, it is not anticipated that there would be any potential for PTS from offshore wind farms, UXO clearance campaigns, oil and gas seismic surveys, or geophysical surveys.</p> <p>Regarding other activities, the potential for PTS onset in marine mammals due to other activities, such as dredging, drilling, rock placement, and vessels, is unlikely, and therefore has not been fully assessed for the Projects alone. The underwater noise modelling report for the Projects [APP-192] predicted potential PTS (cumulative) ranges of less than 100m (i.e. a marine mammal would have to be within 100m of the activity when commenced in order to be at risk of PTS onset). This is considered to be unlikely, as marine mammals would likely be disturbed by the activity and the vessels before the activity commenced. As stated in paragraph 402 of the Marine Mammal ES Chapter [APP-096], <i>'PTS as a result of construction activity, other than piling, is highly unlikely and has not been assessed further.'</i> As it has been assessed that there is no potential for PTS from the Projects alone, there would be</p>

ID	Question	MMO Responses	Applicant's Comment
		(when compared to CEAs led by government agencies on a regional and strategic level) (Willsteed et al., 2017).	no potential for PTS cumulatively with other projects.
Q3.12.2.3	<p>Outline Documents</p> <p>In relation to the OPEMP [REP3-060], OPIMP [REP4-015] and Outline Offshore Operations and Maintenance Plan [APP-296], confirm whether each document is fit for purpose and, if amendments or additions need to be made, bullet-list these for clarity as to what you expect and why.</p>	<p>These documents will be developed and refined as SEP and DEP progress through the detailed design process, procurement and construction. The Deemed Marine Licence contains condition requiring these documents to be submitted to the MMO for approval. The MMO are satisfied that any refinements required to these documents can be completed post consent.</p>	Noted. The Applicant welcomes this position.
Q3.12.2.4	<p>Site Integrity Plans.</p> <p>At present, the MMO has expressed that the SIP is acceptable as drafted, would serve its purpose and could be enforced [REP3-133]. Meanwhile NE has said there is no confidence in the SIP process because SIP(s) have limited measures to mitigate the exceedance of seasonal threshold [REP3-146, point D18 and REP3-147 Q2.12.2.1]. The Applicant maintains that the SIP is the established mechanism to regulate and control underwater noise impacts. In this regard:</p> <p>Applicant:</p> <p>a) NE has suggested [REP3-147, Q2.14.1.20] that all mitigation should be set out now, and the SIP is used to discount mitigation that no longer applies at the time the development is commenced. Do you think there is merit in this approach?</p> <p>b) Can you reassure the ExA that the SIP (either for this project or taken together with</p>	<p>The MMO notes that points A – D are directed at the applicant and Natural England.</p> <p>The MMO are satisfied that the SIP is currently provides sufficient control over the timing and nature of noisy activities to ensure that the relevant in- combination disturbance impact thresholds for marine mammals would not be breached. The MMO understands NEs concerns regarding the in combination impacts to the SNS SAC and defer to them as the experts in this area. The MMO however are currently satisfied that the SIP and the subsequent SIP process are enforceable, and therefore have no further comment on the document.</p>	The Applicant agrees that the SIP is the appropriate mechanism for ensuring in-combination AEol on the Southern North Sea SAC is avoided.

ID	Question	MMO Responses	Applicant's Comment
	<p>other SIPs) would be effective in its intended function?</p> <p>NE:</p> <p>c) Due to your reservations on the SIP, your response [REP3-146, point D18] suggests that an AEol cannot be ruled out for the harbour seal and grey seal feature of the SNS SAC. If not the SIP process, what other forms of regulatory control are available to reassure you that AEol would not occur?</p> <p>d) Are you content with the MMMP and the mitigation therein? If so, would this not be enough to reassure you that sufficient mitigation exists to avoid an AEol? Explain with reasons.</p> <p>MMO:</p> <p>e) Do you have any further comments on the SIP that you wish to bring to the ExA's attention, taking into account all your own submissions and those of NE to date and all of the matters raised above in this question?</p>		
Q3.12.2.5	<p><b>Piling Controls</b></p> <p>The Applicant has confirmed that simultaneous piling (or other form of foundation installation) could occur within the project itself, and this has been taken into account in the worst-case scenarios assessed in the ES [REP3-101]. In respect of cumulative noise impacts to marine mammals, would there be a need to include a</p>	<p>The MMO does not intend to add a condition to the Deemed Marine Licence to prevent concurrent piling between the Proposed Development and other consented offshore windfarms. The MMO are satisfied that the SIP (APP-290) provides sufficient control over the timing and nature of noisy activities to ensure that the relevant in-combination disturbance impact thresholds for marine mammals would</p>	<p>The Applicant agrees with the MMO position and refers the MMO and the ExA to its response to this question in <a href="#">The Applicant's response to the Examining Authority's Third Written Questions [REP5-049]</a>.</p>



ID	Question	MMO Responses	Applicant's Comment
	<p>condition within the Deemed Marine Licences to prevent concurrent piling between the Proposed Development and other consented offshore windfarms? Explain with reasons.</p>	<p>not be breached. The aim of the SIP is to ensure that noise within the SNS SAC is managed and aligned with guidance from the Joint Nature Conservation Committee, which advises that noise must not exclude harbour porpoise from more than 20% of the relevant area of the site in any given day, or an average of 10% of the relevant area of the site over a season.</p> <p>The final SIP will be used to identify and assess any potential management or mitigation measures that could ensure 'no adverse effect' on the SNS SAC for the significant disturbance of harbour porpoise based on the final design of SEP and DEP. The MMO consider that this is a fair approach to all projects within the area generating underwater noise, and that a condition added to the DML of this project, if not included within other offshore windfarm DML's, would place an unfair burden on this project.</p>	
Q3.12.2.6	<p>Monitoring NE [REP1-136] originally raised concern regarding the OPIMP, particular at points A8 and A19 [REP3-146]. Now that the Examination has moved on, do you agree that appropriate measures are secured, or could potentially be secured in the future, by way of the OPIMP [REP4-015]?</p>	<p>With regard to point A8 - The MMO share Natural England's concerns that the wording of condition 20 is only for the provision of monitoring, and would be satisfied if amendments were made to ensure that appropriate action is sought should impacts exceed what has already been assessed within the ES.</p> <p>With regard to A19 – Again the MMO agree with this point and would welcome amendments to the DCO to include the need for the development of countermeasures should this be identified during post-consent monitoring.</p>	<p>Noted. The Applicant is considering potential updates to the monitoring condition wording within the DMLs and will provide an update at Deadline 7.</p>

ID	Question	MMO Responses	Applicant's Comment
		<p>The MMO acknowledge that this document will be developed and refined as SEP and DEP progress through the detailed design process, procurement and construction. The MMO are satisfied that any refinements required to these documents can be completed post consent.</p>	

*Table 7 The Applicant's comments on National Farmers Union's responses to the Examining Authority's Third Written Questions*

ID	National Farmers Union Comment	Applicant Response
2.0	<b>Q3.6.2.1 LINK BOXES</b>	
2.1	<p>Equinor have provided the following 'The number and placement of the link boxes would be determined as part of the detailed design. Where possible, the link boxes would be located close to field boundaries and in accessible locations'.</p> <p>The NFU and LIG now understand that the number and placement will be determined at detailed design and so the request is that Equinor provide the worst-case scenario of how link boxes could be configured. This needs to be understood in regard to the impact on agricultural operations on a day to day basis so that the compensation for this impact can be calculated.</p> <p>The NFU and LIG would also like to understand how the final location of a link box is agreed with a landowner. What are the factors which govern where a link box is sited? How can the location be influenced so that it is in a field boundary rather than 5m out from the boundary? It has now been highlighted that the ALO in the outline CoCP will as one of its roles discuss the location of link boxes, but the NFU and LIG think that this needs to state in the OCoCP that the location will be discussed and agreed with landowners.</p>	<p>The Applicant refers the respondent to its Position statement of ID13 in the <b>Draft Statement of Common Ground with the National Farmers Union</b> [REP5-061] submitted at Deadline 5.</p>
3.0	<b>Q3.16.1.1 Outline Management Plan for Agricultural Matters</b>	
	<b>3.16.1.1.(a) Construction Practice Addendum</b>	
1	<p>The NFU and LIG have sent back the Construction Practice Addendum to Equinor's agents with comments on 12th June 2023 for consideration.</p>	<p>The Applicant will review the comments received from NFU and LIG and respond in due course.</p>
	<b>3.16.1.1.(b) NFU, does the additional information in relation to role of the ALO, soil heating and soil management, provided by the Applicant in the revised drafts of the OCoCP [Rev C, REP3- 064] [Rev D, REP4-016] address your concerns in relation to those matters?</b>	
2	<p>1) <b>Role of the ALO:</b> The NFU is pleased to see that wording has now been included at paragraph 115 in the OCoCP to cover the scope of the works of the ALO. But there are two sections of wording which have not been included as follows:</p> <p>Sixth bullet point (which will include endeavoring to keep the landowner/occupier informed at least 3 months in advance (where practicable)</p>	<p>1) The <b>Outline Code of Construction Practice (Revision E)</b> [REP5-029] submitted at Deadline 5 includes information on the roles and responsibilities of the Agricultural Liaison Officer (ALO) in line with what has so far been agreed with the NFU and LIG. This includes text with regards to pre-construction liaison (Section 2.4 and paragraph 116, bullet 5) and the ALO's role in site inspections (paragraph 116, bullet 6).</p>

ID	National Farmers Union Comment	Applicant Response
	<p>of the Applicants intention to take entry in order to commence the cable installation works);</p> <p>Fifth bullet point: Undertaking site inspections during construction to monitor working practices and ensure landowners' and occupiers' reasonable requirements are fulfilled. The NFU would like to see this wording also included under the scope of works for the ALO.</p> <p>2) <b>Soil Heating:</b> The NFU has seen that the wording ' Best practice guidance and latest industry standards' will be followed has been added to the Outline CoCP.</p> <p>The NFU would like to understand what will happen once the scheme is operational and if there is heating of soil which impacts on cropping, how will this be treated and how does a landowner submit a claim for losses?</p> <p>Equinor have stated that the Applicant's position in ID3 sets out that the Offshore Transmission Owner (OFTO) will have responsibility for the transmission infrastructure and cables once SEP and DEP become operational.</p> <p>NFU and LIG require more detail on this. Obligations need to form part of the transfer to protect landowners.</p> <p>3) <b>Outline OCOP and Soil Management:</b></p> <p>As stated, before the NFU has accepted that there is a detailed section on Soil Management within the OCoCP but again specific wording that the NFU would like to see agreed and set out within the OCoCP has not been agreed and detailed in that section.</p> <p>It is not accepted that specific detail cannot be included due to the outline nature of the OCoCP. As stated, the wording we are requesting has been agreed and included in other OCoCP for similar DCO schemes. It is very important that this wording is agreed because as stated in paragraph 21 the provisions of the OCoCP will be incorporated into contracts for the construction of the project.</p>	<p>2) The Applicant refers the respondent to its Position statement of ID3 in the <b>Draft Statement of Common Ground with the National Farmers Union</b> [REP5-061] submitted at Deadline 5. This is copied below for eased of reference:</p> <p><i>Once SEP and DEP are operational, the Offshore Transmission Owner (OFTO) will have responsibility for the transmission infrastructure and cables. The relevant powers and obligations under the DCO will be transferred to the OFTO pursuant to the OFTO Regulations, together with the relevant interests in land, which will include all relevant land agreements entered into by Scira Extension Limited (SEL) and/or Dudgeon Extension Limited (DEL). The responsibilities under the land agreements will be already known to the relevant landowners. This means that responsibility during the operational phase (after the transfer to the OFTO) and decommissioning will fall on the OFTO.</i></p> <p>3) The Applicant is in discussions with the NFU and LIG regarding providing some assurance on these aspects by way of a Construction Practice Addendum. This will form part of the legally binding Option Agreements between the Applicant and landowners. The Construction Practice Addendum was sent to the NFU and LIG on 6th October 2022 and more recently on 15th May 2023 and received a response on 12th June 2023 which it is considering. The information on soil handling, land/field drainage and irrigation and water supply within the Construction Practice Addendum will form part of the final CoCP.</p>
<p><b>Fully justify why this information or an outline of what the final CoCP will include cannot be provided now in the OCoCP?</b></p>		
3	<p>The NFU agrees that the approval of the Code of Construction practice is secured through Requirement 19. But as stated above what is important to the NFU and LIG is that specific wording is agreed for field drainage, soil reinstatement and how water supplies including irrigation will be dealt with so that this wording will be</p>	<p>The Applicant refers to its previous response to Q1.6.6.1 in <b>The Applicant's Comments on Responses to the Examining Authority's First Written Questions</b> [REP2-040].</p>



ID	National Farmers Union Comment	Applicant Response
	<p>carried forward from the outline CoCP to the final CoCP. The NFU and LIG see no reason for this not being included now in the OCoCP. The wording requested has been agreed and set out in many OCoCPs for other Offshore Wind Farm developments.</p>	
4)	<p><b>Q3.16.1.2 Effect on Individual Businesses</b></p>	
4	<p>The Applicant [REP1-036, Q1.16.1.8] sets out that it is not possible to meaningfully estimate the amount of land in each holding or therefore the amount of land affected. However, the NFU [REP3-136, Q2.16.1.4] noted that the Applicant should have an understanding of such matters from the discussions taking place with each landowner. Please provide further justification for your position?</p> <p>The NFU believes that it is possible to be able to set out the amount of land in each holding affected by the underground cables. The applicant has to know this to be able to calculate the easement payment under the voluntary agreement and the Applicant is also wanting to have restrictive covenants in place across the easements on each holding.</p>	<p>The Applicant has only acquired HM Land Registry titles intersected by the PEIR boundary on which consultation was undertaken. This does not in all cases represent the full extent of a Land Interest's holding as, for example, land titles can be split during sales or for tax planning purposes. Additional land can also be acquired and added to a holding under a separate HM Land Registry title number. HM Land Registry refreshes after this stage of the project were only undertaken on the extent of the Order Limits and therefore up to date information is not held nor relevant on titles located outside it. Furthermore, Land Interests can occupy other land as a tenant which in most cases is not registered against an HM Land Registry title and whilst a tenant interest within the Order Limits is relevant at this point of time, it is subject to change up to the exercising of any rights.</p> <p>There is therefore no way for the Applicant to provide the information requested unless it is volunteered by a Land Interest.</p> <p>The Applicant therefore refers to its response provided at Deadline 5 to Q3.16.1.2 of <a href="#">The Applicant's Response to the Examining Authority's Third Written Questions</a> [document reference 19.2] which explains that the consultation undertaken to date as set out in the <a href="#">Consultation Report</a> [APP-029] and <a href="#">Statement of Reasons (Revision D)</a> [REP3-019] has provided the Applicant with sufficient understanding of the wider farming and business operations which may be indirectly impacted during the works.</p>

*Table 8 The Applicant's comments on National Highways's responses to the Examining Authority's Third Written Questions*

ID	Question	National Highways Response	Applicant's Comment						
<b>Q3.23 Traffic and Transport</b>									
<b>Q3.23.1 Effects from Construction Vehicles on the Highway Network and Living Conditions</b>									
Q3.23.1.1	<p><b>Driver Delay, Capacity and Assessment Methodology</b></p> <p>The draft SOCG [REP3-080] sets out that the Applicant is providing further information to NH in relation to driver delay, capacity and assessment methodology. Set out what the further information is and what remains the concern of NH.</p>	<p>In response to clarifications requested by NH in relation to driver delay, capacity and assessment methodology, the applicant's transport consultant has provided a technical note titled, 'Junction Modelling Clarifications' which addresses potential traffic impacts on the previously agreed list of 11 junction models for assessment. The document was received by NH on 22 May 2023, and contains 552 pages (including appendices) for review. NH is progressing its review of this document and will provide an update by Deadline 7.</p> <p>Table 1 sets out the 11 sensitive junctions which were identified by National Highways at the 13 July 2021 ETG (Expert Topic Group) meeting. The outstanding modelling issues for each respective junction are set out.</p> <p>Table 1: Outstanding Modelling Issues for 11 sensitive SRN junctions</p> <table border="1" data-bbox="884 1090 1458 1394"> <thead> <tr> <th data-bbox="884 1090 929 1185">Jct. No.</th> <th data-bbox="929 1090 1137 1185">SRN - Junction Name</th> <th data-bbox="1137 1090 1458 1185">Outstanding Modelling Issues</th> </tr> </thead> <tbody> <tr> <td data-bbox="884 1185 929 1394">1</td> <td data-bbox="929 1185 1137 1394">A47 / B1535 / Berrys Lane staggered junction (west of Honingham)</td> <td data-bbox="1137 1185 1458 1394">The output results (reported RFC's and queues) shown within the tables within the TA, do not appear to correlate with Annex 32 for the 'with development' scenarios.</td> </tr> </tbody> </table>	Jct. No.	SRN - Junction Name	Outstanding Modelling Issues	1	A47 / B1535 / Berrys Lane staggered junction (west of Honingham)	The output results (reported RFC's and queues) shown within the tables within the TA, do not appear to correlate with Annex 32 for the 'with development' scenarios.	<p>The Applicant acknowledges National Highways commitment to close out all matters relating to junction modelling by Deadline 7.</p> <p>The Applicant would highlight that the clarifications provided to National Highways demonstrate that the conclusions of the <b>Transport Assessment</b> [APP-268] remain valid.</p>
Jct. No.	SRN - Junction Name	Outstanding Modelling Issues							
1	A47 / B1535 / Berrys Lane staggered junction (west of Honingham)	The output results (reported RFC's and queues) shown within the tables within the TA, do not appear to correlate with Annex 32 for the 'with development' scenarios.							

