

# Sheringham Shoal and Dudgeon Offshore Wind Farm Extension Projects

The Applicant's Responses to the Examining Authority's Second Written Questions

**Revision A** Deadline 3 May 2023 Document Reference: 16.2









Doc. No. C282-RH-Z-GA-00260 Rev. no. A

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# **1** Applicant's Responses to Second Written Questions

 Following the issue of the Second Written Questions by the Examining Authority (ExA) on 12<sup>th</sup> April 2023 to Equinor New Energy Limited (the Applicant) and other Interested Parties, the Applicant has subsequently responded to each of those relevant questions. Details of the Applicant's responses are set out within this document in the subsequent tables below.



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# Table 1 Applicant's responses to the Examining Authority's Second Written Questions: Q2.1

ID	Question addressed to	Question	Applicant Response		
Q2.1.1 Pla	Q2.1.1 Planning Policy				
		No further questions in this section at this stage			
Q2.1.2 Pla	anning Permissions				
		No further questions in this section at this stage			
Q2.1.3 Leç	gislative Framework				
		No further questions in this section at this stage			
Q2.1.4 Mis	scellaneous	·			
Q2.1.4.1	Applicant Local Planning Authorities	Availability of Resources for NSIP casework In relation to responses from LPAs, would the Applicant be willing to commit to entering into Planning Performance Agreements in order to provide the relevant LPAs with the resource needed to ensure smooth and timely handling of requirement discharge processes should consent be granted? Explain with reasons.	The Applicant considers that it is in the interest of all parties for the local planning authorities (LPAs) to be suitably resourced to ensure an efficient discharge of the requirements process and has had initial discussions with the LPAs regarding entering Planning Performance Agreements (PPA) to cover reasonable costs for that phase of the development. Discussions with Norfolk County Council (NCC) have progressed and a draft PPA has been shared with NCC for initial comment. The Applicant has indicated to North Norfolk District Council, South Norfolk Council, and Broadland District Council that it is willing to cover reasonable costs but has not yet entered detailed discussions with each on a draft PPA. The Applicant anticipates that discussions on the detail of any PPAs will progress post- consent.		
Q2.1.4.2	Applicant	<b>National Security</b> Considering all aspects of the Proposed Development and development scenarios, would there be any issue which may affect national security?	In preparing the Application the Applicant has had regard to the security considerations presented in Overarching National Policy Statement for Energy (EN-1) Section 4.15. No national security implications requiring consultation with the relevant security experts have been identified in relation to the Projects. The wind farm sites and offshore export cable corridor have been selected so as to minimise potential interactions with and		



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			impacts on Ministry of Defence (MoD) infrastructure, as set out in Environmental Statement Chapter 15 – Aviation and Radar [APP-101] and Chapter 16 – Petroleum Industry and Other Marine Users [APP-102]. The site is located outside of any MoD danger areas, practice areas and exercise areas. Chapter 15 – Aviation and Radar [APP-101] considers the potential impacts on MoD infrastructure in relation to aviation and radar, including potential impacts on the MoD Air Defence Radar at Trimingham. The Applicant will continue to engage with the MoD to agree a suitable mitigation solution, as set out in response to Q2.4.1.3, which will ensure impacts on Trimingham ADR are mitigated and do not cause any issues which may affect national security.
Q2.1.4.3	Applicant	<b>Transboundary</b> Considering all aspects of the Proposed Development and development scenarios, would there be any issue which may affect transboundary matters or foreign countries, and if so, what would be the magnitude of these impacts, and would these be adverse in nature?	Consideration of potential transboundary impacts of the Projects has been summarised in <b>ES Volume 1 Chapter 29 –</b> <b>Transboundary Impacts</b> [APP-115]. The topics for which transboundary impacts have been scoped into the assessment are listed in <b>Table 29.2</b> . Further detail on the transboundary impact assessment carried out for each of the topics listed is provided in the relevant ES chapters. This assessment has considered the realistic worst-case scenario across all aspects of the Projects and all development scenarios. None of the transboundary effects considered have been assessed as having significant impact.
Q2.1.4.4	All parties	<ul> <li>Responses</li> <li>a) Clearly reference any supporting evidence that you may have provided in an appendix.</li> <li>b) Applicant and other parties, ensure the question numbering and sub-numbering is consistent with WQ2 as published.</li> </ul>	<ul> <li>a) Supporting evidence to the Applicant's Responses to the Examining Authority's Second Written Questions has been provided in Appendix A - Supporting figures to the Applicant's Responses to the Examining Authority's Second Written Questions [document reference 16.2.1] and Appendix B - Supporting documents to the Applicant's Responses to the Examining Authority's Second Written Questions [document reference 16.2.2]. Reference has been provided to these appendices in the</li> </ul>



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ID	Question addressed to	Question	Ар	plicant Response
				Applicant's answers to written questions that have required further supporting material.
			b)	A check has been completed to ensure the numbering in the Applicant's responses accords with the numbering in WQ2 as published.



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# Table 2 Applicant's responses to the Examining Authority's Second Written Questions: Q2.2

ID	Question addressed to	Question	Applicant Response	
Q2.2.1 Se	2.2.1 Selection of Landfall Site			
		No further questions under this topic at this stage.		
Q2.2.2 Se	election of Substation Site	•	•	
Q2.2.2.1	Applicant National Grid Electricity System Operator Limited All Parties	<ul> <li>Grid Connection <ul> <li>a) Interested Parties and other persons, provide any additional comments relating to Applicant's approach to grid connection at Norwich Main in light of the letter written by Minister of State for Energy and Climate, dated 16 January 2023 [REP1-038, Pages 471-473].</li> <li>Applicant and NG ESO, the ExA considers that adequate response have not been provided by either party to parts of WQ1.2.2.1 [REP1-036] [REP1-188], and at ISH4 [EV-057] [EV061]. For that reason, some questions here have been repeated. The ExA requests both parties to submit a jointly prepared, comprehensive and complete responses to the following questions as a separate submission, making reference to the CION guidance as relevant. You may use the following sub-headings to structure your joint response.</li> <li>Decision making framework</li> <li>b) Notwithstanding your response [REP1-036, Q1.9.1.5], confirm and support with evidence if possible, that you already have or not a 'connection contract in place' with for the Proposed Development at Norwich Main. Respond with reference to the letter written by Minister of State for Energy and Climate, dated 16 January 2023 [REP1-038, Pages 471-473, Paragraph 3].</li> <li>c) Provide the CION guidance referenced at ISH4, and</li> </ul></li></ul>	<ul> <li>As requested, the Applicant and NGESO has jointly prepared the following question responses:</li> <li>a) n/a</li> <li>b) As set out in paragraph 7 of the 8.1 Cable Statement [APP-283] submitted with the DCO application, <i>"the Grid Connection Agreement that has been secured by the Applicant is for a connection located at the Norwich Main substation in Norfolk, …"</i>.</li> <li>For completeness, and as set out in Table 20, ID16 of The Applicant's Comments on Written Representations [REP2-017] the Applicant has since made a Modification Application (ModApp) to National Grid for an increase in transmission entry capacity such that the grid connection is available and secured should there be any future opportunity to amend the capacity in the Agreement for Lease (AfL) prior to construction of SEP and DEP. A Grid Connection offer was made by National Grid in November 2022 for the increased transmission entry capacity at the Norwich Main substation. The Applicant reiterates that if the opportunity arises to realise a greater capacity, this will not require any of the existing parameters for SEP and DEP to increase.</li> <li>The Grid Connection Agreement with National Grid has a connection date of 2027 for the 719MW existing capacity (stage 1). The ModApp offered and now signed</li> </ul>	



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ID	Question addressed to	Question	Applicant Response
		in the ExA's considerations, and its recommendation to the SoS.	allows for the increase in transmission entry capacity at a connection date of 2031 (stage 2).
		Alternatives considered	The Applicant therefore confirms that it has a
		d) Signpost in the Application material or submit information to highlight what alternative grid connections, other than Norwich Main, were offered to the Applicant?	'connection contract' (Grid Connection Agreement) in place, as can be evidenced on the publicly available Transmission Entry Capacity (TEC) register kept by National Grid ESO (NGESO).
		e) NG ESO, the ExA notes your brief response regarding Walpole Substation [REP1-188, Q1.2.2.3]. Further information in the context of the above question is requested.	<ul> <li>c) The Applicant has provided a copy of The Connection and Infrastructure Options Note (CION) Process, Guidance Note v4.0 (NGESO, November 2018) (the CION guidance) at B.9 of Appendix B - Supporting documents to the Applicant's Responses to the</li> </ul>
		Selection process and roles	Examining Authority's Second Written Questions
		f) At ISH4, the Applicant explained that while the CION was driven by NG ESO, it was a collaborative process to which the Applicant did contribute. In order to demonstrate compliance with NPS-EN1 (Paragraphs 4.4.1 and 4.4.2), set out the role of the Applicant in particular, and also of NG ESO and any other parties in the consideration of alternatives in the CION.	(document reference 16.2.2) submitted by the Applicant at Deadline 3. The process for projects to secure a Grid Connection Agreement is an Ofgem regulated process which sits outside of the consenting process for a proposed development. NGESO as System Operator coordinates inputs from Developers, Transmission Owners (TOs) and NGESO.
		Selection criteria and weighting	The Applicant does not consider the CION guidance to
		g) What criteria did you consider in making the connection offer to the Applicant? Provide a full flow chart with the sequence of steps taken, and the criteria and weighting that underpinned key decisions.	be a material consideration in the ExA's recommendation to the Secretary of State given that the process for NGESO making a grid connection offer to a customer is regulated separately under a different relevant legislative framework to that under which
		<ul> <li>What weight or extent of consideration is given to nature, biodiversity and sites designated for nature conservation when preparing the CION and offer options?</li> </ul>	consent is sought (i.e. the Planning Act 2008 and relevant secondary legislation), and for reasons set out in response to part d) below. The CION guidance provides background to the NGESO-led process followed which determined Norwich Main as the grid
		Given its distance in-land, what factors made Norwich substation the best option for the grid connection?	connection location offered to the Applicant.



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ID	Question addressed to	Question	Applicant Response
			<ul> <li>d) No alternative grid connections were offered to the Applicant. The CION process considered a range of potential options but resulted in only Norwich Main being offered to the Applicant. Therefore, whilst reference is made in the application materials to the grid connection point and the CION process (section 3.6 and 3.10 of 6.1.3 Chapter 3 Site Selection &amp; Assessment of Alternatives of the ES [APP-089], and section 3.1.3.2 of 6.3.3.1 Appendix 3.1 – Onshore Substation Site Selection Report [APP-175]), 'alternative grid connections' are not studied within the Environmental Statement as none were under consideration.</li> </ul>
			Paragraphs 2.2.1 of the current draft NPS 5 fully recognises that "The Applicant does not substantially control the initiating and terminating points of new electricity networks infrastructure. The siting is determined by the location of new generating stations and/or system capacity by the Electricity System Operator."
			NPS policy is clear that alternatives are relevant only in specified circumstances. Policy paragraph 4.4.2 of NPS EN-1 requires that where alternatives have been studied:
			"applicants are obliged to include in their ES, as a matter of fact, information about the main alternatives they have studied. This should include an indication of the main reasons for the applicant's choice, taking into account the environmental, social and economic effects and including, where relevant, technical and commercial feasibility;"
			Similarly, paragraph 2 of Schedule 4 to the EIA Regulations requires that the Environmental Statement must include:



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			"2. A description of the reasonable alternatives (for example in terms of development design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects".
			In the case of both NPS policy and the EIA Regulations, the requirement to consider alternatives applies to those studied by the Applicant where the Applicant has made a selection of a "chosen option" (EIA Regulations) and not to other processes by other national or other organisations in which the Applicant has been consulted.
			Designated NPS EN-1 policy also clearly limits any need to consider alternatives where it states (in paragraph 4.4.1) that:
			"this NPS does not contain any general requirement to consider alternatives or to establish whether the proposed project represents the best option".
			<ul> <li>e) Walpole 400 kV was one of the sites considered during the initial stages of the CION process undertaken in 2018. As per the CION guidance there is a process to "filter down" the potential sites identified to those that will be taken forward for more detailed assessment. Walpole substation did not make the shortlist of sites taken forward after initial consideration, due to a number of issues identified by NGET with that site, which included: Limited space on site, substation considered 'full' for generation, fault level issues and lack of thermal capacity. It is also the case, as noted in NGESO's response to the Examining Authority's First Written Question (Q1.2.2.3) [REP1-188], that the seabed routes to Walpole around the Wash were believed to be at capacity with no further available space for more cables.</li> </ul>



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			The conclusion was that the Walpole 400 kV was very congested, therefore it was not recommended by the CION parties to be taken forward as a potential option.
			f) As set out in the CION guidance at B.9 of Appendix B - Supporting documents to the Applicant's Responses to the Examining Authority's Second Written Questions (document reference 16.2.2) submitted by the Applicant at Deadline 3, "the CION requires input from NGESO as System Operator, TOs and Developers. NGESO as System Operator coordinates this input." The guidance provides an overview of the process including the roles and responsibilities of each CION party (the parties being the developer, NGESO and the TOs).
			As set out in response to d) above, compliance with Paragraphs 4.4.1 and 4.4.2 of NPS EN-1 is not triggered by the location of the grid connection on the basis that:
			<ul> <li>the process for NGESO making a grid connection offer to a customer is regulated separately under a different relevant legislative framework;</li> </ul>
			<ul> <li>only one connection point, Norwich Main, was offered to the Applicant and therefore no other alternatives have been studied as part of the DCO application; and</li> </ul>
			• the requirements of the EIA Regulations are not applicable to the grid connection location given that no other connection points represent a <i>'reasonable alternative' 'studied by the developer'</i> .
			g) The CION Guidance (B.9 of Appendix B - Supporting documents to the Applicant's Responses to the



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			<b>Examining Authority's Second Written Questions</b> (document reference 16.2.2)) sets out the sequence of steps and the criteria considered that underpin key decisions. The guidance includes a series of flowcharts representing how the process is undertaken. NGESO and the other Transmission Licensees have a statutory duty under the Electricity Act to develop and maintain an efficient, coordinated and economical transmission system and the CION process was the relevant process undertaken to identify the overall efficient, co-ordinated and economical solution in the context of the connection for SEP and DEP. Under the CION process, as set out in the CION guidance, the onshore TO (in this case NGET) identified connection options which were shared with the Applicant, and the Applicant considered the offshore and onshore connection routes/design associated with these. The options appraisal included consideration of costs and a high-level appraisal of the technical, environmental, planning consent and deliverability issues associated with each of these.
			These options were reviewed by the CION parties (NGET, NGESO and the Applicant) and the options to be taken forward for detailed assessment and a cost benefit analysis (CBA as described in the CION guidance) identified. As noted in the answer to question (e) above, Walpole was assessed and ruled out for the reasons mentioned at that stage. The CBA outcome was then considered by the CION parties but also taking into account the other issues associated with each option as identified by NGET and the Applicant. As noted in (h) below the preferred connection option was Norwich Main and agreed by all the CION parties despite being the second most economic option under the CBA as it carried less deliverability risk. The CION process, whilst focused on the overall efficient, co-ordinated and



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			economical solution, does (and has in the case of the grid connection for SEP and DEP) attribute weight to other considerations including environmental and consent risk matters.
			<ul> <li>h) As explained in the CION guidance, the purpose of the CION process is to consider and identify the overall economic and efficient connection option in line with the statutory duty under the Electricity Act to develop and maintain an efficient, coordinated and economical transmission system. So there is a focus on the cost and economic rationale of a connection option but deliverability is also important and consenting and environmental factors influence this and so can also influence the preferred connection option recommended through the CION process. As highlighted in (g) above, for SEP and DEP, the CBA undertaken as part of the CION process identified Norwich Main as the second most economic connection option - but this was only by a relatively small cost margin compared to the most economic connection option.</li> </ul>
			Compared to Norwich Main, the most economic connection option required a new transmission substation and a longer cable route, which was considered to have increased consenting/deliverability risk. As a result, all three CION parties (NGET, NGESO and the Applicant) agreed that Norwich Main should be the recommended option from the CION process, since it presented less risk to the project deliverability.
			As a general point, it is important to note that the assessment of the respective potential connection options under the CION process considered the full length of the connection from the arrays to the proposed connection location i.e., offshore as well as onshore. Appendix A.6 of <b>Appendix A - Supporting figures to</b>



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			the Applicant's Responses to the Examining Authority's Second Written Questions (document reference 16.2.1) presents the location of the existing Walpole and Norwich substations at the time of the CION process, from which it can be seen that the total distance (onshore and offshore) to Walpole is clearly greater than the distance to Norwich Main.
Q2.2.3 Vi	ability of the grid connection	on and progress with other licences	
		No further questions under this topic at this stage	
Q2.2.4 Th	ne Need for this type of End	ergy Infrastructure, and specifically for the Proposed Dev	elopment
		No further questions under this topic at this stage	



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## Table 3 Applicant's responses to the Examining Authority's Second Written Questions: Q2.3

ID	Question addressed to	Question	Applicant Response
Q2.3. Benth	ic ecology, Intertida	al, Subtidal and Coastal effects	
Q2.3.1 Effect	cts on Marine Life a	nd Benthic Habitats	
Q2.3.1.1	Applicant	<ul> <li>Benthic Mitigation Plan <ul> <li>a) Applicant, comment on NE's [REP2-065] suggestion for an outline benthic mitigation plan to demonstrate the potential mitigation that could be implemented for all important receptors, including benthic reef features.</li> <li>b) Provide reasons if you do not consider that an outline benthic mitigation plan is required.</li> <li>c) Provide the outline for such a plan, without prejudice.</li> </ul> </li> </ul>	Condition 13 (i) of Schedules 10 and 11 and Condition 12 (j) of Schedules 12 and 13 of the <b>Draft DCO</b> ( <b>Revision F</b> ) [document reference 3.1] includes provision for a mitigation scheme for any benthic habitats of conservation, ecological and/or economic importance constituting Annex I reef habitats identified by pre-construction surveys and will be in accordance with the <b>Offshore In Principle Monitoring Plan</b> [APP-289]. This is the appropriate approach to mitigating impacts on benthic habitats of conservation, ecological and/or economic importance. Mitigation of potential impacts on benthic ecology receptors are described in Section 8.3.3 of <b>Chapter 8 Benthic Ecology</b> [APP-094]. The primary means of mitigating potential impacts on sensitive benthic features that are identified within the pre- construction surveys would be through avoidance during project design and through micro-siting of the wind turbines and cable routes. With specific regard to the Cromer Shoal Chalk Beds (CSCB) Marine Conservation Zone (MCZ), the <b>Outline</b> <b>CSCB MCZ Cable specification and Installation Monitoring</b> <b>Plan (CSIMP)</b> [APP- 291] details the measures that will be implemented to avoid, minimise and mitigate potential impacts on the MCZ features. Outcropping chalk reef in the nearshore area has been avoided through the use of HDD. The Applicant notes that no biogenic reef features have been identified during any surveys of the existing Dudgeon and Sheringham or SEP and DEP wind farm sites or export cable corridors.



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			There may be a requirement for avoidance of for example geogenic reef or peat and clay exposures with piddocks however until detailed pre-construction surveys and project design are undertaken post-consent, the specific locations for avoidance cannot be determined.
			Therefore, the Applicant does not consider that there would be value in submitting an outline benthic mitigation plan during the Examination since the final plan will be so heavily reliant on the results of the pre-construction surveys and detailed design.
			Notwithstanding the Applicant's above position, it is considered that any such plan would be expected to cover, for example:
			Embedded mitigation
			Evidence from pre-construction surveys
			Micro-siting requirements
			Mechanism for avoidance
			<ul> <li>Management of potential conflicts between design of the project and sensitive benthic features</li> </ul>
			<ul> <li>Management of potential conflicts between sensitive benthic features and archaeology</li> </ul>
			The specific details will be discussed and agreed with the MMO in consultation with Natural England during development of the final mitigation scheme which will be based on pre-construction survey data and the detailed design information at that time.
Q2.3.1.2	Applicant	Adaptive Management NE [REP2-064] has highlighted the need for adapted management measures if necessary following monitoring. Does the Applicant agree with the need for this approach; explain with reasons. If so, how would this be secured?	The Applicant highlights that adaptive management is standard practice for monitoring. The <b>Offshore In-Principle Monitoring</b> <b>Plan (IPMP)</b> [APP-289] states: 'The scope and design of all monitoring work should be finalised and agreed following review of the results of any preceding survey and / or monitoring work (i.e. an adaptive approach), including those surveys conducted in support of the EIA. This includes the



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			potential for survey requirements to be adapted based on the results of the monitoring outlined in this document.'
			The Applicant considers this to be secured through the existing requirement to submit a monitoring plan in accordance with the <b>Offshore IPMP</b> [APP-289]. Condition 18 of Schedules 10 and 11 and Condition 17 of Schedules 12 and 13 of the <b>Draft DCO</b> ( <b>Revision F</b> ) [document reference 3.1].
			The Applicant also highlights that it is intending to submit an update to the <b>Offshore IPMP</b> [APP-289] at Deadline 4 to seek to address, as appropriate, comments from Natural England in REP1-136.
Q2.3.1.3	Applicant	Use of fall pipes The MMO has recommended [REP2-059] that the Applicant uses a fall pipe in all disposal activities wherever practicable, to ensure that sediments are broadly returned to the same areas they were removed from. Is this a method that the Applicant could commit to for disposal activities, and if so, how would this be secured?	The Applicant 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. 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 Chapter 6 Marine Geology, Oceanography and Physical Processes [APP-092] (e.g. paragraph 241).
			As noted in response to Q2.12.1.3 and ID 7 of Table 16 of the <b>Draft SoCG: MMO (Revision B)</b> [document reference 12.11], regarding the <b>Disposal Site Characterisation Report</b> [APP-300], further contaminants sampling and analysis is being undertaken post-consent. Therefore, the licence for the disposal of sediment at sea will be applied for post-consent. Condition wording, as agreed with the MMO, to secure the requirement for post-consent contaminants sampling has been



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			included with the <b>Draft DCO (Revision F)</b> [document reference 3.1] at Deadline 3.
			The Applicant therefore proposes to withhold any further updates to the Disposal Site Characterisation Report until the post-consent stage when more accurate details on the design (e.g. foundation types) and therefore quantities of material that are required to be disposed of, are known. This will enable a more accurate assessment to be undertaken.
			This approach has been agreed with the MMO.
Q2.3.1.4	Marine Management Organisation Natural England	Electromagnetic Field impacts Even if cables were buried or covered with cable protection, would this be sufficient mitigation to prevent adverse impacts to benthic ecology by reason of electromagnetic fields or through sediment heating?	Appendix 28.1 (Sheringham and Dudgeon Extension Projects EMF Assessment [APP-279]) provides an independent project-specific EMF assessment which describes that the magnetic fields from all scenarios reduced to very low levels within a few metres from the circuits and are highly localised. For example, under a worst case cable circuit option, EMF at the cable surface could be up to 1653 micro tesla ( $\mu$ T) but assuming a cable burial depth of 1m below the seabed, this would produce a magnetic field of 27 $\mu$ T at the surface of the seabed and it's important to note that that these levels do not take account of shielding factors of the cable sheath which would further reduce the fields.
			Background measurements of the magnetic field in the southern North Sea are approximately $50\mu$ T (Tasker et al. 2010). Whilst there is potential that burial depths shallower than 1m would be achieved, which could result in EMF levels higher than $27\mu$ T, these levels would still be below those expected to result in significant physiological or behavioural impacts on fish and shellfish ecology receptors (particularly those which are commercially exploited) and along the majority of the cable routes EMF would be below ambient measurements.
			Where external cable protection is installed to protect cables that are unable to be buried to an adequate depth, the barrier



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			provided by this would be expected to attenuate EMF by a factor approximating that of a burial depth of 0.5m (since cable protection would be 0.5m high).
			Elasmobranchs (sharks, skates and rays) are the class of fish most sensitive to EMF effects (defined as medium sensitivity in ES Chapter 9 Fish and Shellfish Ecology [APP-095]). As described in ES Chapter 12 Commercial Fisheries [APP-098] elasmobranchs do not form a targeted fishery in this area and are not taken in significant quantities as retained or non-target species by the fleets in operation across the SEP and DEP offshore sites. Shellfish dominate fish landings from the regional study area and are considered to be of low sensitivity to EMF effects.
			The Applicant notes that evidence from post construction surveys of Round 1 wind farms (Kentish Flats, Lynn and Inner Dowsing, Burbo Bank and Barrow) show no significant effects to fish populations as a result of EMF. In addition, recent scientific research investigated the effect of EMF exposure on brown crab, which is an important commercially caught species in the SEP and DEP commercial fisheries study area. Scott et al. (2021) tested EMF strengths of $250\mu$ T, $500\mu$ T and $1,000\mu$ T and measured stress related parameters and behaviour responses of brown crab in laboratory conditions. Brown crab showed a clear attraction to EMF shelters exposed to strengths of $500\mu$ T and above, with significant reduction in time spent roaming (i.e., they stayed still in the EMF exposed shelters). However, no differences were found between brown crab exposed to $250\mu$ T and the control group (which were not exposed to EMF). Responses were recorded at EMF strengths of $500 \mu$ T, which is over 10 times the predicted level to be produced by the Projects assuming a cable buried at 1m.
			The Applicant does not, therefore, consider that EMF could have significant impact to fish and shellfish species.



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Q2.3.1.5	Applicant	<ul> <li>Scour Assessments</li> <li>NE [REP2-064] have requested both a Scour Assessment and a Secondary Scour Assessment to be submitted, including consideration on the scoured material on suspended sediment.</li> <li>a) Can this information be submitted or explained why this is not necessary.</li> <li>b) What is the total maximum volume of scour protection per turbine?</li> </ul>	<ul> <li>a) As noted at ID 54 and 55 of Table 4.18.4 in The Applicant's Comments on Relevant Representations [REP1-033], no scour assessment has been carried out. An assumption has been made for the worst-case scenario that scour protection will be used wherever scour will occur, reducing sediment release to negligible quantities. A conservative worst-case scenario of all foundations having scour protection is considered for the assessments of seabed disturbance.</li> <li>The limited geographical extent of secondary scour means that the potential impact would be anticipated to be nugatory. Hence, an assessment of secondary scour has not been undertaken. However, the Offshore IPMP [APP-289] includes provision for monitoring of secondary scour around scour protection.</li> <li>b) Individual gravity base structure (GBS) footprints including scour protection are 14,313.8m<sup>2</sup> and 25,446.9m<sup>2</sup> for a 15MW and 18MW wind turbine respectively. The maximum total footprint of 43 18MW GBS foundations including foundation scour protection is 1.09km<sup>2</sup>. This is the worst case scenario which has been assessed for seabed disturbance impacts.</li> <li>The maximum volume of scour protection per GBS foundation (i.e. the worst-case) would be 31,809m<sup>3</sup> and 56,549m<sup>3</sup> for a 15MW and 18MW wind turbine respectively.</li> </ul>
Q2.3.1.6	Marine Management Organisation Natural England	UXO in Benthic Communities The Applicants' document 'Assessment of Sea Bed Disturbance Impacts from Unexploded Ordnance Clearance' [APP-080] states, regarding the recovery of benthic communities following a detonation, that " <i>Recovery</i> of these communities will take place rapidly with full	As agreed with the MMO and Natural England through the evidence plan process, UXO will be a separate Marine Licence post consent (see SoCGs: <b>Draft SoCG with Natural England</b> ( <b>Offshore</b> ) [REP2-044] and <b>Draft SoCG with MMO (Revision</b> <b>B)</b> [document reference 12.11]).



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		<ul> <li>recovery expected within two years in many areas based on the resilience of most biotopes. Recovery may take longer in some coarse and mixed sediment areas but based on DOW post-construction monitoring of cable installation activities, full recovery is expected in less than four years".</li> <li>a) Do you agree with the conclusions on this matter? Explain with reasons.</li> <li>b) Provide details if you consider further evidence or mitigation is necessary?</li> <li>See related questions in the sections on Habitats and Ecology Offshore and the section on Historic Environment and Cultural Heritage.</li> </ul>	During the Marine Licensing process, an accurate assessment of the potential impact (including potential cumulative and in- combination impacts) on benthic communities taking account of the number of UXO to be detonated, their locations, and the method of UXO clearance, will be undertaken in consultation with the MMO and Natural England. If there are UXO identified for explosion within proximity of potentially sensitive benthic habitats then strategies for avoidance and mitigation will be discussed at that time. The Applicant is not aware of any other studies of UXO impacts on benthic communities however it is anticipated that the width and depth of any crater will be dependent on the size of the UXO, the method of detonation, and the underlying sediment and geology.
			As noted in response to second written question Q2.12.2.7, the preferred method of UXO detonation is a low order clearance technique such as deflagration whereby explosive energy is reduced – see Section 1.4.2.1 of <b>Draft MMMP</b> [REP1-013].
			Since the number of UXO required to be cleared is unknown, and a detailed assessment will be undertaken based on the actual number and size of UXO to be cleared at that time, the Applicant does not propose to provide any further updates to the <b>Assessment of Sea Bed Disturbance Impacts from</b> <b>Unexploded Ordinance (UXO) Clearance</b> [APP-080]. As noted in that document, the assessment was provided for information purposes only in response to stakeholder comments (see Section 4 of the <b>Stage 1 CSCB MCZ</b> [APP- 077].
Q2.3.1.7	Applicant	Response to Natural England Issue and Risk Log	Responses to Tab E – Marine and Coastal Processes, Tab F –
		The NE issue and risk log [REP2-064] indicates that there are many points relating to the MCZ and Benthic Ecology that NE still has concerns about, identified as red and amber in the log. Applicant, respond specifically of each of	All Other Marine Matters and Tab G – Cromer MCZ of the Natural England Risk and Issues Log [REP2-064] have been provided in <b>The Applicant's Comments on Natural</b> <b>England's Deadline 2 Submission</b> [document reference 16.6].