ID	Question	National Highways Response		Applicant's Comment	
		2	A47 / Taverham Road / Blind Lane staggered junction (east of Honingham)	<p>A plan should be provided to show the mitigation proposals at this junction and therefore it has not been possible to verify the geometry measurements used within the Junctions 9 model; a plan showing the geometry measurements used should be provided.</p> <p>The modelled period for the AM peak appears to be between 07:30-08:30, and it is understood that the intention is that the period from 06:30-07:30 should have been modelled. This should be clarified.</p> <p>The output results (reported RFC's and queues) shown within the Tables held within the TA, relating to the 'in isolation' scenarios, do not appear to correlate with the outputs provided within Annex 32. This discrepancy should be clarified.</p>	

ID	Question	National Highways Response		Applicant's Comment	
		3	A47 / Church Lane/ Dereham Road 'Easton' Roundabout	TA output results (reported RFC's and queues) within the Tables held within the TA, relating to the 'with development' scenarios, do not appear to correlate with the outputs provided within Annex 32 (marginal differences).	
		4	A11 / Station Lane junction	TA output results (reported RFC's and queues) within the Tables held within the TA, relating to the 'with development' scenarios, do not appear to correlate with the outputs provided within Annex 32 (marginal differences).	
		5	A11 / A47 'Thickthorn' grade separated roundabout	The output results shown within the Tables held within the TA, relating to all scenarios, do not appear to correlate with the outputs provided within Annex 32.	
		6	A47 / Markshall Farm Road / Harford Park and Ride Road	It is considered that the 'lane simulation' function may be useful when modelling this roundabout, however, it is clear from Google Maps that this junction does not appear to suffer from congestion issues during the modelled peaks; notwithstanding this, the use of this function should be considered (particularly for the A140 arms of the	



ID	Question	National Highways Response		Applicant's Comment
			<p>junction) if the modelling is updated in the future.</p> <p>The output results (reported RFC's and queues) shown within the Tables held within the TA, relating to the 'with development' scenarios, do not appear to correlate with the outputs provided within Annex 32 (marginal differences).</p>	
		7	<p>A47 / Norwich Road roundabout</p> <p>The modelled period for the AM peak appears to be between 07:30-08:30, and it is understood that the intention is that the period from 06:30-07:30 should have been modelled. This should be clarified. The flare length included within the model set up for the A47 east arm appears to be excessive (modelled as 74m on length); this should be checked and the model re-run as required.</p> <p>The output results (reported RFC's and queues) shown within the Tables held within the TA,</p>	

ID	Question	National Highways Response		Applicant's Comment
			<p>relating to the 'with development' scenarios, do not appear to correlate with the outputs provided within Annex 32 (marginal differences).</p>	
		8	<p>A47 / A1074 / William Frost Way five arm roundabout</p> <p>The Google Maps traffic function appears to show some congestion at this junction, particularly during the PM peak. The modelling results appear to contradict this and further clarification should be provided with regards to this.</p>	
		9	<p>A47 / Dereham Road / Long Lane five arm roundabout</p> <p>The geometry measurements for the 'A47 North' approach to the roundabout appear to differ to our reviewer's measurements. These measurements should be clarified/ revisited and the model updated as appropriate.</p>	
		10	<p>A47 / B1108 / Green Acres / Walton Road six arm roundabout (east of the A47)</p> <p>The output results (reported RFC's and queues) shown within the Tables held within the TA, relating to the concurrent' scenarios, do not appear to correlate with the outputs provided within Annex 32. This discrepancy should be clarified.</p>	

ID	Question	National Highways Response		Applicant's Comment
		11	A47 / B1108 / Walton Road four arm roundabout (west of the A47).  No outstanding concerns or queries.	
Our Spatial Planning Framework consultant, AECOM, is currently reviewing the submitted 'Junction Modelling Clarifications' technical note and National Highways will submit our response by Deadline 07 (10 July).				
<b>Q3.23.5 Suitability of Access Strategy</b>				
Q3.23.5.1	<p><b>Abnormal Indivisible Loads</b></p> <p>a) NH has set out [REP3-138, Q2.23.5.1] that it's consultants will be issuing their report soon for the Scarning Bridge assessment. Provide an update on the progress of the report.</p> <p>NH note [REP3-138, Q2.23.5.1] that it has been agreed between the parties that abnormal load movements can be dealt with post consent through the development of the CTMP and established Electronic Service Delivery for Abnormal Loads processes. Further, NH is of the view that engagement will also be required with the A47 scheme major project teams and other major offshore wind farm developers to proactively understand risks to and programme abnormal load movements around the A47 works and other abnormal load movement needs, not solely rely on the processes.</p>	<p>a) Please find update on the Scarning Bridge assessment, together with an updated in relation to the West Bilney No 1 Culvert:</p> <p><b>Scarning Bridge (Structure Key 7650).</b> Analysis of the structure has been completed and the preliminary findings indicate that the structure is adequate for the abnormal load WYLN/35/S1. In any case, National Highways understand that an alternative route using the Local Road Network has been agreed between the Applicant and the Local Highway Authority which would avoid the need to use this bridge.</p> <p><b>The structural reviews for West Bilney No 1 Culvert (Structure Key 1291 and extension 1292):</b> It is recommended that the load is moved away from the damaged wall (for example, onto the opposite (westbound) lane). The load distribution measures such as plating over the carriageway</p>		<p>a) The Applicant welcomes clarification from National Highways that both structures are passable and that they are content that the movements can be managed through the CTMP post consent.</p> <p>b) The Applicant agreed with National Highways at a meeting on the 6 June 2023 that the CTMP is to be amended to include the need to establish a monitoring group. This was implemented at Deadline 5. Notwithstanding, the Applicant would clarify it was agreed there would be a need for regular meetings with National Highways A47 Major Project Team and the Applicant is in the process of organising these. These meetings will be monthly and will allow for discussion of co-ordination matters including abnormal loads. The requirement for ongoing meetings will also be captured within the co-operation agreement which is being developed between the parties.</p>

ID	Question	National Highways Response	Applicant's Comment
	<p>b) What changes are needed to the OCTMP to capture such matters?</p>	<p>being used to help spread the load away from the head wall; so that the load distribution remains within the undamaged part of the overall structure. This approach is assumed to be the easiest method to facilitate the movement and remove with minimal disruption, before and after the passage of the Special Order (SO) vehicle.</p> <p>National Highways have reviewed the Outline Construction Traffic Management Plan (OCTMP) Revision C dated May 2023 (clean version REP3-062) submitted by Equinor. This OCTMP has mentioned the alternative arrangements that the applicant may need to make in relation to the Abnormal and Indivisible Loads (AIL) route. NH has reviewed this element of the OCTMP and is content with how this will be dealt with in the OCTMP.</p> <p>b) Engagement will still be required with the A47 scheme major projects teams in respect of the routing of AILs around the A47 scheme construction works. A meeting was held on 06/06/2023 with National Highways A47 Major Projects, North Tuddenham and Easton team. At this meeting, National Highways recommended regular project-to-project meetings between the A47 Major Projects team and the Equinor team to make and co-ordinate access arrangements during the period in which the works overlap. These meetings should also address the question of the routing of AILs around the works. The OCTMP should be amended to refer to this process. The parties also envisage that co-operation around these works will need to be</p>	



ID	Question	National Highways Response	Applicant's Comment
		included within the proposed co-operation agreement.	
Q3.23.5.4	<p>Access to the North of the A47</p> <p>a) NH has recommended [REP3-138] the Applicant considers the implications to their construction programme of a 2-year period of no access to the north of the A47 or if access from Church Lane in the east is required to mitigate the risk. The Applicant is of the view [REP4-028] that this can be suitably managed by the OCTMP. Is this accepted by NH?</p>	<p>This answer relates to coordinated construction activities and phases among National Highway's major projects in and around the Norfolk area and all those third-party led Nationally Significant Infrastructure Projects (NSIPs) within the same area. The issues raised by NH also relate to NH's ability to comply with its own DCO (The A47 North Tuddenham to Easton Development Consent Order 2022) and its agreements to co-operate with the Hornsea Three Offshore Wind Farm Project. See further details in Appendix 1 of NH's submissions.</p> <p>The submitted document, 'The Applicant's Comments on Responses to the ExA's Second Written Questions' (REP4-028) mentioned, at ID-19, that Equinor will be seeking to further mitigate risks to the programme associated with the construction of the A47 North Tuddenham to Easton Scheme through the forthcoming co-operation agreement with National Highways. National Highways welcomes the Applicant's acknowledgement that a co-operation agreement is required and will be entered into.</p> <p>In order to resolve this challenging situation National Highways and Equinor have engaged in discussions to enter into a co-operation agreement to cover access arrangements, programming of works, lines of communication, engineering works where relevant (for example, infrastructure under the A47), ecological</p>	<p>The Applicant welcomes clarification from National Highways that this matter can be addressed through the cooperation agreement and ongoing dialog between the parties.</p> <p>With regard to amendments to the Outline Construction Traffic Management Plan (OCTMP), National Highways' request to include a monitoring group has been incorporated into the latest revision of the <b>OCTMP (Revision D)</b> submitted at Deadline 5 [REP5-027].</p>

ID	Question	National Highways Response	Applicant's Comment
		<p>mitigation and road closures. There are also impacts on the overlapping Hornsea Three Offshore Wind Farm Project which will also need to be taken into account by the Applicant and dealt with in the co-operation agreement. Matters were raised at a recent meeting on 06/06/2023 with the National Highways A47 Major Projects, North Tuddenham to Easton team. At this meeting, National Highways recommended regular project-to- project meetings between the A47 Major Projects team and the Equinor team to make and co-ordinate access arrangements during the period in which the works overlap. Equinor accepted this approach. The OCTMP should also be amended to refer to this process.</p> <p>In relation to the proposed access from the Church Lane, as stated in the ID-20 of the Applicant's Responses to the ExA's Second Written Questions (REP4-028), the highways including Church Lane are in the ownership and control of Norfolk County Council (NCC) as local highway, and not National Highways.</p> <p>National Highways have requested further amendments to the OCTMP, by setting up a monitoring group, which will be chaired by the Applicant. The Monitoring Group will include a review of the outputs of a Monitoring Report and discuss any remedial measures. This monitoring group will consider whether the CTMP is being carried out and is working in practice.</p>	

ID	Question	National Highways Response	Applicant's Comment
Q3.23.5.5	<p>Honingham Lane Temporary Traffic Regulation Order</p> <p>NH has raised concerns [REP3-138] about the effect of the Honingham Lane Temporary Traffic Regulation Order that forms part of the A47 Tuddenham Scheme on the proposed development. The Applicant asserts [REP4-028] that in the event that link 149 is closed an alternative route via link 148 from the west would be available and the associated impacts of the use of this route have been assessed.</p> <p>a) Has the ES considered and assessed such a circumstance in terms of vehicles numbers that the alternative would receive?</p> <p>b) Does this overcome NH's concern and is the Applicant's view supported by NCC?</p>	<p>a) National Highways notes that this is a question directed to the Applicant but National Highways is able to highlight the documents and information provided by the Applicant that National Highways has had sight of. In particular National Highways has reviewed Chapter 24 Traffic and Transport where it sets out (Tables 24.19 and 24.20) the forecast construction vehicle trips for the number of peaks, all and average daily HGV trips; especially, for all those SRN associated links, out of total 140 links within the Traffic and Transport Study Area (TTSA). In addition, the resultant peak daily HGV trips per link are also summarised in the Annex A of the OCTMP (REP3-062). The alternative route link 148, mentioned above in the ExA's question, is part of the local road network, where Norfolk County Council (NCC) is the responsible highway authority.</p> <p>b) National Highways understands that any change or non-availability, due to road closures of any of those previously assessed links, the Applicant will initially seek to reschedule works and subsequently propose (contingency) diversion routes on the highway network for approval by the relevant highway authorities. National Highways has submitted and had approved its traffic management plan under the A47 North Tuddenham to Easton Development Consent Order 2022. Whilst National Highways will be willing to assist with any updates to routes on the highway, it is</p>	<p>The Applicant welcomes clarification from National Highways that their concerns have been addressed by the clarifications provided by the Applicant.</p> <p>The agreement between the parties is reflected in the latest version of the <b>Draft Statement of Common Ground with National Highways (Revision C)</b> submitted at Deadline 5 [REP5-034].</p>

ID	Question	National Highways Response	Applicant's Comment
		<p>constrained by the approved traffic management plan already approved under its Order. National Highways would be happy to share this with the Applicant so it can be taken into account in the Applicant's scheme going forward.</p> <p>At the meeting held on 6th June 2023, the Applicant explained to National Highways the alternative routes available to traffic should Honingham Lane be closed to construction traffic during the course of the works. Alternative routes to/ from the A47 via Taverham Road and the B1535 are equally available whether Honingham Lane is open or closed to construction traffic and the difference between them in impacts on the A47 is therefore likely to be minimal.</p> <p>This additional information overcomes the previously raised concern in the National Highway's response (REP3-138).</p>	
<b>Q3.23.6 Effectiveness of Proposed Mitigation Measures</b>			
Q3.23.6.1	<p><b>Mitigation – A47 Tuddenham Scheme</b></p> <p>NH have set out [REP3-138] that the Applicant has acknowledged the need to enter into a Legal/ Co-operation agreement similar to that between NH and Orsted for the Hornsea Project Three DCO wind farm cable crossing of the A47 Tuddenham Scheme.</p>	<p>NH's position is that a co-operation agreement is required alongside the protective provisions that have been proposed by NH. The purpose of the protective provisions is to provide protection to the existing assets held by NH from the authorised development. Where there are impacts on the SRN by an application for a proposed Development Consent Order, it is NH's position that the assets require protection by</p>	<p>Please refer to the Applicant's response to this question in Table 3 of <a href="#">The Applicant's Responses to the Examining Authority's Third Written Questions</a> [REP5-049].</p> <p>The Applicant would like to clarify that, following receipt of National Highways' updated protective provisions received as part of its written representation [REP1-132], and more recently at Deadline 3 [REP3-139], the protective provisions currently being negotiated offer protections to</p>



ID	Question	National Highways Response	Applicant's Comment
	<p>Explain why this is necessary outside of the DCO and its protective provisions.</p>	<p>virtue of protective provisions – this is the case for all schemes affecting the SRN.</p> <p>In addition, in relation to this project the Applicant is proposing to use a Horizontal Direction Drill (HDD) to drill and install cabling underneath the SRN. The protective provisions seek to protect the SRN from such works, and to address the issues arising in relation to rights in land held by National Highways for the purposes of their undertaking.</p> <p>The co-operation agreement is required in relation to this particular scheme because of the nature of the interaction between this scheme and the development consented by both The A47 North Tuddenham to Easton Development Consent Order 2022 and The Hornsea Project Three Offshore Wind Farm Order 2020. The interactions between the three projects cannot be dealt with solely within the proposed Order given that there will likely be obligations on all parties to work with each other. The co-operation agreement will allow for the parties to agree how best the three projects are implemented in relation to the specific areas of land affected to best avoid there being any conflict between competing projects. It is not unusual for parties to enter into agreements, such as the one proposed, in circumstances such as this.</p>	<p>National Highways in relation to the A47 Tuddenham Scheme and not just the existing apparatus. The Applicant has updated the protective provisions for National Highways included in Part 14 of Schedule 14 of the <b>draft DCO (Revision I)</b> [document reference 3.1] to more properly reflect the content of the protective provisions currently being discussed with National Highways.</p>

*Table 9 The Applicant's comments on National Trust's responses to the Examining Authority's Third Written Questions*

ID	Question	National Trust Responses	Applicant's Comment
<b>Q3.8. Compulsory Acquisition and Temporary Possession</b>			
<b>Q3.8.3 Special Land</b>			
Q3.8.3.2	<p><b>National Trust Land</b></p> <p>Provide an update on progress with negotiations and highlight any particular issues which may be an impediment to reaching a voluntary agreement before the close of the Examination.</p>	<p>The National Trust's position remains unchanged since Deadline 3.</p> <p>The Trust has been working with Equinor to agree terms for access that will cause minimal impact and disruption, with a view to securing a signed Option agreement and Deed of Easement for the requisite cables and access over and under Trust land. Whilst the majority of terms have now been agreed, there is still disagreement over the need for the easement to be in perpetuity, and we await suitable reasoning to be presented by the developer. Therefore, this issue currently remains unresolved.</p>	<p>Noted. The Applicant refers to its response to its answer to Q3.8.3.2 in <a href="#">The Applicant's response to the Examining Authority's Third Written Questions [REP5-049]</a>.</p>
<b>Q3.14. Habitats Regulation Assessment</b>			
Q3.14.1.4	<p><b>The Farne Islands Management Plan</b></p> <p>NT submitted the draft Farne Islands Management Plan to the Examination, noting that it needs signoff from NE [AS-042]. NT expressed that the management plan may not become a Government document, as alleged by the Applicant, and look to NE to advise [REP3-140]. NT also consider the Applicant's proposals do not represent additionality and the SoCG with the NT [REP2-046] suggests that there need not be any further discussion on the Farne Islands compensation measures with the</p>	<p>a) This is a matter for Natural England and the National Trust defers to their response.</p> <p>b) Natural England are best placed to respond to this question. We would ask that Natural England clarify this and make the National Trust aware of any implications should the Farne Islands Management Plan be considered a Government document. The National Trust's understanding is that the Management Plan will not become a Government document. It is a local site management plan which acts as the consenting tool for management of a National Nature Reserve. Once approved</p>	<p>The Applicant highlights its response to Q3.14.1.6 in <a href="#">The Applicant's response to the Examining Authority's Third Written Questions [REP5-049]</a>, regarding the development of an additional compensatory measure option at Blakeney involving predator eradication. The Applicant is working with National Trust and Natural England to develop a proposal which will be submitted before the end of Examination (along with updated DCO drafting).</p> <p>It should be noted that Natural England has indicated that this measure could replace the Applicant's proposed measure at the Farne</p>

ID	Question	National Trust Responses	Applicant's Comment
	<p>most recent SoCG [REP4-024] stating resources should be deployed elsewhere.</p> <p>a) When will the draft Farne Islands Management Plan document be endorsed by ME?</p> <p>b) When adopted, will this constitute a Government document?</p> <p>c) If yes to b) above, is the Applicant justified in relying on that document and what is said in the Energy Security Bill with respect to the arguments of providing compensation on the Farne Islands (the 'additionality' point) [REP3-111]?</p> <p>d) Given the lack of certainty about the status and efficacy/ additionality of the management plan, should the proposals at the Farne Islands be discounted from the Applicant's package of compensatory measures for sandwich terns? Explain with reasons.</p> <p>e) In light of the SoCG [REP2-046] is NT, as the owners and managers of the Farne Islands, stating that the Farne Islands are not available to the Applicant?</p>	<p>by Natural England, the Management Plan is used to assess applications for activities which require SSSI consent.</p> <p>c) This is a matter for Natural England and the National Trust defers to their response.</p> <p>d) The National Trust considers that the proposals at the Farne Islands should be discounted from the Applicant's package of compensation measures for sandwich terns. As set out in the Trust's Written Representation (REP1-134), responses to WQ2 (REP3-141) and draft SoCG Rev.B [REP4-024], the National Trust does not consider the proposals demonstrate additionality to existing management proposals. Furthermore, the area used for shelters is very fragile due to puffin burrows and available and suitable space for interventions is limited as most of the area is keenly contested by seabirds. The National Trust does not consider the proposals are appropriate or deliverable.</p> <p>e) Yes, for the reasons set out above and, in our representations, the National Trust, as the owners and managers of the Farne Islands advises that the Farne Islands are not available for the for the compensation measures proposed by the Applicant.</p>	<p>Islands SPA. However, the Applicant maintains its position that the measures proposed would make a meaningful difference to the Sandwich tern population on the Farne Islands for the reasons described in Section 4.2.1 of the <b>HRA Derogation and Compensatory Measures Update Note (Revision C)</b> [document reference 3.1] and that the measures would be additional to those proposed in the National Nature Reserve Management Plan and therefore is retaining this option in its compensatory measures package. See further details in response to d) and e) below.</p> <p>The Applicant also highlights that this work is at an early stage of development given the date it was presented to the Applicant. As a result of the short amount of time remaining within the SEP and DEP Examination, the maturity of the proposals submitted into Examination over the next month will be subject to further development.</p> <p>b)</p> <p>The Applicant considers that the reference in this question to 'Government document' is potentially misleading. As set out in ID8 of <b>The Applicant's Response to National Trust Deadline 2 Submission</b> [REP4-031], the term 'Government document' is not used in the draft Energy Bill or in the associated Policy Statement. The relevant article of the draft Bill (article 241) refers to measures taken or secured by a 'public authority', which is defined as any person with functions of a public nature.</p>

ID	Question	National Trust Responses	Applicant's Comment
			<p>The Applicant assumes that the NNR Plan would fall within that scope because it sets out the plan for management of a National Site Network site which, whilst situated on land owned by National Trust, is a site for which Government is responsible for approving the management measures proposed and setting the conservation status and requirements for these to be maintained and restored.</p> <p>The Applicant considers that the response from the National Trust supports this, and that the National Trust's management of the site would be carrying out functions of a public nature.</p> <p>a) and c)</p> <p>No comments</p> <p>d) &amp; e)</p> <p>In light of possible upcoming changes to policy and best practice guidance with respect to additionality and the severity of the situation at the Farne Islands SPA, which has seen Sandwich tern breeding numbers decline considerably over 40 years, despite ongoing conservation and management efforts (see <a href="#">Annex 2B - Sandwich Tern Nesting Habitat Improvements Site Selection [APP-071]</a>), the Applicant considers its proposal to undertake measures to improve breeding success at the Farne Islands SPA to be an important part of its proposed package of compensatory measures for Sandwich tern. It is considered that there is sufficient evidence outlined in the <a href="#">Appendix 2 - Sandwich Tern Compensation Document [APP-069]</a> and the <a href="#">Sandwich Tern –</a></p>



ID	Question	National Trust Responses	Applicant's Comment
			<p><b>Quantification of Productivity Benefits Technical Note</b> [REP3-091] to demonstrate that if delivered at an appropriate scale, the measures proposed could provide substantial benefits to breeding numbers of Sandwich tern at the Farnes as well as complement the Applicant's proposed measure at Loch Ryan (see the <b>Sandwich Tern – Quantification of Productivity Benefits Technical Note</b> [REP3-091] for further information with respect to this).</p> <p>The Applicant recognises the following comment from National Trust '<i>Available and suitable space for interventions on the Farne Islands is limited, as most of the area is keenly contested by breeding seabirds</i>' however still considers it useful to explore whether a high quality nesting habitat in an area away from the expanding puffin colony could be created – installing tern terraces onto a gravel substrate in an area cleared of nitrophilous vegetation where vegetation control could be carried out before each breeding season. The Applicant agrees that attempting to increase tern numbers on top of the puffin colony would not be recommended as puffin burrows affect ground stability. In addition, much of the gull activity is intercepting puffins carrying fish into burrows and therefore this is unlikely to be a suitable location to encourage nesting of tern species which are also susceptible to gull predation.</p> <p>In light of possible upcoming changes to policy and best practice guidance with respect to additionality and the severity of the situation at</p>

ID	Question	National Trust Responses	Applicant's Comment
			<p>the Farne Islands SPA, it is considered important that this measure remains within the Applicant's proposed package of compensatory measures for Sandwich tern.</p>
Q3.14.1.5	<p><b>Route to acquire Farne Islands</b></p> <p>It has been previously mentioned that the Applicant would seek negotiated positions with landowners to implement compensatory measures, but there remains the ability under the Electricity Act 1989 to pursue compulsory acquisition if required [REP3-101, Q2.14.1.10]. The SoCG with the NT [REP2-046] states the NT does not wish to engage with the developers any further with regards to opportunities on the Farne Islands, although the Applicant maintains that the compensatory measures are viable and deliverable [REP3-101].</p> <p>If the Applicant wished to proceed, in light of the apparent objection from the NT with regards to land the Trust holds inalienably, where would that leave the Proposed Development with regards to special parliamentary procedure (either through this Examination or through any subsequent pursuance of compulsory acquisition powers under the Electricity Act 1989)?</p>	<p>Where a developer proposes to compulsorily acquire land or rights over land that the National Trust has declared inalienable and the Trustees of the National Trust object to that acquisition and maintain that objection until the Development Consent Order is confirmed, the matter is referred to Special Parliamentary Procedure ("SPP"). Only the Trustees of the National Trust can decide not to object or to withdraw an objection to a compulsory acquisition proposal affecting NT inalienable land, as set out in the Planning Act 2008.</p> <p>This process only applies to an objection to the acquisition of NT inalienable land (or rights over NT inalienable land), as opposed to other objections NT might raise as part of a DCO examination process. It is a safeguarding provision to help the National Trust preserve the land in its care, that is of such quality, it has taken the decision to protect this land for the benefit of the nation, in perpetuity.</p> <p>Currently, we understand that the only proposed compulsory acquisition of rights over Trust inalienable land by the Applicant relates to the commercial forestry at Sheringham. Should the Applicant amend its application to include other National Trust inalienable land as part of this Examination process, and the National Trust object to that acquisition, the</p>	<p>The Applicant refers to its response to its answer to Q3.14.1.5 in <a href="#">The Applicant's response to the Examining Authority's Third Written Questions [REP5-049]</a>, there is no intention by the Applicant to compulsorily acquire National Trust inalienable land at the Farne Islands.</p>

ID	Question	National Trust Responses	Applicant's Comment
		<p>same provisions relating to Special Parliamentary Procedure would apply.</p> <p>Similar provisions relating to National Trust inalienable land and Special Parliamentary Procedure are set out at clause 18 of the Acquisition of Land Act 1981, which is incorporated into the Electricity Act 1989 at Schedule 3, paragraph 5. In this way, the same process would apply should the Applicant seek to exercise the compulsory acquisition powers of a Licence Holder under the Electricity Act 1989.</p>	

*Table 10 The Applicant's comments on Natural England's responses to the Examining Authority's Third Written Questions*

ID	Question	Natural England Responses	Applicant's Comment
<b>Q3.3. Benthic ecology, Intertidal, Subtidal and Coastal effects</b>			
<b>Q3.3.1 Effects on Marine Life and Benthic Habitats</b>			
Q3.3.1.3	<p><b>Electro-Magnetic Fields</b></p> <p>If cables were to be buried, but not at a depth of 1.5m and with no cable protection used, would there be an adverse impact from electro- magnetic fields on fish, shellfish or other forms of benthic ecology?</p>	<p>Natural England acknowledges the MMO's advice in [REP3-133] advising burial to 1.5m+ should minimise adverse impacts to benthic ecology receptors via electromagnetic field and/or heating.</p> <p>As per our previous advice [REP3-141] the evidence to date remains inconclusive as to the depth of burial. However Natural England advises the deeper the burial, the likelihood of significant impacts occurring is reduced.</p>	<p>The Applicant will make reasonable endeavours to bury offshore cables, minimising EMF effects and the requirement for external cable protection. The Applicant anticipates that across most of the cable routes, burial depths of between 0.5m and 1.5m will be achieved. Where sufficient cable burial depths are not achieved, the use of external cable protection will be considered.</p> <p>With specific reference to export cables in the nearshore areas, these will be buried where the substrate allows burial to a target burial depth of 1.0m, with 0.6m or greater being acceptable in chalk. Furthermore, as described in the <a href="#">Export Cable Burial Risk Assessment</a> [APP-293] and <a href="#">Outline CSCB MCZ CSIMP</a> [APP-291], reduced burial depths (0.3m) may be accepted in order to avoid the need for external cable protection in the MCZ. Acceptance of burial depths is something that will be decided between the Applicant and the export cable installation contractor at the time of the cable installation. Should the required depths not be achieved, the necessary remedial action would be discussed with the MMO and Natural England at the time.</p>
Q3.3.1.5	<p><b>Timing for required Benthic Mitigation Plan/Scheme</b></p> <p>ExA is not convinced that the assessment of the ES on matters of benthic ecology and mitigation measures can be relied upon</p>	<p>a) Applicant to respond.</p> <p>b) Natural England advises that recently consented offshore windfarm projects (notably EA1N/EA2) have included a mitigation plan which outlines mitigation</p>	<p>The Applicant maintains its position that a benthic mitigation plan or scheme is not required to be provided pre-consent. Condition 13(1)(i) of Schedules 10 and 11 and Condition 12(1)(j) of Schedules 12 and 13 of the <a href="#">draft DCO (Revision I)</a> [document reference 3.1] include provision for a</p>



ID	Question	Natural England Responses	Applicant's Comment
	<p>without an outline Benthic Mitigation Plan or Scheme.</p> <p>a) Applicant, provide an outline Benthic Mitigation Plan or Scheme setting out what the Applicant could commit to in relation to benthic mitigation and also what other forms of mitigation would likely be, or could be included, subject to pre-commencement surveys for example. If not, please provide further justification why this cannot be done at this Examination stage.</p> <p>b) What is NE's view of the Applicant's response [REP3-107] that there would not be any value to an outline Benthic Mitigation Plan/Scheme until post-consent pre-commencement surveys and detailed design has been undertaken?</p>	<p>measures including benthic that have been committed to by the Applicant.</p> <p>Natural England would wish to see an outline mitigation plan for benthic included as part of the consenting phase. We refer the ExA and the Applicant to Natural England's tabulated list of standard benthic mitigation measures provided in our Relevant Representations [RR-063]. This considers how SEP and DEP have adopted the mitigation measures at the time of application.</p>	<p>mitigation scheme for any benthic habitats of conservation, ecological and/or economic importance constituting Annex I reef habitats identified by pre-construction surveys, which will be undertaken in accordance with the <b>Offshore In Principle Monitoring Plan (Revision B)</b> [REP4-014]. With respect to the MCZ, the <b>Outline CSCB MCZ CSIMP</b> [APP-291] applies.</p> <p>This is the appropriate approach to mitigating impacts on benthic habitats of conservation, ecological and/or economic importance.</p> <p>Details of the benthic mitigation that applies are provided in Tables 8-3 and 8-4 of the ES [APP-094] and are secured within the <b>Schedule of Mitigation and Mitigation Routemap</b> [APP-282] and the <b>Outline CSCB MCZ CSIMP</b> [APP-291]. No other forms of mitigation at this time are proposed by the Applicant.</p> <p>Further details and justification are provided in the response to Q3.3.1.6 of <b>The Applicant's response to the Examining Authority's Third Written Questions</b> [REP5-049].</p> <p>Also see the Applicant's response to NE's Table 1 Benthic Mitigation Plan at ID 14-27 of <b>The Applicant's Comments on Relevant Representations</b> [REP1-033].</p> <p>With respect to EA2/1N, the Applicant presumes that Natural England is referring to those projects' Outline Sabellaria Reef Management Plan. The Applicant reiterates that no <i>Sabellaria</i> reef has been recorded in any of the existing or extension wind farm sites or export cable corridor characterisation / monitoring surveys and</p>

ID	Question	Natural England Responses	Applicant's Comment
			therefore it is very unlikely that <i>Sabellaria</i> reef is present within the SEP and DEP offshore sites. In respect of sensitive features in the CSCB MCZ, as noted above, mitigation for these is described in and secured through the <b>Outline CSCB MCZ CSIMP</b> [APP-291].
<b>Q3.3.2 Impact on subtidal chalk features</b>			
Q3.3.2.2	<p><b>HDD Exit Point – Chalk Impact</b></p> <p>The Applicant has stated [REP3-107] that the HDD exit point will be located in the deep infilled channel cut through the chalk to 17m below seabed level and filled with Weybourne Channel deposits. On this basis, is NE satisfied that the exit point would not adversely impact sub- cropping or out-cropping chalk?</p>	<p>On the basis of the Applicant's clarification in [REP3-107] Natural England is satisfied that the cable installation works at the HDD exit point will not adversely impact the sub-cropping or out-cropping chalk. In order to resolve this issue we advise this is secured in the DCO/dML.</p> <p>However, Natural England continues to disagree with the Applicant's position in REP3-107 that avoidance of sub-cropping chalk more generally is not an appropriate or necessary action with respect to the environmental assessment. We refer the ExA to our advice in response to WQ2 [REP3-141] at Deadline 2.</p>	<p>The Applicant is considering including provision within the DMLs to secure the HDD exit pits within the Weybourne Channel and will provide an update at Deadline 7.</p> <p>The Applicant maintains its position as reflected in response to Q1.3.2.1 in REP3-107 that it is not an appropriate or necessary action with respect to the environmental assessment, although sub-cropping chalk will be avoided where possible as part of the process of maximising the chance of success of cable burial.</p> <p>See the Applicant's response to Natural England's response to Q2.3.2.2 in <b>The Applicant's Comments on Responses to the ExA's 2WQ</b> [REP4-028].</p>
Q3.3.2.3	<p><b>Management Plan for addressing exposed chalk</b></p> <p>a) Condition 13(c)(i) of the DMLs Revision G [REP4-003] includes a condition that there should be monitoring of cables. However, provide more information in the form of an outline Management Plan for the scenario where a cable has become exposed in the post-construction stage and how this would be addressed.</p>	<p>a) Natural England notes that a condition for monitoring secures that monitoring will be undertaken, but unless the condition specifies action to be taken based on the results of the monitoring then there is no security on additional mitigations being undertaken should they be required.</p>	<p>The Applicant refers to its response to this question in <b>The Applicant's response to the Examining Authority's Third Written Questions</b> [REP5-049].</p> <p>The Applicant is considering potential updates to the monitoring condition wording within the DMLs and will provide an update at Deadline 7.</p>