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		the issues where disagreement remains in Tab E – Marine and Coastal Processes, Tab F – All Other Marine Matters (where it relates to Benthic Ecology) and Tab G – Cromer MCZ. The ExA is seeking a clear response to all points.	
Q2.3.2 Imp	oact on subtidal cha	lk features	
Q2.3.2.1	Applicant	HDD exit pits - impact to chalk features	a)
		<ul> <li>Provide a succinct written explanation of potential impact of HDD exit pits on the MCZ, including from the use of a Jack-Up vessel?</li> </ul>	The works at the HDD exit are described in <b>ES Chapter 4</b> <b>Project Description (Revision B)</b> [6.1.4] Section 4.5.2 and the <b>MCZA</b> [APP-077] Section 5.4.2.5. Impacts on the outcropping
		b) How can the exposure of sub-cropping chalk in the areas of the exit pits be avoided?	chalk feature in the nearshore are entirely avoided through the commitment to HDD. Impacts on sub-cropping chalk (and other habitats/features at the HDD exit) are described in <b>ES Chapter</b>
		c) Finally, how would sediment be removed, stored and redistributed from the exit pits?	8 Benthic Ecology [APP-094] (primarily sections 8.6.2.1 and 8.6.3.3) and the MCZA [APP-077] (primarily sections 8.1.1 and 8.2.2).
			The impacts on benthic habitats in general can be most succinctly summarised as: (1) temporary habitat loss / disturbance from activities including making the necessary excavations, temporarily depositing the excavated material on the seabed and indents from jack-up vessels; and (2) long term habitat loss from the use of rock bags or concrete half shells for cable protection purposes in the offshore transition zone (if required). The footprints for all these activities are clearly set out in Table 5.2 of the MCZA.
			As explained at ISH6 [document reference 16.11] the HDD exit will be located within the deep infilled channel cut through the chalk to 17m below the seabed, filled with Weybourne Channel deposits (Appendix 6.3 of the ES Sedimentary Processes [APP-182] - visible on Figure 3.4), located across the export cable corridor from approximately 750m to 1.5km offshore. Given the depth of overlying sediment deposits there is no potential for exposure of chalk in this area (the depth of the



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			excavation is only up to 1m, as described at Section 5.4.2.5 of the MCZA).
			b)
			As explained above there is no potential for exposure of sub- cropping chalk in this area. It has already been avoided through the positioning of the HDD exit in the location described.
			c)
			<b>ES Chapter 4 Project Description (Revision B)</b> [document reference 6.1.4] para 262: A jack-up barge vessel with backhoe excavator would be used for the excavations and/or installing any necessary external cable protection. All excavated sea bed sediments will be temporarily stored alongside the works location and within the export cable corridor (i.e. sidecast), prior to being backfilled after cable installation (for a period of up to approximately nine months for SEP and DEP). The sea bed footprint of the deposited material is estimated to be up to approximately 400m <sup>2</sup> (SEP and DEP). Alternatively, the excavated sediment could be stored on a barge.
			The Applicant notes that a potential concern relates to whether sediment will be returned within an area of similar sediment type. The Applicant considers that this will be the case in this instance since the excavated sediments will be backfilled into the same location that they were removed from and the excavated sediments are likely to be relatively homogenous in nature on account of the depth (17m) within which the Weybourne Channel deposits have infilled the channel as described above.
			A second potential concern relates to the possible mobility of the deposited sediment before it is backfilled. The sediment removed from the Weybourne Channel will be predominantly cohesive (compacted over 1,000s of years) laminated sandy clay. Sub-bottom profiles distinguish these sediments from an



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			underlying unit of older sand and gravel, which is unlikely to be penetrated during excavation. Due to its cohesive nature, the sediment that is sidecast will be in the form of aggregated 'clasts' that will remain on the seabed rather than being disaggregated into individual fine sediment components. Because of their potential size, future transport of the aggregated clasts in the sidecast material would be limited, and most would remain static on the seabed. If left for a significant amount of time (decades), the flow of tidal currents over the sidecast material would gradually winnow (there would be a gradual disaggregation of the clasts into their constituent particle sizes) the topmost clasts. However, given there will be a relatively short period of time (approximately nine months) between sidecasting and backfill, the loss of particulate material from the clasts through winnowing will be negligible.
Q2.3.2.2	Natural England	Sub-cropping chalk	No response required.
		<ul> <li>Explain in detail the concerns regarding potential impact to sub-cropping chalk and what value it contributes towards the MCZ conservation objectives?</li> </ul>	
		b) Explain why you consider this to be a feature of the MCZ, and how it would be affected where it is below the surface?	
		c) Is there any way impacts to sub-cropping chalk can be mitigated or avoided, especially if it is covered with a layer of sediment?	
Q2.3.2.3	Applicant	Avoidance of sub-cropping chalk	a)
		a) What would the contractor do if sub-cropping chalk is uncovered when ploughing/digging the trench for cable burial?	The <b>Outline CSIMP</b> [APP-291] provides information on the proposed cable installation methodologies and mitigation that may be adopted to minimise the impact on the CSCB MCZ as far as practicable, which includes the sub-cropping chalk. The



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		<ul> <li>b) What would be the consequence for the cable route?</li> <li>c) Could the impact to this uncovered sub-cropping chalk be avoided?</li> <li>d) Where in the application material is this set out?</li> </ul>	<ul> <li>information provided is very comprehensive and will be reviewed and updated in the final CSCB MCZ CSIMP once details from pre-construction surveys and detailed engineering studies are available, as secured through the relevant draft DMLs.</li> <li>For example Table 4 of the <b>Outline CSIMP</b> gives a summary of the export cable mitigation commitments in the MCZ. Of particular note this includes the potential to accept reduced burial depth. Reduced burial depth is possible in solid ground conditions (including subcropping chalk) because, from a cable burial risk assessment perspective, these conditions offer greater protection from damage from anchoring and fishing activity. As explained at para 42, reduced burial depths may be considered acceptable following completion of the preconstruction surveys and assessments, taking into account the overall risk assessment concluded in the final Cable Burial Risk Assessment that will be produced pre-construction. Cable burial depth requirements will be included in the cable burial depths will therefore reduce the likelihood of remedial works being required (and therefore the risk of further impact to the MCZ), including the need to resort to the use of external cable protection. By way of example, exactly this situation arose during the installation of the existing Dudgeon OWF export cables, as explained at para 53 of the <b>Outline CSIMP</b>. The same approach would be followed for SEP and DEP.</li> <li><b>b</b>)</li> </ul>
			installation there would be no consequence for the cable route at this stage of the works. However as set out in the <b>Outline</b> <b>CSIMP</b> [APP-291] the cable route will be micro-sited prior to the cable installation works starting in order to select a route that maximises the chance of successful burial (and therefore by



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			definition avoids areas of shallow sub-cropping chalk as far as possible).
			c)
			Refer to (a) and (b) above.
			d)
			As above. The Applicant would also refer to the <b>Interim Cable</b> <b>Burial Study</b> [APP-292] which, amongst other things, describes the potential for micro-siting of the export cables.
Q2.3.2.4	Natural England	Cable protection or impacts to sub-cropping chalk	No response required.
		Would it be preferable for the cable route to impact sub- cropping chalk with burial or alternatively to avoid such impact by use of cable protection in the MCZ?	
Q2.3.3 Coas	tal erosion effects a	and coastal processes	
		No further questions under this topic at this stage.	No response required.
Q2.3.4 Effect	ts on the Marine Co	onservation Zone	
Q2.3.4.1	Natural England	Cable Protection Assessment	No response required.
		The Applicant in ISH6 [EV-084] [EV-088] explained the analysis that underpinned the calculation of the amount of cable protection they could be required within the MCZ. To retain the necessary flexibility, the Applicant does not consider it necessary to provide more accurate cable protection details until pre-construction.	
		<ul> <li>Provide your comments to the Applicant's position and explain why you consider further detail is required at this stage.</li> </ul>	



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		<ul> <li>b) What would be the implications of not having further detail of cable protection requirements until post- consent/ pre-construction stage?</li> </ul>	
Q2.3.4.2	Applicant	Impacts of Cable Protection	a)
	Natural England	NE's position [REP2-064] is that, even with cable protection removal at decommissioning stage, scientific doubt remains regarding the impact of the proposals (alone or in combination with other projects) on the conservation objectives of the MCZ and that site recovery would not be assured.	The MCZ features that would potentially be affected by long term habitat loss from installation of external cable protection, and which have been assessed in the <b>Stage 1 Cromer Shoal</b> <b>Chalk Beds (CSCB) Marine Conservation Zone (MCZ)</b> <b>Assessment</b> [APP-077], are the following broadscale habitat features:
		<ul> <li>a) NE, regarding the long-term habitat loss, does this point relate to the MCZ generally or can NE provide detail as to which specific features and/or conservation objectives of the MCZ would be most impacted by any cable protection?</li> <li>b) NE, given the cable corridor route is through the MCZ, is there any way to overcome your concerns or does this indicate the inevitable need for MEEB to offset potential adverse effects?</li> <li>c) If the MEEB was deemed to be required, what specific features and/ or conservation objectives would it specifically be compensating for?</li> <li>d) The Applicant can also respond to these questions.</li> </ul>	<ul> <li>Subtidal mixed sediments</li> <li>Subtidal sand sediments</li> <li>Subtidal coarse sediments</li> <li>These features form a habitat mosaic (see Figure 7.2 of APP-077) throughout the export cable corridor with subtidal sand features being more prevalent in the nearshore area and subtidal mixed and subtidal coarse sediments being more prevalent from approximately 1.5km offshore to the boundary of the MCZ. Since the locations in which external cable protection may be required will not be known until post-consent, it is unknown which broadscale habitats will be 'most' affected by any cable protection. The Applicant draws the ExA's attention to its response to first written question Q1.3.1.7, Natural England's response in Section 5 of The Applicant's comments on Natural England's Deadline 2 Submission [document reference 16.6].</li> </ul>
			b)
			No comments.
			c)



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			If MEEB was deemed to be required, the restoration of a native oyster bed would provide enhanced ecological function to the broadscale habitat features (i.e. subtidal sand, mixed or coarse sediments) that would be lost from installation of external cable protection (see the <b>In-Principle CSCB MCZ MEEB Plan</b> [APP-083]).
Q2.3.4.3	Natural England	Cromer Shoals MCZ Conservation Advice update	No response required.
		Update the ExA on the Conservation Advice package for the Cromer Shoal Chalk Beds MCZ, and the current timescales for issue	
Q2.3.4.4	Applicant	Decommissioning of Cable Protection	The Applicant does not consider that this specific requirement
		NE states [AS-041] that real time assessment at the decommissioning phase should be undertaken of cable protection to assess the best course of action; for example, whether to remove the cable protection from the seabed. Is this something that the Applicant can commit to and secure in the dDCO?	is required to be secured within the Draft DCO. The Decommissioning Programme which will be produced in the pre-construction phase and is secured in Schedule 2, Part 1, Requirement 8 of the <b>Draft DCO (Revision F)</b> [document reference 3.1] will include, as appropriate, consideration of whether to remove or decommission <i>in situ</i> external cable protections.
Q2.3.4.5	Applicant	Historic oyster bed evidence The Applicant has stated [REP2-020] that there were oyster beds historically in this area, when providing support for	<ul> <li>Evidence of the historical extent of oyster beds in the region is provided in Section 2.1 of Annex C of the In-Principle CSCB MCZ MEEB Plan [APP-083].</li> <li>Native oyster once formed extensive beds across the North-East Atlantic (see Plate 2.1 in APP-083). These reefs covered large parts of the English Channel, many estuarine areas of the</li> </ul>
	Marine Management		
	Organisation	their MEEB preference. Can you provide any evidence of historia syster hads in this part of the southern North See2	
	Natural England	historic oyster beds in this part of the southern North Sea?	
	Inshore Fishing Conservation Authority		British coast and approximately 20% of the Dutch part of the North Sea floor (over 25,000 km <sup>2</sup> ) (Olsen, 1883). These once abundant beds contributed to food security, by providing a cheap and readily available source of protein to coastal communities since pre-historic times (Gonther, 1897; Pogoda, 2019). During the 19th century, with the invention of steam- powered trawlers, native oyster began to be heavily exploited commercially to meet high demand (Pogoda, 2019), with



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			approximately 700 million oysters consumed in London during 1864 alone (Philpots, 1890). Consistent overexploitation combined with habitat degradation, water pollution and disease led to major declines in native oyster throughout its range and functional extinction <sup>1</sup> in Belgian, German and Dutch waters (Airoldi and Beck, 2007; Gercken and Schmidt, 2014; Pogoda, 2019).
Q2.3.4.6	Natural England	<b>Need for the MEEB</b> Considering the extent and size of the oyster bed proposed by the Applicant, would this be deemed necessary as compensation for impacts to the MCZ?	As agreed through the evidence plan process, in order for the MEEB to be deemed successful, a self-sustaining reef would be required to be maintained. The Applicant has calculated that, once fully functioning, a 10,000m <sup>2</sup> reef would be self-sustaining (see the <b>In-Principle CSCB MCZ MEEB Plan</b> [APP-083]). As noted at ID 6 of Table 2-10 of the Draft SoCG with Natural England (Offshore) [REP2-044], Natural England state that that <i>'the scientific evidence used to inform a 10,000m<sup>2</sup> restoration area to enable a self-sustaining reef is agreed.'</i> .
Q2.3.4.7	Applicant Natural England	Necessary level of success for the MEEB Provide a view on what level of oyster bed success or partial success would be considered a suitable level of compensation? Also, would any such success need to be achieved within a particular timeframe?	Section 8.5.1 of the In-Principle CSCB MCZ MEEB Plan [APP-083], provides details on monitoring, including the aims of monitoring proposed and the criteria that will be used to determine whether the MEEB has been successful. This information is intended to provide an initial monitoring framework. Should the Secretary of State conclude that MEEB is required, further details related to the nature and frequency of monitoring as well as success metrics would be developed post-consent as part of the MEEB Implementation and Monitoring Plan and in consultation with the MEEB steering group.

<sup>&</sup>lt;sup>1</sup> A species population that is no longer viable. This occurs when the number of individuals within the population are so greatly reduced that one or more of the following is true: 1) successful breeding cannot occur; 2) genetic diversity is so low that the population cannot maintain itself; 3) the population plays a negligible role in ecosystem functioning.



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ID	Question addressed to	Question	Applicant Response
Q2.3.4.8	Natural England Applicant	<b>Securing the MEEB if necessary</b> If you consider the MEEB as necessary to offset adverse impacts to the MCZ how would this best be secured? Provide suitable wording for the dDCO. Applicant may comment.	Wording to secure delivery of the proposed MEEB, if deemed to be required by the Secretary of State is provided in the <b>Proposed Without Prejudice DCO Drafting</b> [REP2-011].
Q2.3.4.9	Natural England	<b>Priority of MCZ qualifying features</b> Can you provide, a list of the qualifying features of the MCZ and how they may rank in terms of priority, and particularly where sub-cropping/ subtidal chalk features may fit within this.	No response required.
Q2.3.4.10	Natural England	<b>Mixed sediment areas</b> The Applicant at ISH6 [EV-084] [EV-088] stated that it is unlikely that the cable route would avoid areas of mixed sediment. Is there any mitigation that could be suggested that would minimise any impact to these mixed sediment areas, both if there is to be any cable protection and also if the cable can be buried?	As noted in Natural England's Position Statements in Lieu of Attendance at Issue Specific Hearing 4, Issue Specific Hearing 5 and Issue Specific Hearing 6 [AS-041], 'we are aware that it is highly probable that any cable route transecting the MCZ is likely to interact with mixed sediment other than progressing a single ops serving both windfarms it is unlikely that further mitigation measures can be implemented to suitably reduce the impacts to acceptable levels'. Also see response to Q2.3.1.1 above.
Q2.3.4.11	Applicant	<ul> <li>UXO in the MCZ</li> <li>a) Provide more details of the potential impact of craters following detonation of UXO on MCZ features such as mixed sediment, chalk or peat features.</li> <li>b) What would be the in-combination effect of such potential craters and detonations on the MCZ with other projects such as HP3?</li> </ul>	See the Applicant's response at Q2.3.1.6.



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		See related questions in the sections on Habitats and Ecology Offshore and the section on Historic Environment and Cultural Heritage.	



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# Table 4 Applicant's responses to the Examining Authority's Second Written Questions: Q2.4

ID	Question addressed to	Question	Applicant Response			
Q2.4. Civil a	Q2.4. Civil and Military Aviation					
Q2.4.1 Effe	cts on Radar and Defen	ce Interests and Proposed Mitigation				
Q2.4.1.1	Applicant Norwich Airport	<b>Norwich Airport</b> Applicant, submit a SoCG with Norwich Airport.	A SoCG with Norwich Airport has been submitted at Deadline 3, <b>Draft Statement of Common Ground: Norwich Airport</b>			
	Norwich Airport	Applicant, submit a Socie with Norwich Aliport.	[document reference 16.23].			
Q2.4.1.2	Applicant	Mitigation with National Air Traffic Services	National Air Traffic Services (NATS) has previously suggested			
	National Air Traffic Services	Provide an update on the necessary mitigation required relating to effects of the Proposed Development on radar.	that the preferred mitigation solution for other offshore developments in the Southern North Sea (SNS) would be applicable for SEP and DEP. The NATS preferred mitigation solution will require two stages – blanking of the affected radar systems; and an application to the UK regulator (the CAA) under an Airspace Change Process (ACP) proposal detailed in CAP 1616 (CAA, 2020) to establish a Transponder Mandatory Zone (TMZ).			
			NATS have identified and defined a technical mitigation for this site and is currently engaged with the Applicant. The Applicant has received a first copy of the Mitigation and Services Contract for the Project, which is currently under review.			
			The Applicant has no reason to believe that an agreement is not forthcoming. As soon as the agreement is entered in to, we understand NATS will be in a position to withdraw its objection.			
Q2.4.1.3	Applicant	Defence radar mitigation progress	The Applicant contacted the DIO on the 21 <sup>st</sup> March to seek			
	Ministry of Defence/ Defence Infrastructure Organisation	The Applicant continue to work with the DIO and submit a mitigation plan, with an update on progress provided to ExA.	clarification from DIO regarding the requirement for a radar mitigation plan. The Applicant notes that the DIO acknowledged this communication at ISH 6 and stated that it expected to issue a reply.			
	Ŭ		At Deadline 3 the Applicant has received no further feedback from the DIO.			



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ID	Question addressed to	Question	Applicant Response
			As set out in the Applicant's Comments on Written Representations [REP2-015], section 2.17, ID8, the Joint Task Force (JTF) published the Strategy and Implementation Plan on coexistence between air defence and offshore wind in the UK in 2021.To underpin the strategy, the JTF has also initiated a series of studies. This includes a market survey of mitigation solutions as well as a report presenting the outcomes of Concept Demonstrations undertaken in 2021, funded by the OWIC members, of which Equinor are members.
			The Applicant highlights that it continues to be engaged in the JTF programme procuring ADR technical mitigation solutions in partnership with other participating developers. Moreover, the Applicant remains actively involved in discussions between the MOD and the representatives of the developers with regards to the initial stages of the MOD's ADR Mitigation Procurement Programme.
			The Applicant has already included a DCO Requirement (Requirement 27) within the <b>draft DCO</b> ( <b>Revision F</b> ) [document reference 3.1] which ensures that the Applicant cannot operate SEP and DEP until mitigation for impacts on RRH Trimingham or RRH Neatishead have been approved by the Secretary of State in consultation with the MOD. The Applicant highlights that the drafting of that Requirement follows drafting from other recent development consent orders, namely the draft Hornsea 4 order, which the Applicant notes the MOD agreed the wording for. Therefore, whilst the Applicant will continue to seek to engage with the MOD, the Applicant considers that there is already sufficient protection for the MOD to be confident that no impact can occur until it is satisfied suitable mitigation is in place for SEP and DEP, which is legally secured through the <b>draft DCO (Revision F)</b> [document reference 3.1].



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## Table 5 Applicant's responses to the Examining Authority's Second Written Questions: Q2.5

ID	Question addressed to	Question	Applicant Response
Q2.5. Constr	uction Effects Offsh	lore	
Q2.5.1 Devel	opment Scenarios a	Ind Rochdale Envelope	
Q2.5.1.1	Applicant	Offshore Construction Programme OPEMP [REP1-017, Paragraphs 46 and 47], in respect of red-throated divers, refers to vessel movements associated with operation and maintenance works. Should the mitigation in the OPEMP also be applied to construction vessels in transit as well and, if so, what effect would that have on the predicted 2-4 year construction programme?	The Applicant clarifies that this is a typographical error and that the best practice protocol also covers construction vessels. The <b>Outline PEMP (Revision C)</b> [document reference 9.10] has been updated at Deadline 3 to address this point. This change does not affect the construction programme. The Applicant also notes that implementation of the PEMP during the construction and operation and maintenance phases is secured in Condition 13(d) of Schedules 10 and 11 and Condition 12(d) of Schedules 12 and 13 of the <b>Draft DCO</b> ( <b>Revision F</b> ) [document reference 3.1].
Q2.5.1.2	Natural England Marine Management Organisation Wildlife Trust	<ul> <li>Concurrent versus sequential scenarios</li> <li>Depending on the construction scenario, the offshore construction period may either be 2 years in the concurrent scenario or 4 years in the sequential scenario, with a potential maximum 2 years break in between [APP-314]. The concurrent scenario would result in a greater intensity of activity, but over a shorter time frame whereas the sequential scenario would seek a lesser intensity of activity but over a longer period of time. Whilst much of the focus for offshore ornithology, marine mammals and benthic ecology has been on the operational effects, comment on:</li> <li>a) From EIA and HRA perspectives, which construction scenario is considered better and would be preferred by the Applicant and why?</li> <li>b) Would the concurrent scenario, by limiting the amount of construction time within the Greater Wash</li> </ul>	<ul> <li>(a) As set out in ES Chapter 5 EIA Methodology [APP-091] and subsequently throughout the ES and the RIAA [APP- 059], the Applicant has given careful consideration to which of the concurrent or sequential construction scenarios is the worst case for each impact and has undertaken the assessments on this basis.</li> <li>As with any development that involves any degree of flexibility in how the works may be taken forward, there may be differences in the environmental impacts between the different scenarios or options. However, the Applicant has identified and assessed the worst case in line with the applicable guidance (as set out in the above referenced documents and in the Response to ExA Request for a table of the anticipated adverse effects for each proposed scenario [PDA-002]) and where necessary has applied and secured the appropriate mitigation.</li> <li>With this in mind, and with respect to point (a), the Applicant notes that it has explained its reasons for requiring the</li> </ul>



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		<ul> <li>SPA, be more beneficial for red-throated divers than the sequential scenario?</li> <li>c) Is there any evidence to suggest that the on and off effect of construction in the sequential scenario would have a dissuading effect that birds may not return to the location?</li> </ul>	different scenarios in the Scenarios Statement [APP-314] and that the scenarios approach sought in the draft DCO (Revision F) [document reference 3.1], including those that result in the possibility of construction being undertaken in either a concurrent or sequential manner, has already been accepted multiple times by the Secretary of State.
			The Applicant therefore does not consider it necessary or appropriate to identify a single preferred construction scenario from either an EIA or HRA perspective. Further details are provided in 9.28.2 <b>Supplementary Information</b> <b>to the Scenarios Statement</b> , submitted at Deadline 3.
			(b) The updated assessment presented in the Apportioning and Habitats Regulations Assessment Updates Note (Rev B) [REP2-036] sets out in Section 11.2.1 the predicted construction-phase effects on red-throated diver populations from Greater Wash SPA. For a worst case scenario, where cables for SEP and DEP were installed sequentially, it is concluded that the total duration of activity that could impact red-throated divers from the SPA would be approximately 25 days. Based on the extent and duration of the effects, it is concluded that there would be no adverse effect on integrity on the Greater Wash SPA. If work was to be undertaken concurrently, it is estimated that the <i>total duration</i> of cable laying would be 100 days, compared to 110 days if SEP and DEP cables were laid sequentially. Therefore, the reduction in duration affecting the SPA would be relatively small (from approximately 25 to 23 days). Therefore, while there would be a small reduction in potential effect, this would not affect the overall conclusion of the assessment.
			<ul> <li>(c) Paragraph 98 of the Apportioning and Habitats</li> <li>Regulations Assessment Updates Note (Rev B) [REP2-036] sets out the evidence in relation to resettlement of birds following cable laying activities. It concludes that birds would</li> </ul>



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			be expected to return in a short period to the affected areas following departure of the cable-laying vessel. Given the overall short duration of the cable laying activities affecting Greater Wash SPA red-throated diver populations, it is concluded that there would be no adverse effect on integrity on Greater Wash SPA.
Q2.5.1.3	Applicant	Horizontal Directional Drilling If both projects were to proceed, regardless of whether sequential or concurrent construction, would there only be a single HDD operation to lay the ducts and bring offshore export cables ashore? What scenarios would result in two separate HDD operations being undertaken concurrently or sequentially and why?	For clarity, in the ES the HDD works are defined in terms of the total number of drills. For the landfall works these details are set out in Table 4.31 of <b>ES Chapter 4 Project Description</b> ( <b>Revision B</b> ) [document reference 6.1.4]. Note that the numbers stated in Chapter 4 include one extra drill per project for contingency purposes as stated at para 254 i.e. up to two drills for a single project to install one duct, or up to four drills in total to install two ducts, one duct for SEP and one duct for DEP. The total number including contingency is what has been assessed, in all cases. Distinct to the number of drills, the Examining Authority refers in its question to "HDD operations". For the purpose of responding the Applicant has assumed an HDD operation to consist of the mobilisation of HDD equipment, undertaking of HDD drilling works and demobilisation, which might involve the installation of the duct/s for either one or two projects. In terms of which scenarios would result in two separate HDD operations being undertaken concurrently or sequentially, these are scenarios 1(c) and 3, as shown in the table below (N.B. the scenarios correspond to those set out in the <b>Scenarios Statement</b> [APP-314] and the maximum number of drills include the contingency):



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		Scenario	No. ducts	Max. no. drills	Max. no. HDD operations	Concurrent or sequential	Notes
		1(a)	1	2	1	n/a	SEP in isolation
		1(b)	1	2	1	n/a	DEP in isolation
		1(c)	2	4	2	Sequential	SEP & DEP, separate transmission system
		1(d)	2	4	1	Concurrent	SEP & DEP, separate transmission system
		2	2	4	1	Concurrent HDD operations	SEP & DEP, separate transmission system. 1 <sup>st</sup> project installs ducts for 2 <sup>nd</sup> project
		3	2	4	2	Sequential or concurrent HDD operations	SEP & DEP, integrated transmission system at onshore substation only
		4	2	4	1	Concurrent HDD operations	SEP & DEP, integrated transmission system



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			The reasons why it is not possible at this stage to commit to undertaking these works in a single HDD operation are explained in the <b>Scenarios Statement</b> [APP-314], including considerations around anticipatory investment and the potential for a four year gap between construction start dates for SEP and DEP when constructed sequentially.
Q2.5.1.4	Applicant Natural England	<ul> <li>Statistical Differences between DEP-N and DEP as a whole</li> <li>The intention of the Applicant to retain optionality for DEP-N to be developed fully as opposed to being in conjunction with DEP-S, and the statistical basis underpinning this is stated [REP2-040].</li> <li>a) Is NE satisfied and in agreement with the justification?</li> <li>b) If not, in light of the statistical position put forward by the Applicant, explain why a minimal number of turbines should be built in DEP-N.</li> <li>c) Applicant and NE, if a commitment to reducing turbine numbers in DEP-N was required, where would this best be secured?</li> </ul>	<ul> <li>The Applicant refers to its detailed response to WQ1 (Q1.5.1.2) [REP1-036] and reiterates that development consent is being sought for DEP as a whole and that whether to utilise both the DEP North and DEP South array areas, or just DEP North is a detailed design decision that would be made post-consent. The Applicant considers that this is in line with other OWF DCOs where final layout decisions are taken post-consent. It is necessary to retain this flexibility within the DCO application to enable the Applicant to take appropriate account of the key technical and commercial factors (see parts (e) and (g) of the Applicant's response at Q1.5.1.2 [REP1-036]), the extent and implications of which will not be fully known until later stages of the onward project programme.</li> <li>To recap, the key assessment related factors that must be taken into account include (full details at Q1.5.1.2 [REP1-036]):</li> <li>The mitigation hierarchy has been followed by the Applicant in designing the Order Limits, including the DEP North boundaries, which were influenced by areas believed to be important for feeding birds, as advised by Natural England.</li> <li>Applying the design-based approach to density estimation, the assessment assumes DEP North and DEP South have an even density of seabirds distributed across them. On this basis, the Applicant considers there is no justification for reducing the number of turbines in any part of DEP, because the predicted impacts are the same irrespective of</li> </ul>



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			whether DEP North and DEP South is developed or only DEP North.
			- When assessed for Sandwich tern using model-based density estimates, the DEP North only scenario increases the collisions impact only very slightly – project-alone increases in background mortality are predicted to be 0.37% for all of DEP and 0.55% for DEP North only.
			- Whilst for the majority of months mean density and predicted collision is higher for DEP North than for all of DEP, there is substantial overlap in confidence intervals in all cases and these differences do not approach statistical significance. As such the Applicant considers that there is no justification for reducing the number of turbines in any part of DEP, because any reduction in impact is marginal and the benefits uncertain, and such an action is outweighed by the issues of technical feasibility and economic viability. "Alternative solutionsshould be limited to those which would deliver the same overall outcome for the activity whilst creating a substantially lower risk of impact to the MPA." (Defra 2021). Neither of those conditions would be met by reducing the number of turbines in any part of DEP.
			- With respect to the Seascape and Visual Impact Assessment (SVIA), where the assessed effects on views are higher (including Peddars Way, which is significant) this is chiefly a result of DEP South, which is closer to the coastline. Any action to limit the number of turbines in DEP North would increase the same in DEP South. Such a change would be a challenge with respect to visual appearance and would not be welcomed by Natural England as evidenced in their advice to date (and who advised at the pre-application stage (including in their comments on the Preliminary Environmental Information Report) that it was



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			DEP South that should be excluded). Matters of visual appearance come with a much greater degree of certainty than that which can be associated with the seabird density and collision estimates (as discussed above) and this must be given appropriate consideration in the overall planning balance.
			In light of this, it is not considered necessary or appropriate to request a commitment to reducing turbine numbers in DEP North for the purpose of assessment within the consent application or for such a detail to be secured in the dDCO.
Q2.5.1.5	Applicant	<ul> <li>Spacing of turbines</li> <li>Whilst there are a number of factors reported that will influence the layout of the arrays during construction [APP-090], would the spacing parameters remain the same if lesser turbines were to be built in an array or would the Applicant seek to maximise the land within the offshore Order limits?</li> <li>a) If larger turbines are used, would they be spaced further apart across the whole of the Order limits or would they be contained to a more regular 1km apart spacing?</li> <li>b) Should this explanation be included in the Offshore Design Statement [APP-312] or elsewhere in the ES [APP-090] (see question below regarding offshore design at 2.10.1.4).</li> </ul>	<ul> <li>In general, larger, and fewer turbines could see a greater mean turbine spacing. However, there are several factors that would affect this spacing and turbine to turbine spacing may vary within the wind farm sites.</li> <li>a) Minimum spacing is considered in ES Chapter 16 Petroleum Industry and Other Users [APP-102] and ES Chapter 13 Shipping and Navigation [APP-099]. Minimum spacing is defined to assess a worst case relevant to specific impacts and is of itself not a key design criterion, but a by-product of applying the layout commitments and optimum layout factors to the project envelope. It would not be accurate to say that if larger turbines were used, they would simply be spaced further apart across the whole of the Order Limits. Nor would it be accurate to say they would be contained to a 1km spacing. </li> <li>b) Section 6 of the Offshore Design Statement [APP-312] states that a layout will be selected from within the consented parameters to optimise energy output and the foundation installation process, accounting for water depths, ground conditions, wake effects and any other constraints. As explained above minimum turbine spacing is not a key</li></ul>



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			design criterion used to determine the final layout. Layout commitments are given in Table 6.1 of APP-312 in accordance with the guidance contained within the Marine Guidance Note (MGN 654) and are presented in <b>Appendix</b> <b>13.1 Navigation Risk Assessment</b> [APP-198]. These layout commitments are secured in the DMLs under condition 13(1)(a) in Schedules 10 (the SEP offshore generation licence) and 11 (the DEP offshore generation licence). Within the restrictions of the commitments above an optimum layout will ensure that the flow in front of a wind turbine is affected as little as possible by wake effects from existing and proposed wind turbines. The Applicant believes that Section 6 of the <b>Offshore Design Statement</b> [APP- 312] provides the most accurate representation of the layout design process through layout commitments and the description of the process to identify the final layout.
Q2.5.1.6	Applicant Statutory Undertakers	<ul> <li>Layout of arrays and protective provisions <ul> <li>a) Applicant and Statutory Undertakers set out whether, the protective provisions would constrain the layout of the turbines.</li> <li>b) Explain the implication of these constraints, if any, for example in terms of wake losses, reduction in wind farm capacity, increased complexity of construction?</li> </ul> </li> </ul>	<ul> <li>a) There are currently no protective provisions in the draft DCO (Revision F) [document 3.1] which constrain the layout of the turbines. However, the Applicant notes that it is currently in discussions with Perenco regarding Protective Provisions for the crossing of the Waveney – Durango pipeline. It is expected that the Perenco protective provisions will reflect the mitigation described in Paragraph 108 of ES Chapter 16 – Petroleum Industry and Other Marine Users [APP-102] which sets out that wind turbines and OSPs will be located a minimum of 500 metres away from the pipeline.</li> <li>b) The Perenco protective provisions are not expected to give rise to any implications which have not already been taken into account within the application.</li> </ul>
Q2.5.1.7	Applicant	Foundation Design Choice	a) All turbines at SOW and DOW were installed on monopile foundations. The SOW offshore substation (OSS) was also



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ID	Question addressed to	Question	Applicant Response
		<ul> <li>The ExA remains unconvinced with the justification provided to date, regarding not providing nor committing to the choice of foundation design for the offshore wind turbines. If the Applicant were able to give an indication of the likelihood of certain foundation types being chosen, this would benefit the Examination in assessing the extent and effectiveness of mitigation. The ExA requests the Applicant to provide greater clarity, utilising experience gained from constructing the original parent wind farms of SOW and DOW.</li> <li>a) How many turbines at SOW and DOW were installed using piled foundations and what other types of foundation were used?</li> <li>b) Is the geology underlying SOW and DOW likely to be consistent with the geology under the SEP and DEP arrays?</li> <li>c) Can the Applicant therefore predict the numbers of turbines within the Proposed Development likely to require piling?</li> <li>d) Without prejudice, set out for Examination, the most suitable way in which the Applicant could present a preferred foundation design choice taking account of your responses to a-c.</li> </ul>	<ul> <li>installed on a monopile foundation, while the DOW OSS was installed using a suction bucket jacket.</li> <li>b) In general, largely the same geotechnical units found within the SOW and DOW wind farm sites are predicted to be present within the SEP and DEP wind farm sites; however, from the site surveys undertaken to date, the Applicant has observed differences in the depth at which some are encountered. Most notably, there is predicted to be high-density chalk present at relatively shallow depths (N.B this is outside the MCZ), which was not the case for SOW and DOW, and could have implications for the feasibility of piled foundations at some locations. Further geotechnical surveys will be required post consent to provide additional detail on the geology underlying the SEP and DEP wind farm sites and this will inform the detailed design and final foundation choice.</li> <li>c) As set out by the Applicant in its response to Q 1.5.1.5 [REP1-036], the Applicant is not able to refine the foundation design choice at this stage due to the uncertainties that remain with respect to the underlying geology and the final turbine size, and therefore the required size of the associated foundations, would be significantly larger for SEP and DEP compared to those installed at SOW and DOW. While it may therefore have been technically feasible to install comparatively smaller monopiles at SOW and DOW, this may not necessarily be the case for larger monopiles within the SEP and DEP wind farm sites and the distinct geology that may be encountered.</li> <li>The Applicant has addressed this uncertainty within the ES by assessing a robust worst-case scenario for each receptor and impact pathway. For example, piled foundation types (i.e. monopile, jacket-pile) are the worst-case scenario for</li> </ul>



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			underwater noise impacts. Therefore, a build-out of 100% of wind turbines with piled foundations is the worst-case scenario for underwater noise impacts. Updated marine mammal assessments are provided within the <b>Marine</b> <b>Mammals Technical Note and Addendum</b> [document reference 16.14]. These assessments conclude that there would be no project alone or cumulative significant impact at EIA scale and no project-alone or in-combination adverse effect on integrity for any of the sites and qualifying features screened into the HRA.
			The Applicant would reiterate that the approach adopted for this application is entirely consistent with accepted precedent and follows the guidance contained within Planning Inspectorate Advice Note Nine (the Planning Inspectorate, v3 2018) and National Policy Statement (NPS) for Renewable Energy Infrastructure (EN-3).
			<ul> <li>d) For the reasons set out in points (a)-(c) above, the Applicant is not able to present a preferred foundation design choice at this stage. The Applicant needs to maintain the optionality that is included within the application and that has been assessed through the Environmental Statement.</li> </ul>
Q2.5.1.8	Applicant	Installation of Turbine Foundations	a) The use of a range of wind turbine foundation types within
		It is stated [REP2-051] that simultaneous piling within one windfarm array remains an option.	the SEP and / or DEP wind farm sites is a possibility (and has been considered and assessed accordingly). Therefore, there could be a scenario where wind turbine foundation
		<ul> <li>a) Would there be potential, under any scenario, for a piling action to take place simultaneously with another form of foundation type (i.e. Gravity Based foundations)?</li> </ul>	piling and the installation of GBS foundations occurs simultaneously. Also, in the event that all wind turbine foundations were GBS there would still be the potential for use of jacket piles at the offshore substation/s (OSS) and
		<ul> <li>b) If two different foundation types could be installed simultaneously, what cumulative effects would arise and have these been assessed in the ES?</li> </ul>	therefore piling at an OSS could be being undertaken at the same time as GBS wind turbine foundation installation.