ID	Question	Natural England Responses	Applicant's Comment
	b) Provide detail as to how such a Management Plan would be secured?		
<b>Q3.3.3 Physical Processes, Coastal erosion effects and coastal processes</b>			
Q3.3.3.1	<p><b>Sediments at HDD offshore exit points</b></p> <p>The Applicant states that since the excavated sediments at the HDD exit points would be backfilled into the same location that they were removed from, the excavated sediments are likely to be relatively homogenous. Furthermore, the Applicant considers that the cohesive nature of the sediment at the exit point means that when it is sidecast it will be in the form of aggregated clasts that will remain on the seabed rather than being disaggregated into individual fine sediment components [REP3-107]. Does NE agree with this assessment, and expand on your answer?</p>	<p>Natural England is concerned about side-casting. Natural England would welcome any measures that could reduce the impacts to the designated site features i.e., storing on a barge as set out by the Applicant in REP3-107. This would also reduce the likelihood of any sediment being dispersed into the wider marine environment. We advise that a fall pipe is used to direct the sediment as it is returned to the site creating less of an impact. As a mitigation measure we advise this should be secured into the outline mitigation plan.</p>	<p>The Applicant maintains that it does not consider that this is a commitment that should be required or that could be made within the timeframes of the Examination. The Applicant has not yet procured a construction contractor and therefore is not able to provide certainty that a fall pipe will be used for disposal activities wherever practicable (this will need to be informed by vessel availability and water depth, for example). It is noted that the predominantly coarse grained nature of the sediments in question, i.e. sand, means that on release, even from at or near the sea surface, they can be expected to settle quickly through the water column and therefore will be returned to the same broad area. This is supported by the assessments described in ES <a href="#">Chapter 6 Marine Geology, Oceanography and Physical Processes</a> [APP-092] (e.g. paragraph 241).</p> <p>Moreover, given that a disposal licence will not be applied for until post consent when further contaminants sampling and analysis has been undertaken it would not be appropriate to make a commitment to this effect, at this stage of the Projects. Therefore, the licence for the disposal of sediment at sea will be applied for post-consent. Condition wording to secure the requirement for post-consent contaminants sampling has been agreed with the MMO, see ID 7 of Table 16 of the <a href="#">Draft Statement of Common Ground with Marine Management Organisation (Revision C)</a></p>



ID	Question	Natural England Responses	Applicant's Comment
			[document reference 12.11], regarding the Disposal Site Characterisation Report [APP300],
Q3.3.3.2	<p><b>Secondary Scour</b></p> <p>The Applicant [REP3-107] has considered that for secondary scour, the limited geographical extent means that the potential impact would be anticipated to be nugatory. Does NE agree with this, or would a full assessment of secondary scour be necessary for this Examination?</p>	<p>Natural England advises that best practice would be for the likelihood and scale thereof of secondary scour to be considered as part of the consenting process to allow for any mitigation measures (where required) to be thoroughly explored and secured.</p> <p>We are currently unable to advise further until this secondary scour assessment is undertaken.</p>	<p>The Applicant is not aware that there is any guidance on or information / data upon which to base an assessment of secondary scour or to estimate its potential scale. The Applicant understands that Natural England have previously signposted to Schultze et al. (2020) and Christiansen et al. (2022) as potential sources however the Applicant notes that these studies largely relate to turbulence in the wake of turbines which could cause scour (and increased suspended sediment concentrations), however do not provide any information on the potential for secondary scour. As previously noted by the Applicant, where scour is likely to occur, scour protection would be installed to prevent scour.</p> <p>The Applicant reiterates that it has committed through the <b>Offshore IPMP (Revision B)</b> [REP4-014] to monitor the extent of secondary scour (where scour protection is installed). Data from this monitoring could then be used to inform any future secondary scour assessment.</p>
Q3.3.3.3	<p><b>Coastal Erosion Impacts</b></p> <p>Is the point where the HDD exit is proposed at landside set sufficiently far back from the coast to ensure against impact from coastal erosion for the lifetime of the development?</p>	<p>Appendix 3.2 - Cable Landfall Concept Study [APP- 176] includes coastal retreat data taken from the National Coastal Erosion Risk Mapping (NCERM) tool on the Environment Agency website. This indicates that the anticipated cliff retreat distance is 10m at the proposed landfall location, in the medium term (20-50 years). We also understand that, based on historical beach profile data (EA 2007), whilst there is a large degree of annual variability in beach profile at landfall, overall</p>	<p>Noted. The Applicant welcomes this position.</p>




ID	Question	Natural England Responses	Applicant's Comment
		<p>beach profile erosion is steady but modest and without significant beach steepening. In addition, further to the east, near the Weybourne car park, the beach profile appears to be stable. In ES Chapter 4, it states that the HDD entry point onshore will be set back approximately 150m inland from the beach frontage. Therefore, based on the information currently available, we are content that the proposed set back of the HDD entry point location onshore (landside) is appropriate.</p> <p>At detailed design, it will be important to consider the operational lifetime of the project. For example, in ES Chapter 6, it states that the lifetime of each [SEP &amp; DEP] project is assumed to be a minimum of 40 years. Yet, the Cable Landfall Concept Study [APP-176), provided by the Applicant, assumes a cable design life of 30 years. Consequently, we would advise consideration of predicted cliff erosion profile data associated with the longer term (50-100 years). We would also advise the Applicant to seek the expert advice of North Norfolk District Council and the Environment Agency with regards to the latest information on coastal erosion and management at landfall.</p>	
<b>Q3.3.4 Effects on the Marine Conservation Zone</b>			
Q3.3.4.1	<p><b>When the MEEB is required</b> NE has advised that the MEEB would be required if there was an adverse impact to sub-cropping chalk or in a circumstance</p>	<p>a) Please be advised in our conservation advice, Natural England does not use thresholds in determining impact on the conservation objectives of the site. The test is</p>	<p>As a point of clarification it is not the Applicant's position that "<i>cable protection is most likely to be required within mixed sediment areas</i>". The circumstances in which external cable protection</p>

ID	Question	Natural England Responses	Applicant's Comment
	<p>where cable protection is used within the MCZ [REP3-147, Page 4].</p> <p>a) Applicant and NE, provide a threshold or a set of assessment criteria to determine when a MEEB is required that can be set out for Examination?</p> <p>b) For instance, would the criteria to determine if a MEEB required relate to a construction method, the use and extent of cable protection, what the effects would be on sub- cropping chalk, or a mix of these different aspects.</p>	<p>whether the conservation objectives for the site are likely to be hindered.</p> <p>b) Natural England agrees with the Applicant that cable protection is most likely to be required within mixed sediment areas. Therefore it is assumed that the conservation objectives for that feature will be hindered. The MEEB requirement is to provide a 'reef like community similar to that of a mixed sediment environment.</p>	<p>may be required are set out in the <a href="#">Outline CSCB MCZ CSIMP</a> [APP-291].</p> <p>The Applicant does however note that as described in Section 4.5.2 of ES <a href="#">Chapter 4 Project Description (Revision C)</a> [REP5-021], the HDD installation method preferred by the Applicant for SEP and DEP is that used for DOW which required external cable protection at the HDD exit pit and therefore SEP and DEP would also likely require removable external cable protection to be installed at the HDD exit pit.</p>
Q3.3.4.2	<p><b>Success thresholds for the MEEB</b></p> <p>The Applicant has stated that the success metrics of the MEEB would be developed post- consent [REP3-101]. NE has advised that a fully functioning oyster bed would be required for compensation as a MEEB [REP3-147]. This does not provide satisfactory clarity for the ExA is relation to this matter.</p> <p>a) Applicant, provide some detailed information as to how a successful oyster bed as a MEEB would be determined, for instance.</p> <p>b) Applicant, does this mean that the oyster bed would have to be approximately 100% successful or could a partial success be also considered a sufficient MEEB?</p> <p>For NE only:</p>	<p>a) During pre-application discussions Natural England advised that a fully functioning oyster bed i.e. ecologically self-sustaining is required for compensation and because of this the ratio for MEEB has become irrelevant in this instance. The Applicant, as part of their submission documents has [APP-081], included a description of a fully functioning oyster bed and the size required. Natural England is supportive of this. To inform whether or not further adaptive management is required, there is an expectation from Natural England for the Applicant to develop a success criteria based upon the question of what constitutes a fully functioning oyster bed and develop and undertake a monitoring plan to demonstrate this.</p> <p>b) As this is MEEB, this should be agreed as part of a secured package and signed off by the Secretary of State in consultation with Natural England. We advise the above should</p>	<p>a)</p> <p>The Applicant agrees with and welcomes this position. It is considered that the level of detail provided within the <a href="#">Appendix 1: In-Principle CSCB MCZ MEEB Plan (Revision C)</a> [REP2-020] to determine the success of the MEEB is sufficient in order to determine whether adaptive management would be required.</p> <p>The Applicant also refers Natural England to its response to this question in <a href="#">The Applicant's response to the Examining Authority's Third Written Questions</a> [REP5-049], including the need to consider, given the complex nature of native oyster restoration, the need for some degree of flexibility and to prevent an over-reliance on the proposed metrics and whether these represent out-and-out success or failure. For example, it may be the case that the 10,000m<sup>2</sup> reef has patchy success long term which, through an adaptive management approach, could require redefining of the reef</p>

ID	Question	Natural England Responses	Applicant's Comment
	<p>a) When should such an assessment be made and who should need to agree the outcome of such an assessment?</p> <p>b) How should such circumstances be suitably considered and at what part of the process?</p> <p>c) Would the contents of Schedule 17, Part 4 of the Proposed Without Prejudice DCO Drafting (Revision B) [REP2-011] sufficiently and suitably secure the MEEB process in your view?</p>	<p>be agreed in outline as part of the consenting process, to be refined post consent.</p> <p>c) Please see Natural England's advice on the DCO Schedule 17.</p>	<p>boundary to exclude areas that are unsuccessful and extend in the areas that are successful. Similarly, the addition of more oysters to the successful areas could be undertaken to further increase oyster density. It could also be the case that the reef is found to be self-sustaining when its extent is only, for example, 7,000m<sup>2</sup> which would still be considered to represent successful implementation of the MEEB.</p> <p>Overall, it is anticipated that a holistic approach, considering all of the criteria within Table 8.1 of <b>Appendix 1: In-Principle CSCB MCZ MEEB Plan (Revision C)</b> [REP2-020], but with a focus (particularly in the early stages) on oyster density and reef size, would be used to determine the success of the Applicant's MEEB proposals.</p>
Q3.3.4.3	<p><b>When a decision on a MEEB is required</b></p> <p>At what point is there to be a decision on whether a MEEB is required – would this depend on the information provided by pre-commencement surveys, for example, which would be post-consent, or would the decision need to be pre-decision?</p>	<p>Natural England advises, as per compensation, MEEB needs to be agreed as part of the consenting process.</p> <p>The Secretary of State will need to determine the significance of impact to the features of the MCZ as part of their decision making process. Therefore, an outline plan will need to be agreed and secured as part of the examination process to help and support the Secretary of State decision.</p>	<p>The Applicant agrees with Natural England that at the point of determining the DCO application, the Secretary of State will need to determine whether or not the activities of SEP and DEP are likely to hinder the achievement of the conservation objectives stated for the MCZ.</p> <p><b>Appendix 1: In-Principle CSCB MCZ MEEB Plan (Revision C)</b> [REP2-020] serves as the outline plan which secures the potential MEEB requirement.</p>
Q3.3.4.4	<p><b>Cable protection in mixed sediment areas</b></p> <p>NE states [REP3-147, Q2.3.4.1] that there is a high likelihood of cable protection within mixed sediment areas. If cables being run through mixed sediment areas cannot be avoided, does this also mean there is a high</p>	<p>Natural England refers the Applicant to our response to WQ3.3.4.1 above.</p>	<p>As noted by the Applicant in its response to this question, the Applicant disagrees that there is a high likelihood of cable protection being used within mixed sediment areas and is unsure what evidence NE has based this position on. The process, as set out in the <b>Outline CSCB MCZ CSIMP</b> [APP-291] and <b>ICBS</b>, is to maximise the</p>

ID	Question	Natural England Responses	Applicant's Comment
	likelihood of cable protection being used through such areas?		<p>chance of success of cable burial and minimise the likelihood of needing to use external cable protection. The <b>ICBS</b> [APP-292] describes the work that has been undertaken, and will be further developed post consent, to maximise the avoidance of areas challenging to cable burial. Notably, use of external cable protection was able to be avoided in the case of SOW and DOW (except at HDD exit pits for DOW), both of which also route through mixed sediment areas, as evident on Figure 7.2 of the <b>Stage 1 CSCB MCZA</b> [APP-077]. For ease of reference an excerpt of that figure is shown below. The mixed sediment areas are shown in green (light green outside of the export cable corridor based on the NE data for the MCZ and dark green inside the corridor based on the Project's own and more refined surveys). The SOW and DOW export cables are shown in blue.</p>



ID	Question	Natural England Responses	Applicant's Comment
			
Q3.3.4.5	<p><b>Jack-Up Vessel use in MCZ</b></p> <p>The Applicant has explained [REP3-107] that the use of a jack-up vessel would only be required at the HDD exit pit for construction. The Applicant has also stated that due to the position of the exit-pits there would be no impact to sub- cropping chalk. NE, respond to these points with an assessment of the potential impacts from this jack-up vessel in this approximate location.</p>	<p>Natural England notes the use of a jack-up vessel will be undertaken at the HDD exit pit only. We note this is located within the area of seabed filled with Weybourne Channel deposits.</p> <p>We advise the onus is on the Applicant to ensure the footprint of the jack-up vessel is placed on the area of sandy clay Weybourne channel deposits and there will be no impact to outcropping or sub- cropping chalk features of the MCZ. NB: Natural England would have</p>	<p>During finalisation of the CSBC MCZ CSIMP post-consent, the specific design of the HDD exit pit and the specific jack-up vessel requirements within the Weybourne channel deposit will be discussed and agreed with the MMO in consultation with Natural England.</p>

ID	Question	Natural England Responses	Applicant's Comment
		concerns about any jack up leg stabilisation within the MCZ.	
<b>Q3.12. Habitats and Ecology Offshore</b>			
<b>Q3.12.1 Effects on Ornithology</b>			
Q3.12.1.1	<p><b>Requirements or Obligations</b></p> <p>Paragraph 5.3.17 of NPS EN-1 states that the ExA should ensure that species and habitats are protected from the adverse effects of development by using requirements or planning obligations.</p> <p>a) Applicant, justify why, in this instance, it is felt that the Requirements suffice and there is not any need for obligations.</p> <p>b) Natural England, do you consider there to be any reason or justification for obligations to be sought in this instance, given the Applicant's approach to mitigation (EIA Scale) at this stage?</p>	<p>b) Other than the outstanding requirements as regards impacts on red-throated divers associated with the Greater Wash SPA and Outer Thames Estuary SPA, and our outstanding concerns regarding the effectiveness and security of the proposed compensatory measures for SPA impacts, Natural England do not consider there to be a significant justification for obligations to be sought beyond those commitments already made.</p>	No further comments.
Q3.12.1.2	<p><b>Enhancement of Habitats</b></p> <p>The Applicant states that embedded mitigation seeks to reduce effects for certain ornithology species (great black-backed gulls for example) and that, no further mitigation is proposed in the ES [APP-097]. However, bullet 4 within Paragraph</p> <p>5.3.18 of NPS EN-1 states that opportunities will be taken to enhance existing habitats or to create new habitats of value within the site landscaping proposals. Can the Applicant explain why, with reference to the landfall location in particular, opportunities to create</p>	<p>Natural England does not see any realistic potential for enhancing or creating habitats at the landfall or terrestrial locations that would support offshore ornithology species.</p>	<p>The Applicant agrees with the Natural England position.</p>

ID	Question	Natural England Responses	Applicant's Comment
	new habitats supportive of offshore ornithology species have not/ cannot be taken?		
Q3.12.1.3	<p><b>Future Monitoring</b></p> <p>It is noted from NE's D3 response that there is concern the Requirements in the dDCO specify that monitoring should be undertaken, but that no subsequent remedial action is secured if the effects are worse than those originally predicted [REP3- 146, points A13 and A19]. The ExA observes that paragraph 2.6.71 of NPS EN-3 states monitoring can identify the actual impact so that, where appropriate, adverse effects can then be mitigated.</p> <p>a) NE, expand on what is expected, in terms of wording, within a dDCO that would secure appropriate remedial actions should monitoring highlight a need for it. Also confirm if such wording has been applied in other DCOs (examples required).</p> <p>b) Applicant, explain if any triggers are being considered for responsive or remedial action as a result of the proposed monitoring, and where such information can be found/ secured? If it is not being considered, why not?</p>	<p>a) Please refer to Natural England's submission at Deadline 5 (Appendix A2) where Natural England sets out our further advice and comment on the Applicant's IPMP [REP4-015].</p>	<p>Regarding Natural England's comments in Appendix A2, the Applicant is intending to provide a response and updated <b>Offshore In-Principle Monitoring Plan</b> [REP4-015] at Deadline 7 to address the points raised as far as possible however, fundamentally, the Applicant maintains that the level of detail currently provided within the Offshore IPMP is sufficient as an 'in-principle' document to inform potential monitoring to be undertaken post-consent.</p> <p>As noted in response to Q3.3.2.3 above, the Applicant is considering potential updates to the monitoring condition wording within the DMLs and will provide an update at Deadline 7.</p>
<b>Q3.12.2 Effects on Aquatic Wildlife including Mammals, Fish and Shellfish</b>			
Q3.12.2.3	<p><b>Outline Documents</b></p> <p>In relation to the OPEMP [REP3-060], OPIMP [REP4- 015] and Outline Offshore Operations</p>	OPEMP [REP3-060]	The Applicant highlights that with respect to Natural England's response on the OPEMP [REP3-060], the response provided by Natural

ID	Question	Natural England Responses	Applicant's Comment
	<p>and Maintenance Plan [APP-296], confirm whether each document is fit for purpose and, if amendments or additions need to be made, bullet-list these for clarity as to what you expect and why.</p>	<p>We note the changes with regard to Otter/Water vole and the mitigation measures provided.</p> <p>However, should water vole be identified we would suggest further mitigation should be considered in the form of making the area temporarily unsuitable/undesirable to water vole/otter prior to the works to ensure they are not in the location of the works during construction and then ensuring the recovery of the habitat following the completion of the works in the area.</p> <p>Natural England welcomes the commitment to survey for White-clawed crayfish, however we note that there is no commitment to mitigate should the surveys locate white-clawed crayfish. We advise mitigation measures should be proposed in outline and agreed.</p> <p>IPIMP [REP4-015] Please see Appendix 2 for Natural England's detailed comments on the OIPMP</p> <p>OOOMP [APP-296] With regard to the deployment of cable protection, we note the changes and accept the deployment of cable protection for five years after construction outside of the site. However, we disagree with the deployment of</p>	<p>England in relation to Otter/Water and White-clawed crayfish is not relevant to that document. The Natural England response is in relation to the OEMP, not the OPEMP [REP3-060].</p> <p><b><u>Offshore IPMP [REP4-015]</u></b> See response to question Q3.12.1.3.</p> <p><b><u>Outline OOMP [APP-296]</u></b> The Applicant welcomes that Natural England agree with the Applicant's updates to the Outline OOMP regarding the installation of cable or scour protection outside of the MCZ during the operation period for up to five years following completion of construction.</p> <p>Regarding the definition of completion of construction, the Applicant considers this is not required to be included within the DMLs. Completion of construction is a phrase commonly used in DMLs without further definition.</p> <p>It is a question of fact in each case when the developer has completed their construction programme and not something that should be defined. If/when SEL or DEL submit a close out report (as required by condition 22(1) of the DMLs in Schedules 10 and 11 and condition 21(1) of the DMLs in Schedules 12 and 13 of the <b>draft DCO (Revision I)</b> [document reference 3.1]) then that indicates that construction is complete. If no report was submitted, but the MMO considered that construction was finished (i.e. because no further works appeared to be being undertaken) then they could take enforcement action. The onus would then be on SEL or DEL to show that they still intended to carry out further works,</p>



ID	Question	Natural England Responses	Applicant's Comment
		<p>cable protection for one year, following construction, within the designated site. Furthermore, because there is no agreed definition of completion of construction either within the document or within the DCO the time period remains uncertain and unsecured. Additionally, due to the uncertainty this creates there is a potential for operation and maintenance works to impact on the monitoring required within the IPMP which could potentially invalidate monitoring of the impacts from construction.</p>	<p>which, again, is a question of fact that doesn't need to be defined.</p> <p>Regarding the potential for O&amp;M works to affect monitoring required within the Offshore IPMP, the Applicant notes that allowing installation of external cable protection within the MCZ for up to one year following completion of construction would be unlikely to have any influence on pre-construction monitoring and that, with respect to post-construction monitoring, fine-tuning of this to ensure no or minimal influence on post-construction monitoring could be undertaken, upon which the Applicant and Natural England are broadly aligned i.e. <i>'Natural England is content to leave fine tuning of the IPMP to post-consent in relation to the build out scenarios only.'</i> [REP5-090].</p>
Q3.12.2.4	<p><b>Site Integrity Plans</b></p> <p>At present, the MMO has expressed that the SIP is acceptable as drafted, would serve its purpose and could be enforced [REP3-133]. Meanwhile NE has said there is no confidence in the SIP process because SIP(s) have limited measures to mitigate the exceedance of seasonal threshold [REP3-146, point D18 and REP3-147 Q2.12.2.1]. The Applicant maintains that the SIP is the established mechanism to regulate and control underwater noise impacts.</p> <p>In this regard: Applicant:</p>	<p>c) To clarify, due to our reservations on the SIP, we are not confident that AEol can be ruled out for the harbour porpoise feature of the SNS SAC due to potential in-combination seasonal disturbance. Harbour seal and grey seal are not features of the SNS SAC. We recognise that the Project can only control the underwater noise that it produces.</p> <p>Therefore, measures to mitigate the Project's contribution to in-combination underwater noise disturbance are strongly recommended.</p> <p>Reducing the extent of the interaction with the SAC from the project through a commitment to use e.g. Noise Abatement</p>	<p>c)</p> <p>The Applicant maintains its position and refers Natural England and the ExA to its response to this question in <a href="#">The Applicant's response to the Examining Authority's Third Written Questions</a> [REP5-049].</p> <p>d)</p> <p>The Applicant welcomes this position.</p>

ID	Question	Natural England Responses	Applicant's Comment
	<p>a) NE has suggested [REP3-147, Q2.14.1.20] that all mitigation should be set out now, and the SIP is used to discount mitigation that no longer applies at the time the development is commenced. Do you think there is merit in this approach?</p> <p>b) Can you reassure the ExA that the SIP (either for this project or taken together with other SIPs) would be effective in its intended function?</p> <p>NE:</p> <p>c) Due to your reservations on the SIP, your response [REP3-146, point D18] suggests that an AEoI cannot be ruled out for the harbour seal and grey seal feature of the SNS SAC. If not the SIP process, what other forms of regulatory control are available to reassure you that AEoI would not occur?</p> <p>d) Are you content with the MMMP and the mitigation therein? If so, would this not be enough to reassure you that sufficient mitigation exists to avoid an AEoI? Explain with reasons.</p> <p>MMO:</p> <p>e) Do you have any further comments on the SIP that you wish to bring to the ExA's attention, taking into account all your own submissions and those of NE to</p>	<p>Systems (NAS) is the most likely method of reducing the risk of future in-combination adverse effects arising.</p> <p>However, Natural England's confidence in the SIP process could be increased through greater regulatory control. Our experience to date is that HRAs on submitted SIPs are not carried out by the Marine Management Organisation (MMO). This would provide a further element of regulatory scrutiny and potentially identify additional mitigation.</p> <p>Alternative options could also be considered in the future, for example a cross-regulator Appropriate Assessment prior to the relevant season of the SNS SAC, which identifies all projects that will occur in the season and demonstrates that AEoI will not occur, with additional controls (where appropriate) placed on projects that submit applications for that relevant season but after the AA has been undertaken. However we recognise that the above is not in the gift of the Applicant.</p> <p>d) Natural England is content with the draft MMMP and the outline mitigation therein, which will be finalised post-consent. The outline mitigation in the draft MMMP is sufficient to reduce the risk of injury to marine mammals, which also reduces the risk of AEoI to marine mammal designated sites. However, the draft MMMP does not, and is not meant to,</p>	

ID	Question	Natural England Responses	Applicant's Comment
	date and all of the matters raised above in this question?	include measures specifically aimed at reducing in- combination underwater noise disturbance. Our concerns around AEol are specifically due to in- combination underwater noise disturbance.	
Q3.12.2.5	<p><b>Piling Controls</b></p> <p>The Applicant has confirmed that simultaneous piling (or other form of foundation installation) could occur within the project itself, and this has been taken into account in the worst-case scenarios assessed in the ES [REP3-101]. In respect of cumulative noise impacts to marine mammals, would there be a need to include a condition within the Deemed Marine Licences to prevent concurrent piling between the Proposed Development and other consented offshore windfarms? Explain with reasons.</p>	<p>Mitigation measures to reduce in-combination disturbance, such as a commitment to prevent concurrent piling between offshore windfarms, are controlled by the SIP at present, and would presumably be secured by the MMO during the discharge of the SIP.</p> <p>Natural England does not consider there to be a need to include a condition of this nature within the Deemed Marine Licences for the Proposed Development for marine mammals.</p> <p>However, we note that there may be other reasons why a simultaneous piling may need restriction, such as impacts to spawning fish, we defer to MMO on this point.</p>	<p>The Applicant notes that the MMO have no major concerns in relation to fish and underwater noise. There are minor points of clarification that the Applicant is intending to address before the close of the Examination. See the <a href="#">Draft Statement of Common Ground with Marine Management Organisation (Revision C)</a> [document reference 12.11].</p>
Q3.12.2.6	<p><b>Monitoring</b></p> <p>NE [REP1-136] originally raised concern regarding the OPIMP, particular at points A8 and A19 [REP3- 146]. Now that the Examination has moved on, do you agree that appropriate measures are secured, or could potentially be secured in the future, by way of the OPIMP [REP4-015]?</p>	<p>Please see our detailed response to the OIPMP [ REP4-015] in Appendix A2 submitted at Deadline 5.</p>	<p>See response to question Q3.12.1.3 above.</p>
<b>Q3.13. Habitats and Ecology Onshore</b>			
<b>Q3.13.1 Effects on Protected and Priority Species</b>			

ID	Question	Natural England Responses	Applicant's Comment
Q3.13.1.2	<p><b>Weybourne Cliffs</b></p> <p>Does the Applicant's further evidence [REP4-028, Q1.13.1.2] demonstrate that there are no effects predicted on the living conditions for sand martins in this location as a result of vibration related HDD activity? If not, please expand with further reasoning.</p>	<p>As advised in Natural England's response to the Examining Authority's Second Written Question (WQ2) [REP3-147] Natural England is content with the information provided by the Applicant that there are no effects predicted for sand martins in this location as a result of vibration related HDD activity.</p> <p>As advised in our Relevant Representations [RR-063] Natural England advises pre-construction bird surveys would be required to re-confirm the presence of breeding sand martins. Suitable mitigation measures should be put in place to minimise the impact to these species. Pre-construction surveys would be required to demonstrate this remains the case.</p>	<p>Noted. The Applicant refers to its response to Q2.13.1.2 of <a href="#">The Applicant's Comments on Responses to the Examining Authority's Second Written Questions</a> [REP4-028].</p>
<b>Q3.13.2 Effects on Ancient Woodland, Trees and Hedgerows</b>			
Q3.1.1.2	<p><b>Wensum Woods</b></p> <p>Does the Applicant's further evidence [REP3-101, Q1.13.2.1] and [REP4-028, Q1.13.2.1] demonstrate that it would provide sufficient protection to protected species, including Barbastelle bats, and that it would adopt best practice measures of mitigation that would future proof the Proposed Development in the event that Wensum Woods was notified as a SSSI?</p>	<p>Natural England defers our response to this question to Deadline 7 at the latest.</p>	<p>Noted. No response required.</p>
<b>Q3.14. Habitats Regulation Assessment</b>			
<b>Q3.14.1 Effect of the Proposed Development on its own and In-combination with Other Plans and Projects</b>			



ID	Question	Natural England Responses	Applicant's Comment
Q3.14.1.4	<p><b>The Farne Islands Management Plan</b></p> <p>NT submitted the draft Farne Islands Management Plan to the Examination, noting that it needs signoff from NE [AS-042]. NT expressed that the management plan may not become a Government document, as alleged by the Applicant, and look to NE to advise [REP3-140]. NT also consider the Applicant's proposals do not represent additionality and the SoCG with the NT [REP2-046] suggests that there need not be any further discussion on the Farne Islands compensation measures with the most recent SoCG [REP4-024] stating resources should be deployed elsewhere.</p> <p>A) When will the draft Farne Islands Management Plan document be endorsed by ME?</p> <p>B) When adopted, will this constitute a Government document?</p> <p>C) If yes to b) above, is the Applicant justified in relying on that document and what is said in the Energy Security Bill with respect to the arguments of providing compensation on the Farne Islands (the 'additionality' point) [REP3- 111]?</p> <p>D) Given the lack of certainty about the status and efficacy/ additionality of the management plan, should the proposals at the Farne Islands be discounted from the Applicant's package of compensatory measures for sandwich terns? Explain with reasons.</p>	<p>a) Natural England anticipates signing off the Farne Islands NNR plan later this year, subject to resource constraints.</p> <p>b) NNR management plans have a legal element in that they form the SSSI consent notice that Natural England assesses prior to consenting management activities, but beyond that they do not have a legal status and as such are not generally considered a 'government document'. NNR management plans are not generally published, but they are available from Natural England under Freedom of Information or Environmental Information Regulation on request.</p> <p>d) For the reasons set out in our Relevant Representations [RR-063], we consider that the proposals for the Farne Islands do not provide meaningful benefits. We also note and support National Trust's observation in their letter dated 20th April 2023 that 'Available and suitable space for interventions on the Farne Islands is limited, as most of the area is keenly contested by breeding seabirds. The Sandwich tern nesting area is also very fragile due to puffin burrows.' Even were the measure to have meaningful benefits, the proposed level of provision seems unachievable without potentially negative consequences e.g loss of sandwich tern nesting space, including those areas envisaged to be restored by the management plan, and/or damage to puffin nesting habitat.</p>	<p>b)</p> <p>The Applicant considers that the reference in this question to 'Government document' is potentially misleading. As set out in ID8 of <a href="#">The Applicant's Response to National Trust Deadline 2 Submission</a> [REP4-031], the term 'Government document' is not used in the draft Energy Bill or in the associated Policy Statement. The relevant article of the draft Bill (article 241) refers to measures taken or secured by a 'public authority', which is defined as any person with functions of a public nature.</p> <p>The Applicant assumes that the NNR Plan would fall within that scope because it sets out the plan for management of a National Site Network site which, whilst situated on land owned by National Trust, is a site for which Government is responsible for approving the management measures proposed and setting the conservation status and requirements for these to be maintained and restored.</p> <p>The Applicant considers that the response from the National Trust to this question (Table 9 above) supports this, and that the National Trust's management of the site would be carrying out functions of a public nature.</p> <p>d)</p> <p>In light of possible upcoming changes to policy and best practice guidance with respect to additionality and acknowledging the severity of the situation at the Farne Islands SPA, which has seen Sandwich tern breeding numbers decline considerably over 40 years, despite ongoing</p>

ID	Question	Natural England Responses	Applicant's Comment
	<p>E) In light of the SoCG [REP2-046] is NT, as the owners and managers of the Farne Islands, stating that the Farne Islands are not available to the Applicant?</p>		<p>conservation and management efforts (see <a href="#">Annex 2B - Sandwich Tern Nesting Habitat Improvements Site Selection</a> [APP-071]), the Applicant considers its proposal to undertake measures to improve breeding success at the Farne Islands SPA to be an important part of its proposed package of compensatory measures for Sandwich tern. It is considered that there is sufficient evidence outlined in the <a href="#">Appendix 2 - Sandwich Tern Compensation Document</a> [APP-069] and the <a href="#">Sandwich Tern – Quantification of Productivity Benefits Technical Note</a> [REP3-091] to demonstrate that if delivered at an appropriate scale, the measures proposed could provide substantial benefits to breeding numbers of Sandwich tern at the Farnes as well as compliment the Applicant's proposed measure at Loch Ryan (see the <a href="#">Sandwich Tern – Quantification of Productivity Benefits Technical Note</a> [REP3-091] for further information with respect to this).</p> <p>The Applicant considers that it may be useful to explore whether a high quality nesting habitat in an area away from the expanding puffin colony could be created – installing tern terraces onto a gravel substrate in an area cleared of nitrophilous vegetation where vegetation control could be carried out before each breeding season. Attempting to increase tern numbers on top of the puffin colony would not be recommended as puffin burrows affect ground stability, and much of the gull activity is intercepting puffins carrying fish into burrows, so probably not an ideal location to</p>

ID	Question	Natural England Responses	Applicant's Comment
			<p>encourage nesting of tern species which are also susceptible to gull predation.</p> <p>For the above reasons, it is considered important that this measure remains within the Applicant's proposed package of compensatory measures for Sandwich tern.</p>
Q3.14.1.7	<p><b>Kittiwake Tower</b></p> <p>The HPAI is purported [REP4-042] to have resulted in the death of 965 kittiwakes. It is recognised that HPAI is difficult to contain and prevent transmission. Nonetheless, the ExA are concerned regarding the HPAI and the efficacy of the proposed kittiwake tower as a compensatory measure.</p> <p>A) Would the clustering of nests together, as would be the case in the provision of a kittiwake tower, potentially increase the risk of infection compared to an open-air nesting environment?</p> <p>B) If the answer to a) is yes, are the predicted rates of breeding success likely to be overestimated, thus affecting the reliability of the measure delivering the necessary compensation?</p> <p>C) Is there any data regarding the artificial structures in Lowestoft to suggest whether or not the kittiwake accommodation there has been subject to higher, lower or similar levels of mortality?</p> <p>D) When the kittiwake tower designs get submitted at Deadline 5, set out how the</p>	<p>a) Natural England advises that the layout of Saltmeadows tower (a series of parallel, horizontal ledges on three faces) is designed to 'mimic' that of cliff ledges, and is in an open air environment. On that basis we do not consider the provision of these artificial structures increases the risk of infection. There is also the possibility to implement a disinfection regime pre-breeding at the artificial structure that would be hard or impossible to implement at most natural sites.</p> <p>b) n/a</p> <p>c) Assuming this relates to HPAI mortality - we are waiting confirmation from HPAI specialists at Natural England, but it is unlikely we'll have data that can inform us to that resolution from 2022.</p> <p>d) n/a to Natural England at this stage.</p>	Noted. No response required.