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		c) Could piling or other form of foundation works take place simultaneously with the horizontal directional drilling activities to bring export cables to shore?	In assessment terms, the worst-case scenario for underwater noise would be from simultaneous piling and the worst-case scenario for seabed footprint would be from GBS. As set out throughout the assessments, the worst- case has been carefully identified and assessed in relation to each impact and receptor.
			<ul> <li>b) As above, piled foundation types (i.e. monopile and jacket-pile) are the worst-case scenario for underwater noise impacts whilst GBS are the worst-case scenario for seabed disturbance and habitat loss impacts. Further scenarios whereby differing proportions of foundation types are assessed is not required because these would not represent the worst-case for the respective impacts since, for example, assuming build-out of 100% of wind turbines with piled foundations is the worst-case scenario for underwater noise impacts whilst build-out of 100% of wind turbines with GBS foundations is the worst-case scenario for seabed disturbance and habitat loss impacts. As such the simultaneous installation of different foundation types would always be within the worst-case scenarios assessed.</li> </ul>
			c) There is potential for foundation installation works to be undertaken at the same time as HDD activities at the landfall (refer to Plate 4-25 of ES Chapter 4 Project Description (Revision B) [document reference 6.1.4]). However, there would not be any pathway for 'cumulative' effects between the two activities given that SEP and DEP would be approximately 14.8km and 23.8km from the HDD exit point, respectively. The HDD works do not generate significant levels of underwater noise – this is discussed further at the response to Q2.12.2.2.



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## Table 6 Applicant's responses to the Examining Authority's Second Written Questions: Q2.6

ID	Question addressed to	Question	Applicant Response
Q2.6. Con	nstruction Effects O	nshore	
Q2.6.1 De	evelopment Scenari	os	
Q2.6.1.1	Applicant	<ul> <li>Possible Conclusion in line with s104(7) of the PA2008</li> <li>a) In light of several representations [too numerous to list] regarding the adverse effects on onshore communities, and the assessed adverse onshore and offshore construction stage effects and cumulative effects in the ES [too numerous to list], Applicant comment on the possibility that post Examination, the ExA finds that the balance of the evidence in Examination does not demonstrate that that the adverse impact of some or all of the options under Scenario 1 of the Proposed Development would outweigh its benefits, in line with s104(7) of the PA2008.</li> </ul>	Please refer to the <b>Supplementary Information to the</b> <b>Scenarios Statement</b> [document reference 9.28.2] submitted at Deadline 3 which sets out the Applicant's response to this question.
		The ExA is interested to explore options that may be available to the SoS, including a decision which supports granting consent for all development scenarios except some or all of the options under Scenario 1. In order to examine this option, the Applicant is requested to provide the following information:	
		<ul> <li>b) a summary of the implications in terms of the assessment of need, viability and deliverability, of an Order being made that grants development consent for all scenarios, except some or all of the options under Scenario 1;</li> </ul>	
		c) whether information provided thus far, particularly in the ES is sufficient for the assessment of significant adverse effects, especially highlighting any areas where	



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		the worst case scenario might be worser with the removal of Scenario 1;	
		d) what information, particularly in the certified documents, would need to be updated to support this approach;	
		e) what modifications would be required to the dDCO, if the Applicant can provide without prejudice a version of the dDCO to support this approach, and by when; and	
		<ul> <li>f) what modifications would be required to the Land Plans, Crown Land Plans and Special Category Land Plans, if the Applicant can provide without prejudice a version of the plans to support this approach, and by when.</li> </ul>	
Q2.6.1.2	Applicant	Potential for Greater Impacts	Please refer to the Supplementary Information to the
		<ul> <li>Are there any controls in the Works Plans and provisions in the dDCO that would not allow for SEP and DEP to be constructed wholly separately but concurrently.</li> </ul>	<b>Scenarios Statement</b> [document reference 9.28.2] submitted at Deadline 3 which sets out the Applicant's response to this question.
		<ul> <li>b) Provide evidence to demonstrate whether SEP and DEP, if developed wholly separately but concurrently, would not result in greater effects than those assessed in the ES.</li> </ul>	
Q2.6.1.3	Applicant	Traffic and Transport Assumptions for Development Scenarios	Further to the response to Q2.6.1.2 above, the Applicant responds as follows:
		The Applicant at ISH4 [EV-057] [EV-061] set out that the concurrent scenario allows for SEP & DEP to be developed wholly separately but concurrently.	a) Section 24.3.2.2 and Table 24-2 of ES <b>Chapter 24 Traffic</b> and <b>Transport</b> [APP-110] sets out in detail the worst case assumptions that have been assessed for traffic and
		<ul> <li>Set out in full detail what assumptions have been modelled for Traffic and Transport in the concurrent scenario.</li> </ul>	<ul><li>transport.</li><li>b) The Applicant would clarify that the scenario where SEP and</li></ul>
		b) The ExA is of the view that it is logical to consider that the potential traffic generated from SEP & DEP when	DEP are constructed concurrently has been assessed and is referred to throughout ES <b>Chapter 24 Traffic and</b>



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		developed wholly separately but concurrently would be two lots of the in-isolation scenario added together. Explain fully why this is not the case in the ES and why the forecast traffic generated in the concurrent scenario is significantly below this.	<b>Transport</b> [APP-110] as the 'concurrent scenario'. The Applicant clarifies that in this scenario, opportunities to optimise resources and schedule activities to limit the traffic demand have been identified. For example, SEP and DEP would share accesses, compounds and a haul road. It is for these reasons that a concurrent scenario does not generate twice the traffic movements of an in-isolation scenario. This reflects the response set out at Q2.6.1.2(a) above, which confirms that the <b>draft DCO (Revision F)</b> [document reference 3.1] does not provide for wholly separate but concurrent construction. Further details with regard to shared works are detailed within Section 8.3 of the <b>Scenarios Statement</b> [APP-314].
Q2.6.1.4	Applicant	<ul> <li>ES Assumptions on Working Crews</li> <li>The Applicant at ISH4 [EV-057] [EV-061] set out that the impacts assessed in the ES assume that there would be a maximum of 10 construction crews working along the onshore cable corridor at any one time.</li> <li>a) Where in the ES is this described and controlled?</li> <li>b) To avoid any potential effects that have not been assessed does or should the dDCO secure this maximum?</li> </ul>	<ul> <li>a) This is described in ES Chapter 4 Project Description (Revision B) [document reference 6.1.4], Table 4.32 (number of simultaneous work fronts) and paragraph 278. Relevant text is repeated below:</li> <li>'The installation of the onshore ducts and cables is expected to take up to 24 months (single Project in isolation) 26 months (two Projects concurrently); or two separate periods of 24 months for the two Projects sequentially scenario. Construction may be carried out by up to ten teams (one per 1km section) along the export cable corridor at the same time. Each team typically working on a 400m length of the corridor on any given day, and within that length the extent of open trenches would typically be between 50-100m on any given day, with the trench being excavated at one end and backfilled at the other as works progress along that section'. The ES further considers this assumption within the various topics as set out within the respective Realistic Worst Case</li> </ul>



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			<ul> <li>surrounding the Project parameters used in the assessment. For example:</li> <li>ES Chapter 22 Air Quality [APP-108] assumes for Non- Road Mobile Machinery (NRMM) Emissions, the plant numbers in operation are based on anticipated plant per activity or location at any one time. The anticipated number of plant per activity/location is not expected to differ under each scenario, however the number of work fronts or</li> </ul>
			locations differs under each scenario. The assessment was undertaken on the basis of the Project parameters described above, and concluded that impacts from emissions of NRMM along the cable route would not be significant based on baseline air pollutant concentrations, the number of plant items in operation at any one time and the duration of activities in the vicinity of any given receptor based on the linear nature of the works.



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			<ul> <li>ES Chapter 23 Noise and Vibration [APP-109] assumes the same construction plant are required per workfront for each scenario (in isolation, concurrent or sequential), and the construction scenario won't affect the distance between the plant and noise sensitive receptors. The worst-case scenario for assessment of onshore cable corridor noise and vibration impacts at sensitive receptors is considered to be SEP and DEP sequentially as this represents the longest duration (temporal impact) and requires the same maximum number of work fronts and plant as SEP or DEP constructed in isolation or SEP and DEP constructed concurrently. The assessment of cable corridor construction noise was undertaken on the basis of the Project parameters described above, and concluded that effects would not be significant due to the rate of progression of the works along the corridor, of around 250m per week. As each team is to be around 400m apart, at any one time, the noise from only one team is anticipated to be audible at a noise sensitive receptor.</li> <li>The approach to the assignment of construction traffic movements (that has informed the assessment (TA) [APP-268].</li> <li>To inform a worst case assessment of traffic impacts, section 24.1.4.5 of the TA details the approach to assigning the peak number of LV trips per onshore cable route section are assumed to occur at the same time.</li> </ul>



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			Assumptions and mitigation measures are controlled via the relevant management plans set out in the <b>draft DCO</b> ( <b>Revision F)</b> [document reference 3.1] via Requirement 15 Traffic and Transport (the requirement to submit a Construction Traffic Management Plan) and Requirement 19 Code of Construction Practice.
			<ul> <li>b) As set out in (a) above, the ES has assessed the potential impacts and relevant mitigation is appropriately secured through the draft DCO (Revision F) [document reference 3.1] via Requirement 15 Traffic and Transport (the requirement to submit a Construction Traffic Management Plan) and Requirement 19 Code of Construction Practice. The Applicant does not consider it necessary to include any further drafting controls.</li> </ul>
Q2.6.2 App	proach to Construc	tion, Compounds, Programme, Timing and Methods	
Q2.6.2.1	Applicant	<ul> <li>Construction Programme</li> <li>At ISH4 [EV-057] [EV-061] the Applicant, with reference to the ES [APP-090, Plate 4-25], explained the worst-case scenario for the likely maximum construction period for sequential construction. The Applicant confirmed that the maximum period for onshore construction works effecting landowners would be six years for sequential construction.</li> <li>a) Signpost where in the ES this explanation relation to the maximum construction programme is set out.</li> <li>b) If it is not in the ES, submit a revision to the relevant chapter(s) to include this explanation.</li> </ul>	<ul> <li>a) This is described in ES Chapter 4 Project Description (Revision B) [document reference 6.1.4], Plate 4-25 and an annotated version can be found in Appendix A.4 of the Supporting Figures to The Applicant's Responses to the Examining Authority's Second Written Questions [document reference 16.2.1]. The six year period covers 'Onshore cable ducting and installation' only. It does not account for other onshore works (inc. Onshore substation site preparation and Onshore substation construction). The Applicant wishes to reiterate that this Construction Programme is indicative.</li> </ul>
			<ul> <li>b) Response not required further to the information provided in Q2.6.2.1 a) above.</li> </ul>
Q2.6.2.2	Applicant	Potential for Greater Impacts with an Extended Construction Period	<ul> <li>As recognised by the Applicant at ISH4, there is always a possibility that any infrastructure development project may be delayed for a number of different reasons, most of which are likely to be outside of the Applicant's direct control.</li> </ul>



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		<ul> <li>At ISH4 [EV-057, 00:38:13 to – 01:05:27] [EV-061, page 13 to 22], following the discussion regarding 'maximum construction period' in the case of the sequential construction programme, the Applicant explained that while the planning system places a limit on commencement of a project, it does not limit how long it takes to complete a development. The Applicant went on to describe a scenario where the Proposed Development would start and then could be met with a long delay, indicating that the delay could be very long or potentially indefinite.</li> <li>The ExA agrees with the Applicant that some delays in any project delivery can happen, and that the PA2008 legislative regime does not require an end date for project delivery. Nonetheless, the ExA is concerned with the Applicant's description of the possibility of indefinite delays to project delivery. Moreover, the assessment of different types of adverse effects in the ES and corresponding mitigations secured in the dDCO, are underpinned by a reasonable estimate of the maximum construction period.</li> <li>In this context, the ExA is seeking some clarifications from the Applicant:</li> <li>a) Describe the possibility and likelihood of long delays to the construction programme that could affect landowners and local communities, and the offshore environment.</li> <li>b) What extent of delay (in weeks, months or years) to the maximum construction period have you accounted for in the ES and where is this set out? What extent of delay</li> </ul>	<ul> <li>However, the Applicant has no reason to think that long delays are any more likely to occur on this project than on any other project of a similar nature.</li> <li>The Applicant has made an assessment of the realistic worst-case scenario for project construction timings within the Environmental Statement submitted to support the application. At this stage, the Applicant has no reason to depart from those estimated timings.</li> <li>The likelihood of anything happening to cause significant delays to those timings is extremely difficult to predict. Any predictable/potential delays have already been factored in to the realistic worst-case scenarios (for example, the potential that the projects receive CfDs in different allocation rounds) and so it would only be if something</li> <li>unexpected/unpredictable occurred that those timings would considerably change. As with any development of this nature, there is always a possibility that such events could occur but the Applicant would hope that the likelihood of this is low.</li> <li>The point made orally by the Applicant was not intended to dismiss the construction period estimate in the ES, but simply to make the point that a true "maximum" period cannot be imposed in law, as is addressed further in relation to e) below.</li> <li>b) Before answering the specific questions, it is important to understand the legal requirements and guidance which the Applicant has followed.</li> <li>The approach taken by the Applicant is required by the requirements of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 ("the EIA Regulations"). Regulation 14(2)(b) of the EIA Regulations provides that an Environmental Statement ("ES") must</li> </ul>



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		<ul> <li>(in weeks, months or years), in the worst case do you expect?</li> <li>c) If a long delay to construction programme were to take place, what adverse effects in the ES (onshore and offshore) would be worse than they are currently assessed? Could this mean that the mitigation that would be secured for those adverse effects could potentially be inadequate?</li> <li>d) Could such long delays lead to blight for affected landowners? Explain with reasons.</li> <li>e) Explain why the ExA should not recommend to the SoS to place an end date on the delivery of the Proposed Development when you have stated that the maximum construction period could be delayed to such an extent that the adverse effects could worse than assessed in the ES, and therefore the proposed mitigation not adequately effective. Provide this justification especially in the context of your response to c) and d).</li> </ul>	<ul> <li>include "a description of the <u>likely</u> significant effects of the proposed development on the environment". Regulation 14(3)(b) requires the ES to include "the information <u>reasonably</u> required for reaching a <u>reasoned</u> conclusion on the significant effects of the development on the environment, taking into account <u>current knowledge</u> and methods of assessment" (emphasis added). The ES submitted by the Applicant complies with all of these requirements. There is no requirement to assess "unlikely" significant effects, and notably the EIA Regulations are clear that the information must be based on current knowledge. The Applicant submits that any significant delays to the projects would be unlikely and that all known factors that could cause potential delays to the construction programme that are within the Applicant's current knowledge have already been accounted for in the construction programme presented in ES Chapter 4 Project Description (Revision B) [document reference 6.1.4].</li> <li>PINS Advice Note 7 and the Annex to that Advice Note in relation to the proposed development. Indeed, the Annex to the Advice Note is clear that the ES should provide "a clear, objective and <u>realistic</u> description of the <u>likely</u> significant effects of the Proposed Development" (emphasis added).</li> <li>PINS Advice Note 9 is also helpful in outlining the Rochdale Envelope approach, which the Applicant has followed in preparing its ES. In particular, at paragraph 2.4, the Advice Note states that "the DCO application documents should explain the need for and the <u>timescales</u> associated within</li> </ul>



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ID	Question addressed to	Question	Applicant Response
			clearly defined parameters." (emphasis added). The Applicant has complied with this element of the Rochdale Envelope by clearly setting out the realistic construction programme timescales in ES Chapter 4 ProjectDescription (Revision B) [document reference 6.1.4] and 
			on that basis, the effects which the project could have to ensure that the impacts of the project as it may be constructed have been properly assessed." (emphasis added). Again, this recognises that the Applicant is only able to base its EIA on matters that are within its current knowledge.
			The realistic parameters of the construction programme presented in <b>ES Chapter 4 Project Description (Revision B)</b> [document reference 6.1.4], which are based on the



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			Applicant's current knowledge and which account for any potential known or predictable delays, and the Applicant's subsequent assessment of likely significant impacts based on those parameters is therefore fully in compliance with the EIA Regulations and associated policy and guidance. The approach which the Applicant has followed is routinely followed in Environmental Statements of all types, including all the offshore wind farms consented in the UK to date.
			Turning to the specific questions, ES Chapter 4 Project Description (Revision B) [document reference 6.1.4] contains, at sections 4.7.1 and 4.7.2, the construction programme which has informed the environmental impact assessment (EIA) process. The construction programme has accounted for the different development scenarios, which results in a potential gap between start of construction for the first project and start of construction for the second project where the projects are not built at the same time. Paragraph 351 states that "the construction programme is dependent on numerous factors including consent timeframes and funding mechanisms" as well as final design and weather conditions during construction. These factors have been taken into account by the Applicant in presenting a reasonable and realistic basis for undertaking the environmental assessments.
			Each ES technical chapter sets out the details of how the assessments account for the different scenarios, including SEP and DEP constructed either concurrently or sequentially, together with the implications of the construction programme. For example, ES Chapter 19 Land Use, Agriculture and Recreation [APP-105] explains at Section 19.3.2 that the realistic worst-case scenario is based on the project parameters described in Chapter 4



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Applicant Response
<ul> <li>Project Description, which provides further details regarding specific activities and their durations. It goes on to explain that "In addition to the design parameters set out in Table 19-2, consideration is also given to how SEP and DEP would be built out as described in Section 19.3.2.2 below. This accounts for the fact that whilst SEP and DEP are the subject of one DCO application, it is possible that either one or both of the projects would be developed, and if both are developed, that construction may be undertaken either concurrently or sequentially.". Section 19.3.2.2 goes on to identify the specific assumed maximum construction durations that have determined the worst-case scenario. The total assumed maximum period during which construction could take place is identified in this section as eight years for both Projects (N.B this describes offshore and onshore construction with SEP and DEP built sequentially with up to a 4-year gap between construction start dates, as shown on Plate 4-25 of ES Chapter 4</li> <li>Project Description). The assumed maximum duration of specific activities, as relevant to the assessment of each impact, is described in Table 19-2. For example construction works for the onshore cable corridor have a maximum duration of 28 months under both the concurrent and sequential scenarios.</li> <li>c) As stated in the response to b) above, the Applicant has carried out an assessment of the likely significant effects of the proposed development based on a worst case scenario for each individual environmental topic which takes account of the realistic parameters of the construction programme, which already account for any known or potential delays to the best of the Applicant's current knowledge. There is no requirement within the EIA Regulations or associated policy or guidance for the EIA carried out by the Applicant to go</li> </ul>



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			unreasonable or unrealistic project parameters. The Applicant has therefore not carried out an assessment based on a long delay to the projects as this is not within the realistic parameters considered by the Applicant for construction of the projects. On that basis, the Applicant is not able to say what adverse effects may arise from that scenario. The Applicant is confident that the mitigation provided for within the DCO application is sufficient to address any likely significant effects that may arise from the projects that have been identified in the EIA.
			<ul> <li>d) The draft DCO (Revision F) [document reference 3.1] restricts the ability of the Applicant to exercise compulsory acquisition powers after the end of the period of 7 years beginning with the day on which the DCO is made (Article 19). Any long delay to the projects would not affect this provision and so there is certainty that the Applicant will have exercised compulsory acquisition powers to acquire the relevant land and rights for the projects within that timeframe (or alternatively that it has not exercised such powers and the powers have expired).</li> </ul>
			Once the compulsory acquisition powers have been exercised, the affected parties' right to claim compensation effectively crystallises and, even if there were then a delay to the projects, this would not affect the affected parties' rights to claim compensation.
			Blight is only applicable in advance of compulsory acquisition powers being exercised. There would therefore be no difference between what is currently expected by way of construction programme, whereby compulsory acquisition powers would be exercised within the 7 year period, and the position where a long delay to the projects was to occur – in either circumstance, the maximum amount of time that the land could be blighted for would be the same. Once the 7



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			year period expires, blight would cease to exist because no compulsory acquisition powers would be available to the Applicant.
			e) The Applicant is not aware that the Planning Act 2008 allows for an "end date" to be placed on the delivery of the proposed development and the Applicant is not aware of any precedent for this.
			If such a restriction were to be included the Applicant submits that there may be grounds for legal challenge on the basis that there is no statutory authority for such a provision to be included.
			The mechanism by which the Secretary of State already has available to control the "end date" for delivery of the development would be through the application of paragraph 3 of Schedule 6 to the Planning Act 2008, which allows for the revocation of a DCO by the Secretary of State, on application by a local planning authority, in circumstances where the development has begun but been abandoned and the amenity of other land in the local planning authority's area or an adjoining area is adversely affected by the condition of the land. This would cover a limited range of circumstances where such an abandonment of commenced works created an amenity issue.
			The general approach of the UK planning system is that it controls commencement of development and typically only has some form of reserve power (completion notices in the case of the TCPA 1990) to provide pressure on developers to complete developments which are delayed after they have commenced. In practice, such completion notices – in the case of the TCPA 1990 - are almost never served.



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			It would be without precedent to include an end date as a requirement or condition in a consent of any kind, whether a DCO or otherwise.
Q2.6.2.3	Applicant	<ul> <li>HDD and Other Trenchless Techniques</li> <li>a) The Applicant in response to written questions [Q1.6.2.5, REP1-036] provided details of different trenchless crossing techniques that could be used in the Proposed Development, although insisted at ISH3 [EV-035] [EV-040] that HDD would be the only method.</li> <li>b) Provide clarity on this matter and whether other techniques would be deployed, and where is this controlled.</li> <li>c) What would be the adverse affects of each crossing technique and how have these effects been assessed</li> </ul>	<ul> <li>a) Noted</li> <li>b) ES Chapter 4 Project Description (Revision B), Section 4.6.1.5.1, Paragraph 310 [document reference 6.1.4] to be submitted at Deadline 3 provides further clarity on trenchless crossings. The Applicant can confirm where trenchless crossing techniques are referred to in the ES and assessed as a design and construction parameter, the methodology is HDD only. For clarity, the draft DCO (Revision F) [document 3.1] has been updated to remove reference to 'other trenchless installation techniques' as necessary.</li> <li>c) The Applicant wishes to note part c) does not apply given</li> </ul>
Q2.6.2.4	Applicant	in the ES? Cable Separation within HDD Processes Set out the rationale at HDD sites for separating out the cables into a potential 8 ducts and provide examples of other projects that have adopted a similar approach to using multi-separate ducts.	<ul> <li>(c) The Applicant Wishes to note part of does not apply given the responses given to parts a) and b) above.</li> <li>The rationale for separating out ducts at crossings is predominantly led by the cable system design to manage the dissipation of heat. Construction risk is also a factor that is considered as not all ground conditions are suited to larger diameter bores required for trefoil solutions.</li> <li>Project examples where separation at the crossings has been increased from a single onshore cable trench are:</li> <li>Triton Knoll Electrical System (Triton Knoll Electrical System Order 2016) (HVAC) onshore cables – 2 trenches, 6 crossings.</li> <li>Sofia Offshore Wind Farm (Dogger Bank Teesside A and B Offshore Wind Farm Order 2015)(HVDC) – 2 trenches, 4 crossings.</li> </ul>



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			<ul> <li>Dogger Bank C Offshore Wind Farm (Dogger Bank Teesside A and B Offshore Wind Farm Order 2015) (HVDC) onshore cables – 2 trenches, 4 crossings.</li> </ul>
			<ul> <li>Western Link HVDC interconnector onshore cables – one trench – 2 crossings.</li> </ul>
			<ul> <li>Norfolk Vanguard and Norfolk Boreas (Norfolk Vanguard Offshore Wind Farm Order 2022), (Norfolk Boreas Offshore Wind Farm Order 2021) (HVDV) onshore cables – three circuits to be split into six single cables at crossing locations.</li> <li>During detailed design the opportunity to install ducts in trefoil will be explored.</li> </ul>
Q2.6.2.5	Applicant	<ul> <li>Link Boxes</li> <li>The NFU is of the view [REP1-122] that link boxes stand proud above ground level and so greatly interfere with agricultural operations and are a hazard to farm machinery. The NFU therefore consider it important to have further design information on link boxes and the siting of them, with a preference that all link boxes are located within field boundaries.</li> <li>a) Applicant, provide further information on the design of the link boxes, especially above ground if it is proposed that they would stand proud above ground level.</li> <li>b) While the ES states that link boxes would be located close to field boundaries and in accessible locations [APP-090, Paragraph 301 to 302], should the OCoCP also make a commitment to locating these close to field boundaries?</li> </ul>	<ul> <li>a) As stated in ES Chapter 4 Project Description (Revision B), Section 4.6.1.3.7 [document reference 6.1.4], link boxes, similar to joint bays, are typically constructed from concrete and buried below ground with an above ground marker post to locate them, and a secured metal access panel at ground level. The below ground dimensions would be up to 2.6m x 2m x 1.5m.</li> <li>Please refer to Appendix A.5 of the Supporting Figures to The Applicant's Responses to the Examining Authority's Second Written Questions [document reference 16.2.1] which provides illustrations of link boxes crossing a ditch and typical link box details. These show the link boxes themselves will not stand proud of the ground level.</li> <li>b) The Outline Code of Construction Practice (Revision C) [document reference 9.17] submitted at Deadline 3 includes some additional wording in Section 2.5.5 with regards to link boxes. This is set out below for ease of reference:</li> </ul>



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			'One link box per circuit is required in proximity (within 10m) to the jointing bay locations to allow the cables to be bonded to earth to maximise cable ratings. Link boxes would not be required at all jointing bay locations but as a worst-case it is assumed that they could be required up to a frequency of one every 1,000m. 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'.
			The <b>Outline Code of Construction Practice (Revision C)</b> [document reference 9.17] submitted at Deadline 3 is secured by Requirement 19 of the <b>draft DCO (Revision F)</b> [document reference 3.1] submitted at Deadline 3.
Q2.6.2.6	Applicant	Weybourne WoodsA written representation [REP1-166] notes plans for a new retirement home and an extension to the Weybourne Forest Lodge holiday park where the onshore cables would pass beneath. Would the presence of the cables stop these developments from coming forward?	The Applicant has been engaging with the Land Interest and has agreed signed Heads of Terms for the cable corridor.
			The Land Interest has advised of intentions to build a retirement home further east of their current dwelling which could be within the cable corridor. The Applicant has requested further information on this but has not yet received a location plan confirming the location nor details of designs of any such building, nor have any plans been received showing the location of an extension to Weybourne Forest Lodge Holiday Park.
			The Applicant is therefore not in a position to provide substantive comment on whether or not the presence of the cables would impact either development coming forward but would welcome receipt of further information in order that the matter can be given consideration.
			The Applicant notes that the compulsory acquisition powers that are being sought would create restrictive covenants that would prevent any buildings being constructed over the permanent easement for the cables.



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Q2.6.3 Ba	Q2.6.3 Baseline survey and effects of Unexploded Ordinance					
		No further questions in this section at this stage. See related questions in the sections on Habitats and Ecology Offshore, the section on Benthic ecology, Intertidal, Subtidal and Coastal effects, and the section on Historic Environment and Cultural Heritage.	-			
Q2.6.4 Eff	ects of construction	works on human health				
Q2.6.4.1	Applicant	Potential for Insect Infestation and Odour Further to the Applicant's response [REP1-036, Q1.6.4.1], should measures to control any potential odour and insect infestation be set out in the OCoCP?	The Applicants response to W1.6.4.1 is repeated below for ease of reference: 'Although unlikely, there is the potential for material excavated during construction to be odorous. In the event of this occurring, it is expected that odours would quickly disperse and therefore the impact would be short-lived and would be unlikely to constitute a statutory nuisance. The Project activities are highly unlikely to result in an insect infestation. Any signs of the beginnings of an infestation will be identified through routine maintenance checks during the construction and operational phases of the Project'. It is understood the Examining Authority's question stems from the Energy NPS (EN-1), Section 4.13. The Applicant suggests that consideration of odour and insect infestation is more applicable to Developments which have the potential to generate odour impacts and create the potential for insect infestation such as Energy from Waste facilities. As such, the Applicant does not consider it appropriate to include measures to control any potential odour and insect infestation in the Outline Code of Construction Practice given the Projects are highly unlikely to result in either statutory nuisance from odours or insect infestation impacts.			



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Q2.6.4.2	Corpusty and Saxthorpe Parish Council	<ul> <li>Methodology for Assessing Health Effects</li> <li>The Applicant in its reply to Corpusty and Saxthorpe PC submissions [REP2-043] point out that the methodology for assessing health effects was agreed with NCC. At OFH2 [EV-074] [EV-075], Corpusty and Saxthorpe PC set out that it was seeking to obtain the minutes from the meeting where such matters were discussed and agreed.</li> <li>a) Provide those minutes if they have now been obtained.</li> <li>b) Does Corpusty and Saxthorpe PC have any concerns about the expertise of NCC in this regard and if so, why?</li> </ul>	<ul> <li>a) The minutes of the meeting are presented in Appendix B.8 of the Supporting Documents to The Applicant's Responses to the Examining Authority's Second Written Questions [document reference 16.2.1].</li> <li>b) No response required from the Applicant.</li> </ul>
Q2.6.4.3	Applicant	<b>Consultation Methods</b> Corpusty and Saxthorpe PC is of the view [REP1-073] that the consultation methods deployed by the Applicant have been passive rather than actively investigative and exploratory in its quest for information, failing to engage properly with important aspects necessary for understanding the project impact. Applicant, address these comments and provide further justification for the approach adopted.	In line with its responsibilities under The Planning Act 2008 and to ensure that its consultation was comprehensive and representative, the Applicant undertook the following measures. The core consultation zone consisted of a minimum buffer of 1,000 meters on either side of the project search area, as presented at the Phase One consultation. This ensured that all individuals and stakeholders identified within a minimum distance of 1,000 meters from any associated underground or overground infrastructure were consulted. Prior to the Phase Two consultation, the core consultation zone included properties situated at least 1,000 meters away from any shortlisted main compound locations. In addition, the broader consultation zone encompassed the host local authorities, with all neighbouring local authorities also notified. The Applicant proactively informed selected "hard to reach" groups of our consultations, including charities, schools, and community groups. The full list of these groups can be found in 'Table 5-1' of the <b>Consultation Report</b> [APP-029]. The Applicant sought to proactively engage with stakeholders throughout the pre-application process. This included hosting webinars with question and answer sessions as well as regular



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			meetings with interested parties during and outside of the defined consultation periods. Following the relaxation of COVID- 19 regulations and acknowledging a preference from some stakeholders for face-to-face engagement the Applicant hosted four project information days between 07 March and 10 March 2022 in, Aylsham, Weston Longville, Swardeston, and Sheringham respectively. These events were attended by 313 stakeholders. The Applicant also hosted an additional project information day on 1 June 2022 in Weybourne. This event was attended by 19 stakeholders.
			Throughout the pre-application period the Applicant took stakeholder feedback into account and made changes to the project as a result.
			The Applicant's regard to stakeholder feedback during the Phase One and Two Consultations can be found within the Consultation Report appendices - <b>Applicant's Response in</b> <b>Regard to S47 Comments</b> [APP-032] and <b>Applicant's</b> <b>Response in Regard to S42 Comments</b> [APP-033].
			The Applicant has carried out and clearly demonstrated a comprehensive pre-application consultation on SEP and DEP which has complied with and gone beyond the requirements of the Planning Act 2008 and associated legislation and guidance.
			The Application has been accepted by PINS for examination on this basis.
Q2.6.4.4	Applicant Corpusty and Saxthorpe Parish Council	Impact of Offshore Wind Farms by Glasson et al (2022) Corpusty and Saxthorpe PC has referred [REP1-073] to a study concerning assessment of impact of offshore wind farms by Glasson et al (2022). The Applicant [REP2-043] notes points made in Glasson et al (2022) and confirm that the Applicant's own approach to mitigation, including, employing a Local Community Liaison Officer, commitments	<ul> <li>a) The full citation of the article is: Glasson, J., Durning, B., Welch, K., &amp; Olorundami, T. (2022). The local socio-economic impacts of offshore wind farms. <i>Environmental Impact Assessment Review</i>, 95, 106783. The article is available through ScienceDirect, however it is not open access and a payment is required in order to access it. The ExA has advised the Applicant that if the</li> </ul>



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		<ul> <li>to monitor actual impacts and the provision of a community benefit fund that could lead to environmental and socio-economic initiatives, aligns with the study.</li> <li>a) Applicant, please can a copy of the study be provided.</li> <li>b) Are the above points from the Applicant accepted by the Parish Council?</li> </ul>	<ul> <li>paper were to be submitted to the examination it would necessarily be published as an examination document. The paper will therefore not be submitted as this would breach the terms and conditions of ScienceDirect.</li> <li>The Applicant refers back to its previous responses with regards to this paper, specifically ID31 within The Applicant's Comments on Post-Hearing Submissions [REP2-043] which includes relevant references to and summaries of information in the paper.</li> <li>b) No response required from the Applicant.</li> </ul>
Q2.6.4.5	Applicant	Questions Raised by Corpusty and Saxthorpe Parish CouncilApplicant, provide a response to the questions raised by Corpusty and Saxthorpe PC in the post hearing submission [REP1-073, a. to n.].	Please refer to Appendix B.3 of the Supporting Documents to The Applicant's Responses to the Examining Authority's Second Written Questions [document reference 16.2.1] which provide a response to the questions raised by Corpusty and Saxthorpe PC in the post hearing submission [REP1-073, a. to n.].
Q2.6.4.6	Norfolk County Council	<ul> <li>Mental Health Mitigation</li> <li>NCC [RR-064] has set out that it would like the Applicant to include further mitigation measures to address any adverse effects on mental health, especially given the potential length of construction works, and adverse effects with regard to EMF. The Applicant has responded [REP1-036, Q1.6.4.8] that there are provisions to ensure community liaison that will contribute to reducing stress and anxiety associated with the construction programme, these include:</li> <li>Liaison with NCC about proposed construction works on Public Rights of Way; and</li> <li>Community liaison, including the appointment of a liaison officer and setting out procedures for addressing</li> </ul>	No response required.