ID	Question	Natural England Responses	Applicant's Comment
	design takes into account the health and well-being of the species.		
Q3.14.1.13	<p><b>RTD Effects</b></p> <p>Can you confirm whether your conclusions on AEol for this species applies only to the Greater Wash SPA, or also to the Outer Thames Estuary SPA. Can an AEol be ruled out on the latter designated site or not? Explain with reasons.</p>	<p>The potential impacts on the red-throated diver feature of Outer Thames Estuary SPA (OTE SPA) relate to vessels transiting through the SPA associated with i) the construction phase and ii) operations &amp; maintenance traffic. An adverse effect alone on the OTE SPA can be ruled out, but until further information regarding vessel movements is provided, Natural England is not able to advise whether there will be an AEol in-combination with other plans and projects. This information is scheduled to be submitted by the Applicant at Deadline 5.</p>	<p>The Applicant has provided further information regarding vessel movements and updated the relevant red-throated diver assessments in the <a href="#">Apportioning and HRA Updates Technical Note (Revision C)</a> [REP5-043].</p> <p>The assessments conclude that an AEol on the Greater Wash SPA and Outer Thames Estuary SPA can be ruled out.</p>
Q3.14.1.14	<p>Implementation or completion</p> <p>The Sandwich Tern OCIMP [APP-070], section 3.6 relates to the implementation and delivery programme, to be forthcoming post-consent. Similarly, section 2.6 does the same in the Kittiwake OCIMP. Schedule 17, parts 6 and 15 both specify that the Applicant must implement the measures and, particularly for kittiwakes, this implementation must be done several breeding seasons in advance.</p> <p>A) Define what is meant by 'implement' or 'implementation' in these circumstances.</p> <p>B) Does 'implement' equate to completion?</p> <p>C) In respect of b) above, is there any risk that technical implementation (similar to technical commencement) could be instigated by the Applicant, but then the</p>	<p>a) Natural England considers that, as the author of the DCO, it is for the applicant to define what they mean by implementation. We will review and respond to their interpretation.</p> <p>b) As per response to a) we will respond to the Applicant's response.</p> <p>c) Based on the current wording within the schedule Natural England notes that the compensation must be implemented prior to operation for Sandwich Tern and 3 full breeding seasons for Kittiwake. However, depending on the definition of implementation this may not be sufficient. Natural England considers that as a minimum the compensation measures should be implemented 2 full breeding seasons prior to first generation, but,</p>	<p>c)</p> <p>As per the Applicant's response to this question in <a href="#">The Applicant's response to the Examining Authority's Third Written Questions</a> [REP5-049], "Implement" and "implementation" are used in schedule 17, parts 6 and 15 with their plain English meaning (i.e. to put something into effect). When the approved Sandwich Tern CIMP or Kittiwake CIMP has been put into effect, it will have been implemented.</p> <p>When interpreting the conditions within schedule 17, it is appropriate to have regard to the whole of each part of a schedule. Taking Part 2 (which relates to kittiwake) as an example, condition 13 sets out the requirements that the Kittiwake CIMP will require to include. Condition 13(d) requires an implementation timetable for the delivery of artificial nest site improvements to be included</p>



ID	Question	Natural England Responses	Applicant's Comment
	<p>measures are not completed or in place prior to the operation of any turbine?</p> <p>D) What gives you confidence that the measures would be provided in time to ensure they are functioning before effects on sandwich terns occur?</p>	<p>subject to review of additional documentation, this could be increased up to 4 full breeding seasons. With regard to Kittiwake, we refer to the previous decisions for Hornsea 3 and other relevant OWF projects where it was determined that installation of the compensatory measures four full breeding seasons prior to operation was appropriate</p> <p>d) In addition to our comments above, please see our response in Appendix C3 at Deadline 5, specifically our comments around mortality debt relating to sandwich terns.</p>	<p>within the Kittiwake CIMP. Condition 15 requires the undertaker to implement the measures set out in the Kittiwake CIMP. Condition 16 requires the undertaker to notify the Secretary of State on completion of implementation of the artificial nest site improvement measures.</p> <p>In practice, the implementation of the measures will be the point that the undertaker has completed construction or delivery of the relevant compensatory measures set out in the CIMP. At that point, they will notify the Secretary of State that the CIMP has been implemented (as required by condition 16 in Part 1), which will trigger the start of the timing controls in condition 15 that require the measures to have been implemented a certain number of seasons prior to commencement.</p> <p>Regarding the potential for a mortality debt to accrue, as noted by the Applicant in the Sandwich tern and Gateshead Quantification of Productivity Benefits Notes (REP3-087 and REP3-091 respectively), if that were to arise, then it is expected that the 'debt' would accrue for a small number of years only, in which case it could, if required, be accounted for by extending the duration over which active management was undertaken at the Gateshead and Loch Ryan sites (i.e. potentially beyond the Projects' operational period) to ensure that sufficient levels of breeding success are maintained over a sufficient number of years to balance the mortality predicted to have occurred during the Projects' operational periods. However, if throughout the operational phase of the Projects', the scale of compensation being</p>

ID	Question	Natural England Responses	Applicant's Comment
			<p>provided increased to a level sufficient to offset any mortality debt accrued in the early years, then extending the duration over which active management was undertaken at the Loch Ryan site would not be required.</p> <p>The Applicant is intending to update the Outline CIMP documents at Deadline 7 to secure that it would extend the duration over which active management is undertaken beyond the operational period of the Projects, if required to account for any mortality debt.</p> <p>Finally, the Applicant also refers to its response to Q2.14.1.5 in <a href="#">The Applicant's Responses to the Examining Authority's Second Written Questions</a> [REP3-101] which signposts the various documents that detail the justification for the timescales selected within the DCO drafting. In addition, the Applicant has also provided a response to Natural England's response to Q2.14.1.5 in <a href="#">The Applicant's Comments on Responses to the ExA's 2WQ</a> [REP4-028].</p>
Q3.14.1.15	<p><b>Gannet, Guillemot and Razorbill</b></p> <p>The Examination so far has suggested that an AEol upon the Gannet feature of the FFC SPA potentially could be ruled out, whilst there remains a dispute between the parties as to whether an AEol can be ruled out for guillemot and razorbill.</p> <p>The Applicant provided a contextual note for HPAI [REP4-042] within which are summaries of the effects of HPAI upon relevant seabird populations. In each case it is assumed that a reduction in the population of a species would</p>	<p>a)Natural England's Deadline 5 response confirms that we have ruled out AEol on the FFC SPA gannet population, both alone and in-combination.</p> <p>b)and c) for the Applicant.</p> <p>d)Natural England's current position for guillemot is that AEol cannot be ruled out in-combination with other plans and projects. We are awaiting an updated assessment of the in-combination totals from the Applicant, which is scheduled to be submitted at Deadline 5. Natural England will confirm its</p>	<p>The Applicant has submitted the updated guillemot and razorbill in-combination assessments with the <a href="#">Apportioning and HRA Updates Technical Note (Revision C)</a> [REP5-044] at Deadline 5 as noted by Natural England.</p>

ID	Question	Natural England Responses	Applicant's Comment
	<p>result in less collisions and displacement effects, which NE confirmed would be a logical position [REP3-147, Q2.14.1.2]. However NE</p> <p>also highlighted: "However, where a population has been significantly depleted, it should be considered whether an equivalent level of impact would have greater implications for the newly reduced population."</p> <p>Taking all the above into account, as well as all other information before the Examination:</p> <p>a) Applicant and NE - Can an AEol be ruled out for Gannet?</p> <p>b) Applicant - If the answer to a) is yes, does the Applicant propose keeping Gannet named within the relevant (without prejudice) compensatory documents [APP- 075] in case the Secretary of State concludes otherwise or should this be removed in the final version prior to close of the Examination?</p> <p>c) Applicant - If the answer to a) is no, would the Applicant consider making the compensatory measures for Gannet official in a separate document (i.e. removing the 'without prejudice' status and committing to undertaking such measures) and providing relevant text for Schedule 17 of the dDCO?</p>	<p>position at Deadline 7 on 10th July following review of that submission.</p> <p>e)Natural England's current position for razorbill is that AEol cannot be ruled out in-combination with other plans and projects. We are awaiting an updated assessment of the in-combination totals from the Applicant, which is scheduled to be submitted at Deadline 5. Natural England will confirm its position at Deadline 7 on 10th July following review of that submission.</p>	

ID	Question	Natural England Responses	Applicant's Comment
	<p>The following responses are required, but may be deferred until Deadline 6 following review of the Applicant-promised 'Apportioning and HRA Updates Technical Note' at Deadline 5.</p> <p>d) NE - can an AEol be ruled out for Guillemot? Explain with reasons.</p> <p>e) NE - can an AEol be ruled out for Razorbill? Explain with reasons.</p>		
Q3.14.1.17	<p><b>Pink-Footed Geese</b></p> <p>Provide an update on the ongoing dialogue between the Applicant and NE regarding pink-footed geese.</p>	<p>Natural England continues to engage with the Applicant in providing advice to formulate a pink-footed geese management plan.</p>	<p>The Applicant confirms it continues to engage with Natural England on pink-footed geese.</p>
<b>Q3.17. Landscape and Visual Effects</b>			
<b>Q3.1.2 Effectiveness of mitigation proposals</b>			
Q3.17.3.2	<p><b>Removal of Existing Trees and Hedgerows, Replanting and Management</b></p> <p>Would it be acceptable for tree and hedgerow replacement, designed to mitigate for the loss of existing planting, to be carried out off site at a location outside of the Order limits?</p>	<p>Natural England advises this is acceptable for trees. We would require this to be greater than the number removed for BNG</p> <p>However, for hedgerows, Natural England advises these should be replaced at the location of removal.</p>	<p>Noted. The Applicant refers to its response to <a href="#">The Applicant's response to the Examining Authority's Third Written Questions Q2.17.3.1 [REP5-049]</a>.</p>



*Table 11 The Applicant's comments on Norfolk County Council's responses to the Examining Authority's Third Written Questions*

ID	Question	Norfolk County Council Responses	Applicant's Comment
<b>Q3.6 Construction Effects Onshore</b>			
<b>Q3.6.4 Effects of construction works on human health</b>			
Q3.6.4.2	<p><b>Meeting Notes</b></p> <p>Provide a copy of the meetings referred to by Corpusty and Saxthorpe PC:</p> <p>a) NCC Public Health and SEP and DEP: Hearing 3 - Item 3 (iii) – Health, Date 26 April 2023, Time 1400-1500 attended by Jane Locke [JL] (NCC Public Health), Stephen Faulkner [SF] (NCC), Daniel Richards [DR] (Equinor), Ben Cave [BC] (Ben Cave Associates Ltd)</p> <p>b) NCC Planning and Highways Delegations Committee 22 October 2022.</p>	<p>The above-mentioned documents have been attached as part of our submission for deadline 5.</p>	<p>Noted. No comment required.</p>
<b>Q3.22. Socio-economics effects</b>			
<b>Q3.22.2 Effects on jobs and skills</b>			
Q3.22.2.1	<p><b>Outline Skills and Employment Plan</b></p> <p>The draft SOCG provided between the Applicant and NCC [REP4-021] sets out that discussions on the OSEP are still being undertaken with regard to key NCC recommendations, including outcomes from the new LSIP process dialogue (Norfolk Chambers). Provide an update on such discussions and NCC confirm whether you are now content with the OSEP following its revision [REP3-072].</p>	<p>NCC has provided feedback on the OSEP Document Reference:9.23, we anticipate further discussion with the applicant as the document continues to evolve. NCC is aware that the applicant has engaged with Norfolk Chamber, leading on the development of the Local Skills and Improvement Plan.</p>	<p>Noted. The Applicant refers to its response to Q3.22.2.1 in <a href="#">The Applicant's response to the Examining Authority's Third Written Questions</a> [REP5-049] and confirms it will continue to engage with NCC, as well as North Norfolk District Council, Broadland District Council, South Norfolk Council, New Anglia Local Enterprise Partnership and Norfolk Chamber, in the development of the Skills and Employment Plan.</p>
<b>Q3.23. Traffic and Transport</b>			

ID	Question	Norfolk County Council Responses	Applicant's Comment
<b>Q3.23.5 Suitability of Access Strategy</b>			
Q3.23.5.2	<p><b>Accesses ACC25 and ACC25b</b></p> <p>The most recent draft SOCG [REP4-021] with NCC notes that matters associated with access ACC25 and ACC25b and mitigation measures are still in discussion. Provide an update on these discussions.</p>	<p>Both access points require a set of lights to operate simultaneously. The two access points are some 800 metres apart, and access point 25b already has restricted working hours.</p> <p>We have held dialogue with the consultants and have agreed additional traffic control measures at ACC25b for the hours of operation. In summary:</p> <ul style="list-style-type: none"> <li>• Access from the B1149 to the Sheringham and Dudgeon Extension Projects via both accesses ACC25 and ACC25b will be controlled by traffic signals.</li> <li>• Access ACC25 will be utilised by construction traffic for a period of approximately six months and access ACC25b will be utilised for a period of approximately two months. The Applicants have also confirmed that both accesses may be operational at the same time.</li> <li>• ACC25b has a greater propensity to induce traffic queuing, therefore further controls are required for this installation to prevent conflicts.</li> </ul>	<p>The Applicant refers to its response to Q3.23.5.2 in <b>The Applicant's response to the Examining Authority's Third Written Questions</b> [REP5-049] and confirms that the agreed additional commitments (to manual control of the traffic signals) at ACC25b have been reflected in the <b>Outline Construction Traffic Management Plan (Revision D)</b> [REP5-027] submitted at Deadline 5. The parties have agreed that with the addition of this measure the matter can be resolved. This is reflected in the <b>draft Statement of Common Ground with Norfolk County Council (Revision D)</b> [REP5-033] submitted at Deadline 5 confirming agreement between the parties on all matters in relation to transport.</p>

ID	Question	Norfolk County Council Responses	Applicant's Comment
		<ul style="list-style-type: none"> <li>NCC has previously agreed with the Applicant that controls on operating hours for the traffic signals will be required at ACC25b (i.e. not to operate during network peaks). These controls are outlined within the Applicants latest Outline Construction Traffic Management Plan (OCTMP) (Revision C) but need to be extended to ACC25.</li> <li>NCC have also requested that the Applicants include an additional commitment for the ACC25b signals to operate under manual control (manual control would allow the timing of the traffic signals to be manually adjusted on site to prevent blocking back between the signals). The Applicant has confirmed to NCC that they will include this additional commitment in a revision to the OCTMP at Deadline 5.</li> <li>No controls on operating hours or method of signal control are proposed for ACC25</li> </ul> <p>Subject to updating the OCTMP at Deadline 5 as per the above, NCC is now content.</p>	
<b>Q3.23.6 Effectiveness of Proposed Mitigation Measures</b>			
Q3.23.6.3	<p><b>OCTMP</b></p> <p>The Applicant has provided a revised OCTMP [REP3-062]. This includes: an amended access design for the main construction compound at Attlebridge; text in relation to the ability to review routes if they become unavailable for</p>	<p>The amendments provided by the applicants do overcome the concerns that NCC raised.</p>	<p>Noted. No comment required.</p>

ID	Question	Norfolk County Council Responses	Applicant's Comment
	use; restrictions of LVs through Oulton village; and the addition of a crossing schedule. Does this overcome NCC's remaining concerns?		
<b>Q3.24. Water quality and resources</b>			
<b>Q3.24.1 Effects on Flood Risk and Drainage, including Adequacy of Sequential and Exception Tests</b>			
Q3.24.1.1	<b>Flood Risk Assessment</b> The revised FRA addendum [REP3-097] sets out that a number of clarifications have been requested by the LLFA, in a letter dated 20 March 2023. Provide a copy of that letter.	The LLFA is attached as part of our submission, letter dated 20th March 2023 LLFA Ref: FW2023_0203 (File name: FW2023_0203 LLFA Response - Final).	Noted. No comment required. The Applicant notes that the letter has now been submitted into the examination.
Q3.24.1.3	<b>Onshore Substation Drainage Study</b> The revised Onshore Substation Drainage Study [REP3-036] considers that the four sustainability pillars of SuDS and concludes that there are significant constraints to the delivery of the Amenity and Biodiversity pillars due to security. Is this accepted by the LLFA?	The LLFA and the applicant have discussed this matter. On consideration of the constraints of this site including the security matters on the limited infiltration opportunities, the LLFA is acceptant of the justification of why on this occasion the pillars of Amenity and Biodiversity are not possible to achieve on this site.	The Applicant refers to its response to Q3.24.1.3 in <a href="#">The Applicant's response to the Examining Authority's Third Written Questions</a> [REP5-049]. The Applicant notes the LLFA's response. No further comment required.
<b>Q3.24.4 Effectiveness of Mitigation Measures</b>			
5	<b>Protective Provisions</b> Provide an update on discussions to finalise the protective provisions still under discussion [RE3-101, Q2.24.4.2].	The LLFA have been requested to review the protective provisions for this application. The LLFA has requested the applicant covers the legal advice costs. The applicant has agreed to this request and LLFA has requested a review of the protective provisions by the NCC Legal representation. This work is ongoing at this time.	The Applicant refers to its response to Q3.24.4 in <a href="#">The Applicant's response to the Examining Authority's Third Written Questions</a> [REP5-049]. The Applicant remains confident that it will reach agreement with the LLFA and the IDB on the joint provisions before the end of the Examination.



*Table 12 The Applicant's comments on Norfolk Rivers Internal Drainage Board's responses to the Examining Authority's Third Written Questions*

ID	Question	Norfolk Rivers Internal Drainage Board Responses	Applicant's Comment
<b>Q3.24. Water quality and resources</b>			
<b>Q3.24.4 Effectiveness of Mitigation Measures</b>			
Q3.24.4.1	<b>Protective Provisions</b> Provide an update on discussions to finalise the protective provisions still under discussion [RE3-101, Q2.24.4.2].	The Board provided feedback on the current draft of the joint Protective Provision as requested by the applicant. The Board have yet to receive any response to said feedback. It is the Boards opinion that there are currently several outstanding issues to be resolved.	The Applicant notes this response. The Applicant will continue to engage with the Norfolk Rivers Internal Drainage Board.

*Table 13 The Applicant's comments on South Norfolk Council's responses to the Examining Authority's Third Written Questions*

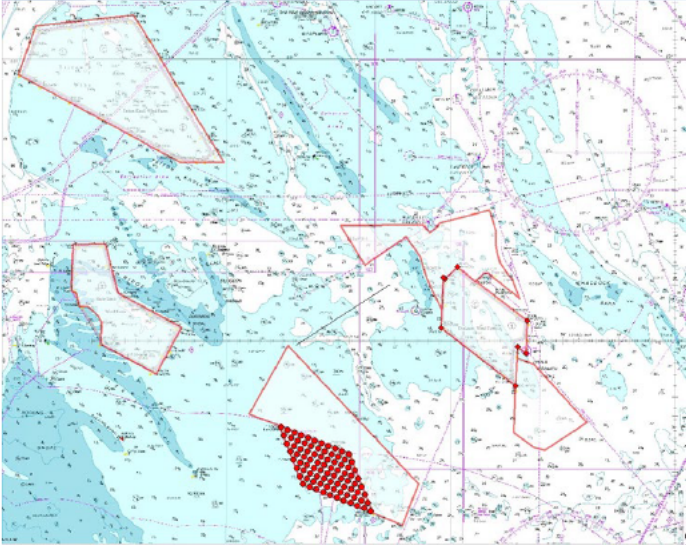
ID	Question	South Norfolk Council Responses	Applicant's Comment
<b>Q3.17. Landscape and Visual Effects</b>			
<b>Q3.17.3 Effectiveness of mitigation proposals</b>			
Q3.17.3.2	<p><b>Removal of Existing Trees and Hedgerows, Replanting and Management</b></p> <p>Would it be acceptable for tree and hedgerow replacement, designed to mitigate for the loss of existing planting, to be carried out off site at a location outside of the Order limits?</p>	<p>The concern would be that a location outside the Order limits would be less easy to oversee, and that compliance with the approved details might be hard to achieve, especially if other parties are involved. If full mitigation cannot be achieved within the current Order limits, could the limits be extended to include suitable areas for the mitigation? If not, a robust mechanism needs to be in place to ensure full compliance and successful establishment and long-term management.</p>	<p>The Applicant acknowledges South Norfolk Council's response. The Applicant refers to its response to Q3.17.3.1 and Q3.17.3.2 in <a href="#">The Applicant's response to the Examining Authority's Third Written Questions</a> [REP5-049].</p> <p>The Applicant is confident that mitigation can be achieved within the Order Limits.</p> <p>In addition, the Applicant is willing to explore, through landowner consultation whether there may be opportunity to secure individual agreements to undertake planting or other habitat enhancements outside the Order Limits which could form part of the evolving Biodiversity Net Gain Strategy. As set out within the Outline Biodiversity Net Gain Strategy 'actual enhancement of habitats will need to be agreed in detail with landowners and other stakeholders in the future, and once construction details are more clearly defined' [REP3-048]. The Applicant is therefore unable to commit to any habitat enhancement outside the Order Limits at this stage.</p>
<b>Q3.20. Noise and Vibration</b>			
<b>Q3.20.1 Adequacy of the Assessments for Construction</b>			
Q3.20.1.1	<p><b>Main Construction Compound</b></p> <p>BDC and SNDC have set out [REP3-127, Q2.20.1.1] [REP3-121, Q2.20.1.1] that their</p>	<p>At this time the specifics of the compound and the equipment to be used within the compound is unknown as this will depend upon the</p>	<p>The Applicant acknowledges South Norfolk Council's response. The Applicant refers to its response in <a href="#">The Applicant's response to the</a></p>

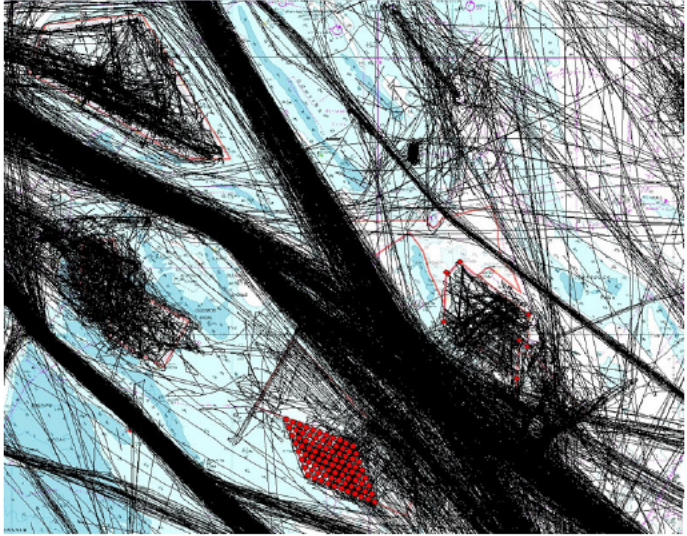
ID	Question	South Norfolk Council Responses	Applicant's Comment
	<p>concerns in relation to the impacts of the main construction compound can be addressed through Section 61 agreements. The Applicant has provided a revised OCoCP [REP4-016] that includes this for the main and secondary compounds. Explain to the ExA why this is preferred, rather than securing appropriate mitigation as part of the DCO?</p>	<p>requirements of the appointed contractor. As such a requirement would not be able to be placed on the DCO as it would require variation at the time of the construction, whereas a Section 61 can be tailored to the requirements of the contractor and include specific mitigation measures required by the LA for each specific compound including consideration of any nearby vulnerable receptors.</p>	<p><b>Examining Authority's Third Written Questions</b> [REP5-049].</p> <p>The Applicant has reached agreement with South Norfolk Council on its proposal to submit Section 61 applications. This agreement is captured in the <b>Draft Statement of Common Ground with South Norfolk Council (Revision B)</b> [REP4-018, Table 13].</p>

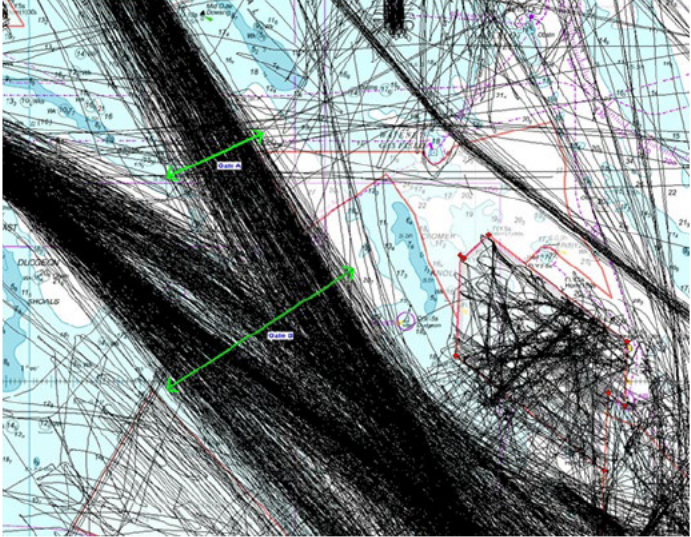
**Table 14 The Applicant's comments on Trinity House's responses to the Examining Authority's Third Written Questions**

ID	Stakeholder Comment	Applicant Response			
6	<p>Accordingly, Trinity House requests to submit a written response to the Examining Authority (ExA) for Deadline 5 in respect of its Third Written Questions (WQ3) as follows:-</p> <table border="1" data-bbox="248 517 1115 1046"> <tr> <td data-bbox="248 517 394 1046">Q3.19.1.5</td> <td data-bbox="400 517 577 1046">UK Chamber of Shipping Trinity House</td> <td data-bbox="584 517 1115 1046"> <p><b>Assessment of Navigational Risk and Safety</b> With regards to the concerns raised relating to navigational safety from the MCA [REP1-117] [REP1-118] [REP3-134] [REP4-047], together with the Applicant's submissions (including the NRA [APP-198] and the Navigational Safety Technical Note [REP3-031]) comment on whether you would consider the remaining sea room past the proposed windfarms, particularly west of the DEP north boundary, as representing an unacceptable risk to navigational safety or have an acceptable and safe width of sea room? Explain with reasons and with reference to these submissions from MCA and the Applicant.</p> </td> </tr> </table>	Q3.19.1.5	UK Chamber of Shipping Trinity House	<p><b>Assessment of Navigational Risk and Safety</b> With regards to the concerns raised relating to navigational safety from the MCA [REP1-117] [REP1-118] [REP3-134] [REP4-047], together with the Applicant's submissions (including the NRA [APP-198] and the Navigational Safety Technical Note [REP3-031]) comment on whether you would consider the remaining sea room past the proposed windfarms, particularly west of the DEP north boundary, as representing an unacceptable risk to navigational safety or have an acceptable and safe width of sea room? Explain with reasons and with reference to these submissions from MCA and the Applicant.</p>	<p>The Applicant has noted the response provided by Trinity House in their Deadline 5 submission [REP5-096] and welcomes their contribution. The Applicant will address the points raised in Trinity House's submission at Issue Specific Hearing 7 on 21<sup>st</sup> June 2023 and will provide further details (if required) in writing at Deadline 7. Additionally, a meeting between the Applicant and Trinity House has been scheduled for the 26<sup>th</sup> of June where we hope to revisit the SoCG and discuss the mitigation highlighted in at 4 and 5 of their submission's summary points.</p> <p>The Applicant also notes the Trinity Houses submission of the Draft Statement of Common Ground with Trinity House at Deadline 1 [REP1-049], which states that in 'Trinity House's view the relevant mitigation proposed by the Applicant through the draft Development Consent Order (DCO), which has been the subject of long-standing discussion with Trinity House, was appropriate and consistent with other offshore wind farm development'. The draft Statement of Common Ground between the Applicant and Trinity House has all matters agreed with regards to the methodology and assessment [REP1-049].</p>
Q3.19.1.5	UK Chamber of Shipping Trinity House	<p><b>Assessment of Navigational Risk and Safety</b> With regards to the concerns raised relating to navigational safety from the MCA [REP1-117] [REP1-118] [REP3-134] [REP4-047], together with the Applicant's submissions (including the NRA [APP-198] and the Navigational Safety Technical Note [REP3-031]) comment on whether you would consider the remaining sea room past the proposed windfarms, particularly west of the DEP north boundary, as representing an unacceptable risk to navigational safety or have an acceptable and safe width of sea room? Explain with reasons and with reference to these submissions from MCA and the Applicant.</p>			
<b>1. INTRODUCTION</b>					
7	<p>Trinity House is the General Lighthouse Authority for England, Wales, the Channel Islands and Gibraltar with powers principally derived from the Merchant Shipping Act, 1995, as amended. The role of Trinity House as a General Lighthouse Authority (GLA) under the Act includes the superintendence and management of all lighthouses, buoys and beacons within its area of jurisdiction.</p>	<p>The Applicant has noted the response provided by Trinity House in their Deadline 5 submission [REP5-096] and welcomes their contribution. The Applicant will address the points raised in Trinity House's submission at Issue Specific Hearing 7 on 21<sup>st</sup> June 2023 and will provide further details (if required) in writing at Deadline 7.</p>			
8	<p>Trinity House recognises the Maritime and Coastguard Agency's (MCA) remit in regard to Offshore Renewable Energy Installations (OREIs) is to ensure that the safety of navigation is preserved, and the UK's Search and</p>				

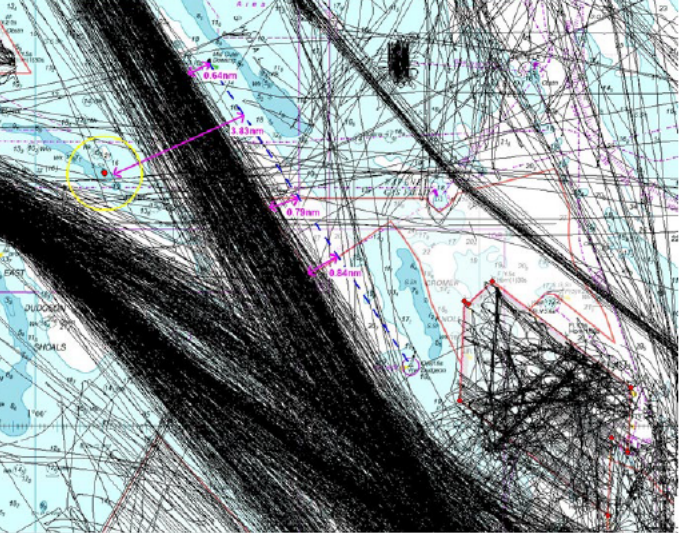


ID	Stakeholder Comment	Applicant Response
	<p>Rescue (SAR) capability is maintained. As such Trinity House respect the MCA recommendations and advice in relation to ship routing.</p> <p>When assessing the proposed DEP north boundary, 28 days AIS data supplied by the MCA and processed for Trinity House by Anatec has been used. This dataset related to the period mid- July to mid-August 2022. The dataset for a wider area has been viewed to try and assess the routeing of the vessels and possible changes if the windfarm were to be consented with the current red line boundary / order limits.</p>	
9	<p>As stated at the first issue specific hearing and as set out in Trinity House's submissions at Deadline 1 [REP1-163], Trinity House do consider that the compression of marine traffic would increase the risk of collision, and from reading the submissions listed in the ExA's question and from the submissions that point is agreed by all parties, albeit to differing levels.</p>  <p>Figure 1: Overview of area</p>	