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	community complaints through the OCoCP and the PEMP.			
		Does NCC agree with this and if not, what specific extra mitigation is being sought?		
Q2.6.4.7	Norfolk County	Assessment Scope	No response required.	
Council		Does NCC agree with the Applicant's response [REP1-036, Q1.6.4.5 and Q1.6.4.6] that the inclusion of the additional vulnerable population groups and health outcomes sought by NCC would not change the overall findings of the ES [APP-114] with regards to air quality?		
Q2.6.4.8	Applicant	EMF	The Applicant refers back to the response given in The	
		Explain what other factors at detailed design stage would determine the final cable configuration [REP1-036, Q1.6.4.11].	Applicant's Responses to the Examining Authority's First Written Questions [REP1-036]:	
			'EMF levels depend on several parameters, not only cable configuration. A combination of cable configuration, burial depth and distance from the circuits will determine the anticipated EMF levels at a given locationThe final cable configuration will be determined at detailed design'.	
			The Applicant considers the response above sets out details relating to the other factors/parameters.	
Q2.6.5 Eff	ects from emission	s on air quality		
Q2.6.5.1	Applicant	<b>Air Quality</b> Following discussions at ISH3 [EV-037] [EV-042], provide justification to support your view that if adverse effects on air quality are found to be negligible, whether it should be considered for cumulative assessment. In its response, the	The EIA Regulations (Regulation 5) require the consideration of cumulative effects; Advice Note 17 provided by the Planning Inspectorate (PINS) includes more detailed guidance as to how a cumulative assessment could be undertaken for major infrastructure projects.	
		Applicant should make reference to the EIA Regulations and PINS advice notes.	The air quality assessment undertaken for the application considered cumulative impacts on the road links which were shown to have a potentially significant impact from the Projects, i.e. those which exceeded the IAQM and EPUK (2017)	

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			screening criteria. As such, detailed dispersion modelling was undertaken to consider the cumulative effects on these links. This approach to the assessment therefore identified the worst- case cumulative effects which would arise due to the Project- generated traffic flows. This detailed assessment showed that no significant effects would occur.
			In the Applicants Responses to the Examining Authority's First Written Questions Q1.6.5.8 [REP1-036], the Applicant identified additional road links which did not exceed the IAQM and EPUK (2017) screening criteria as a result of Project-generated traffic, but which may, due to other projects, be screened in to a cumulative assessment for other purposes. However, the relative contribution of SEP and/or DEP to any such cumulative impact would be negligible and insignificant in air quality terms.
			PINS Advice Note 17 states in paragraph 3.2.3 "it is important not to exclude consideration of effects deemed individually not significant from the CEA, since the cumulative effect of a number of non-significant effects could in itself be significant". Whilst this is acknowledged, and numerous incremental changes in air quality could ultimately give rise to a significant effect (a benchmark for which would be potential exceedance of the air quality Objectives) the baseline air quality assessment (presented in ES Chapter 22 Air Quality [APP-108]) identified that baseline air quality conditions across the study area are good and therefore there are no areas of significant air quality concern (i.e. Air Quality Management Areas or other locations where the ambient concentrations exceed or approach the relevant Objectives ). As such, the risk of exceedance of the air quality Objectives, even with potential incremental local changes, is low.
			The PINS advice note also states in paragraph 3.4.5 <i>"Whilst applicants should make a genuine attempt to assess the effects</i>



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			arising from multiple, individually non-significant effects, the CEA should be proportionate and should not be any longer than is necessary to identify and assess any likely significant cumulative effects." As noted above, in accordance with the recommended proportionate approach, all of those links which were considered to have a potentially significant effect as a result of the Projects were considered in detail in the cumulative assessment. Furthermore, the applicant undertook a semi- qualitative assessment (detailed in <b>The Applicant's</b> <b>Responses to the Examining Authority's First Written</b> <b>Question</b> 1.6.5.8 [REP1-036]), based on the detailed dispersion modelling already undertaken, to demonstrate that significant cumulative effects would not occur on any additional links considered. Also relevant to the proportionate approach is that the effects of the Projects would be experienced only on a temporary basis, during construction. As such, there is no potential for a long-term cumulative air quality effect.
			Notwithstanding the above, the Applicant has produced an Outline Construction Traffic Management Plan (OCTMP) (Revision C) [document reference 9.16] submitted at Deadline 3, which contains the control measures and monitoring procedures for managing the potential traffic and transport impacts of constructing SEP and DEP. Section 4.10 of the Outline Construction Traffic Management Plan (OCTMP) (Revision C) [document reference 9.16] submitted at Deadline 3 also includes details of measures to cap cumulative traffic flows on certain sensitive links to manage the potential for cumulative impacts with other windfarm projects. The Contractor would be required to comply with this Outline Construction Traffic Management Plan (OCTMP) (Revision C) [document reference 9.16] submitted at Deadline 3 (which is secured by Requirement 15 in the draft DCO (Revision F) [document reference 3.1] submitted at Deadline 3, and ensure that traffic numbers and routes are in accordance with the Outline



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ID	Question addressed to	Question	Applicant Response
			Construction Traffic Management Plan (OCTMP) (Revision C) [document reference 9.16] submitted at Deadline 3.
Q2.6.6 Ad	lequacy of the Outli	ne Code of Construction Practice	
Q2.6.6.1	Applicant	Trenchless CrossingsAmend the OCoCP [APP-302, Section 2.5.9] to refer to the Crossing Schedule [AS-022] to make clear where trenchless crossings are proposed.	Additional text has been provided in Section 2.5.10 Trenchless Crossings of the <b>Outline Code of Construction Practice</b> (Revision C) [document reference 9.17] submitted at Deadline 3, in relation to the Crossing Schedule.
Q2.6.6.2	Applicant	Waste Management Further to discussions at ISH3 [EV-036] [EV-041] provide an amended OCoCP to include reference to the Waste Assessment [APP-207] supporting the application.	Additional text has been provided in Section 5 Waste Management of the <b>Outline Code of Construction Practice</b> (Revision C) [document reference 9.17] submitted at Deadline 3, in relation to reference to the Waste Assessment [APP-207] and associated mitigation measures.
Q2.6.7 Wa	aste Management.		
		No further questions in this section as this stage.	



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# Table 7 Applicant's responses to the Examining Authority's Second Written Questions: Q2.7

ID	Question addressed to	Question	Applicant Response
Q2.7. Com	nmercial Fisheries a	nd Fishing	
Q2.7.1 Eff	ects on Fishing Sto	cks	
Q2.7.1.1	Eastern Inshore Fisheries Conservation Authority	Benefits to fish stock Provide further information on whether the potential for fishing restrictions, due to construction of the Proposed Development, may result in any benefits to fish stock.	No response required.
Q2.7.2 Eff	ects on fishing ente	rprises as a result of navigational or special restrictions	
Q2.7.2.1	Jonas Seafoods Applicant	<ul> <li>Jonas Seafood compensation and impacts <ul> <li>a) Provide further evidence to demonstrate the effects on the business during previous windfarm construction and associated fishing restrictions?</li> <li>b) Furthermore, provide further justification to demonstrate why Jonas Seafood is a special case in relation to compensation from the Applicant.</li> <li>c) Evidence from Jonas Seafood and the Applicant's response to the evidence and the cases made to be provided jointly.</li> </ul></li></ul>	The Applicant met with Kevin Jonas of Jonas Seafood on the 24 <sup>th</sup> of April to discuss further evidence. Additional information from Jonas Seafood states the crab caught from ICES Division IVb where the minimum catch size is lower is important to Jonas seafood who have built their processing methods and market on the reliable supply of this crab. But it must be noted that SEP & DEP and the cable routes are located within ICES Division IVc. This is supported by information presented in Figure 1-1 of <b>ES Appendix 12.1 –</b> <b>Commercial Fisheries Technical Report</b> [APP-197] showing the boundary between ICES Divisions IVb and IVc and vessel monitoring system data for potting vessels of length 15m and overplotted Figure 2-6 and 2-7 of <b>ES Appendix 12.1 –</b> <b>Commercial Fisheries Technical Report</b> [APP-197] which shows greater potting effort to the North outside the Project boundaries and within ICES Division IVb. It is therefore the Applicants view that there is no special case for compensation to Jonas Seafood. The Applicant views that appropriate management and mitigation in line with best practice will most effectively limit any impacts.



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ID	Question addressed to	Question	Applicant Response
			Best practice approaches include:
			<ul> <li>Coordination with fisheries to establish and implement 'rolling survey areas' and' rolling construction zones' to limit the spatial extent and duration of 'closed areas';</li> </ul>
			<ul> <li>OFLRs onboard survey/construction vessels to identify fishing gear, communicate with fishers offshore and provide advice to vessel Masters;</li> </ul>
			<ul> <li>Scout Boats where appropriate to identify and map fishing gear in survey areas for active avoidance of, or temporary removal of fishing gear by approved contractors;</li> </ul>
			<ul> <li>Real-time adaptive management of planned daily survey areas to avoid mobile fishing activities;</li> </ul>
			<ul> <li>Timing of activities where feasible to avoid seasonal fishing hotspots;</li> </ul>
			<ul> <li>Provision of regular survey and/or construction updates through FLO, websites, social media, mail shots; and</li> </ul>
			<ul> <li>Fishing gear entanglement procedures (safe recovery, reporting, claims process).</li> </ul>
			The Applicant seeks to anticipate potential disruption and seek solutions to avoid or reduce temporary displacement during surveys and construction, with financial compensation being a last option to offset remaining significant impacts. Where financial compensation is required, evidence-based agreements will be established for those individual fishermen that have a demonstrable economic dependency upon the area proposed for closure.



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ID	Question addressed to	Question	Applicant Response
			The Applicants compensation strategy is in line with the FLOWW Best Practice Guidance for Offshore Renewables Developments: Recommendations for Fisheries Liaison.
			The Applicant notes for completeness, and for the avoidance of doubt, that it will make payments of compensation wherever it has a legal liability to do so. There is no general legal principle that would entitle a third party to compensation from a developer due to indirect impacts that arise to their business as a result of a development being constructed.
			A clear distinction can be drawn with compensation measures paid to commercial fisheries in accordance with the FLOWW Guidance. That guidance is an adopted best practice for renewables developers to compensate fishermen for <u>direct</u> impacts to them, such as the need to remove gear from areas during surveys or construction. The developer obtains a direct benefit from this, in that the area that they need to work in is clear of fishing gear. It is not possible to carry out the development without the gear being removed from the area. In return, the developer compensates for any loss caused.
			That is not the same as a third party claiming that a developer should make a compensation payment as a result of an <u>indirect</u> impact. The planning system, deliberately, does not provide for that.



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# Table 8 Applicant's responses to the Examining Authority's Second Written Questions: Q2.8

ID	Question addressed to	Question	Applicant Response
Q2.8. Com	pulsory Acquisition a	nd Temporary Possession	
Q2.8.1 Upd	ates on Negotiations	and Funding Statement	
Q2.8.1.1	Applicant	<b>Funding Statement</b> Please provide an update of accounts for Equinor New Energy Limited.	The Applicant notes this request and has submitted updated accounts at Deadline 3 within the <b>Funding Statement</b> (Revision B) [document reference 4.2].
Q2.8.1.2	Applicant	<ul> <li>Updates to CA and TP related material in Examination</li> <li>Further to the update provided at CAH1 [EV-067] [EV-071], provide:</li> <li>a) Titles and summaries of categories of new rights in Table 1 of the BoR to improve legibility, including cross-referencing with Table 11-1 of the SoR;</li> <li>b) Relevant amendments to the BoR to address the errors, duplication and omissions with plot numbers;</li> <li>c) Updated statutory undertakers table with colour coding to demonstrate progress with negotiations;</li> <li>d) Highlight points of disagreements with SUs at D5, and the implications arising if agreement is not reached; and</li> <li>e) Provide an update for the Heads of Terms and subsequent Option Agreements process in the CA schedule.</li> </ul>	<ul> <li>a) The summaries of the categories of rights within the Statement of Reasons (Revision D) (document reference 4.3) have been added to the menu of rights within the Book of Reference (Revision E) (document reference 4.1).</li> <li>b) The update provided at CAH1 [EV-067] [EV-071] did not advise that plots were missing from the Book of Reference (Revision E) (document reference 4.1). The update did advise that plots were either missing in error, duplicated or added in error within the following documents: <ul> <li>Compulsory Acquisition Schedule (Revision B) [document reference 12.5]</li> <li>The Applicant's Statutory Undertakers Position Statement (Revision B) [document reference 12.46]</li> <li>Open Space Agreements Updates [document reference 12.48].</li> </ul> </li> <li>A summary of the amendments made within the updated versions of the above documents (which are all being submitted at Deadline 3) can be found in the Written Summary of the Applicant's oral submissions at the Compulsory Acquisition Hearing 1 [document reference 16.12].</li> <li>c) The Applicant hotes this request and an updated revision of the Applicant's Statutory Undertakers Position</li> </ul>



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ID	Question addressed to	Question	Applicant Response
			Statement (Revision B) [Doc Ref 12.46] has been submitted at Deadline 3.
			d) The Applicant notes this request and will incorporate the request within the submission at Deadline 5.
			<ul> <li>e) The Applicant notes this request. An updated revision of the Compulsory Acquisition Schedule (Revision B) (document reference 12.5) has been submitted at Deadline 3. The Applicant has also added information on the Heads of Terms and Option Agreements process.</li> </ul>
Q2.8.2 Affec	ted Persons' Site-spec	cific Issues	
Q2.8.2.1	Applicant National Farmers Union	<ul> <li>Term</li> <li>a) NFU, provide evidence that 99 years term for the dDCO and aspects of CA has been secured in Triton Knoll (although the ExA understands that the 99-year term was not secured through the dDCO and though other means), the reasons why this was agreed, and the mechanism used to secure the agreement.</li> <li>b) Applicant, provide justification why you may need any of the provisions in the dDCO, especially land acquired through CA, for any more than 99 years, with reference to s122 of the PA2008.</li> </ul>	<ul> <li>a) No response required.</li> <li>b) At CA1, the Applicant confirmed that it is not aware of any express legal mechanism or precedent which allows for compulsory purchase/acquisition powers to permit acquisition of rights or land for a limited term only. There is no mechanism by which a lease may be granted through compulsory purchase/acquisition, and this is widely acknowledged and accepted. Furthermore, unless the relevant compulsory purchase legislation specifically authorises it, it is not possible to compulsorily acquire rights for the purposes of creating new rights as well as acquiring rights. This general proposition was confirmed in the House of Lords case of Sovmots v Investments Ltd v Secretary of State for the Environment [1977] 2 W.L.R 951) which highlighted that the creation of new rights was not always available to acquiring authorities in all compulsory purchase cases. A number of legislative provisions have since been amended to enable the creation of permanent rights (and therefore easements) through compulsory purchase. It is notable that no amendments have been made to specifically</li> </ul>



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ID Question addressed	Question o	Applicant Response
		allow for time limited acquisition through the creation of leases or time limited easements. Conversely, there is a mechanism through DCOs by which land may be used on a temporary basis (and plenty of precedent for this approach), which is distinct from the permanent acquisition of rights. The Applicant submits that the use of land for the siting of the cables and associated infrastructure for the lifetime of the development (and potentially beyond that) goes beyond what is intended to be covered by powers of temporary possession. The only other options available to the Applicant through compulsory acquisition powers under the DCO are therefore either the permanent acquisition of land or the permanent acquisition of rights. It is not considered proportionate to permanently acquire the land required for the cable route and so the Applicant is seeking the permanent acquisition of rights and the imposition of restrictive covenants over the relevant land. This would enable the ongoing use of the land by affected parties, subject to some restrictions on use to ensure the safe operation of the cables. At this stage, as set out in paragraph 329 of <b>ES Chapter 4</b> <b>Project Description (Revision B)</b> [document reference 6.1.4], no decision has been made regarding the final decommissioning policy for the onshore cables, as it is recognised that industry best practice, rules and legislation change over time. It is stated within that Chapter that it is likely that the cables would be removed from the ducts and recycled, with the transition pits and ducts capped and sealed then left in situ. A permanent easement would therefore ensure ongoing authority for the apparatus to remain in place, which is considered a proportionate approach given the uncertainty about what decommissioning requirements may exist at the relevant time. Without this certainty, there is potential for the creation of unnecessary environmental impacts which may arise should a landowner insist that all apparatus is removed at the expiry of the 99 year term.



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ID Ques addr	tion Question	Applicant Response
		Furthermore, the grant of permanent rights would avoid any future administrative burden to all parties should there be a need to extend the term in the future. A permanent easement provides certainty to both the Applicant and affected landowners. In addition, given the ongoing critical need for offshore wind generation (as confirmed by the Government in the latest draft National Policy Statements (DESNZ, 2023) the future repowering of SEP and DEP and the potential extension of any lease granted by The Crown Estate remains a possibility (albeit not one that has been assessed in this application and which would be subject to its own future consenting process). That process would be made simpler if the necessary land rights were available to the project on an ongoing basis and so there is an ongoing public interest in those rights being available on a permanent basis. It is also clear from established compulsory purchase case law ( <i>Belfields Ltd v Secretary of State for Communities and Local Government [2007] EWHC 3040 (Admin): Pascoe v First Secretary of State [2007] 1 WLR 885)</i> that it is not a requirement of compulsory purchase for it to involve the least intrusive means of acquisition for it to be considered proportionate. The relevant order must simply strike a fair balance between the public benefits sought and interference with the rights in question. The Applicant's commitment to use acquisition of permanent rights along the cable corridor rather than permanent freehold acquisition is proportionate in the compulsory acquisition context. Section 122 of the Planning Act 2008 ("2008 Act") requires that the rights sought must be (a) required for the development to which the development to which the development to which the development to which the development to that development to the facilitate or incidental to that development to the rights sought rare transite that it has demonstrated that the land and rights sought rare required for the development to anation of acquired to make that the land and rights s



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ID	Question addressed to	Question	Applicant Response
			and that there is a compelling case in the public interest for the land and rights to be acquired compulsorily. Further details of this are contained within the <b>Statement of Reasons (Revision D)</b> [document reference 4.3].
Q2.8.2.2	Q2.8.2.2       Applicant       Approach to Tenants         Applicant, you stated at CAH1 [EV-068] [EV-072] that it was your expectation that landlords would deal with the tenants who would be affected by CA and TP provisions in the dDCO. In light of the representations made on behalf of landowners, consider an approach where you might lead or support engagement and negotiation with tenants.	The approach taken by the Applicant to identify Landowners (hereafter also referred to as "Landlords") and Tenants of land is set out in Section 5.5 of the <b>Consultation Report</b> [APP-029]. All Landlords and Tenants identified within the <b>Book of</b> <b>Reference (Revision E)</b> [document reference 4.1] have been included in one or both of the Statutory Consultation and Targeted Consultation. In addition to the consultations undertaken by the Applicant, Tenants have been met in person and written to, with communications as set out within the <b>Consultation Report</b> [APP-029] Section 6.7. In respect of Tenant consultation specific to negotiations for acquisition of land rights, a fact sheet was sent to all Tenants on 1st August 2022. The fact sheet set out the Applicant's approach to securing the required land and rights with Landowners and how voluntary agreements would impact on their existing rights as Tenants.	
			The Applicant's approach to securing the necessary rights for the cable corridor is by way of an option agreement with Landowners for a deed of easement. The deed of easement is to be agreed at the same time as the option agreement and the agreed form deed of easement will be attached to the option agreement.
			From the outset, the Applicant has maintained that it is for Landowners to secure a Tenant's consent, if required, for them to enter into the voluntary agreement. Farm Business Tenancies under the Agricultural Tenancies Act 1995 will more commonly reserve rights for a Landowner to grant the Applicant the necessary rights without the need for obtaining Tenant consent, however tenancies under the Agricultural Holdings Act



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ID	Question addressed to	Question	Applicant Response
			1986 will be less likely to do so and in some cases there may not be a written agreement to refer to in which case the assumption is that the rights are not reserved.
			(a) Where the rights are reserved to the Landowner, the Applicant's position has remained that there is no requirement for Tenants to consent to the granting of rights.
			(b) Where rights are not reserved or there is no evidence to prove either way, the Applicant has maintained that it is the Landowner's responsibility to secure the Tenant consent.
			LIG has taken the view that the Applicant has a responsibility to secure Tenant consent whether legally required or not by way of a separate voluntary agreement subject to an additional payment to the Tenant, an approach it is claimed has been taken from previous projects on which they are involved.
			LIG raised concerns that some relationships between Landowner and Tenant were difficult, and that Landowners being expected to negotiate with their Tenants to sign into option agreements might exacerbate matters.
			In line with industry standard, the Applicant does not consider it reasonable that it should cost more to acquire identical rights in land subject to a tenancy in comparison to land owned and occupied by a single interest. If the Landlord requires a Tenant's consent (in line with (b) above) the Applicant considers the consideration offered should be negotiated and apportioned between Landlord and Tenant.
			The Applicant has been advised by LIG that it was agreed by three previous projects in the region that Tenants would have a separate agreement and incentive payment.
			The three previous projects are:



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ID	Question addressed to	Question	Applicant Response
			Orsted's Hornsea Project 3 ("HOW03")
			<ul> <li>Orsted's Hornsea Project 4 ("HOW04")</li> </ul>
			<ul> <li>Vattenfall's Norfolk Boreas and Norfolk Vanguard</li> </ul>
			The Applicant understands that HOW03 and HOW04 agreed to enter into a separate Occupier Consent agreement. The Applicant understands Orsted secured rights through a lease of subsoil rights and due to the legal structure of a lease a separate agreement would be required. The Applicant considers that the two negotiations are therefore not comparable.
			The Applicant is unaware of the reason for Vattenfall adopting this approach because, as with Orsted, copies of the final documents are confidential.
			During the Applicant's negotiations of the Heads of Terms, details of which Landowners could and could not grant rights without Tenant's consent were requested, preferably with a copy of the tenancy agreement for legal review. To date no tenancy agreements have been provided.
			In the absence of substantive evidence being provided by LIG and in an effort to move negotiations forwards, the Applicant agreed to pay arm's length tenants an incentive (Occupier Incentive payment) for being signatories to option agreements. An arm's length tenant is defined within the HOTs as follows:
			"An arm's length tenant is defined as a tenant who is independent of the Grantor, without any special relationship (including without limitation being a relative) or any side agreement between them or either party having control over the other."
			The reason for limiting the Occupier Incentive payment to arm's length tenants was to avoid situations where a tenancy was



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			created for tax planning or business accounting purposes meaning the Tenant was in fact the Landowner.
			As referred to above, a Tenant Factsheet was sent to LIG for review on 20th June 2022 and again on the 10th of August 2022 but no comments were received. In the absence of any response or comments from LIG, the factsheet was sent to all Tenants with whom the Applicant is attempting to secure signed HOTs from their Landlords on 1st August 2022. No comments or queries have been raised on the Tenant Factsheet from any Tenants or LIG to date.
			In the event that the Landowner is unable to secure the tenant's consent, if required, the Applicant is willing to become involved in securing the tenant's consent on behalf of the Landlord. For the avoidance of doubt no Landowner or Tenant has come forward requesting the Applicant's involvement to date.
			The Applicant has pointed out to Landowners and their appointed agents that if it were to negotiate directly with tenants, as well as freehold owners, there would likely be implications for the terms of the agreements with freehold owners which have been offered on the basis that the freehold owner would obtain consent from any relevant tenants.
			Where HOTs have been signed by the Landlord the Applicant's legal advisors are currently negotiating the draft option agreement with LIG's appointed legal advisors, Birketts LLP (who are acting on behalf of all Landowner's that have signed HOT's with the exception of a few interests whose separate legal advisors have been sent copies of the travelling draft for review). A response to Birketts LLP's first comments and amendments, where progress in line with the Applicant's approach had been made on the matter of Tenant Consent, was returned by Burges Salmon on 24th March 2023.



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ID Question addressed to	Question	Applicant Response
Q2.8.2.3 Applicant Mr Clive Hay	Smith Land outside the order limits, belonging to Mr Clive Hay-Smith Applicant, explain the reason for seeking additional 20 acres of land outside the Order limits, belonging to Clive Hay-Smith and the interaction of this land with the score and powers of the dDCO when such land falls outside the Order limits. Applicant and Mr Clive Hay-Smith prova joint position statement akin to a SoCG.	project, it is common for voluntary agreements to include additional items over and above those included within the DCO to reflect the negotiated status of those documents and that the Applicant is likely to be compensating the affected landowner in excess of the compensation that the affected party would be entitled to if the Applicant relied upon compulsory acquisition



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ID	Question addressed to	Question	Applicant Response
Q2.8.3.1	Applicant	<ul> <li>Public Open Space</li> <li>Update the progress of negotiations with parties affected by the inclusion of public open space within the Order limits, and a timetable identifying key milestones towards reaching agreement in relation to the Examination timetable. In the Open Space Update [REP1-054, Unique Reference 120720] the Applicant has stated that with respect to plots 01-009 and 01-010, the land is unregistered.</li> <li>a) How will this affect the acquisition of these plots?</li> <li>b) Would these plots then effectively be bona vacantia?</li> </ul>	<ul> <li>The Applicant notes this request. An updated revision of the Open Space Agreement Update (Revision B) [document reference 12.48] has been submitted at Deadline 3.</li> <li>a) In the event the Applicant cannot obtain evidence of ownership of plots 01-009 and 01-010 the Applicant will rely on compulsory acquisition rights sought within the DCO in order to acquire the necessary rights to deliver the project.</li> <li>b) The fact that land is unregistered does not mean that it necessarily becomes bona vacantia land. Unregistered land simply means that the ownership of the land has not been registered at Land Registry. Whilst the Applicant has not currently been able to identify the owner of plots 01-009 and 01-010, despite making diligent enquiries to seek to establish ownership, that does not mean that there is not an unregistered owner of those plots. Land would usually only become bona vacantia land where a landowner dies intestate and without known kin or where the land was previously owned by a company that has been dissolved. There is no reason to assume that either of those circumstances applies to plots 01-009 and 01-010.</li> </ul>
Q2.8.3.2	Applicant National Trust	National Trust Land 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.	The Applicant provided an update on negotiations with the National Trust at CA1. It was highlighted at that hearing that the main point of disagreement between the parties at present relates to the term (or not) of the easement being sought by the Applicant. Since the hearing, the Applicant has provided the National Trust with justification for seeking an easement in perpetuity and is awaiting a response. The Applicant intends to continue discussions with the National Trust and hopes to be able to reach agreement with the National Trust prior to the close of the Examination.



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ID	Question addressed to	Question	Applicant Response
Q2.8.3.3	Applicant	Crown Land Update progress with negotiations, supported with evidence where possible.	As confirmed at CA1, section 135 Planning Act 2008 consent from Defra and Forestry Commission has been received and was included at Appendix B.5 to REP1-039. In relation to The Crown Estate, the Applicant has now received a draft letter of consent and agreement for undertaking from The Crown Estate's lawyers, which the Applicant is currently reviewing. The Applicant has no reason to think that the final consent will not be forthcoming by the close of Examination. With regards to the MOD, the Applicant has recently been given updated contact details within the MOD and is in ongoing discussions in relation to the consent sought. In relation to the Secretary of State for Transport, that party has confirmed that it has delegated the section 135 consent to National Highways and the Applicant is seeking confirmation of contact details for the relevant individual there.
Q2.8.3.4	Applicant	Statutory Undertaker Land The ExA has seen the Current Status of Statutory Undertaker Negotiations [REP1-053], and requests an update at Deadline 3, to include future timescales where necessary and any particular issues that may impede progress with a Statutory Undertaker. Please set out the updated document for the status of Statutory Undertaker negotiations to follow the lead colour coding approach seen in the CA Schedule as well as any other legibility improvements possible.	The Applicant's Statutory Undertakers Position Statement (Revision B) [document reference 12.46] has been updated to include a status key similar to that used within the CA Schedule. Revision B has also been updated to group the undertakers by type and to provide updates where appropriate on the current status of negotiations with each statutory undertaker. Further updates will be provided at Deadline 5 as requested at Q2.8.1.1.
Q2.8.4 App	licant's Strategic Ca	se for CA and TP	
Q2.8.4.1	Applicant	<b>Purpose for which the land is required</b> The SoR [REP2-018] and elsewhere in the ES, it is stated that if only one project, either SEP or DEP were built, the cable corridor, working easement and permanent easements would be substantially less than the scenarios where both projects were built. Further to	<ul> <li>a) As stated in CA1, the Applicant's position is that the case for compulsory acquisition is made out for both projects within the overall cable corridor. There is always a balance between providing certainty for landowners and retaining flexibility for the development. The Applicant confirmed at CA1 that compensation will be payable where compulsory acquisition is used. This</li> </ul>



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ID	Question addressed to	Question	Applicant Response
		<ul> <li>the discussion at CAH1 [EV-066] [EV-070] on this matter, the ExA ask the Applicant to clarify with reasons:</li> <li>a) If the case for CA is made for Scenario 1 options i, and ii, where either SEP or DEP do not proceed to construction;</li> <li>b) If it would be appropriate and possible to demarcate on land plans the order limits for a Scenario 1 options i, and ii, where either SEP or DEP do not proceed to construction;</li> <li>c) If landowners who would be affected by the uncertainty of the amount of land that might be acquired, might suffer blight, and if this would be taken into account when calculating compensation; and</li> <li>d) How soon the Applicant could give certainty to landowners of the preferred scenario and how this could be committed.</li> </ul>	<ul> <li>means there is a commercial incentive to take the least amount of land possible.</li> <li>The ES Chapter 4 Project Description (Revision B) [document reference 6.1.4] and the Statement of Reasons (Revision D) [document reference 4.3] already both confirm the widths of the cable corridor in the different development scenarios.</li> <li>b) However, the Applicant notes the point made by the ExA in relation to Scenario 1 options (i) and (ii) (which the Applicant has taken to refer to scenario 1(a) and scenario 1(b) as drafted in the draft DCO (Revision F) [document reference 3.1]) and has been giving further consideration to whether further reassurance could be provided to give more certainty that no more land than is necessary will be used by a project if it is constructed in isolation. As such, the Applicant is actively considering whether potential drafting could be included in the DCO Requirements to limit the width of the cable corridor in Scenario 1 options (i) and (ii). The Applicant will provide a further update on its position at Deadline 4.As explained at CA1, it is not appropriate or possible to demarcate on land plans the Order Limits for Scenario 1 options (i) and (ii). This is because the final route alignment for the cable route will be subject to micrositing during detailed design. If the route for an in-isolation scenario were fixed now then it would remove any future flexibility to microsite around environmental and land constraints to achieve the best possible outcome for the route.</li> <li>Instead, as set out at a) above, the Applicant is considering whether potential drafting changes could be made to the DCO requirements and will provide an update on this at Deadline 4.As explained in paragraph 81 of the Explanatory Memorandum (Revision D)</li> </ul>



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ID	Question addressed to	Question	Applicant Response
			<ul> <li>[REP2-013], because the Order land for both projects is the same, one undertaker must obtain consent from the other when exercising powers of compulsory acquisition to ensure coordination between the two projects such that each project will be able to secure appropriate land and rights for construction, operation, and maintenance of its project assets. This consent mechanism provides reassurance that if one project is built in isolation, it will not use the entirety of the cable corridor.</li> <li>The Statement of Reasons [document reference 4.3] sets out the amount of land and rights that would be taken, both on a temporary and permanent basis, in the different development</li> <li>The Applicant therefore submits that it has provided certainty in relation to the amount of land that might be acquired.</li> <li>c) Blight claims can only be made prior to the exercise of compulsory acquisition powers. A blight claim would arise if the necessary legal tests were able to be demonstrated by a landowner. It would therefore be open to any landowner to make such a claim prior to the exercise of compulsory acquisition powers by the undertakers of the DCO. The Applicant would consider any blight claim made by a landowner on its merits and, should there be disagreement between the parties as to the merits of any valid blight claim, either party would be able to refer the matter to the Upper Tribunal (Lands Chamber) for determination. The potential for blight claims has been considered and accounted for in the property cost estimate appended to the Funding Statement [APP-027] and a contingent liability for blight claims has been included in the estimate.</li> </ul>



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ID	Question addressed to	Question	Applicant Response
			<ul> <li>d) The Applicant would be in a position to provide further certainty to the affected parties on the development scenario that would be taken forward once that decision has been made and notified to the relevant planning authority pursuant to Requirement 9 in Schedule 2 to the draft DCO (Revision F) [document reference 3.1]. The Applicant has made updates to the outline Code of Construction Practice [document reference 9.17], which refers to a Stakeholder Communications Plan, which will be developed as part of the final Code of Construction Practice. The Applicant considers that the best place to secure communication with landowners and affected parties in relation to the chosen development scenario is within the Stakeholder Communications Plan.</li> </ul>



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# Table 9 Applicant's responses to the Examining Authority's Second Written Questions: Q2.9

ID	Question addressed to	Question	Applicant Response
Q2.9. Cumu	lative Effects		
Q2.9.1 Scop	e and Extent		
	Applicant	Potential Delays to Hornsea Project 3 Provide the press statement relating to potential delays to the delivery of HP3 [EV-037] [EV-042].	Copies of press statements made by Ørsted in March 2023 in relation to potential delays to the delivery of Hornsea Project 3, as published by Reuters, reNEWS and Sky News, have been provided in Appendix B.4 of the Supporting documents to the Applicant's Responses to the Examining Authority's Second Written Questions [document reference 16.2.2].



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# Table 10 Applicant's responses to the Examining Authority's Second Written Questions: Q2.10

ID	Question addressed to	Question	Applicant Response
Q2.10. Desi	gn		
Q2.10.1 Des	sign Principles		
Q2.10.1.1	Applicant	Onshore substation platform level Confirm the lowest ground level (AoD) of the proposed onshore substation site compared to the height of the proposed platform on which the proposed substation would sit.	The Applicant confirms this as 24.17m AOD, being approximately 4m below the platform level of 28.23m but would refer the ExA to Appendix B.1 of the Supporting Documents to The Applicant's Responses to the Examining Authority's Second Written Questions [document reference 16.2.1], para 25 for a fuller explanation.
Q2.10.1.2	Applicant	Siting and Topography Notwithstanding the responses provided during ISH4 [EV-063], [EV-059], set out the limitations which prevent more effective mitigation of the magnitude of visual effect resulting from the proposed onshore substation. Why, for instance, would it not be possible for the layout of buildings and equipment to follow the natural topography of the site more closely?	The Applicant confirms a terraced platform, following the existing contours of the land is not possible, as a single flat area is required operationally, and the need to lift the platform out of the flood risk area at the lowest point of the site, but would refer the ExA to Appendix B.1 of the Supporting Documents to The Applicant's Responses to the Examining Authority's Second Written Questions [document reference 16.2.1], para 25 for a fuller explanation.
Q2.10.1.3	Applicant Relevant Local Authorities Relevant Statutory Bodies	Consideration of the design of buildings and materials in the Design and Access Statement (onshore) With reference to the DAS (onshore) [APP-287], provide evidence to the Examination, or provide signposting to evidence already in Examination, to demonstrate that the Applicant has completed an initial phase of design that includes careful consideration of building design, massing and materials which might be appropriate for the context within which the substation buildings are proposed. Evidence should include, but may not be limited to:	The Applicant would draw the ExA's attention to Appendix B.1 of the Supporting Documents to The Applicant's Responses to the Examining Authority's Second Written Questions [document reference 16.2.1] which provides a full response to questions relating to the design of the OnSS, including the buildings.



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ID	Question addressed to	Question	Applicant Response
		<ul> <li>Preliminary designs for the form of buildings within the onshore substation complex which would be enclosed by a building envelope;</li> </ul>	
		<ul> <li>b) Preliminary proposals for the material types and colour range which the Applicant believes would be appropriate for any building envelopes;</li> </ul>	
		<ul> <li>c) Preliminary proposals which demonstrate the Applicant's design approach and commitment to the design quality of security fencing and other site screening proposals.</li> </ul>	
		d) Relevant LAs and Statutory Bodies may respond to the adequacy of the DAS (onshore) in relation to a-c.	
Q2.10.1.4	Applicant	Offshore Design Statement Should the Offshore Design Statement [APP-312] be included within the list of certified documents. If not, set out how the offshore design-related matters described within the Offshore Design Statement would be secured in the event that consent is granted. This question should be read and responded to in conjunction with Q2.5.1.5	The Applicant does not believe APP-312 needs to be a certified document. As stated in the response to Q2.5.1.5 Section 6 of the Offshore Design Statement [APP-312] states that a layout will be selected from within the consented parameters to optimise energy output and the foundation installation process, accounting for water depths, ground conditions, wake effects and any other constraints. As explained in the response to Q2.5.1.5 minimum turbine spacing is not a key design criterion used to determine the final layout. Layout commitments are given in Table 6.1 of APP-312 in accordance with the guidance contained within the Marine Guidance Note (MGN 654) and are presented in Appendix 13.1 Navigation Risk Assessment [APP-198]. These layout commitments are secured in the DMLs under condition 13(1)(a) in Schedules 10 (the SEP offshore generation licence). Within the restrictions of the commitments above an optimum layout will ensure that the flow in front of a wind turbine is affected as little as possible by wake effects from existing and proposed wind turbines. The Applicant believes that Section 6 of the Offshore Design Statement [APP-312] provides the most accurate



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ID	Question addressed to	Question	Applicant Response
			representation of the layout design process through layout commitments and the description of the process to identify the final layout.
Q2.10.2 Des	ign Development Pi	rocess	
Q2.10.2.1	Applicant	<ul> <li><b>Design Review</b></li> <li>a) Provide reasoning to support a design approach which does not align with the intent of NPS EN-1, paragraph 4.5.5 wherein applicants are encouraged to engage in an independent design review process</li> <li>b) Provide wording for a requirement within the dDCO to secure an independent design review process for the Proposed Development in the event that the ExA concludes that it cannot report to SoS that the Applicant has conducted a design process that meets the policy tests set out in NPS EN-1, section 4.5.</li> </ul>	(Technical Note: Onshore Substation Design Response) of the Supporting Documents to The



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			this wording with SNC ahead of Deadline 3 and hopes to agree the drafting with SNC for Deadline 4.
Q2.10.2.2	South Norfolk District Council Broadland District Council	<ul> <li>Design Review</li> <li>a) Set out the role(s) that you would expect to undertake in the event that the Proposed Development were subject to an independent design review process.</li> </ul>	No response required.
		<ul> <li>b) Is the local authority confident that it has the relevant expertise and experience in house to deliver post-consent approvals as defined in Requirement 10 (R10) within the dDCO, in the event that the SoS makes the Order?</li> </ul>	



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# Table 11 Applicant's responses to the Examining Authority's Second Written Questions: Q2.11

ID	Question addressed to	Question	Applicant Response
Q2.11. Draf	t Development Cons	ent Order	
Q2.11.1 Ge	neral		
•	ns here relate to the d ed with EL references		All other documents referenced in the following questions have
Q2.11.1.1	Applicant	Format of providing the draft Development Consent Order with track changes	Please see document draft DCO (Revision F) (Full tracked – Revisions A/F).
		Provide the track change version of the dDCO that shows all the changes made since the submissions of the application.	
Q2.11.1.2	Applicant	Completion Date Does the CfD process impose a completion date upon developers in order to attract investment into the project?	<ul> <li>The Contract for Difference (CfD) regime is regulated by the UK Government and managed by the Department for Energy Security and Net Zero (DESNZ). The regime and details of each allocation round are subject to change. The Applicant provides the following response based on information publicly available, and its understanding of how the regime currently operates.</li> <li>Any project that is awarded a CfD under The Contracts for Difference (Allocation) Regulations 2014 has obligations placed upon it relating to milestone delivery dates and commitment</li> </ul>
			dates. The 'CfD Allocation Round 5: Generic Agreement' includes the following definition: "(Initial) Milestone Delivery Date" applicable to this Contract for Difference shall be eighteen (18) months after the Agreement Date. The initial Milestone Delivery Date relates to the date by which generators awarded a CfD must demonstrate delivery progress by providing evidence of either spend of 10% of total pre- commissioning cost, or that the project commitments have been made. The Milestone Requirement in the CfD is designed to demonstrate commitment and progression of the projects to achieve generation by the dates stated in the CfD contract. This



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ID	Question addressed to	Question	Applicant Response
			milestone is currently the same for all successful projects in a given allocation round.
			Additionally, each CfD contract will have commitment dates for example, "Initial Target Commissioning Window", "Target Commissioning Date", "Longstop Period", which will be dependent on the CfD bid submission and the Delivery Year targeted by the project in question. The commitment dates will therefore differ project to project.
Q2.11.2 Defi	nitions		
Q2.11.2.1	Applicant	<b>Definition of 'Buoy'</b> Should the SoS incorporate the Applicant's without prejudice wording [REP2-013] in the dDCO, would the definition of 'buoy' need to be adjusted to incorporate looming eye buoys?	No, the Applicant does not consider that it would be necessary to amend the definition of "buoy" if the Secretary of State decided to incorporate the Applicant's without prejudice wording [REP2-013] in the <b>Draft Development Consent Order</b> (Revision F) [document reference 3.1] (draft DCO). The definition of "buoy" within the draft DCO is deliberately drafted by reference to being a floating device used for
			navigational purposes or measurement purposes. The various references to "buoy" within the draft DCO are all within the context of it being required or used for these purposes only.
			The <b>Proposed Without Prejudice DCO Drafting (Revision B)</b> [REP2-011] does not make a specific reference to "buoys". As outlined within the <b>Gannet, Guillemot and Razorbill</b> <b>Compensation Document</b> [APP-074], the use of looming eye buoys is one technology that is being considered to reduce fisheries bycatch. However, the final decision on the technology and methods that would be used to deliver the compensation measures would be determined and agreed post-consent in consultation with the Gannet, Guillemot and Razorbill Compensation Steering Group and included within the Gannet, Guillemot and Razorbill CIMP. This is provided for in paragraph 22(2)(a) of the proposed Part 3, Schedule 17 that is set out



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			within the Proposed Without Prejudice DCO Drafting (Revision B) [REP2-011].
Q2.11.2.2	Applicant Local Planning Authorities National Highways	<ul> <li>Pre-commencement works</li> <li>Following the discussion at ISH3 [EV-035, EV-040], Applicant to provide a joint position statement with LPAs to cover the following:</li> <li>a) how each of the activities that are excluded from the definition of commencement in dDCO are controlled, and parties' position whether or not control is required through the dDCO;</li> <li>b) whether there is the need for a definition for pre- commencement in the dDCO and provide wording for such a definition;</li> <li>c) including NCC as a consultee in R19; and</li> <li>d) other related changes to the wording of R19.</li> <li>e) NH and Applicant, confirm if the draft PPs for NH leaves a shortfall in terms of the protection required by NH, which would be covered by the outline CoCP.</li> <li>f) Does NH need to be listed in R19(1) as a consultee?</li> </ul>	<ul> <li>a) The Applicant refers to Appendix B.11 of the Supporting Documents to The Applicant's Responses to the Examining Authority's Second Written Questions [document reference 16.2.1] which includes a table setting out how each of the precommencement activities are controlled and includes amendments to relevant Requirements as appropriate. This table has been shared with each of the local authorities for comment and agreement. The Applicant and the LPAs will aim to provide an update on the status of this table at Deadline 4. The Applicant has however included the drafting amendments shown in Appendix B.11 within the draft DCO (Revision F) [document reference 3.1] at this time.</li> <li>b) Whilst the Applicant does not consider a definition of 'pre-commencement works' to be strictly necessary, it has included one in Article 2 of the draft DCO (Revision F) [document reference 3.1]. Consequently, the definition of 'commence' has now also been updated to cross-refer to pre-commencement works rather than list the excluded activities themselves within the definition of 'commence'.</li> <li>c) The Applicant has amended the draft DCO (Revision F) [document reference 3.1] to reinstate NCC as a consultee in Requirement 19.</li> <li>d) The Applicant does not consider any further changes are required to Requirement 19 but, as set out in Appendix B.11 of the Supporting Documents to The Applicant's Responses to the Examining Authority's Second Written Questions [document reference 16.2.1], the Applicant has made amendments to Requirement 18 and included a</li> </ul>



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ID	Question addressed to	Question	Applicant Response
Q2.11.3 Art	icles		<ul> <li>new Requirement 32 (Contaminated land and groundwater scheme) to provide additional clarity on how relevant pre-commencement activities will be controlled.</li> <li>e) and (f) The Applicant reiterates its position at Issue Specific Hearing 3 where it confirmed that it considers that National Highways assets will be adequately protected by protective provisions. A draft set of protective provisions have been included in Part 14 of the draft DCO (Revision F) [document reference 3.1]. For the avoidance of doubt, the protective provisions for National Highway are not yet in agreed form and discussions with National Highways as a consultee in Requirement 19.</li> </ul>
Q2.11.3.1	Applicant Marine Management Organisation	<ul> <li>Article 5 – Benefit of Order</li> <li>a) The Applicant and MMO are to continue discussions on changes to Article 5 of the dDCO. This should include the consideration of the role of MMO in subparagraph 5, particularly whether requirement to consult the MMO before giving consent to the transfer or grant to another person of the benefit of the provisions of the dDMLs is sufficient involvement for the MMO.</li> <li>b) MMO to also research other DCOs and whether there have been similar issues of transfer of benefits of orders and marine licences using DCO provisions, and possible duplication of processes that may have occurred.</li> </ul>	<ul> <li>a) The Applicant confirms that as discussed at Issue Specific hearing 6 it has amended Article 5 of the draft DCO (Revision F) [document reference 3.1] to provide for the transfer of the whole of a DML only and to remove the ability to grant a lease of a deemed marine licence.</li> <li>Following on from discussions on Article 5 at Issue Specific Hearing 6, the Applicant has also provided a further response to the MMO in The Applicant's Comments on the Marine Management Organisation's Deadline 2</li> <li>Submission [document reference 16.4]. The Applicant has confirmed in that response that, subject to the drafting amendments identified above, it considers the current drafting included in Article 5 to be necessary and appropriate.</li> <li>The MMO and the Applicant have not reached an agreed position on Article 5 at Deadline 3 and this is reflected in the Draft Statement of Common Ground: Marine</li> </ul>



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ID	Question addressed to	Question	Applicant Response
			Management Organisation (Revision B) [document reference 12.11].
Q2.11.3.2	Applicant Marine Management Organisation	<b>Collaboration conditions</b> For both parties to continue discussions as to the wording for a collaboration condition for the dDCO.	A collaboration condition has been added to the deemed marine licences. See Schedules 10 and 11, part 2, condition 24 and Schedules 12 and 13, part 2, condition 23 of the <b>draft DCO</b> (Revision F) [document reference 3.1].
Q2.11.3.3	Applicant Affected Persons	Article 16 – Authority to survey and investigate land Applicant, consider if a definition of "land adjacent to Order limits" should be included in the dDCO, provide wording for such a definition, and related revision to the wording of Article 16.	The Applicant confirmed in oral submissions at Compulsory Acquisition Hearing 1 that the purpose of Article 16 is to ensure the undertaker can enter land in order to undertake surveys in land outside of the Order limits. The power reflects what has been accepted on other DCOs and is equivalent to powers in other legislation. See agenda item 16.ii of the <b>Written</b> <b>Summary of the Applicant's Oral Submissions at</b> <b>Compulsory Acquisition Hearing 1</b> [document reference 16.12]. It is the Applicant's position that no changes should be made to the drafting of Article 16 with regards to what land may be surveyed. The drafting is both reasonable and necessary to enable the development and is well precedented. The Applicant notes that there is a definition of "land adjacent to the Order limits" in the A428 Black Cat to Caxton Gibbet Development Consent Order 2022. It is as follows: "land adjacent to the Order limits the use of which is reasonably necessary to construct the authorised development or any section or part of the authorised development". This defined term is then used once in the DCO articles in article 4(2) as follows: Any enactment applying to land within the Order limits or land adjacent to the Order limits has effect subject to the provisions of this Order.



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ID	Question addressed to	Question	Applicant Response
			The drafting of this term and the context of its use is not analogous to Article 16 of the <b>draft DCO (Revision F)</b> [document reference 3.1] for SEP and DEP. The draft DCO is not seeking to use land outside of the Order limits other than in relation to surveys authorised by Article 16. The intention of the powers within the A428 Black Cat to Caxton Gibbet Development Consent Order 2022 appear to be to seek wide powers of land adjacent to the Order limits. In that context, it would be logical to include the above definition in order to offer clarity over the wide powers being sought. In the context of this draft DCO, it is the Applicant's position that it is not logical to do so given the undertaker will be able to rely on the legislative powers described in the Compulsory Acquisition Hearing (see above) and in response to Q1.11.3.6 (see <b>The Applicant's Responses to the Examining Authority's First Written Questions</b> [REP1-036]). The Applicant is restricted to entering only land which may be affected by the authorised project and for a purpose which relates to the Order. The Applicant considers these powers are
			satisfactorily restricted and does not propose to make any further amendments.
Q2.11.3.4	Applicant	<ul> <li>Article 38 – Certification of plans and documents, etc.</li> <li>a) Include a schedule in the dDCO that lists all certified documents with greater detail relating to the suite of documents that comprise the ES, in particular to include the updates, technical notes and other supplementary information submitted during the course of the Examination.</li> <li>b) Consider if both, a schedule of certified documents and Article 38, should be included in the dDCO.</li> </ul>	The Applicant is following the approach taken by East Anglia One North Offshore Wind Farm Order 2022 by including both article 38 for the certification of plans etc. and also a new Schedule 18 which sets out the details of those documents to be certified. Please see the <b>draft DCO (Revision F)</b> [document reference 3.1]. Given the documents set out in Schedule 18 will be subject to further change, not all the information relating to these documents has been included in the draft DCO but the Applicant will further update Schedule 18 at Deadline 5 to capture all documents and all information available at that stage. A further update will be provided in the final version of the draft DCO at Deadline 7.



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ID	Question addressed to	Question	Applicant Response
		c) At Deadline 5, submit updated relevant ES chapter in take account of all supplementary information that has been submitted during the Examination.	
Q2.11.4 Sc	hedules		
Q2.11.4.1	Applicant	<ul> <li>Schedule 17 – Compensation Measures <ul> <li>a) In the definition "Sandwich Tern CIMP", should the word 'Compensation' be added before the word 'implementation' (as is done for the kittiwake CIMP)?</li> <li>b) Are you content with the wording of Schedule 17 [REP2-008], and the potential additional wording [REP2-011], or do you consider amendments are required?</li> <li>c) Confirm when final versions of the compensation documents, relied upon within Schedule 17, will be provided to the Examination.</li> </ul> </li> </ul>	<ul> <li>a) Yes, this word was missed in error. This has been corrected in schedule 17 of the draft DCO (Revision F) [document reference 3.1].</li> <li>b) Subject to the minor amendments contained within schedule 17 of the draft DCO and the Proposed Without Prejudice DCO Drafting (Revision B) [REP2-011] the Applicant is content with the wording. The Applicant considers that the wording provides a suitable legal mechanism to secure that compensation measures will be delivered, as required by reg.68 of the Conservation of Habitats and Species Regulations 2017 and reg.36 of the Conservation of Offshore Marine Habitats and Species Regulations 2017.</li> <li>c) Schedule 17 includes reference to two documents that will be certified in accordance with article 38 of the draft DCO: <ul> <li>habitats regulations derogation provision of evidence, annex 2A - outline sandwich tern compensation implementation and monitoring plan [APP-070]</li> <li>habitats regulations derogation provision of evidence, annex 3A - outline kittiwake compensation implementation and monitoring plan [APP-073]</li> </ul> </li> </ul>
Q2.11.5 Re	equirements		
Q2.11.5.1	Applicant	Requirement 2	The exclusion of towers, masts and cranes from the offshore parameters in Requirement 2 is because until the detailed design work for the offshore substation platform is complete



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ID	Question addressed to	Question	Applicant Response
		Can the Applicant explain the 'exclusions' of towers, masts and cranes, and why these apparatuses are exempt from any dimension restrictions?	uncertainties remain over the dimensions of towers, masts and cranes. For instance in the case of telecommunication towers the height of the tower is dependent on the amount of antennas and the requirement for vertical separation between the antennas, as well as surrounding structures which may prevent line of sight.
			The Applicant notes there is also precedent for this drafting in recent offshore wind DCOs, for example East Anglia One North.
			Given the existing precedent, and the fact it is not possible to confirm at this stage what the detailed parameters of these elements would be, the Applicant's position is that this drafting should be retained.
Q2.11.5.2	Applicant	Requirement 19	See response to Q2.11.2.2.
		See related question in this section under definitions.	
Q2.11.5.3	Applicant MMO Natural England	<b>Requirement 20</b> In the interests of protecting sensitive seabird or marine mammal species and any activities they may do in the hours of darkness, should construction hours be imposed in respect of offshore works?	The Applicant does not consider that restrictions in construction hours are required. It is noted that offshore construction practices will be intermittent in nature and that whilst there is provision for 24-hour construction this does not necessarily mean there will be 24-hour noise and disturbance.
			In respect of marine mammals, the Applicant has accounted for and assessed activities which may occur over a 24-hour period (e.g. piling).
			In respect of seabirds, it is noted that nocturnal activity (when compared to daytime) is significantly reduced for the majority of species (Garthe and Hüppop, 2004), and therefore the risk of, for example, disruption to feeding activity would be less than during daylight hours. The effects of night-time construction (particularly as a result of lighting) are considered in Section



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ID	Question addressed to	Question	Applicant Response
			11.6.1.1 of <b>Chapter 11 (Offshore Ornithology)</b> of the <b>ES</b> [APP-097], which concludes that this would not result in a significant effect on offshore ornithology receptors. The Applicant would also highlight the commitment to implement a Best Practice Protocol to minimise disturbance to red-throated divers, secured through the <b>Outline Project Environmental</b> <b>Management Plan (Outline PEMP) (Revision C)</b> [document reference 9.10], which would apply both at day and night.
Q2.11.5.4	Applicant	Requirement 21 Changes in Rev C of the dDCO [REP1-003] state: "an assessment of noise from the substation, demonstrating that the rating level of the substation sound does not exceed the background sound level by more than 5 dB at nearby receptors, subject to context. The rating level, background sound level and context should be determined in accordance with British Standard 4142:2014+A1:2019 'Methods for rating and assessing industrial and commercial noise' or an equivalent successor standard". Applicant, explain why the words 'subject to context' are needed?	<ul> <li>The proposed criterion in the condition is based on the following conclusion from British Standard 4142:2014+A1:2019 'Methods for rating and assessing industrial and commercial sound': "A difference of around +5 dB is likely to be an indication of an adverse impact, depending on the context". Section 11 of this standard states "The significance of sound of an industrial and/or commercial nature depends upon both the margin by which the rating level of the specific sound source exceeds the background sound level and the context in which the sound occurs. An effective assessment cannot be conducted without an understanding of the reason(s) for the assessment and the context in which the sound occurs/will occur. When making assessments and arriving at decisions, therefore, it is essential to place the sound in context."</li> <li>The standard provides the following examples of factors which may need to be considered when taking context into account:</li> <li>The character and level of the residual sound compared to the character and level of the specific sound.</li> <li>The sensitivity of the receptor and whether dwellings or other premises used for residential purposes will already incorporate design measures that secure good internal and/or outdoor acoustic conditions</li> </ul>



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ID	Question addressed to	Question	Applicant Response
			Without the phrase "subject to context", the requirement would prevent the context from being taken into account, which would not be compliant with BS 4142.
Q2.11.6 Dra	ft Deemed Marine Li	cences	
Q2.11.6.1	Applicant Marine Management Organisation	Timeframes for determinationsThe MMO and Applicant, provide a joint statementsetting out your positions and corresponding rationalesfor the appropriate lead-in period (4 months or 6 months)for review and decisions from the MMO on detailedsubmissions from the Applicant.	Following agreement with the MMO, the Applicant has amended the deemed marine licences of the <b>draft DCO</b> (Revision F) [document reference 3.1]. See Schedules 10 to 13.
Q2.11.6.2	Applicant Marine Management Organisation	Outline Offshore Operation and Maintenance Plan The ExA is concerned regarding the 'amber' items highlighted within the Relevant Representation [RR-053], particularly that additional licences may be required " <i>if</i> <i>proposed works exceed those assessed within the ES or</i> <i>described within the DCO</i> ." What is the likelihood of the works falling outside of the scope of the dDCO or causing greater effects than assessed as the worst-case scenario in the ES?	<ul> <li>The purpose of the Outline Offshore Operations and Maintenance Plan (OOMP) (Revision C) [document reference 9.9] is to provide an outline of reasonably foreseeable offshore maintenance activities and the broad approach to be taken for each activity. The Outline OOMP (Revision C) [document reference 9.9] was updated at Deadline 1 to amend the description of amber items as follows:</li> <li>Amber indicates that an additional marine licence may be required in the extremely unlikely event that proposed works exceed those assessed within the ES</li> <li>As indicated, it is considered to be extremely unlikely that the worst-case scenarios assessed for O&amp;M phase activities would exceed those assessed in the ES since these have been derived from precautionary assumptions based on experience from SOW and DOW. However, if that were to be the case, a new marine licence for operation and maintenance activities would be required which would ensure that any activities over and above those assessed in the ES were assessed through the marine licensing process.</li> </ul>



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			Regardless of whether or not a new marine licence would be required, amber activities would require approval from the MMO prior to the activities being undertaken.
			It should also be noted that the <b>Outline OOMP (Revision C)</b> [document reference 9.9] is a live document to be updated and reviewed every three years. The approval and implementation of the OOMP is secured by conditions 13(1)(f) and 15(3) in Schedules 10 and 11 and conditions 12(1)(g) and 14(3) of Schedules 12 and 13. Conditions 13(1)(f) and 14(1)(f) in the relevant DMLs also specify that the OOMP must be resubmitted and reviewed every 3 years therefore ensuring continual review of the position in relation to cable protection and scour protection alongside all other operation and maintenance activities and will enable the MMO to continually review at the appropriate time during operation whether or not a new licence is required for any further deployment of external cable protection or scour protection.
Q2.11.7 In	teraction of the dDCO	with Other Legislated DCOs, Other Existing Infrastructur	e and Planned Projects
		No further questions in this section at this stage.	



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# Table 12 Applicant's responses to the Examining Authority's Second Written Questions: Q2.12

Question Ref.	Question addressed to	Question	Applicant Response
Q2.12. Habitats	and Ecology Offs	shore	
Q2.12.1 Effects	on Ornithology		
Q2.12.1.1	Natural England	Rates and Assumptions Within the Models	No response required.
		Following the Applicant's submission [REP2-036] can NE confirm that there is no disagreement with the Applicant regarding:	
		Application of the Population Viability Analysis	
		Use of the Biologically Defined Minimum Population     Scale	
		• Avoidance rates (including use of macro avoidance)	
		Mortality rates	
		Counterfactuals	
		Determination of the 95% CI	
		The use, or not, of ranges	
		If there is disagreement, NE identify and expand on the precise issues and specify what re-modelling or reassurances are required.	
Q2.12.1.2	Natural England	Highly Pathogenic Avian Influenza (HPAI)	a) The Applicant has discussed this matter directly with
	Applicant	<ul> <li>Applicant and NE, discuss and agree how the HPAI should be accounted for in the assessments including the relevant species,</li> </ul>	Natural England, and Natural England has recently provided the Applicant with 2022 data relating to known HPAI mortality from English colonies,
		colonies, methodologies and data required.	b) Natural England has advised that the Applicant should
what further information is required in relation to assessing HPAI effects on the ES data set.	provide a summary report to review how colonies relevant to SEP and DEP have been affected. Natural England has asked that this information is used to contextualise the vulnerability of these populations to additional impacts. Natural England has also confirmed		



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Question Ref.	Question addressed to	Question	Applicant Response
		c) Provide timetable for any additional evidence gathering and the timetable for submission of material in relation to the Examination Timetable.	<ul> <li>that it is <u>not</u> seeking any revision to the quantification of impacts presented for SEP and DEP in light of HPAI.</li> <li>c) The Applicant confirms that it will provide the HPAI review report by Deadline 5. The Applicant will include data provided by Natural England in the report, and will also seek comparable data from relevant Scottish colonies. Assuming that such data can be obtained, this will also be included within the review report.</li> </ul>
Q2.12.1.3	Applicant	Disposal Site Characterisation Report The MMO has highlighted [REP2-059] that fish receptors, such as herring and sandeel, are not considered within the Disposal Site Characterisation Report [APP-300]. Applicant, respond to these specific comments and set out how disposal of 'won' material may impact on the habitats for these fish species, and the potential associated effects for relevant bird species.	The Applicant notes that the standard approach to the Disposal Site Characterisation Report is to use the existing assessment information provided within the EIA, the details of which have been discussed and agreed through the evidence plan process. The assessments on fish species relevant to sediment disposal are provided in Sections 9.6.1.2, 9.6.1.3, 9.6.2.5 and 9.6.2.6 of <b>ES Chapter 9 Fish and Shellfish Ecology</b> [APP-095]. These assessments conclude negligible to minor adverse effects on herring and sandeel which is agreed with the MMO (see ID 8 of Table 9 of <b>Draft SoCG with MMO (Revision B)</b> [document reference 12.11]. Section 11.6.1.2 of <b>Chapter 11 Offshore</b> <b>Ornithology</b> [APP-097], assesses the indirect effects on offshore ornithology receptors through effects on habitats and prey species during the construction phase. As described at ID 7 of Table 16 of the <b>Draft SoCG: MMO</b> ( <b>Revision B)</b> [document reference 12.11], regarding the <b>Disposal Site Characterisation Report (Revision B)</b> [REP1- 019], further contaminants sampling and analysis is being undertaken page assessed to the processes of the disposed
			undertaken post-consent. Therefore, the licence for the disposal of sediment at sea will be applied for post-consent. Condition wording, as agreed with the MMO, to secure the requirement for post-consent contaminants sampling has been included within the <b>Draft DCO (Revision F)</b> [document reference 3.1] at Deadline 3.