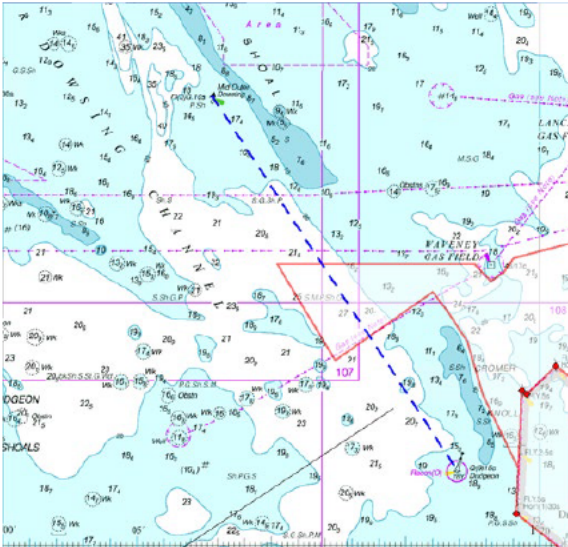
ID	Stakeholder Comment	Applicant Response
	 <p data-bbox="259 900 860 927">Figure 2 : Overview of area with 28 days AIS traffic</p>	
2.	<b>AIS DATA ANALYSIS</b>	
10	<p data-bbox="259 986 1122 1134">When assessing our data we generated similar results to the Applicant's, which are reported in the Navigation Risk Assessment [APP-198]. These showed an average of 33 vessels a day passing between the existing windfarms through Gate B shown in figure 3 and 13 a day passing the proposed DEP northwest boundary (Gate A in figure 3).</p> <p data-bbox="259 1150 1061 1241">The traffic patterns show that the majority of traffic passing the DEP boundary is bound between the northerly British ports and mainland European ports as laid out in APP-198 by the Applicant.</p>	

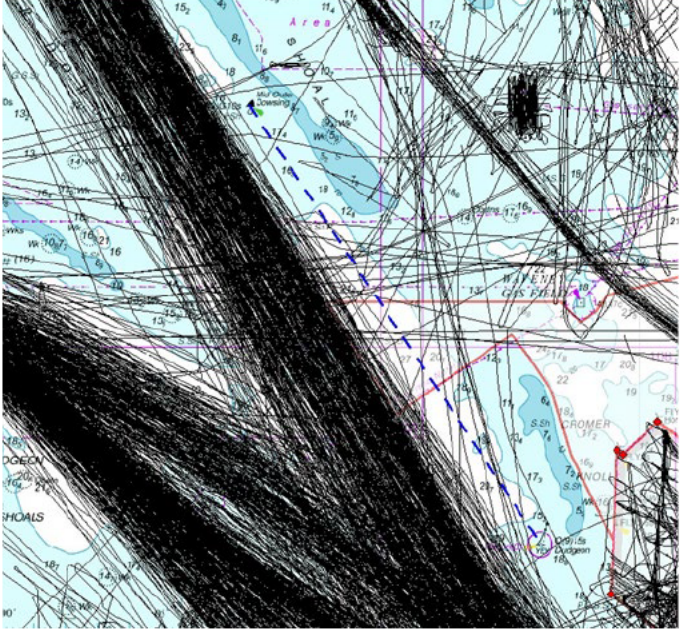
ID	Stakeholder Comment	Applicant Response
	 <p data-bbox="259 879 647 911">Figure 3: Gate analysis positions</p>	
11	<p data-bbox="259 935 1137 1054">The traffic analysis also shows that the majority of the traffic is maintaining a distance of between 0.6nm and 0.8nm clear of a line between the Mid Outer Dowsing Buoy and the Dudgeon Buoy which are Trinity House assets placed to delineate the banks in that area (Figure 4).</p> <p data-bbox="259 1114 1149 1201">Figure 4 also shows that the vast majority of vessels are clearly maintaining a distance of 1.0nm from the shallow patch at the south eastern point of Triton Knoll.</p> <p data-bbox="259 1222 1144 1310">The major shipping appears to be maintaining a distance of 1.0nm from the boundaries of all the windfarms in the area, which aligns with the views expressed by the MCA in its submission [REP1-117].</p>	




ID	Stakeholder Comment	Applicant Response
	 <p data-bbox="253 895 898 927">Figure 4: Buoy to Buoy Line and distances maintained</p>	
3.	<b>LENGTH OF PERCEIVED CORRIDOR</b>	
12	<p>The MCA's position that the corridor should be measured up to the East Dudgeon Buoy [REP1- 117], instead of to the end of the proposed Sheringham Extension, could be the preferred solution when assessing the compression of the traffic given the DEP North Westerly boundary encroaches on the shipping lane. However, in this instance, as can be seen in figures 2 and 3, the traffic appears to already have moved to the sides of the available sea room to progress up the Outer Dowsing Channel or west of Triton Knoll windfarm. Trinity House would suggest that the additional length of the channel when considered in calculations would not bring additional mitigation to this area.</p>	
4.	<b>NORTH WEST DEP BOUNDARY CONSIDERATION</b>	
13	<p>When viewed alongside the existing buoy to buoy line which marks the extremities of the current shipping route (figure 5), the proposed boundary</p>	



ID	Stakeholder Comment	Applicant Response
	<p>of the windfarm encroaches into the shipping route by around 0.84nm. As a percentage of the existing Outer Dowsing channel this is approximately a 22% reduction in available sea space.</p>  <p>Figure 5: Proposed DEP Boundary and buoy to buoy line</p>	
14	<p>However when viewed with the current traffic pattern (figure 6) the proposed boundary goes right up to the current limits of the shipping. If shipping routes were to be adjusted to stay 1.0nm clear of the windfarm this would reduce the usable sea space by around 50%.</p>	

ID	Stakeholder Comment	Applicant Response
	 <p data-bbox="259 986 1059 1018">Figure 6: Proposed DEP Boundary and buoy to buoy line with traffic</p>	
15	<p data-bbox="259 1038 1144 1286">As can be seen from Figure 6 this does present an enhanced risk of collision by compressing the traffic into a channel which could be approximately only 2 miles wide when passing the end of the Triton Knoll. Vessels are currently allowing a safe passing distance of 1nm from the bank so it could be argued the effective sea space is now only about 1nm. If consideration is then given to fishing activity in the area, and to additional vessels servicing the windfarm, then the enhanced risk of collision could become significant.</p>	
16	<p data-bbox="259 1302 1133 1422">In the NRA [APP-198] Sec 20.1 Safety Zones Para 402 the Applicant lays down its expectation for safety zones during all phases of the project and these include "500m around any structure where construction is ongoing, as denoted by the presence of a construction vessel" and "500m around</p>	

ID	Stakeholder Comment	Applicant Response
	<p>any structure where major maintenance is ongoing during the operational phase, where major maintenance is as defined within the Electricity Regulations (2007).” If these areas were to extend beyond the proposed redline boundary / order limits this would reduce the available sea space further and would be considered unacceptable around the western side of the DEP Northern boundary.</p>	
17	<p>During the construction phase any buoyage used to delineate the windfarm area could also have the effect of reducing sea space if not placed within the development zone. This would be the same for all boundaries in the project aligning with the shipping route.</p> <p>When considering the proposed boundary in conjunction with the existing NPS EN-3 2.6.168 and 2.6.16 Trinity House would conclude that the effects on the shipping lane could be an obstruction to navigation. We are aware that these are the worst case scenarios and without knowing the final number and layout of turbines in the area we cannot fully assess these impacts.</p>	
5.	<p><b>SOUTHERLY TRAFFIC ROUTES</b></p>	
18	<p>The traffic pattern shows that vessels using the area from the north are already having to consider their routes for passing the Haisborough Sand and Hewett Gas Fields to the south east. When approaching from the south, vessels will have planned for passing between the windfarms and exiting for the northern ports. As such, the compression of available sea space will be a larger consideration for these vessels.</p>	

ID	Stakeholder Comment	Applicant Response
	 <p data-bbox="248 895 689 927">Figure 7: Overview of traffic routing</p>	
6.	<b>CONCLUSIONS</b>	
19	The proposed DEP North west boundary will cause shipping to navigate in a more compressed area increasing the risk of collision between vessels.	
20	This risk would be increased further when allowing for vessels fishing and servicing the new structures in the area.	
21	COLREGS will still need to be followed by vessels and the area available to vessels to alter course will have been reduced.	
22	If the project goes ahead with the current boundaries and turbines built to the extremities of the area, the buoy to buoy line between the Mid Outer Dowsing Buoy and the Dudgeon buoy will become irrelevant and Trinity House would need to reassess the requirements for general aids to navigation in the area.	



ID	Stakeholder Comment	Applicant Response
23	The area at the DEP north west boundary is the area of greatest concern as the reduction in sea space could possibly lead to grounding on the Triton Knoll for some vessels and this would need mitigating if the project is consented and builds out to the red line.	
24	Safety zones and buoyage used during the construction phase and future maintenance could further restrict the sea space outside of the red line boundary.	
<b>7. SUMMARY</b>		
25	In response to the question, we consider the risks to navigational safety, particularly to the west of the DEP north boundary, to be considerable and complex to mitigate with aids to navigation. These risks could be alleviated if the full area within the redline boundary was not utilised as vessels are currently staying clear of the buoy to buoy line which is why the Applicant has drawn the red line to this point in our opinion.	
26	Allowing for the volume of marine traffic, and an assumption that fishing activity will continue between the windfarms, the compression of traffic through the rest of the site will increase the risk of collisions as with all sites and will likely be mitigated by aids to navigation, correct charting and proper bridge watchkeeping on the vessels.	
27	The use of safety zones during construction and maintenance could further restrict available sea space outside of the red line boundary. This is a concern along the main shipping route between the project's and the DEP north westerly boundary.	
28	Finally, despite the assessment made above, Trinity House would defer to the MCA, as the primary navigational safety body, when defining shipping routes/lanes and assessing the appropriate widths of corridors as per MGN654.	

Table 15 The Applicant's comments on UK Chamber of Shipping's responses to the Examining Authority's Third Written Questions

ID	Question	UK Chamber of Shipping Response	Applicant's Comment
<b>Q3.19. Navigation and Shipping</b>			
<b>Q3.19.1 Navigational Risk and Effect on Navigational Safety</b>			
Q3.19.1.5	<p><b>Assessment of Navigational Risk and Safety</b></p> <p>With regards to the concerns raised relating to navigational safety from the MCA [REP1-117] [REP1-118] [REP3-134] [REP4-047], together with the Applicant's submissions (including the NRA [APP-198] and the Navigational Safety Technical Note [REP3-031]) comment on whether you would consider the remaining sea room past the proposed windfarms, particularly west of the DEP north boundary, as representing an unacceptable risk to navigational safety or have an acceptable and safe width of sea room? Explain with reasons and with reference to these submissions from MCA and the Applicant.</p>	<p>The area is complex and used by a diverse range of marine users. The Chamber first raised concerns with the negative impact on navigational safety of the proposed sites in August 2018, during the Crown Estate's Round Three Extension consultation. When asked to provide comments and views on the location of the site, the potential constraints that may affect it, and its overall suitability, the Chamber stated in relation to DEP:</p> <p><i>The Chamber does not have any specific navigational concerns at this stage given the insufficient information provided on layout or placement of potential turbines however has serious navigational concerns over the suitability of western extent of the northern element to Dudgeon extension and the intersection with a high-density route. Accordingly, the Chamber objects to the full extent of the boundary due to the constriction of safe navigational sea room and does not consider the site suitable.</i></p> <p>The above paragraph was submitted to Equinor on 9 June 2021 as part of the UK Chamber of Shipping Response to Dudgeon and Sheringham Shoal Extension Projects Section 42 of the Planning Act 2008 consultation and in</p>	<p>The Applicant has noted the response provided by UK Chamber of Shipping in their Deadline 5 submission [REP5-097]. The Applicant will address the points raised in UK Chamber of Shipping's submission at Issue Specific Hearing 7 on 21<sup>st</sup> June 2023 and will provide further details (if required) in writing at Deadline 7.</p> <p>The Applicant does note, however, that the <b>Draft Statement of Common Ground with UK Chamber of Shipping</b> [REP2-047] 'Agrees' the methodology used within the NRA and EIA and notes 'The Chamber has concerns around the western extent of the northern element of DEP and believes it unnecessarily protrudes into a busy shipping channel impacting navigational safety and is a sub-optimal use of seabed.</p> <p><i>This disagreement [impact significance – Not Agreed No Material Impact] however is not material to the in-isolation impact significance of the wind farm array areas but advocates for commitments not to build out into this section of the PDE' (PDE referring to Project Design Envelope, or Order Limits).</i></p>

ID	Question	UK Chamber of Shipping Response	Applicant's Comment
		<p>the Chamber's assessment this view has not changed.</p> <p>The Chamber does not have a full charting suite to provide its own diagrammatic analysis of the array area but has estimated the impact of the western extent of the northern array area of DEP would reduce available sea room for two-way traffic into a channel with less than half the size afforded by the current sea space, from approximately 4nm to 2nm. This would not permit vessels to continue to use a safe clearance distance of 1nm from both the wind farm and the shoal and pass another vessel.</p> <p>The significant reduction in sea room and identification in APP-198 of an average of 16 commercial vessels passing between through the northern channel (Routes 3 &amp; 5), a considerable number, and this is before additional project, offshore, fishing, recreational traffic is taken into consideration, all of which will inevitably increase collision risk.</p> <p>Upon review of the Applicant's documents to respond to this question, the Chamber has elevated concerns for navigational safety that within APP-198, the analysis undertaken specifically for tankers within the shipping and navigation study area during the survey period is limited. Section "14.1.3.2 Tankers" highlights that an average of 13 vessels per day transit the area and provides that the main destinations recorded were the Humber and mainland Europe. The NRA does not provide any more detailed analysis into tankers, including size, draught, and potential</p>	

ID	Question	UK Chamber of Shipping Response	Applicant's Comment
		<p>manoeuvrability constraints, including typical passing distance off OWFs. Given the potentially hazardous and environmentally significant cargoes that such vessels carry and their often-restricted manoeuvrability due to length and draught the reduction in available sea room for two-way traffic into a channel less than half the size afforded by the current sea space is a particular concern.</p> <p>The application of safety zones, which are expected to be used during all phases of the project, have the potential to reduce available sea room by a further 500m if located at the edge of the red line boundary, which can only be expected under the assumption of worst-case scenario. Such a reduction in what is already a very constrained area would further limit traffic and be unacceptable to navigational safety.</p> <p>In summary, in the Chamber's view, the reduction in sea room between the western extent of the northern array of DEP and the shoaling area does not provide an acceptable width of channel for safe navigation at present.</p> <p>Holistically, the Chamber believes that for the long-term safe co-location of OWFs and commercial shipping, it is incorrect for developers to foresee the safe distance that mariners transit off OWFs as area for development, as this forces commercial vessels into more constrained areas, passing each other ever closer with increasing collision and allision risk. It is well recognised and accepted</p>	



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		<p>by all parties that offshore wind deployment in the UK EEZ is going to continue to increase.</p> <p>It is highly unlikely that navigational safety will be improved by the presence of a wind farm, so the Chamber strongly advocates that the significant pipeline of planned offshore wind farms avoid and minimise risk to navigational safety as much as possible. Poorly planned cumulative proliferation of offshore wind farms has a strong potential to become an existential threat to the safety of navigation for commercial shipping and have a significant adverse impact on the flexibility and efficiency of shipping industry. Encroachments by developments into busy shipping channels and reduction in navigational safety at this relatively early phase of offshore wind proliferation in the UK EEZ will only be exacerbated in the future.</p>	
Q3.19.1.6	<p><b>Disruption or Economic Loss</b></p> <p>Would the Proposed Development location avoid or minimise disruption or adverse transit time changes, including economic loss to the shipping and navigation industries, with particular regard to approaches to ports and to strategic routes essential to regional, national and international trade, lifeline ferries, or recreational users of the sea?</p>	<p>The proposed developments do not directly impact upon approaches to port, nor hinder port access however are located in a busy and complex area for seagoing traffic and marine users, with APP-198 identifying on average 45 commercial vessels passing between the proposed developments each day, whilst excluding project, offshore, fishing, and recreational traffic etc. These vessels comprise strategic routes essential to regional, national and international trade as well as international scheduled ferry services.</p> <p>Accordingly, any reduction in navigable sea room for vessels to stay a safe distance from infrastructure, natural navigational constraints, and have adequate passing space between</p>	

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		<p>vessels to comply with Collision Regulations will have consequences.</p> <p>Those consequences are numerous; vessels may proceed with greater caution, thereby slowing their speed to delay their passage or operate at a less efficient engine level; vessels may determine that additional crew are required as part of the bridge team to maintain a safe and adequate watch, thereby increasing crew costs and limiting hours of rest on vessels; vessels may ultimately determine that there is insufficient sea room to safely navigate and pass other vessels, and so re-route to avoid the area entirely.</p> <p>Vessels constrained by draught and manoeuvrability may determine that the available channel between Triton Knoll and Dowsing Shoal, which may be insufficient for their vessel and choose alternative route so as not to be constrained.</p> <p>All these consequences impact adversely on transit times and economic loss to the shipping industry and resulting supply chains. Furthermore, whilst indirect, should a navigational incident (collision or allision) occur in the vicinity then there would be a direct consequence to the parties involved, and knock on indirect impact to other passing vessels and sea users which would inevitably have economic, temporal, and potentially environmental consequences.</p> <p>Accordingly, to minimise those losses, the view of the Chamber is that the primary means of mitigation is through the lesser reduction in</p>	

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		navigable sea room for marine users to safely occupy.	

## References

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