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			The Applicant therefore proposes to withhold any further updates to the Disposal Site Characterisation Report until the post- consent stage when more accurate details on the design (e.g. foundation types) and therefore quantities of material that are required to be disposed of, are known. This will enable a more accurate assessment to be undertaken.
			This approach has been agreed with the MMO.
Q2.12.1.4	Natural England Royal Society for the Protection of Birds	<b>Outline Project Environmental Management Plan</b> The Applicant submits that mitigation for red-throated divers is contained in the OPEMP [REP1-017]. For this species, and in general, do you consider the OPEMP to be sufficiently detailed to give you assurances that appropriate mitigation will be implemented? Explain with reasons.	The Applicant has updated the <b>Outline Project Environmental</b> <b>Management Plan (PEMP) (Revision B)</b> [document reference 9.10] at Deadline 3 to include the same 'Best Practice Protocol for Minimising Disturbance to Red-throated Diver' wording as that proposed by Natural England for Hornsea Project Four <sup>2</sup> . Therefore, the Applicant anticipates that Natural England will agree with the wording proposed (as indicated by Natural England in email correspondence on 27 April 2023).
Q2.12.1.5	Natural England	<b>Great Black-backed Gull</b> The Applicant states that embedded mitigation to minimise collision is a 30m air gap between the sea level and the blade sweep of each turbine. This is the only mitigation measure being proposed. NE, do you consider this mitigation would adequately minimise the adverse impacts on this species and any others where you perceive the air gap to be of a benefit	The Applicant reiterates that the increase in air gap from 26m to 30m, between PEIR and the DCO submission, provides significant mitigation for great black-backed gull (and other species vulnerable to collision risk). The increase from 26m to 30m results in an approximate 55% reduction in collision risk for great black-backed gull. As per ID 35 of the <b>Draft Statement of Common Ground with</b> <b>Natural England</b> [REP2-045], NE and the Applicant are agreed
		you perceive the air gap to be of a benefit	that there would be a cumulative moderate adverse impact on great black-backed gull. This is the same position as was concluded for the East Anglia One North project (and has also been the case in relation to other OWFs consented in recent years in this region of the North Sea), which was considered

<sup>2</sup>https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010098/EN010098-002246-Natural%20England%20SoS%20Consultation%20Response.pdf

Classification: Open



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			acceptable by the SoS (as part of the overall planning balance). No additional mitigation was proposed for East Anglia ONE North.
			The Applicant's position, as set out in the <b>HRA Derogation</b> - <b>Provision of Evidence</b> [APP-063], is that further increase in air gap would present a significant risk to the overall project viability. Natural England has acknowledged at ID 40 of <b>Draft SoCG</b> <b>(Offshore Ornithology)</b> [REP2-045] 'Natural England recognise that an air gap increase since PEIR from 26m to 30m HAT substantially decreases collision risk for most species. It is acknowledged that further air gap increases could potentially be achieved and would further reduce the project's contribution to cumulative/in-combination impacts, but Natural England acknowledges the Applicant's view that this has the potential to affect project viability and result in potential increased seascape impacts'.
Q2.12.1.6	Applicant	Red-throated Diver Mortality Rate Provide full and complete justification for a 1% mortality rate to be applied as opposed to the range of rates suggested by NE [REP2-064]. Why would the use of a mortality rate greater than 1% give rise to an 'unrealistic' mortality effect?	To clarify, the Applicant <i>has</i> presented a range of mortality rates for red-throated diver (i.e. between 1% and 10% mortality for displaced birds) within the <b>Apportioning and Habitats</b> <b>Regulations Assessment Updates Technical Note (Revision</b> <b>B)</b> [REP2-036], in accordance with Natural England's requirements. This allows Natural England and the ExA to review the full range of mortality scenarios.
			However, in terms of the final assessment of the effects of SEP and DEP, the Applicant considers it appropriate that realistic, evidence-based mortality values should be utilised, and that 1% mortality is the most appropriate (and still precautionary) value for this purpose.
			The key evidence to support use of 1% mortality for displaced red-throated divers is set out in submissions to the Norfolk Vanguard Examination (MacArthur Green, 2019). In summary, this evidence is as follows:



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			<ul> <li>Significant population effects from (effective) habitat loss during the non-breeding season are only likely to occur if the population was regulated by density-dependent competition during that period. However, evidence suggests that red-throated diver populations are limited by competition for safe breeding sites within range of foraging waters (Merrie 1978, Nummi et al. 2013, Rizzolo et al. 2014, Dahlen and Eriksson 2016), but they are probably not in competition for resources during the non-breeding season (Dierschke et al. 2012, 2017). This would suggest that their population size will be limited by breeding habitat suitability and not by wintering habitat (Newton 1998).</li> </ul>
			• During the winter period, red-throated divers are able to use a range of habitats and prey species. They occur at low densities and are also highly mobile, which enables them to find alternative feeding habitat if displaced (Dierschke et al., 2017). This supports the conclusion that this species is not subject to significant density-dependent competition during this period.
			• The annual mortality of adult red-throated divers is estimated to be 16% (Horswill and Robinson, 2015). This mortality will result from all natural and anthropogenic causes, which will include (but are not limited to) predation, disease, weather (such as severe storms), pollution, displacement from vessels, OWFs, oil and gas activities, aggregate extraction and military activity.
			• On that basis, it is inconceivable that the upper range of the mortality range (i.e. 10%) as a result of displacement from SEP and DEP could account for more than 50% of all mortality across the year.
			• Despite the uncertainty regarding impacts on non-breeding red-throated divers, the available evidence suggests that the



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			most likely result is that there will be little or no impact on adult survival, and that any impact would likely be undetectable at the population level.
			• On that basis, it is unlikely that displacement by OWFs would result in an additional mortality exceeding 1% of displaced birds, and any impact is more likely to be close to zero. The assumption that 1% of displaced birds die because of displacement is therefore considered to be precautionary. In addition, strong evidence for density dependent limitation of breeding numbers of red-throated divers suggests that a small increase in winter mortality would have little or no influence on the size of the red-throated diver population, because it is likely to be breeding habitat suitability which sets the carrying capacity.
			Further evidence to support the conclusion that displacement from offshore wind farms does not result in measurable red- throated diver mortality is provided by Vilela et al. (2021). This study examined the population and distribution of red- and black- throated divers in the German Bight, between 2001 and 2018. Despite the construction of 20 offshore wind farms, and the expected resultant changes in spatial distribution of divers, the study found no evidence of population decline.
Q2.12.1.7	Applicant	<b>Clarification on ISH5, Agenda Item 4(vi)</b> Please review the recording of ISH5 of [EV-077, minutes 50-57]. Confirm your position regarding the need for compensatory measures for the Proposed Development if Hornsea 4 were refused.	At ISH5 Part 1 [EV-076], the Applicant explained what it considered to be the three possible decisions that the Secretary of State could reach with respect to Hornsea Project Four: (i) consent is granted, with a need for compensatory measures for certain auk species, (ii) consent is granted without any need for such compensatory measures, or (iii) consent is refused (regardless of the reason for refusal). The Applicant explained the consequent need or otherwise for SEP and DEP to provide compensation for guillemot and razorbill in each scenario.



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Question Ref.	Question addressed to	Question	Applicant Response
			The third outcome described was that, if Hornsea Project Four were to be refused, the project-alone impacts from SEP and DEP would be so low that the Examining Authority and Secretary of State could conclude that there would be no adverse effect on integrity of a protected site (with respect to auk species) arising from SEP and DEP either alone or in-combination with other projects. Therefore, in this scenario any need for compensation falls away. This remains the Applicant's position, noting that any possible need to consider compensation for these species (firmly on a without prejudice basis) arose during the SEP and DEP pre- application period and only as a result of the emerging assessment outcomes on Hornsea Project Four.
			For clarity, the Applicant's assessment as set out in the RIAA [APP-059] for guillemot and the Habitats Regulations Assessment Derogation and Compensatory Measures Update (Revision B) [document reference 13.7] for razorbill, is that the total predicted annual mortality from SEP and DEP is 6 guillemot and 3 razorbill (95% upper confidence limit) or 4 guillemot and 1 razorbill (mean values), resulting in a conclusion of no adverse effect on integrity alone and in-combination. Further details of the assessment outcomes are provided in the response to Q2.14.1.15.
Q2.12.1.8	Natural England Royal Society for the	Responses to matters raised at Issue Specific Hearing 5 Please review the recording for ISH5 [EV-076 to EV-	No response required.
	Protection of Birds	083] and provide any written responses.	



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Question Ref.	Question addressed to	Question	Applicant Response
Q2.12.2.1	Q2.12.2.1Marine Management Organisation Natural England 		No response required.
Q2.12.2.2	Applicant Marine Mammal Mitigation Protocol [REP1-014], the SIP [APP-290] and HDD The focus of mitigation on mammals is around the prevention of auditory injury through percussive noise. However, there would be HDD operations within the MCZ. What level of noise, underwater or otherwise, is anticipated from the drilling and cable pulling operation to bring the offshore export cables ashore? Would that level of noise be significantly disturbing for marine mammals and require mitigation? Does the MMMP or SIP provide mitigation in respect of the HDD operation? Does the MMMP or SIP need to provide mitigation in respect of the HDD operation?		A review of the potential underwater noise levels associated with HDD works has been provided within Annex 1 of the Marine Mammals Technical Note and Addendum [document reference 16.14]. It is not expected that the level of underwater associated with the HDD works would have the potential to cause either auditory injury or disturbance to marine mammals, and therefore there is no requirement for mitigation to be implemented.
Q2.12.2.3	2.3 Applicant <b>Grey Seal feature of the Humber Estuary SAC</b> NE states [REP2-064, Point 23]: "Further information is needed to demonstrate that an AEoI will not occur on the grey seal feature of the Humber Estuary SAC." The ExA note the promise of a Marine Mammals Technical Note at Deadline 3. Whilst it may be appropriate to refer to that document, when submitted, can the Applicant set		An updated assessment has been provided within the Marine Mammals Technical Note and Addendum [document reference 16.14] for the Humber Estuary SAC. The assessments for SEP and DEP alone have been updated to take account of the latest information on grey seal densities associated with the SAC, as well as the updated SAC population estimate. The updated density data and SAC population estimates are taken from Carter <i>et al.</i> (2022) and the latest Special Committee on Seals (SCOS) report of 2021 (SCOS,



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		out what it is doing in order to justify its position regarding AEoI on grey seal.	2021). The assessment of disturbance from piling on grey seal has been updated to use the latest information from the literature on potential disturbance ranges, in addition to an assessment using a dose response curve approach.
			The assessment for SEP and DEP in-combination with other projects has been updated to include project specific data where possible.
			For both SEP and DEP alone and in-combination, population modelling has been undertaken to determine the potential for a significant effect on the population level due to disturbance from piling. The results of this population modelling is used to determine the requirement for further mitigation and / or management for disturbance effects from offshore wind farm piling.
			The full results of the population modelling are provided in the <b>Marine Mammals Technical Note and Addendum</b> [document reference 16.14, which show that there is no potential for a population level impact for either SEP and DEP alone or incombination with the piling at other offshore wind farms. Therefore, no mitigation to reduce disturbance is required and an AEoI on the grey seal feature of the Humber Estuary SAC can be ruled out.
Q2.12.2.4	Natural England Marine Management Organisation	<b>Underwater Noise Modelling</b> Are you content, at this stage, that sufficient underwater noise modelling has been satisfactorily undertaken? Explain with reasons.	No response required.
to have provided justification for screening out PTS and TTS from the cumulative impact assessment. Provide		Review document APP-193 wherein the Applicant states to have provided justification for screening out PTS and	No response required.



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Question Ref.	Question addressed to	Question	Applicant Response
		to be robust or if there remains a disagreement and why.	
Q2.12.2.6	Natural England Marine Management Organisation	<b>Barrier, Disturbance and Displacement Effects</b> Has the Applicant adequately mitigated for potential barrier, disturbance and displacement effects to marine mammals [APP-096, REP1-014]? If not, what would you expect or require from the Applicant to give reassurances on this matter?	<ul> <li>With regard to the potential for barrier effects, an updated assessment for both seal species has been provided within the Marine Mammals Technical Note and Addendum [document reference 16.14]. No significant effect is predicted to occur for any marine mammal species as a result of barrier effects, and therefore no mitigation is required.</li> <li>For the potential for disturbance and deterrence effects, updated assessments have been provided within the Marine Mammals Technical Note and Addendum [document reference 16.14].</li> <li>The Applicant does not consider that mitigation is required for</li> </ul>
			disturbance due to piling, either for SEP and DEP alone or in- combination with other offshore wind projects. Further detail is provided within the <b>Marine Mammals Technical Note and</b> <b>Addendum</b> [document reference 16.14]. In summary, there is no potential for a population level impact due to disturbance for either SEP and DEP alone or in-combination with the piling at other offshore wind farms. Therefore, no mitigation to reduce disturbance is required.
Q2.12.2.7	Applicant	Commitments	UXO
		Can the Applicant confirm (or signpost as necessary) where there are any commitments to control and restrict concurrent/simultaneous pile driving and UXO clearance activities, to avoid exceedance of thresholds for disturbance to harbour porpoise as a feature of the Southern North Sea Special Area of Conservation.	As agreed with the MMO and Natural England through the evidence plan process, clearance of UXO will be subject to a separate Marine Licence post consent (see SoCGs: NE [REP2- 044]; MMO (Revision B) [document reference 12.11]). Any offshore UXO clearance required for SEP and DEP will be assessed and mitigation determined as part of a separate Marine Licence application at the pre-construction stage, including consideration of the management of UXO clearance alongside the piling programme for SEP and DEP (although it is anticipated that UXO clearance would be undertaken prior to piling). Therefore, disturbance from underwater noise during UXO



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Question Ref.	Question addressed to	Question	Applicant Response
			clearance at the SEP and DEP sites is not included within the In Principle SIP for the Southern North Sea (SNS) Special Area of Conservation (SAC) [APP-290] as it will not be authorised under the DCO application for SEP and DEP.
			Potential UXO mitigation options in the <b>Draft MMMP (Revision</b> <b>B)</b> [REP1-013] to prevent marine mammal injury are provided for information purposes only. The final MMMPs will take account of the most suitable mitigation measures and up to date scientific understanding at the time of construction, including further consultation with the MMO, Natural England and TWT.
			The preferred method of UXO detonation is a low order clearance technique such as deflagration whereby explosive energy is reduced – see Section 1.4.2.1 of <b>Draft MMMP (Revision B)</b> [REP1-013]. Any commitments to control underwater noise impacts from UXO detonation will be determined through the marine licensing process for UXO.
			Piling
			There is the potential for simultaneous piling at SEP or DEP, or at SEP and DEP (either two simultaneous piling events at SEP, two at DEP, or one at SEP at the same time as DEP). The Applicant has committed to a Site Integrity Plan (see Schedules 10 and 11, part 2, conditions 14 and Schedules 12 and 13, part 2, condition 13 of the <b>draft DCO (Revision B)</b> [document 3/1])) for the Southern North Sea SAC to manage any potential significant disturbance effects on the harbour porpoise feature of the site.
Q2.12.2.8	Marine Management Organisation	UXO clearance	See response to Q2.12.2.7.
		Are the UXO clearance mitigations listed in the MMMP [REP1-014, paragraphs 34, 35 and 38] scientifically verified and approved by the MMO and CEFAS, ensuring that a Permanent Threshold Shift impact would be avoided?	



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Question Ref.	Question addressed to	Question	Applicant Response
		See related questions in the sections on Benthic ecology, Intertidal, Subtidal and Coastal effects and the section on Historic Environment and Cultural Heritage	



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### Table 13 Applicant's responses to the Examining Authority's Second Written Questions: Q2.13

ID	Question addressed to	Question	Applicant Response
Q2.13. Hat	bitats and Ecology C	Dnshore	
Q2.13.1 Ef	fects on Protected a	and Priority Species	
Q2.13.1.1	Natural England	<ul> <li>Construction Sites and Compounds</li> <li>a) Does the Applicant's comment on responses to the ExA's first written questions [REP2- 040, Q1.13.2.2] adequately identify the need for mitigation of effects</li> </ul>	No response required.
		from lighting and noise on bat species and their prey resulting from construction works in the vicinity of watercourses?	
		b) Would the mitigation proposed reduce the potential effects on bat species and their prey to an acceptable level?	
Q2.13.1.2	Royal Society for the Protection of Birds	Weybourne Cliffs Question repeated for RSPB	The Applicant refers the RSPB to <b>The Applicant's Responses</b> <b>to the Examining Authority's First Written Questions</b> [REP1- 036], which states:
		It is identified that populations of sand martins nest within the cliffs [APP-106]. Would noise and vibration from the landfall construction operations, with particular regard to vibrations from the HDD, have any effect upon the integrity of the cliffs or the living conditions of the sand martins such that nesting could be abandoned?	"No sand martins have been recorded nesting within the Order Limits at the landfall, and the Order Limits do not overlap with Weybourne Cliffs SSSI. The location of Weybourne Cliffs SSSI in relation to the Order Limits is shown in <b>ES Chapter 20</b> <b>Figures - Onshore Ecology and Ornithology</b> [APP-131, Figure 20.2, Sheet 1]. The closest known extent of the Weybourne Cliffs sand martin colony is >100m from the Order Limits.
			There are no known studies on vibration and noise thresholds which lead to disturbance of sand martins. However, sand martin colonies are well documented in heavily disturbed sites (subject to more extensive levels of noise and vibration than would be associated with the HDD works) such as active quarries. Sea cliffs, such as these at Weybourne, will also be



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			subject to baseline levels of noise and vibration, such as from waves, wind and nearby recreational activity. As sand martins will be habituated to tolerate these impacts, the temporary occurrence of HDD at a distance from the cliffs is not expected to lead to disturbance or displacement. Details of pre-construction ecological surveys required are presented in the <b>Outline Ecological Management Plan</b> (Revision B) [document reference 9.19, Appendix 1] and secured via Requirement 13 (Ecological Management Plan) of the <b>draft Development Consent Order</b> (DCO) (Revision C) [document reference 3.1]."
Q2.13.1.3	Natural England	Weybourne Cliffs Does the Applicant's response [REP1-036, Q1.13.2.4] provide sufficient information to 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.	No response required.
Q2.13.1.4			No response required.
Q2.13.2 Ef	fects on Ancient W	oodland, Trees and Hedgerows	
Q2.13.2.1	Applicant	Wensum Woods Provide a response to NE's suggestion [REP1-138] that Wensum Woodlands may become a SSSI due its Barbastelle bat colony and whether this impacts upon the Proposed Development in any way?	The Applicant is aware that Natural England is considering the Wensum Woods in its designations programme. As stated by Natural England, inclusion on the list is not a commitment to designate. The potential impacts upon the Proposed Development from this designation cannot be assessed given the extents of this SSSI are not yet defined.



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ID	Question addressed to	Question	Applicant Response
			The Order Limits do not pass through any woodland habitat in the vicinity of the River Wensum so it is expected that all habitat which would be designated as part of the Wensum Woods SSSI would be avoided.
			Potential impacts to Core Sustenance Zones or key commuting/connective habitat surrounding the woodland would be informed by pre-construction surveys focusing on linear features such as hedgerows and watercourses which are at risk of impacts (i.e. features to be impacted through open-cut installation) and mitigation proposed accordingly.
			Details of pre-construction ecological surveys required are presented in the <b>Outline Ecological Management Plan</b> (Revision C) [document reference 9.19, Appendix 1] and secured via Requirement 13 (Ecological Management Plan) of the <b>draft Development Consent Order</b> (DCO) ( <b>Revision F</b> ) [document reference 3.1].
Q2.13.2.2	Interested parties Local Authorities Applicant	Ancient Woodland a) Does the Applicant's response [REP1-036, Q1.13.3.1] provide sufficient clarity on their proposed approach to mitigation of possible impacts to Ancient Woodlands?	The Applicant refers the ExA, interested parties and Local Authorities to its previous response [REP1-036, Q1.13.3.1] and reiterates that direct impacts to Ancient Woodlands have been avoided through mitigation by design. SEP and DEP Order Limits avoid all ancient woodlands.
		<ul> <li>b) Is the Applicant's proposed approach to mitigation of possible impacts on Ancient Woodlands satisfactory at this stage?</li> <li>c) c) If not, set out which adverse effects would require further mitigation.</li> </ul>	The closest ancient woodland to the Order Limits is Colton Wood (approximately 10 metres from the edge of the Order Limits). The applicant, in its response to The Woodland Trust's Written Representation [RR-115], has committed to maintaining a buffer of at least 30 metres from Colton Wood during detailed design and construction. This committed is captured in the <b>Outline Code of Construction Practice (Revision C)</b> [document reference 9.17, para. 75 – 76], submitted at Deadline 3, and secured via Requirement 19 (Code of Construction Practice) of the <b>draft DCO</b> (DCO) (Revision F) [document reference 3.1].



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			Furthermore, a detailed assessment of potential dust and air pollution impacts has been undertaken and presented in the Environmental Statement (ES) <b>Chapter 22 Air Quality</b> [APP- 108, Section 22.6.1.1.6] and in the Deadline 2 Submission - <b>Addendum to Environmental Statement Chapter 20 Onshore</b> <b>Ecology and Ornithology</b> [REP2-053] which conclude that air quality emissions will have a non-significant impact upon Colton Wood provided that mitigation measures are followed. Dust and air pollution mitigation measures have been listed and secured through the <b>Outline Code of Construction Practice (Revision B)</b> [REP1-023, Section 7] and with buffers to valued habitats described and secured in the Deadline 1 Submission - <b>Outline</b> <b>Ecological Management Plan (Revision B)</b> [REP1-027]. The Applicant is aware of Natural England's advice regarding including a buffer around areas of ancient woodland, ancient trees and veteran trees. Requirement 11 of the <b>draft DCO</b> ( <b>Revision F)</b> [document reference 3.1] also commits the Applicant to providing details of existing trees and hedges to be removed and details of existing trees and hedges to be retained with measures for their protection during the construction period where applicable.
Q2.13.2.3	Applicant	<b>Moveable Hedgerows</b> Provide further comment on the Applicant's position relating to the use of 'bat fencing' as set out in SNDC's response to WQ1 [REP1-102, Q1.13.3.3]	As detailed in <b>The Applicant's Comments on the Local</b> <b>Impact Reports</b> [REP2-039], the Applicant would consider available mitigation options that avoid impacts on species such as bats. The precise scope of mitigation measures will be informed by the results of pre-construction surveys and (where available) on studies into the effectiveness of newly emerging mitigation techniques, such as moveable hedges.
			At this stage the Applicant is not proposing detailed mitigation solutions (such as locations and specifications of temporary hedgerow infill fencing) for bats or similar detailed mitigation for other protected species because such mitigation details can only be determined following the pre-construction surveys. Details of



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			the pre-construction surveys can be found in Appendix 1 of the <b>Outline Ecological Management Plan (Revision C)</b> [document reference 9.19, Appendix 1], and secured via Requirement 13 (Ecological Management Plan) of the <b>draft DCO (Revision F)</b> [document reference 3.1].
Q2.13.3 E	ffects on Rivers and	d River-Based Wildlife	
Q2.13.3.1	Mr Hay-Smith	Chalk Based Streams In your OFH oral representation [EV-074], [EV-075] you made reference to a self-funded community program, in	The Applicant is aware of two separate (although related) management schemes that have been or are being undertaken to improve Spring Beck (also known as Weybourne Beck):
		collaboration with EA and Norfolk Rivers Trust, carried out at Spring Beck. Please provide further details of the works carried out to date and any further intended program of works for Spring Beck. In addition, please outline the risks to the chalk-based stream that you believe could result from the Proposed Development.	<ol> <li>The Environment Agency undertook some floodplain enhancement and woody debris installation in the upper reaches of the beck to improve habitat and reduce flood risk, which was completed in 2019.</li> </ol>
			<ol> <li>The Norfolk Rivers Trust developed a restoration plan, but this has not been published and is not directly mentioned on their website</li> </ol>
			Given that the watercourse and floodplain would be crossed using HDD, the potential for direct impact would be avoided. Indirect impacts could still occur, but a site-specific hydrogeological risk assessment will be undertaken to inform the HDD design and impacts on the strata that directly support the river would be minimised on the basis of its outputs.
Q2.13.3.2	Applicant Environment Agency		The Applicant confirms that an additional entry in the <b>draft</b> <b>SoCG</b> [document reference 12.10] has been included to cover this specific question:
	transmission of s [REP1-036, Q1.	transmission of signal crayfish between watercourses [REP1-036, Q1.13.4.4] is agreed. Submit an updated SoCG which includes the current agreed position on this topic.	As identified in the <b>Outline Code of Construction Practice</b> ( <b>Revision C</b> ) [document reference 9.17, para. 149-152], all the watercourse crossings where signal crayfish have been detected are being undertaken using HDD and hence the risk of transferring signal crayfish or spores of crayfish plague to other watercourses have been avoided. The Applicant commits to



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			HDD beneath the watercourses that have been identified as suitable for White Clawed Crayfish and American Signal Crayfish [APP-222].
			It is the Applicant's position that as a result of this avoidance and the commitment in the <b>Outline Code of Construction Practice</b> ( <b>Revision C</b> ) [document reference 9.17] to prepare an Invasive Non-Native Species Management Plan [para. 153-154] that additional specific mitigation measures targeted at managing the risk of transferring signal crayfish or spores of crayfish plague to other watercourses are not required.
			General INNS avoidance and best practice measures are identified in the <b>Outline Code of Construction Practice</b> ( <b>Revision C</b> ) [document reference 9.17, para. 153]. These measures are secured via Requirement 19 (Code of construction practice) of the <b>draft DCO (Revision F)</b> [document reference 3.1].
			The <b>Outline Ecological Management Plan (Revision C)</b> [document reference 9.19] has been updated at D3 to include the following:
			All watercourses within the Order Limits would be re-appraised for their suitability for riparian mammals and white-clawed crayfish prior to commencement of construction. Any watercourses which are found to provide suitable habitat for these protected species, and which have not been previously surveyed (due to lack of survey access or because of a change in the suitability of the watercourse since the pre-application surveys), would be surveyed for the relevant protected species as part of the pre-construction surveys.
			Details of the pre-construction surveys can be found in Appendix 1 of the <b>Outline Ecological Management Plan (Revision C)</b> [document reference 9.19, Appendix 1], and are secured via



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			Requirement 13 (Ecological Management Plan) of the <b>draft</b> DCO (Revision F) [document reference 3.1].



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# Table 14 Applicant's responses to the Examining Authority's Second Written Questions: Q2.14

ID	Question addressed to	Question	Applicant Response
Q2.14.1 Eff	ect of the Proposed	Development on its own and In-combination with Other PI	ans and Projects
Q2.14.1.1	Applicant Natural England	AEol Conclusions The Applicant assessed a number of designated sites and features within their HRA screening and assessment processes [APP-059] on a project alone and in-combination basis. The Applicant concluded that the project, alone, would not have an AEol on any feature of any designated site. The Applicant concluded that for the project, in combination with other plans and projects, an AEol could be ruled out on all features of all designated sites except for sandwich tern and kittiwake. The ExA require confirmation that this is a common and shared position with NE. Applicant and NE submit a jointly produced table (see Annex A), listing all relevant sites and all features from the HRA process [APP-059] and submit it to the Examination either as a standalone document or as an appendix to the SoCG. Refer to the extract from the East Anglia One North Recommendation Report and provide similar colour coding.	<ul> <li>As requested, within Appendix B - Supporting documents to the Applicant's Responses to the Examining Authority's Second Written Questions [document reference 16.2.2] the Applicant has provided a Joint Natural England and Applicant Position on HRA Conclusions and Derogation Requirements. This document provides the Applicant's and Natural England's joint position in relation to conclusions of Adverse Effect on Integrity (AEoI) and the requirement for HRA derogation and compensation in relation to:</li> <li>Offshore Special Protection Areas (SPA) (including Ramsar Sites with migratory waterbird features at potential risk of collision on passage);</li> <li>Offshore Annex I habitats; and</li> <li>Onshore National Site Network Sites.</li> <li>Regarding marine mammal SACs, Natural England and the Applicant propose to provide the necessary detail at Deadline 5 or 6 since the Applicant has submitted at Deadline 3 a Marine Mammals Technical Note and Addendum [document reference 16.14] which provides updated assessments with respect to the Southern North Sea Special Area of Conservation (SAC) (harbour porpoise), The Wash and North Norfolk Coast SAC (grey seal) and the Humber Estuary SAC (harbour seal). Following review of this document Natural England anticipates being able to provide an updated position on conclusions.</li> </ul>
Q2.14.1.2	Natural England	Updated CRM Assessments Whilst a full review of the Applicant's CRM Updates [REP1- 056] is to be provided at D3, for the purpose of this question, please provide a short response confirming	The Applicant would like to clarify that guillemot and razorbill are primarily at risk of displacement effects, and are not therefore considered within the collision risk assessment presented in the CRM Updates note [REP1-056]. On that basis, the Applicant



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		whether or not NE still consider compensatory measures are required for guillemot and razorbill species.	<ul> <li>would not expect Natural England to review its position for these species in response to the CRM Update note.</li> <li>However, it is noted that the Joint Natural England and Applicant Position on HRA Conclusions and Derogation Requirements, produced in response to Q2.14.1.1 above, confirms the position for the Applicant and Natural England in respect of these species.</li> </ul>
Q2.14.1.3	Applicant	Maximum Design Scenarios Are any further design, alternatives or mitigation options under consideration or not yet fully explored to reduce potential Adverse Effects on Integrity of European sites? Are there any instances where uncertainties (for example, the absence of completed ground conditions or other engineering assessment work) mean that the Maximum Design Scenario may change going forward, with subsequent implications for the information supporting the HRA?	The Applicant has set out in the Habitats Regulations Derogation: Provision of Evidence [APP-063] an assessment of alternatives. These have all been fully explored and no further designs, alternatives or mitigation options are being considered. The Applicant has given careful consideration to the parameters which define the maximum design scenario to ensure a robust worst case has been used within the EIA and HRA. Whilst it remains the case that additional surveys and engineering assessments will be undertaken to inform the detailed design, the refinement of the engineering parameters will continue to be constrained by the maximum design scenario that has been assessed within the ES.
Q2.14.1.4	Natural England	<ul> <li>Project-led compensation</li> <li>The Applicant described at ISH1 [EV-011, EV-015] a process of retaining optionality with regards as to whether project-led compensation would be pursued in the future, or a contribution being made to the Marine Recovery Fund.</li> <li>a) Do you think this appropriate?</li> <li>b) What in your view are the implications for the HRA conclusions and derogations tests if the means of compensation remains undetermined at the close of the Examination?</li> </ul>	The Applicant has put forward a package of measures based on either project-led, collaborative or strategic delivery mechanisms which are secured within Schedule 17 of the <b>Draft DCO</b> (Revision F) [document reference 3.1] for Sandwich tern and kittiwake and the <b>Proposed Without Prejudice DCO Drafting</b> (Revision B) [REP2-011] for gannet, guillemot and razorbill. The Applicant maintains its position set out in Section 4.4 of the Habitats Regulations Assessment Derogation and Compensatory Measures Update (Revision B) [document reference 13.7] that the approach, which proposes the option to contribute to a Strategic Compensation Fund wholly or partly in place of proposed project-led measures or as an adaptive management measure, is an appropriate and, indeed, sensible



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			approach to take. It provides a mechanism that would allow the Applicant to respond to changing guidance and evidence. In doing so, it makes the overall package of measures more robust. However, recognising that some uncertainty remains with respect to the timings and scope of a suitable strategic mechanism, and in accordance with advice from Natural England, the Applicant is continuing to prioritise project-led measures, particularly with respect to Sandwich tern and kittiwake.
Q2.14.1.5	Applicant Natural England Royal Society for the Protection of Birds Norfolk Wildlife Trust Marine Management Organisation	<b>Timetable for Delivery</b> The Applicant's compensatory measures documents [APP-069, APP-072] set out the time periods (breeding seasons etc) for implementation of the compensatory measures before the Proposed Development becomes operational. Are these time periods sufficient in length and sufficiently secured in the dDCO?	The Applicant considers that the time periods secured within the <b>Draft DCO (Revision F)</b> [document reference 3.1] for Sandwich tern and kittiwake are appropriate and sufficiently secured. Details of the proposed timescales are set out in <b>Appendix 2</b> <b>Sandwich Tern Compensation Document</b> [APP-069] and <b>Appendix 3 Kittiwake Compensation Document</b> [APP-072]. In addition, the <b>Sandwich Tern – Quantification of</b> <b>Productivity Benefits Technical Note (Revision B)</b> [document reference 13.4] and <b>Gateshead Kittiwake Tower Modification</b> <b>- Quantification of Productivity Benefits Technical Note</b> ( <b>Revision B)</b> [document reference 13.1] provide further information on the anticipated productivity benefits to be afforded by the proposed measures and, as appropriate, consideration of implementation timelines. Further details are provided in the response to Q2.12.1.7.
			The <b>Proposed Without Prejudice DCO Drafting (Revision B)</b> [REP2-011] contains the wording to secure delivery of compensatory measures for gannet, guillemot and razorbill including the timescales for its implementation. Further details are provided in <b>Appendix 4 Gannet</b> , <b>Guillemot and Razorbill</b> <b>Compensation Document (Revision B)</b> [document reference 5.5.4].
Q2.14.1.6	Applicant	Timetable for Delivery	a) In this scenario, SEP would become operational in advance of DEP. That is, if the Projects are constructed sequentially,



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		<ul> <li>Taking the sequential scenario [APP-314]:</li> <li>a) If SEP is constructed first, knowing that DEP would follow thereafter, would SEP come into operation in advance of DEP or would both SEP and DEP become operational together once all construction is complete?</li> <li>b) Do the compensatory measures documents make it clear that the compensatory measures are to be implemented before operation of any part of the Proposed Development to take account of these sequential possibilities?</li> <li>c) Typically, how long after construction does an OWF become operational (i.e. within a day, a week, a month etc).</li> <li>d) d) Is there a clear notification trigger in the dDCO, the DMLs or the compensatory measures documents whereby the Applicant would need to give notice of its intention to begin operation and the date when operation is intended (i.e. advance notification so it can be assured compensation starts implementation at the relevant period)?</li> </ul>	<ul> <li>the first project would <u>not</u> delay the start of its operation until the second project was also ready to enter the operation phase. Further details are provided in the Scenarios Statement [APP-314].</li> <li>b) As stated in Section 6.4.6.1 of Appendix 2 Sandwich Tern Compensation Document [APP-069] "the pool will be installed as soon as possible after the proposed compensation has been agreed through the Sandwich Tern CIMP and prior to the operation of any turbine forming part of the authorised development (see details in Section 6.4.8). This will allow Sandwich terns time to find the structure and subsequently build up numbers." This is reflected in Draft DCO (Revision F) [document reference 3.1] Schedule 17 Part 1, paragraph 6: "The undertaker must implement the measures set out in the Sandwich Tern CIMP approved by the Secretary of State in consultation with the relevant statutory nature conservation body and the relevant planning authority. In particular, no operation of any turbine forming part of the authorised development [APP-072], "the Applicant intends to implement the measures as soon as possible, but at least three breeding seasons prior to first power". This is reflected in Draft DCO (Revision F) [document [APP-072], "the Applicant intends to implement the measures set out in the Sandwich Tern CIMP have been implemented."</li> </ul>



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			turbine forming part of the authorised development may begin until three full breeding seasons following the implementation of the measures set out in the Kittiwake CIMP have elapsed."
			As stated in Section 9.2.7 of Appendix 4 Gannet, Guillemot and Razorbill Compensation Document (Revision B) [document reference 5.5.4] with respect to the Applicant's bycatch reduction proposals, "Quayle (2015) showed that implementation of bycatch reduction measures at Filey Bay were effective immediately in reducing bycatch there. Therefore, measures should be introduced as soon as required for compensation, and preferably as soon as possible. Because measures will reduce bycatch of adult guillemots and razorbills (as well as other age classes that are present) the compensation will account one to one for losses to OWF impacts, with no delay however the Applicant agrees with Natural England [RR-063] that the compensation should be targeted at the SPA adult birds and that immatures are excluded from the calculations of compensation."
			The <b>Proposed Without Prejudice DCO Drafting (Revision</b> <b>B)</b> [REP2-011] includes the following wording to secure the implementation of the Applicant's proposed bycatch reduction measures: "6. The undertaker must enter into contract(s) with fishers for the provision and use of bycatch reduction technology as set out in the Gannet, Guillemot and Razorbill CIMP approved by the Secretary of State."
			c) The process whereby an OWF becomes operational is iterative during the construction period; it is usually the case that those turbines installed first in the construction programme will undergo testing and commissioning and will proceed to operation while other turbines are still being installed. Therefore, there is typically no hiatus between the



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			completion of construction (where <i>all</i> turbines have been installed) and the commencement of operation – individual turbines will proceed to operation as soon as practicable, not simultaneously once construction of all turbines has been completed.
			<ul> <li>d) Requirement 30 (Schedule 2 of the Draft Development Consent Order (Revision F) (document reference 3.1)) requires that (1) SEL must notify the relevant planning authority and the MMO upon first generation of power from each phase of SEP no later than seven days after the occurrence of this event and (2) DEL must notify the relevant planning authority and the MMO upon first generation of power from each phase of the DEP no later than seven days after the occurrence of this event. Through this, the planning authority and the MMO, as the authorities responsible for enforcing the requirements to the DCO and conditions to the deemed marine licences will be informed of when operation will commence and can check all conditions have been complied with.</li> </ul>
			Condition 22, Schedule 10 and Schedule 11 and condition 21, Schedule 12 and Schedule 13 also require the relevant undertaker to submit a 'close out report' to the MMO and the relevant statutory nature conservation body ("SNCB") within three months of the date of completion of construction. The MMO and the SNCB will know from that point that operation is likely to commence imminently, if it has not already done so.
			The legal framework for the delivery of the compensation measures is set out in Schedule 17 of the draft DCO. This contains restrictions that prevent the operation of any turbine forming part of the authorised development until the measures set out in the relevant compensation, implementation and monitoring plan ("CIMP") have been



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			implemented, or a certain time period has passed after implementation of the measures in the CIMP (paragraphs 6 and 15 of Schedule 17). When the measures set out within the relevant CIMP have been completed, the undertaker is required to notify the Secretary of State (paragraphs 7 and 16 of Schedule 17).
			The outline CIMPs [APP-070 and APP-073] include a section for an implementation and delivery programme. This will be developed post-consent with the compensation steering groups to be established (as provided for in paragraphs 2 and 3 and in paragraphs 11 and 12 of Schedule 17), which will include Natural England as SNCB, amongst others.
			If the undertaker failed to comply with the requirements of the DCO it could trigger the enforcement provisions in Part 8 of the Planning Act 2008. This includes potential for a breach to be an offence.
			The Applicant considers that these provisions together provide a comprehensive and clear framework to ensure that the compensatory measures would be delivered prior to operation commencing. If the relevant undertaker did not do so, it would very quickly be apparent to interested parties (e.g. Natural England), who could report the matter to the MMO, the Secretary of State or otherwise. Enforcement of conditions through the planning system (including the Planning Act 2008) are, in general, reactive to reports of non-compliance. The Applicant considers that the DCO provides a comprehensive framework to ensure that interested parties and regulators receive appropriate notification of the start of operations and can therefore monitor to ensure that this does not take place before the compensatory measures have been implemented.



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			The Applicant therefore respectfully submits that the Examining Authority and the Secretary of State can be satisfied that the provisions in the DCO are sufficient to ensure that compensation is delivered before the development commences.
Q2.14.1.7	Applicant	Derogation Funding Given the changes, updates and disagreements with regard to the overall package compensatory measures (including the without prejudice compensation), make any consequential changes to the derogation funding statement [APP-076].	Whilst the Applicant recognises there have been updates to the overall package of compensatory measures, this has not resulted in any consequential changes to the anticipated costs and therefore no changes to the Derogation Funding Statement are proposed at this stage. Should the ExA seek further information on the wider project funding, this can be found in the response to Q2.8.1.1.
Q2.14.1.8	Applicant	Marine and Coastal Processes NE states [REP2-064, Point 25]: "For the reasons stated in our detailed comments, at present we are unable to agree with the likely significant effect (LSE) conclusions for Inner Dowsing, Race Bank and North Ridge SAC and The Wash and North Norfolk SAC. We advise that further evidence be provided to support the LSE conclusions." Can the Applicant provide the necessary evidence or provide reasoned argument as to why further evidence is unnecessary	Regarding the Inner Dowsing, Race Bank and North Ridge SAC and The Wash and North Norfolk Coast SAC upon which there is potential for indirect effects, these are assessed within the <b>RIAA</b> [APP-059]. The assessments conclude that there would be no AEol. The Applicant has sought to address Natural England's comments on marine processes and has updated the <b>Marine</b> <b>Processes Technical Note (Revision B)</b> [document reference 13.5] at Deadline 3 after receiving comments from Natural England at Deadline 2 [REP2-062] on the first iteration of that document. The Applicant notes that within Appendix B.2 in <b>Appendix B</b> - <b>Supporting documents to the Applicant's Responses to the</b> <b>Examining Authority's Second Written Questions</b> [document reference 16.2.2], Natural England and the Applicant are agreed that there would be no AEoI on the benthic habitat features of the Inner Dowsing, Race Bank and North Ridge SAC and The Wash and North Norfolk Coast SAC.
Q2.14.1.9	Applicant	Quantum for Delivery	The Applicant has set out the implications of the project development scenarios on the compensation proposals in



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		If only one project were to proceed (SEP or DEP), would the compensation secured in the compensation documents still be provided in full as per the agreed documents or	Section 1.3 of Strategic and Collaborative Approaches to Compensation and Measures of Equivalent Environmental Benefit [APP-084]. Paragraphs 17 and 18 state that:
		would the Applicant be seeking to proportionately reduce the amount of compensation to be delivered to reflect the statistical position? If the latter, where and how is this secured in the dDCO or certified documents?	"Where both projects are delivered in the sequential scenario, the overall final package of compensation to be delivered will be the same as in the concurrent scenario. The Applicant therefore considers it practical to deliver all of the compensation at the same time under either the sequential or concurrent scenario.
			In the sequential scenario this may mean that one project delivers compensation earlier than may have otherwise been required if it were a standalone project, which could be at risk e.g. prior to Final Investment Decision (FID). The Applicant considers however that the second project would have the benefit of the compensation being in place slightly longer than the first project thereby reducing pressure on the onward project programme.
			Should SEP or DEP be delivered in isolation then it would be necessary to deliver only the scale of measures required to achieve adequate compensation in proportion to the impacts predicted from the given project (SEP or DEP). Where this is not practical because the measure is not ecologically scalable, the Applicant is proposing to deliver the compensation measure to its full extent. Where compensation is scalable, or partially scalable, compensation would be delivered on a scale appropriate to the nature and extent of the predicted impact from SEP, or from DEP. Measures considered on a strategic or collaborative basis are in the majority of cases, expected to be scalable."
			The detail of how the compensatory measures will be delivered is secured in the dDCO through the requirement to submit to the Secretary of State (SoS) the relevant compensation implementation and monitoring plan (CIMP), which must be approved by the SoS in consultation with the local planning



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			authority, the MMO and the relevant statutory nature conservation body (for example Schedule 17, Part 1, paragraph 3 of <b>Draft Development Consent Order (Revision F)</b> [document reference 3.1]).
Q2.14.1.10	Applicant	Compensatory Measures	a) and b)
		<ul> <li>The Applicant, at ISH1 [EV-011, EV-015] confirmed that artificial nesting sites for kittiwakes would be provided in one of three options:</li> <li>At Gateshead;</li> <li>At Lowestoft; or</li> <li>By 'buying in' to another DCOs compensatory measures</li> </ul>	Gateshead Modifications to the existing kittiwake tower at Gateshead represents the Applicant's preferred option for delivering nest site improvements to enhance breeding success. An update on the positive progress being made thus far is provided in the Habitats Regulations Assessment Derogation and Compensatory Measures Update (Revision B) [document reference 13.7] submitted at Deadline 3.
		<ul> <li>The ExA request that in each case mentioned above, the Applicant to set out: <ul> <li>a) what other consents and licences are required to ensure effective and timely delivery of the compensation and whether or not these would be seen as impediments;</li> <li>b) evidence that the proposed site can be acquired or leased;</li> <li>c) details of the ANS design and any adaptations to support kittiwakes and auks, if appropriate;</li> <li>d) an implementation timetable and when the measures would achieve their objectives in relation to the commencement of operation of the wind farm;</li> </ul> </li> </ul>	The Applicant is intending to submit a pre-application consultation request in May/June 2023 ahead of an anticipated application for planning permission in Q3 2023 to Gateshead Council (as planning authority). The Applicant notes that Gateshead Council are also the owners of the kittiwake tower and the land on which it is located. The Applicant does not consider there to be any impediments to the necessary consents being obtained and notes the letter of support provided by Gateshead Council in Annex 1 of the Habitats Regulations Assessment Derogation and Compensatory Measures Update (Revision B) [document reference 13.7]. In addition, RWE have had their planning application for a kittiwake tower adjacent to Saltmeadows approved and have completed construction of that tower ahead of the 2023 breeding season.
		<ul> <li>e) would, or could, the Applicant exercise its CA powers if the necessary site is not secured prior to the close of the Examination;</li> </ul>	The Applicant held a meeting with Gateshead Council (as landowner) on 5 <sup>th</sup> April to discuss further the terms of an option/lease agreement and positive progress continues to be made towards finalising such an agreement. Based on the



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		<ul> <li>f) would, or could, the Applicant exercise its CA powers if necessary, in respect of sandwich tern compensation at Loch Ryan; and</li> </ul>	discussions held to date and the letter of support received from the council, the Applicant sees no barriers to the leasing of the site.
		g) If 'buying in' was the final option on the table, how can the ExA have confidence that there would be a tangible and measurable compensation benefit arising?	Lowestoft As described within Table 2.1.1 of <b>The Applicant's Comments</b> <b>on Relevant Representations</b> [REP1-033], the Applicant recognises that there is strong opposition from East Suffolk Council to project-led delivery of nest site improvements to enhance kittiwake breeding success within Lowestoft town as it would be contrary to their strategic position. Whilst it remains the Applicant's view that its proposal for Lowestoft has strong ecological merit and is technically feasible, in light of East Suffolk Council's view, and recognising the positive progress being made with respect to securing the option at Gateshead, the decision was taken in December 2022 to not actively progress the option at Lowestoft further at this stage.
			Nonetheless, were this option to be required in future, <b>Appendix 3 Kittiwake Compensation Document</b> [APP-072] notes that several suitable sites for enhancing kittiwake nesting opportunities exist on buildings in Lowestoft and the selection of the best site(s) to develop would depend on discussions with owners of the relevant buildings and the local authorities. If it is necessary to obtain planning consent for the nest site improvements, the application/s would be submitted to the appropriate planning authority. The Applicant's expectation is that the nest site improvements in Lowestoft would most likely be possible as permitted development (depending on the site or building in question and so would require to be confirmed with East Suffolk Council). If the Lowestoft option was to be progressed, the Applicant would seek to secure rights to install the nesting structures at Lowestoft through agreement with the owners of suitable buildings. The Applicant would progress discussions with those parties once a shortlist of preferred



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			locations had been identified by the Applicant, in consultation with the Lowestoft Kittiwake Partnership and East Suffolk Council.
			'Buying in' to another DCO's Compensatory Measures
			Schedule 17 of the <b>Draft DCO (Revision F)</b> [document reference 3.1], includes provision for the option to be exercised by the undertaker, following consent in writing of the Secretary of State, to pay a financial contribution towards the establishment of compensation measures by another party wholly or partly in substitution for project-specific compensation measures. Discussions are ongoing with other offshore wind developers regarding collaborative compensation opportunities. Further detail on collaborative measures is provided in the <b>Strategic and Collaborative Approaches to Compensation and Measures of Equivalent Environmental Benefit</b> [APP-084] and <b>HRA Derogation and Compensatory</b> <b>Measures Update (Revision B)</b> [document reference 13.7].
			c) See section 4.3.2.1.3 of the HRA Derogation and Compensatory Measures Update (Revision B) [document reference 13.7] for a description of the outline design details of the Applicant's proposals at Gateshead. It should be noted that the Applicant's proposals at Gateshead are specifically designed to enhance the breeding numbers and success of kittiwake and would therefore not attract or be suitable for auk species.
			<ul> <li>d) See section 4.3.2.1.5 of the HRA Derogation and Compensatory Measures Update (Revision B) [document reference 13.7] which provides the current indicative delivery programme for the modification of the Gateshead kittiwake tower.</li> </ul>
			e) SEL and DEL, as the undertakers in the draft DCO, hold statutory powers to acquire land (and rights in land)



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			compulsorily under the Planning Act 2008 and under the Electricity Act 1989. The Applicant does not intend to use powers under the Planning Act 2008 to acquire land necessary to deliver compensation measures. The Applicant's strong preference is to obtain all necessary land and/or rights through voluntary agreement with landowners, and efforts towards this are being progressed as set out in <b>HRA Derogation and Compensatory Measures Update</b> (Revision B) [document reference 13.7]. However, should the Applicant be unable to secure the necessary land and/or rights voluntarily, then as a last resort it would consider the use of its compulsory powers under the Electricity Act 1989 (section 10(1) and Schedule 3) to acquire this.
			The Applicant has commissioned a written legal opinion from a specialist KC to explain the availability of compulsory powers under the Electricity Act 1989, if required, to deliver compensatory measures at Gateshead and Loch Ryan, which will be submitted at Deadline 4.
			f) The powers afforded to SEL and DEL under the Electricity Act 1989, as referred to in point (e) above, also apply in Scotland. If the Applicant was unable to reach a voluntary agreement, then it would consider the use of its compulsory powers under the Electricity Act 1989 (section 10(1) and Schedule 3) to acquire the land (or rights in land) necessary to deliver the compensation measures.
			As set out above, the Applicant's strong preference is to acquire the land/rights voluntarily and it is continuing to engage with the relevant parties with a view to reaching an agreement.
			The Applicant has commissioned a written legal opinion from a specialist KC to explain the availability of compulsory powers under the Electricity Act 1989, if required, to deliver



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			compensatory measures at Gateshead and Loch Ryan, which will be submitted at Deadline 4.
			g) As noted above in response (a) and (b), the provisions in Schedule 17 of the Draft DCO (Revision F) [document reference 3.1] require the consent in writing of the Secretary of State before the Applicant would be able to make a financial contribution towards the establishment of compensation measures by another party wholly or partly in substitution for project-specific measures. This could also be used for adaptive management purposes. The Secretary of State would be unlikely to consent to this at the relevant time if it was not going to produce a tangible and measurable compensation benefit. The Applicant considers that including provisions within the Draft DCO (Revision F) [document reference 3.1] allowing it to contribute to collaborative measures makes the overall package of measures more robust.
Q2.14.1.11	Applicant Natural England	Seabird Assemblage and Highly Pathogenic Avian Influenza With regards to HPAI, does this effect the robustness of the Applicant's assessment and conclusions, particularly with regard to whether the bird species can continue to be considered in favourable conservation status [REP2-036]?	The Applicant is discussing this matter directly with Natural England. Natural England has recently provided the Applicant with 2022 data relating to known HPAI mortality from English colonies, and has advised that the Applicant should provide a summary report to review how colonies relevant to SEP and DEP have been affected. Natural England has asked that this information is used to contextualise the vulnerability of these populations to additional impacts. Natural England has also confirmed that it is <u>not</u> seeking any revision to the quantification of impacts presented for SEP and DEP in light of HPAI.
			The Applicant confirms that it will provide the HPAI review report by Deadline 5. The Applicant will include data provided by Natural England in the report, and will also seek comparable data from relevant Scottish colonies. Assuming that such data



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			can be obtained, this will also be included within the review report.
			See also response to Q2.14.1.12 below.
Q2.14.1.12	Natural England Royal Society for the Protection of Birds	<b>Seabird Assemblage, HPAI and Applicant Assertions</b> During ISH5 [EV-076] [EV-080], the Applicant stated that if HPAI had reduced the numbers of birds within the assemblage, there would logically be less birds to collide with the turbines and, as such, the collision risk would be	<ul> <li>This position is set out by Natural England in its preliminary advice regarding HPAI, set out in Appendix B2 of its Relevant Representations [RR063]. This states:</li> <li>'6. Broadly, we expect any changes in abundance at colonies to be reflected proportionately in the at sea data. That is, it is</li> </ul>
		lower, and the effects of any collision would be lesser upon the population. It was asserted NE agreed with that position. Do NE and the RSPB concur with the Applicant's view?	reasonable to assume distribution patterns will remain broadly similar, but densities to change accordingly.
			7. This assumption means that the scale of impact is likely to remain in proportion to the size of the colony. For instance, if a population were reduced by 10% then we would expect 10% fewer collisions. 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.'.
Q2.14.1.13	Natural England	Seabird Assemblage Methodology	No response required.
	Royal Society for the Protection of Birds	Has the Applicant demonstrated, to your satisfaction, that the diversity and abundance elements of the FFC SPA seabird assemblage would remain intact? Explain with reasons.	
Q2.14.1.14	Applicant	Loch Ryan and the Scottish Authorities	The Applicant held a meeting with Dumfries and Galloway
	Natural EnglandHas any meaningful consultation with the ScottishRSPBAuthorities and Nature Scot taken place with regards the compensation proposals for Loch Ryan [REP1-036]?	Council and NatureScot on 16 November 2022 to discuss the Applicant's compensation proposals for Sandwich tern at Loch Ryan, including:	
		Explain with reasons.	<ul> <li>key constraints with respect to different sites within the Applicant's proposed area of search (AoS); and</li> </ul>



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			<ul> <li>the Applicant's further programme of work to progress towards securing the necessary permissions, licences and consents.</li> <li>In addition, consultation with Marine Scotland and Crown Estate Scotland has been undertaken. See Appendix A of the HRA Derogation and Compensatory Measures Update (Revision B) [document reference 13.7] for a detailed record of post- application consultation.</li> </ul>
Q2.14.1.15	Natural England	Need for compensation on Guillemot The Applicant states [REP1-057, Page 13,]: "Natural England agrees with the conclusion that there is no connectivity between breeding adult guillemot population of the FFC SPA and the Projects. Therefore, no update to the assessment for the qualifying feature is required. Natural England apologies for this error." Does this change NE's position on whether compensation is required for the guillemot species?	The connectivity between SEP and DEP and FFC SPA is relevant to the <u>project alone</u> assessment for guillemot, as presented in the <b>RIAA</b> [APP-059]. As per Natural England's comment, this value has not changed since publication of the <b>RIAA</b> . The in-combination assessment has been updated in the <b>Apportioning and Habitats Regulations Assessment</b> <b>Updates Technical Note (Revision B)</b> [REP2-036], to include data from projects not available at publication of the RIAA. SEP and DEP's contribution to the in-combination total is, however, unchanged, and only 1.9% of the total predicted mortality for FFC SPA (in comparison, Hornsea Project Four is predicted to contribute 28%). It remains the Applicant's position that, for the in-combination assessment, there would be no adverse effect on integrity in respect of the FFC SPA guillemot population. This is on the basis of PVA outputs presented in the <b>RIAA</b> , which indicate that a slowing of growth rate, rather than a population decline, would be likely, and that this would not affect the Conservation Objectives of FFC SPA.
Q2.14.1.16	Applicant	Looming eye buoys If the ExA understand correctly, the idea behind the looming eye buoys is to scare and discourage auk species from certain areas, thus reducing the conflict these species would have with fishermen/ netting etc. If proved to be an effective measure, why would the placing of these buoys	The Applicant clarifies that the key risk to auk species (i.e. guillemot and razorbill, for which the without prejudice compensation is proposed) arises from displacement effects. Guillemot and razorbill have a very low risk of collision impacts from wind turbines, and as such no detailed assessment for this impact pathway is presented for these species, either within the



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		around the wind farm arrays not be a means of reducing collision impacts?	<b>EIA</b> [APP-097] or the <b>RIAA</b> [APP-059]. This is in accordance with standard practice, and the Applicant is not aware of any disagreement with Natural England or RSPB on this position.
			On the assumption that guillemot and razorbill are at risk of displacement from the SEP and DEP wind farm sites during the operation and maintenance phase of the projects, it is likely that the placement of looming eye buoys around the arrays would increase the displacement effect, and consequently exacerbate any adverse effect that might occur. In other words, it is considered that this would have the opposite effect to that suggested by the ExA.
			The Applicant is not aware of any evidence that looming eye buoys could prove effective in respect of species considered vulnerable to collision risk (such as kittiwake), but even if this were the case, such an approach would be unlikely to be acceptable, given the potential effect on displacement-sensitive species.
			Evidence on the effectiveness of bycatch reduction techniques in southwest England is provided within Annex 4B Auk Bycatch Reduction Feasibility Statement [document reference 5.5.4.3].
Q2.14.1.17	Applicant	<b>Bycatch reduction</b> Confirm that the proposed bycatch reduction measure is in addition to any bycatch reduction measure required by UK policy or legislation [APP-067]?	The UK government recognises the need to minimise and, where possible, eliminate bycatch of sensitive marine species, as part of a wider effort to ensure the sustainability of fisheries, through the Fisheries Act 2020 and the Joint Fisheries Statement (JFS). As a part of this, reducing bycatch is recognised as complex and likely to require solutions that are tailored to different needs in different fisheries. This requires all stakeholders, including the fishing industry, non-governmental organisations, and national and international experts, to collaboratively develop and implement solutions that are ambitious, effective and practical.



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			As such, the Applicant's understanding is that the proposed bycatch reduction measures would be in addition to, and would complement, any bycatch reduction measure/s required by UK policy or legislation.
Q2.14.1.18	Applicant	Kittiwake Tower details	The Applicant has updated the Gateshead Kittiwake Tower
		Provide the information requested by NE to substantiate the efficacy of the kittiwake tower [REP2-061].	Modification - Quantification of Productivity Benefits Technical Note (Revision B) [document reference 13.1] to seek to address Natural England's comments in REP2-061.
Q2.14.1.19	Applicant	Additionality and Differentially	It is the Applicant's understanding, based on correspondence
	Natural England	It is reported that, despite current management and	with the National Trust's Farne Islands ranger in August 2022 that nest boxes and/or tern shelters (unable to confirm which)
	National Trust	intervention measures, the sandwich tern population at the Farne Islands is in steep decline. The Applicant's compensation proposals include the provision of nest boxes and shelters. Are these measures already being used on the Farne Islands and, if so, would the Applicant's proposal just be perpetuating an already failing measure?	have been installed (in 2022 at least) at the Farne Islands. These had proved successful by corresponding with an uptick in Sandwich tern numbers for the first time in many years however it is the Applicant's understanding that HPAI badly affected the Sandwich tern colony (and other seabirds), at the Farnes in 2022 and so any potential gains provided by the nest boxes / tern shelters would have been offset by the losses to HPAI.
			The Applicant contacted the National Trust to request confirmation on e.g. when nest boxes / tern shelters were first installed, how many were installed, where they were installed and any recorded improvements in productivity however no response was received within the short time between the request and Deadline 3.
			See the <b>HRA Derogation and Compensatory Measures</b> <b>Update (Revision B)</b> [document reference 13.7] for an update on the Applicant's position with regard to implementation of measures to improve breeding success at the Farne Islands SPA.
Q2.14.1.20	Natural England	Marine Mammals	No response required.



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		Confirm whether, in light of the MMMP and the SIP, an AEoI can be ruled out for all marine mammal species assessed in the HRA [APP-059].	
Q2.14.1.21	Natural England	Onshore Habitats Regulations Assessment	a) No response required
		<ul> <li>With regards to the onshore elements of the Applicant's HRA:</li> <li>a) Are you content with the assessment, methodology and conclusions?</li> <li>b) Are you content that all relevant European sites and all relevant features of those sites have been screened and considered by the Applicant?</li> <li>c) Are you content with the conclusions that an AEol can be ruled out in respect of all affected onshore environmental assets?</li> <li>d) Are there any unresolved matters that require urgent attention during the Examination in order to secure or otherwise reassure that AEol would not occur?</li> </ul>	<ul> <li>b) See response to Q2.14.1.1, Appendix B - Supporting documents to the Applicant's Responses to the Examining Authority's Second Written Questions [document reference 16.2.2] includes a joint Natural England and Applicant position table on HRA conclusions for onshore National Network Sites.</li> <li>c) As above for b)</li> <li>d) As above for b)</li> </ul>
Q2.14.1.22	Applicant	Pink Footed Geese	See response to Q2.14.1.1, Appendix B - Supporting
	Natural England	The ExA note the best practice note on PFG [REP1-137] and the Applicant's commitment to develop an approach to PFG with NE [REP2-017]. For the HRA, can an AEoI be ruled out at this stage?	documents to the Applicant's Responses to the Examining Authority's Second Written Questions [document reference 16.2.2] includes a joint Natural England and Applicant position table on HRA conclusions for onshore National Network Sites.
		· ····································	It is the Applicant's position that for the HRA, an AEoI can be ruled out at this stage for PFG.
			The Applicant will continue to develop an approach with Natural England for PFG and both parties are currently in dialogue regarding the details of this.



IDQuestion<br/>addressed toQuestionApplicant ResponseQ2.14.1.23Natural EnglandPink-footed Geese mitigation<br/>You highlight [REP2-064, point A25] the need for a<br/>condition for strategic mitigation to be secured. Provide<br/>further details.The Applicant will continue to develop an approach with Natural<br/>England for PFG and both parties are currently in dialogue<br/>regarding the details of this.

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## Table 15 Applicant's responses to the Examining Authority's Second Written Questions: Q2.15

ID	Question addressed to	Question	Applicant Response	
Q2.15. Hist	Q2.15. Historic Environment and Cultural Heritage			
Offshore M	atters			
Q2.15.1 Ad	equacy of Baseline	Surveys and Environmental Information		
Q2.15.1.1	Applicant	AEZs within the Offshore Temporary Works Area	The following conditions require that an archaeological written	
		In responding to HE comments on this topic [REP1-113], provide signposting to relevant sections of the dDCO and dDML which secure the mitigation of potential risks to archaeological remains sought by HE.	scheme of investigation (WSI) (offshore) must be submitted to and approved in writing by the MMO prior to the commencement of licensed activities (or any phase of those activities), including any pre-commencement surveys and archaeological investigations, and pre-commencement material operations which involve intrusive seabed works:	
			<ul> <li>Schedule 10, (Marine Licence 1: Sheringham Shoal Extension Project Offshore Generation) condition 13(1)(e) and condition 13(2) of the draft DCO (Revision F) [document reference 3.1].</li> </ul>	
			<ul> <li>Schedule 11, (Marine Licence 2: Dudgeon Extension Project Offshore Generation) condition 13(1)(e) and condition 13(2) of the draft DCO (Revision F) [document reference 3.1].</li> </ul>	
			<ul> <li>Schedule 12, (Marine Licence 3: Sheringham Shoal Extension Project Offshore Transmission) condition 12(1)(f) and condition 12(2) of the draft DCO (Revision F) [document reference 3.1].</li> </ul>	
			<ul> <li>Schedule 13, (Marine Licence 4: Dudgeon Extension Project Offshore Transmission) condition 12(1)(f) and condition 12(2) of the draft DCO (Revision F) [document reference 3.1].</li> </ul>	
			This WSI will correspond to the full extent of the order limits (below MHWS), including the Offshore Temporary Works Area,	



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			and must accord with the <b>Outline WSI (Offshore)</b> [APP-298] which was submitted with the DCO application.
			The Outline WSI provides for 16 AEZs within the Offshore Temporary Works Area on the basis of desk-based information. The WSI also provides a commitment to the archaeological assessment of marine geophysical survey data which would inform the retention, amendment or removal of these AEZs, in consultation with Historic England, should the Offshore Temporary Works Area be required for construction.
Q2.15.1.2	Applicant Historic England	<ul> <li>Geotechnical Work <ul> <li>Applicant, provide further comment on the suitability for purpose of the geotechnical survey work carried out to date within both the array areas and cable corridor.</li> <li>HE, explain, with further reasoning, whether it is deemed that the works carried out to date by the Applicant are not sufficient.</li> </ul> </li> </ul>	As set out in the <b>Outline WSI</b> [APP-298], geoarchaeological assessment of geotechnical data acquired for the project forms part of the commitment by the project team to additional mitigation and investigations Geotechnical surveys undertaken to date have incorporated geoarchaeological objectives and a technical report detailing the results of the Stage 1 Geoarchaeological Assessment of Geotechnical Data was submitted as <b>Appendix 14.3</b> to the ES [APP-201]. Recommendations for further assessment, as set out in the Stage 1 report, are being taken forward as part of a wider programme of geotechnical work and geoarchaeological assessment. In this respect the geotechnical survey work carried out to date within both the array areas and cable corridor, and the associated geoarchaeological assessment work is considered suitable for purpose as an initial phase of this ongoing programme of mitigation and investigation. Geotechnical surveys are ongoing and, as required by the <b>Outline WSI (Offshore)</b> [APP-298], planning for these surveys is taking account of the advice of a specialist marine geoarchaeologist to ensure that geoarchaeological objectives are being taken into account. The Applicant's consultants have prepared a Geoarchaeological Method Statement to inform



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ID	Question addressed to	Question	Applicant Response
			ongoing consultation with Historic England which will be submitted at Deadline 4.
Q2.15.1.3	Historic England	Outline Written Scheme of Investigation – Offshore	No response required.
		Clarify whether the Applicant's outline WSI - Offshore [APP-298] provides a sufficient level of detail at this stage to address your concerns related to the extent of geophysical data presented by the Applicant to date [RR- 041].	
Q2.15.1.4	Applicant	Statement of Common Ground	The Applicant has reached out to HE on multiple occasions
		Applicant, ensure that your SoCG with HE covers both offshore and onshore matters and is submitted at D3, or provide detailed reasoning why a SoCG cannot be submitted.	without any response. The Applicant will continue to try to engage via email and telephone and will progress a SoCG which covers both offshore and onshore matters once HE respond.
Q2.15.1.5	Historic England	Unexploded Ordnance	No response required.
	ММО	Do you accept that it is unnecessary for the Applicant to adopt the revised/ additional wording proposed by HE in its WR [REP1-112, Paragraphs 17.4, 17.5 and 17.8].	
		See related questions in the sections on Habitats and Ecology Offshore and the section on Benthic ecology, Intertidal, Subtidal and Coastal effects.	See response to Q2.12.2.7 and Q2.3.1.6.
Onshore Ma	atters		•
Q2.15.2 Add	equacy of baseline s	surveys and information	
Q2.15.2.1	Historic England	Outline WSI – Onshore	No response required.
		In responding to the Applicant's responses to your RR [RR- 041] and WR [REP1-112], please clarify whether the Applicant's outline WSI - Onshore [APP-308] provides a sufficient level of detail at this stage to address your concerns related to the extent and overall suitability of	



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ID	Question addressed to	Question	Applicant Response	
		geophysical survey data presented by the Applicant to date [RR-041].		
Q2.15.3 Effe	2.15.3 Effects on Designated and Non-designated Heritage Assets			
Q2.15.3.1	National Trust	Archaeological Features at Sheringham Park and Weybourne Woods	No response required.	
		It is unclear to the ExA whether NT believes further investigative work could be required in this location during the Examination or whether additional mitigation might be necessary after the close of the Examination. Please clarify, giving details of additional information required if relevant.		



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## Table 16 Applicant's responses to the Examining Authority's Second Written Questions: Q2.16

ID	Question addressed to	Question	Applicant Response			
Q2.16. Land	Q2.16. Land Use					
Q2.16.1 Effect	t on Agricultural La	nd and Businesses and Recreational Assets				
Q2.16.1.1	Applicant National Farmers Union	Outline Management Plan for Agricultural Matters           Further to discussions at ISH3 [EV-036] [EV-041], both parties provide a joint update on discussions about whether there is a need for an outline management plan for agricultural matters to be linked to the OCoCP. Include details of any remaining disagreements.	<ul> <li>The Applicant and NFU met on the 2<sup>nd</sup> March to discuss a draft Statement of Common Ground. Matters discussed included soil handling, reinstatement and aftercare, land/field drainage, irrigation and water supply and the roles and responsibilities of the Agricultural Liaison Officer.</li> <li>The Applicant is in discussions with the NFU and Land Interest Group (LIG) regarding providing some assurance on the above 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. 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.</li> <li>The Outline Code of Construction Practice (Revision B) [REP1-023] is to be updated at Deadline 3 (Revision C) to include further 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.</li> <li>The Outline Code of Construction Practice (Revision C) [document reference 9.17] will not include specific detail on the following aspects given its outline nature:</li> <li>soil handling, reinstatement and aftercare;</li> </ul>			
			land/field drainage; and			
			irrigation and water supply.			



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ID	Question addressed to	Question	Applicant Response
			With these updates incorporated, it is considered by the Applicant that the <b>Outline Code of Construction Practice</b> ( <b>Revision C</b> ) [document reference 9.17] is sufficient.
Q2.16.1.2	Applicant	Agri-environmental Schemes The Applicant set out at ISH4 [EV-058] [EV-062] that it was willing to alter the wording of the dDCO to give 28 days notice where surveys or the construction works will impact on Agri-environment schemes. Provide a revised dDCO that includes this change.	Please see Written Summary of the Applicant's Oral Submissions at Issue Specific Hearing 4 [document 16.9] at agenda item 5.i where the Applicant notes that the question relating to agri-environmental schemes was directed to the National Farmers Union. The Applicant did not confirm in relation to this agenda item that a change would be made to the dDCO and it is not the Applicant's position that a change is required to the notice period in Article 16. The Applicant did however indicate at Issue Specific Hearing 4 that it was considering amending the notice period in relation to Article 26 (temporary possession) and the Applicant subsequently confirmed it would make that change to the notice periods. Please see Written Summary of the Applicant's Oral Submissions at Compulsory Acquisition Hearing 1 [document 16.12], agenda item 16.v.
Q2.16.1.3	Applicant	Outline Landscape Management Plan The Applicant's response [REP1-036, Q1.16.1.6] appears to accept that monitoring requirements for land use, agriculture and recreation are not set out explicitly in the OLMP. On this basis, provide a revised OLMP to include such requirements.	<ul> <li>The Applicant acknowledges that it previously stated within ES</li> <li>Chapter 19 Land Use, Agriculture and Recreation</li> <li>(Revision B) [REP2-022] that the monitoring requirements for land use, agriculture and recreation are to be set out in the</li> <li>Outline Landscape Management Plan [APP-303]. However, on reflection, the Applicant does not consider this to be the most suitable document to capture these requirements and instead refers the ExA to the Outline Code of Construction</li> <li>Practice (Revision C) [document number 9.17] where the monitoring requirements for Agriculture, Land Use and Recreation are outlined, specifically: <ul> <li>Section 6 Soil Management</li> <li>Section 11 Public Rights of Way</li> </ul> </li> </ul>



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ID	Question addressed to	Question	Applicant Response
			The <b>Outline Code of Construction Practice (Revision C)</b> [document number 9.17] is secured by Requirement 19 (Code of Construction Practice) or the <b>draft DCO</b> [document reference 3.1].
			In addition, the management measures for Public Rights of Way (PRoWs) are set out in the <b>Outline PRoW Strategy</b> [APP-309]. The requirement for submission and approval of a Public Rights of Way Strategy is secured through Requirement 24 of the <b>draft DCO</b> [document reference 3.1].
Q2.16.1.4	National	Effect on Individual Businesses	Noted - No response required.
	Farmers Union	The Applicant is of the view [REP1-036 Q1.16.1.8,] that it is not possible to meaningfully estimate of the amount of land in each holding or therefore the amount of land affected. What is the view of the NFU on this matter?	
Q2.16.1.5	Applicant	Abbey Farm and Home Farm, Weybourne The operators of Abbey Farm and Home Farm, Weybourne [REP1-172] have raised concern that the Proposed Development would prevent access to the farm	As referred to in the <b>Applicants Comments on Relevant</b> <b>Representations</b> [REP1-033 and REP1-034], Table 5.26.2 ID 13, Page 523, the Applicant has responded on this point with the following:
		buildings and have a business critical impact on farming operations and both farm businesses. Applicant, explain how access would be maintained and how is this secured in the dDCO.	'ES <b>Chapter 19 Land Use, Agriculture and Recreation</b> [APP- 130, Section 19.7.1.2.5] details mitigation measures to ensure the Respondent's farming operations are not restricted and access is maintained to retained land for farming operations.'
			Access to the farm and field will be maintained for landowners at all times. Gates may need to be installed for security purposes and if so, they will be fitted with combination locks and the code shared with the landowner. Whilst activities are taking place within that section of the project, additional measures such as a Gateman/Security Post maybe required The fencing arrangements and access for residents will be agreed with the Local Planning Authority as part of the final



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			Code of Construction Practice under Requirement 19 (Code of Construction Practice) of the <b>draft DCO</b> (Revision F) [document reference 3.1] Further information is set out within paragraph 75 of the <b>Outline Code of Construction Practice</b> (Revision C) [document reference 9.17]. Early works access will be taken from ACEW03 Holgate Road existing access entrance. Having an early works access allows for the majority of the enabling construction works to be carried out from the field outwards, minimising the impact to the local road network. Upon taking access, if required a temporary access road will be laid using bogmats or temporary track mats. Other early works accesses include ACEW05 and ACEW06 Station Road existing access entrances, with all other access obtained through the haul road in the construction corridor. Access for main works construction will be taken from ACC05 Sheringham Road which is an existing access track at the entrance. Access for farming operations will be maintained as mentioned above. Section 2.4 of the <b>Outline Code of Construction Practice</b> (Revision C) [document reference 9.17] identifies a Stakeholder Communications Plan which will be developed as part of the final Code of Construction Practice. Paragraph 29 states:
			'The Applicant will ensure effective and open communication with local residents, businesses, the local community and the emergency services that may be affected by the construction works. Communications will be co-ordinated on site by a designated member of the construction management team. Community engagement will be maintained, keeping local residents informed of the type and timing of works involved, paying particular attention to activities which may occur in close proximity to receptors. Communication with landowners will be carried out keeping them up to date of land requirement



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			following refinements following detailed design. In addition, landowners will be notified of the chosen development scenario at the same time or shortly after the relevant planning authorities are notified under Requirement 9 of the draft DCO. A combination of communication channels, for example information boards and parish council meetings, will be employed to keep local residents informed".
			The Outline Code of Construction Practice (Revision C) [document number 9.17] is secured by Requirement 19 (Code of Construction Practice) of the draft DCO (Revision F) [document reference 3.1].
Q2.16.1.6	Applicant	Reinstatement Best Practice Mr Clive Hay-Smith, Mr Paul Middleton and Priory Holdings Limited [REP1-158, REP1-171, REP1-183] are concerned that NSIP EIA's routinely assume reinstatement best practice is followed but in practice they frequently are not and that due to compaction, disturbance of the soil structure, scarcity of top-soil at re-instatement and the proximity of buried infrastructure there is routinely a permanent reduction in soil fertility and productivity. Whilst noting the Applicant's reply to their WR's [REP2- 017] please provide more detail on how such impacts will be mitigated.	Section 6 Soil Management of the Outline Code of Construction Practice (Revision C) [document reference 9.17] contains control measures to mitigate the potential for soil compaction and erosion as well as changes to soil drainage during the construction process. Measures will be implemented on site to minimise any effects. A Soil Management Plan will be produced as part of the final Code of Construction Practice which will define the site specific mitigation measures and best practice techniques required to be followed by all to protect soil resources. Measures will include pre-construction soil surveys which will be undertaken by a suitable and competent soil specialist to identify the physical characteristics of the soils. The Outline Code of Construction Practice (Revision C) [document number 9.17] is secured by Requirement 19 (Code of Construction Practice) or the draft DCO (Revision F)
			[document reference 3.1]. The Applicant is in discussions with the NFU and Land Interest Group (LIG) regarding soil reinstatement by way of a Construction Practice Addendum. This will form part of the legally binding Option Agreements between the Applicant and



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			landowners. The Construction Practice Addendum was sent to the NFU and LIG on 6th October 2022. The information on soil handling and reinstatement will form part of the final Code of Construction Practice.
			The <b>Outline Code of Construction Practice (Revision B)</b> [REP1-023] is to be updated at Deadline 3 (Revision C) to include further 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. ALO responsibilities include undertaking pre-construction liaison with landowners, occupiers and their agents to minimise disruption, where possible, to existing farming regimes and timings of activities.
Q2.16.2 Soils	and Soil handling, G	round Conditions, Contamination and Minerals	
Q2.16.2.1	Applicant Local Authorities	<ul> <li>Soil Degradation Mitigation</li> <li>Further to discussions at ISH4 [EV-058] [EV-062] in relation to a mechanism for securing thermal resistance mitigation measures to prevent soil overheating where needed: <ul> <li>a) Applicant to consider where the best place is to secure such measures (such as dDCO, OPEMP and/or OCoCP).</li> <li>b) Applicant and LAs is there a need for such matters to be considered and signed off by the relevant LA?</li> </ul> </li> </ul>	<ul> <li>a) As per the Applicants response to WQ1.16.2.1 [REP1-036]:</li> <li>'The Applicant has carried out a desk based review of open source literature and there is evidence that heating of soils from radiant energy can damage soil quality. The heating of soils can have an impact on the biological, chemical and physical components of soil. Some of the factors that affect the amount of heat dissipated from the soil profile include moisture content and bulk density. However, there is a lack of evidence on how heat generated from high voltage (HV) electrical cables would affect soil quality or harm the yields of crops that may be grown on it'.</li> <li>Paragraph 287 of ES Chapter 4 Project Description [APP-090] outlines typical mitigation measures to reduce the effect of heating soils include encasing the ducting with cement bound sand (CBS). This is used to ensure that the thermal conductivity of material around the cable</li> </ul>



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			installation. CBS has a low thermal resistance to conduct the heat produced during electricity transmission away from the HV cables. ES Chapter 19 Land Use, Agriculture and Recreation [REP2-022] adequately considers the impact of soil heating on agricultural production, concluding a minor adverse impact which is deemed not significant in EIA terms.
			Thermal analyses will be carried out during detailed design that will model the impact of the cables on soil heating. Final cable design and burial cross section design will ensure compliance with all applicable standards with respect to soil heating
			The Applicant has reviewed the Outline Code of Construction Practices from the Norfolk Boreas and Vanguard projects and Hornsea Project 3. Thermal resistivity is made mention of only in relation to Groundwater temperatures and thermal efficiency when Norfolk Boreas crosses Hornsea Project 3. There is therefore no precedent within those projects for needing a mechanism to avoid soil heating in the Projects' Outline Code of Construction Practice. The <b>Outline Code of</b> <b>Construction Practice (Revision C)</b> [document number 9.17] submitted at Deadline 3 will contain reference to thermal analyses to be carried out at detailed design within the Embedded Mitigation section. Beyond design, and given soil heating is an operational consideration, the Applicant strongly considers that the <b>Outline Code of</b> <b>Construction Practice (Revision C)</b> [document number 9.17] is not the appropriate document to capture any further details relating to soil heating.



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			b) In light of the response to part a of Q2.16.2.1, the Applicant considers that this is not a matter to be signed off by the relevant LA.
Q2.16.2.2	Applicant	Contamination The Applicant's response [REP1-036, Q1.16.2.5] sets out that "Geophysical surveys at the airfield are ongoing and the initial results indicate that there are areas of rubble present which are likely to be associated with the construction of the airfield. Further surveys will help identify whether any contamination does exist onsite and if so next steps including micro-siting the cable and any remedial works". Will the full results of such surveys be available during the Examination?	Whilst some early geophysical surveys have commenced, these are required to support the detailed design phase and micro-siting of the cable. The survey campaign is ongoing and the results are unlikely to be available prior to close of the Examination.
Q2.16.2.3	Applicant	Pre-construction Investigations and Control Measures for Contaminated Land The Applicant's response [REP1-036, Q1.16.2.8] notes that pre-construction investigations and control measures for contaminated land are detailed in Section 4.1 of the OCoCP [REP1-023]. However, this does not explicitly refer to the mitigation relied on in the ES for impacts on the built environment. To appropriately secure such mitigation should specific wording be added to the OCoCP?	Amendments have been made to Section 4.1 of the Outline Code of Construction Practice (Revision C) [document reference 9.17]. The amendments outline the mitigation measures in relation to the built environment.



ID	Question addressed to	Question	Applicant Response		
Q2.17. Lands	2.17. Landscape and Visual Effects				
Q2.17.1 Effe	ct on Landscape Cha	aracter and Views			
Q2.17.1.1	Local Authorities	Scope of the ES and LVIA	No response required.		
	Interested Parties	Is the Applicant's approach to the assessment of sequential views within its LVIA [APP112], as described in its response to ExQ1 [REP1-036, Q1.17.1.6] reasonable and sufficient to demonstrate that effects on receptors in this context have properly assessed?			
Q2.17.1.2	Applicant	<b>Viewpoints along PRoWs</b> During ASI2 [EV-028] the ExA noted that there was the possibility to view both the Norwich Main substation and the proposed onshore substation from the PRoW network.	The Applicant has captured the required photography and is in the process of producing the visual information requested by the Examining Authority. This information will be submitted for Deadline 4.		
		Provide a further illustrative viewpoint which depicts the effects on receptors on the PRoW in this location. Provide a similar level of information as that provided for viewpoint 2 [APP-159].	The Applicant refers the Examining Authority to Appendix B.1 in Appendix B - Supporting documents to the Applicant's Responses to the Examining Authority's Second Written Questions [document reference 16.2.2], which supports responses to Second Written Question 2.10 in The Applicant's Response to the Examining Authority's Second Written Questions [document reference 16.2].		
Q2.17.1.3	Local Authorities	Residential Receptors	No response required.		
		<ul><li>Question repeated for response from LAs The Applicant notes that a RVAA has not been undertaken because the nearest receptors would fall below the relevant threshold [APP-112, Paragraphs 117-120].</li><li>a) LAs, is this a reasonable approach?</li></ul>			



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ID	Question addressed to	Question	Applicant Response
		<ul> <li>b) LAs, in your view what weight should be given to private views from residential properties? Make reference to relevant national and local policies in your response.</li> </ul>	
Q2.17.2 Effe	ects on designated an	d historic landscapes, including Areas of Outstanding Na	tural beauty and Ancient Woodlands
Q2.17.2.1	The Countryside Charity Norfolk North Norfolk District Council Norfolk Wildlife Trust Norfolk Coast Partnership	Areas of Outstanding Natural Beauty Do you consider that the Proposed Development prejudices the special qualities of the affected AONB and, if so, state which ones and why conflict is considered to arise?	No response required.
Q2.17.3 Effe	ectiveness of mitigation	on proposals	
Q2.17.3.1	Local Authorities Natural England National Trust Woodland Trust	<ul> <li>Removal of Existing Trees and Hedgerows, Replanting and Management</li> <li>a) Are you satisfied that the Applicant's proposals for the removal, replanting and management of existing trees and hedgerows have been set out to a sufficient level of detail at this stage [REP1-036, Q1.17.1.11]?</li> <li>b) In particular, is the Applicant's approach to</li> </ul>	No response required.
		managing the likelihood of damage occurring to existing trees and hedgerows during the construction period sufficiently clear [REP1-036, Q1.17.1.11]?	
Q2.17.3.2	Applicant	Removal of Existing Trees and Hedgerows, Replanting and Management	The <b>Arboricultural Survey Report</b> [APP-228, Section 6.3] provides an overview of the tree protection measures that will likely be required during construction. Measures include tree



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		<ul> <li>Provide details of, or provide signposting to documents within the Examination which provide details of, the tree protection measures likely to be required during the detailed design and construction stages. Information should include, but may not be limited to: <ul> <li>a) Requirements and information for precommencement operations and briefings;</li> <li>b) The roles and responsibilities associated with the delivery of the protection measures, control and communication associated with works affecting existing trees and hedgerows;</li> <li>c) Mitigation measures to be recorded, monitored and implemented; and</li> <li>d) Review and monitoring mechanisms that would be adopted.</li> <li>e) If not contained within a single document for reference, consider whether the Examination would be assisted by the collation of this information into one document.</li> <li>f) If this information is not currently within the Examination, provide reasoning which explains why it would not be possible for it be included this information in outline form before the close of the Examination.</li> </ul> </li> </ul>	<ul> <li>protection fencing, ground protection, Arboriculturist on-site supervision, hand digging, facilitative pruning in accordance with British Standard 3998: 2010 Tree Work – Recommendations, no-dig hard surfacing and finally as compensation, replacement tree and hedgerow planting. To answer each of the questions in turn:         <ul> <li>a) Requirements and information for pre-commencement operations and briefings are secured in the following documents:</li> <li>Construction Code of Practice (Revision C) [document reference 9.17], submitted at Deadline 3.</li> <li>Section 3.4, paragraph 78. Site induction.</li> <li>Section 2.5.11, paragraph 58 – 60. Arboriculturist.</li> </ul> </li> <li>The Arboricultural Method Statement and Tree Protection Plans         <ul> <li>The Applicant has committed to providing The Arboricultural Method Statement and Tree Protection Plans</li> <li>The Applicant has committed to providing The Arboricultural Method Statement and Tree Protection Plans, through the Arboricultural Survey Report [APP-228, Section 6.5]. This will provide further detail as to when and where an Arboricultural Method Statement and Tree Protection Plans will be submitted to the local planning authority for approval prior to construction commencement. This is secured under Requirement 11(e) of the draft DCO (Revision F) [document reference 3.1] which requires 'details of existing trees and hedges to be retained with measures for their protection during the construction period where applicable'</li> </ul></li></ul>



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ID	Question addressed to	Question	Applicant Response
			Outline Ecological Management Plan (Revision C) [document reference 9.19]
			Where trees and hedgerows support an ecological feature such as a bat roost or nesting birds, the Ecological Clerk of Works (ECoW) will provide on site briefings as detailed in the <b>Outline Ecological Management Plan (Revision C)</b> [document reference 9.19, Section 1.2.4, Section 2.3.3].
			<ul> <li>b) The Construction Code of Practice (Revision C) [document reference 9.17, Section 2.5.11, paragraph 58 – 60] details the roles and responsibilities associated with the delivery of the tree protection measures.</li> </ul>
			The <b>Outline Ecological Management Plan (Revision C)</b> [document refence 9.19, Section 1.2.4] details the general responsibilities of the ECoW, and will be responsible for arranging specialist ecological surveys of trees and hedgerows that have the potential to support protected species and undertake regular inspections of features supporting protected species.
			<ul> <li>c) The recording, monitoring and implementation of the mitigation measures near trees will be detailed in the final Landscape Management Plan and informed by the Arboricultural Method Statement and Tree Protection Plan. The Outline Landscape Management Plan (Revision C) [document reference 9.18, Section 1.5].</li> </ul>
			Requirement 12 of the <b>draft DCO (Revision F)</b> [document reference 3.1] requires a Landscape Management Plan to be provided, post-DCO consent, that will include details of the implementation and monitoring of replacement tree and hedgerow planting over 10 years as detailed in the <b>Outline Landscape Management Plan (Revision C)</b>



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			[document reference 9.18, Section 1.5].
			d) Review and monitoring mechanisms will again be included in the Arboricultural Method Statement and Landscape Management Plans to be provided post DCO consent. The ECoW will be responsible for reviewing and updating the Ecological Management Plan.
			<ul> <li>e) Information relating to tree and hedgerow protection measures are detailed in within the Arboricultural Survey Report [APP-228], and the Outline Landscape Management Plan (Revision C) [document reference 9.18], which is secured by Requirement 11 of the draft DCO (Revision F) [document reference 3.1]</li> </ul>
			In addition, where trees and hedgerows support an ecological feature such as a bat roost or nesting birds, information is provided in the <b>Outline Ecological</b> <b>Management Plan (Revision C)</b> [document reference 9.19], which is secured by Requirement 13 of the <b>draft DCO</b> (Revision F) [document reference 3.1].
			Requirement 11 of the <b>draft DCO (Revision F)</b> [document reference 3.1] will facilitate the production of an Arboricultural Method Statement and Tree Protection Plans following a full tree survey which will consolidate tree and hedgerow protection measures prior to construction commencing.
			f) Not applicable.
Q2.17.3.3	Applicant	Removal of Existing Trees and Hedgerows, Replanting and Management	The documents mentioned in the Applicant's answer to Q2.17.3.2 are secured through the following requirements in the <b>draft DCO (Revision F)</b> [document reference 3.1].



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ID	Question addressed to	Question	Applicant Response
		Set out how the information provided in response to Q2.17.3.2 above is secured within the dDCO	Details of trees and hedges to be removed and retained and measures for their protection will be included in Tree Protection Plans and an Arboricultural Method Statement as stated in the <b>Arboricultural Survey Report</b> [APP-228]. This will inform the final Landscape Management Plan, which is secured by Requirement 11 (Provision of Landscaping) and Requirement 12 (Implementation and maintenance of landscaping) of the <b>draft DCO (Revision F)</b> [document reference 3.1]
			A Construction Code of Practice is secured via Requirement 19 (Code of Construction Practice) of the <b>draft DCO (Revision</b> <b>F)</b> [document reference 3.1]
			An Ecological Management Plan is secured via Requirement 13 (Ecological management plan) of the <b>draft DCO (Revision</b> <b>F)</b> [document reference 3.1].
Q2.17.3.4	Local Authorities	Tree and Hedgerow Replacement	No response required.
	Natural England	Set out whether the Applicant's approach [APP-303] and	
	National Trust	as further clarified in its response to WQ1 [REP1-036, Q1.17.1.12] is a reasonable one at this stage of the	
	Woodland Trust	Examination.	
	Interested Parties		



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# Table 18 Applicant's responses to the Examining Authority's Second Written Questions: Q2.18

ID	Question addressed to	Question	Applicant Response
Q2.18. Sea	ascape and Visual E	ffects	
Q2.18.1 Ef	fects on Designated	and Historic Landscapes	
Q2.18.1.1	Norfolk Coast Partnership	The Existing Baseline and its Effect on the Statutory Purpose of the NCAONB	No response required.
		NE states that the existing OWF installations have a compromising effect on the statutory purpose of the NCAONB [RR-063]. Respond, with reasoning.	
Q2.18.1.2	Norfolk Coast	The Extent of Additional Harm to the NCAONB	No response required.
	Partnership	What is your assessment of the effects of the Proposed Development on the NCAONB in EIA terms?	
Q2.18.1.3	Norfolk Coast	Cumulative Impact Assessment	No response required.
	Partnership	Should a CIA be undertaken in order to inform the EIA to ensure that the impact of SEP and DEP on the statutory purpose of the NCAONB, in the context of the existing OWF, can be made?	
Q2.18.1.4	Norfolk Coast	North Norfolk Heritage Coast	No response required.
	Partnership	Clarify your position on the qualities and significance of the Heritage Coast, particularly the stretch within which the Proposed Development would be theoretically and actually visible. Set out where you consider harms would occur and what, if anything, could be done to minimise the harm or improve the visitor experience.	
Q2.18.2 Cu	umulative Effects		
Q2.18.2.1	Norfolk Coast	Cumulative Effects	No response required.
	Partnership	Are you satisfied with the list of projects included in the assessment of potential cumulative landscape and visual effects? If not, identify those projects that you believe	



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		should be included and indicate why you believe that they should be included.	



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## Table 19 Applicant's responses to the Examining Authority's Second Written Questions: Q2.19

ID	Question addressed to	Question	Applicant Response			
Q2.19. Nav	Q2.19. Navigation and Shipping					
Q2.19.1 Na	avigational Risk and	Effect on Navigational Safety				
Q2.19.1.1	Marine and Coastguard Agency	MCA navigational safety concerns Identify and explain what information within the Applicants' submission at Deadline 1 raised concern regarding shipping safety, which may not have been apparent during earlier engagement?	No response required.			
Q2.19.1.2	Applicant Marine and Coastguard Agency	Background Data MCA and Applicant, provide the background evidence to support your position relating to the matters discussed at ISH6 [EV-085] & [EV-089], particularly matters where there are issues of disagreement, such as navigational buffers and the potential collision risk, statistical calculations of vessels traversing through this sea area if the proposed wind farm sites are where currently proposed? Provide supporting illustrations, diagrams and plans.	<ul> <li>The submission of a Navigational Safety Technical Note [document reference 6.3.13.2] into Deadline 3 of the SEP and DEP examination summarises the Applicant's position on currently unresolved points on the Statement of Common Ground (SOCG) with the Maritime and Coastguard Agency (MCA) highlighted during the ISH6 and forms the technical response to Question Q2.19.1.2. The note summarises the following points: <ul> <li>NPS policy context,</li> <li>Navigation Risk Assessment,</li> <li>Consultation with MCA,</li> <li>Corridor calculations,</li> <li>Baseline traffic numbers,</li> <li>Typical passing distance,</li> <li>Collision risk modelling,</li> <li>Additional modelling for 'sensitivity analysis' regarding DEP-N and the Outer Dowsing Channel; and</li> <li>Existing precedent.</li> </ul> </li> </ul>			



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ID	Question addressed to	Question	Applicant Response
Q2.19.1.3	Applicant Marine and Coastguard	Aarine andCan both parties continue discussion on the key points of disagreement and propose a way of reaching agreement.	The Applicant and the MCA have met since ISH6 to update the SoCG. A new revision has been submitted at this Deadline 3 [document reference 12.12].
	Agency		A series of meetings have been scheduled between Deadline 3 and Deadline 5 to discuss outstanding points of disagreement with particular focus on collision risk for traffic passing DEP-N and the Outer Dowsing Channel.
			The Navigational Safety Technical Note [document reference 6.3.13.2] provides further information on passing distances and new modelling assessing an additional scenario to those run in the NRA [APP-198] (see Section 7.1) which demonstrates how removing the north-western section of DEP North would influence the collision risk. The Applicant believes that following the submission of this information a meaningful discussion could be held with the MCA regarding the appropriateness and efficacy of further proposed mitigation.
			The implications of any disagreement at the end of the Examination will depend on the precise nature of the disagreement at that time. The Applicant remains hopeful that the further analysis supplied in the technical note at this deadline and the ongoing discussions with the MCA will narrow or remove the current disagreement.
			Where disagreement remains, the Applicant would intend to agree with the MCA a clear final statement of the precise nature of the disagreement, the differing positions of the parties and the application of the relevant policy test(s) in the NPS as regards navigational safety. This would allow the ExA be fully informed when applying the relevant balancing exercise in making its recommendation. The Applicant recognises that the ExA will want submissions from both parties as to the decision-making outcomes which are in contemplation in the light of the nature of



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			any final area(s) of disagreement. The final statement would address this as well.
			The Applicant expects that all aspects of this issue (including the different decision-making outcomes) would be aired in detail at the hearing it is requesting on navigation matters in the dates reserved for hearings in w/c 19 June.
Q2.19.1.4	Applicant Marine and Coastguard Agency	Sea Lane Essential to International Navigation In line with the policy requirement in NPS EN3 (Paragraph 2.6.161), does the shipping route through the SEP and DEP sites constitute a sea lane essential to international navigation? If so, can you explain how the proposals would or would not interfere with this sea lane essential to international navigation?	The shipping routes passing through SEP and DEP do not constitute a recognised sea lane essential to international navigation in line with the policy requirement in NPS EN-3 (Paragraph 2.6.161). There are no IMO-adopted routing measures within the study area which would indicate a route is recognised. Nor are the routes essential in providing unique access to a lifeline port. As stated in NPS-EN3 (Paragraph 2.6.155) and covered in <b>ES</b>
			<b>Chapter 13 Shipping and Navigation</b> , Table 13-4 [APP-099] information on internationally recognised sea lanes is publicly available via the Maritime Database which was consulted and confirmed no IMO routeing measures in proximity to the wind farm sites or the offshore export cable corridor. The nearest is approximately 30nm northwest of the wind farm sites.
Q2.19.2 Im	pact on Radar, Sea	rch and Rescue	
		No further questions in this section at this time.	



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## Table 20 Applicant's responses to the Examining Authority's Second Written Questions: Q2.20

ID	Question addressed to	Question	Applicant Response				
Q2.20. Noi	2.20. Noise and Vibration						
Q2.20.1 Ac	lequacy of the Asse	ssments for Construction					
Q2.20.1.1	Broadland District Council South Norfolk District Council	Main Construction Compound Further to discussions at ISH3 [EV-036] [EV-041], provide more evidence to support your views that operational noise guidelines (BS4142) should be used at the main compound rather than construction guidelines (BS5228-1) and that any potential noise complaints cannot be adequately dealt with by other means.	No response required.				
Q2.20.2 Co	onstruction effects of	on Sensitive Receptors					
Q2.20.2.1	Local Authorities	Vibration The Applicant notes [REP1-036, Q1.20.1.5] that the assessment for both building damage [APP-109, Table 23- 14] and human disturbance [APP-109, Table 23-16] are based on exceedance of a fixed limit (specified in peak particle velocity (PPV)) by one event (in this case, one HGV passby). Further, that the number of HGVs passing a property would therefore not affect the PPV experienced at a receptor in the way that it does for noise and hence, annoyance impacts due to vibration associated with construction traffic will be no worse than those due to noise. LA's are you content with this reply?	No response required.				
Q2.20.2.2	Applicant	<b>Construction Noise Management Plan</b> Following discussions at ISH3 [EV-036] [EV-041], provide examples of other OWF developments where significant noise effects had been identified and were dealt with in a CNMP that was provided post consent.	The Applicant has set out within <b>Appendix B.5</b> of the <b>Supporting Documents to The Applicant's Responses to the Examining Authority's Second Written Questions</b> [document reference 16.2.2] the details of four Nationally Significant Infrastructure Projects where significant noise effects were identified and mitigated through a Construction Noise Management Plan (CNMP) provided post-consent. The				



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ID	Question addressed to	Question	Applicant Response
			Applicant notes that not all of these projects are offshore wind farm developments, but considers that the construction aspects are comparable to those in SEP and DEP and are therefore relevant examples of the same approach.
Q2.20.2.3	Applicant	HDD at Oulton Further to discussions at ISH3 [EV-036] [EV-041], Applicant confirm, as a worst case scenario, whether the use of HDD under the solar farm at Oulton would result in the need for night time works/ drilling.	<ul> <li>A worst-case scenario could occur requiring night time working for the HDDs at the Solar Park. The triggers for requiring night time working would be the same as those indicated for Q2.20.4.2</li> <li>c) HDD Restrictions and Emergency Works however mitigation measures such as the following could be used to minimise the likelihood that night-time working will be required.</li> <li>Commence works on each bore and each phase of reaming etc at the start of the shift with adequate planning to ensure that each phase of work is completed in a single shift.</li> <li>Manage the programme to ensure that no bores are started with the potential to not be completed before the end of the working week.</li> <li>Maintain discussions with Docking Solar Park and exchange designs and, where possible, reduce the length of the trenchless crossings ensuring that each activity can be completed in a normal shift.</li> <li>Undertake crossings in flat formation, reducing risk and number of operations required for the installation of each duct.</li> <li>The exact methodology will be set out within a Construction Method Statement which will form part of the Code of Construction Practice, which will be based on the Outline Code of Construction Practice (Revision C) [document reference 9.17] submitted at Deadline 3. The Code of Construction Practice (Revision C) [document reference 9.17] submitted at Deadline 3. The Code of Construction Practice (Revision C) [document reference 9.17] submitted at Deadline 3. The Code of Construction Practice (Revision C) [document reference 9.17] submitted at Deadline 3. The Code of Construction Practice (Revision C) [document reference 9.17] submitted at Deadline 3. The Code of Construction Practice (Revision C) [document reference 9.17] submitted at Deadline 3. The Code of Construction Practice (Revision C) [document reference 9.17] submitted at Deadline 3. The Code of Construction Practice (Revision C) [document reference 9.17] submitted at Deadline 3. The Code of Construction Practice (Revision</li></ul>



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			also will form part of the Code of Construction Practice will set out appropriate noise mitigation specific to the site.
Q2.20.3 C	umulative Effects A	Assessment	
		No further questions in this section at this stage.	
Q2.20.4 A	dequacy and Desig	n of Proposed Mitigation	•
Q2.20.4.1	Applicant	Adequacy of Proposed Noise Mitigation Further to discussions that took place at ISH3 [EV-036] [EV- 041], whilst acknowledging the Applicant's view that no further work is required, without further evidence the ExA remain concerned and unconvinced that the identified significant adverse effects in the ES [APP-109] can be adequately mitigated. The Applicant has provided more detail in relation to the mitigation of impacts for sensitive receptor CCR2C in response to the ExA's first written questions [REP1-036, Q1.20.4.1]. Provide a similar level of detail for all other instances where significant adverse impacts have been identified in the ES [APP-109].	It is understood that this question specifically relates to effects which were identified to have the potential to cause significant effects without mitigation, and the ES proposes that the mitigation will be identified in a Noise and Vibration Management Plan. Such effects are due to construction noise emissions from the main compound and trenchless crossing works (paragraphs 151 and 152 of the Environmental Statement (ES) Volume 1 Chapter 23 Noise and Vibration [APP-109]). The effects reported in APP-109 consider a potential worst-case scenario without mitigation in that all construction plant is assumed to be at the closest approach of the cable corridor. To reduce the impacts, various mitigation methods are proposed, for inclusion in a Construction Noise and Vibration Management Plan to be included in a final Code of Construction Practice, which will be based on the Outline Code of Construction Practice (Revision C) [document reference 9.17] submitted at Deadline 3. Preparation of the final CoCP is secured by Requirement 19 of the draft DCO (Revision F) [document reference 3.1].



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			<ul> <li>CR22, CCR22A and MCR1 – High effect magnitude during night-time working only, effects due to works at other times are not significant.</li> </ul>
			<ul> <li>CCR22B – Medium effect magnitude during night-time working only, effects due to works at other times are not significant.</li> </ul>
			The Outline Code of Construction Practice (Revision C) [document reference 9.17states that "Construction work for the onshore works must only take place between 0700 hours and 1900 hours Monday to Friday, and 0700 hours to 1300 hours on Saturdays, with no activity on Sundays or bank holidays, except as specified below". This is also secured by Requirement 20 of the draft DCO (Revision F) [document reference 3.1]. Paragraph 67 describes the essential activities for which out of hours (e.g. night-time) working may be required. None of these activities are anticipated to occur at the main construction compound. Hence, the construction works at the main compound are not anticipated to result in significant effects.
			Works at Trenchless Crossings
			<b>ES Volume 3 Appendix 23.3 Construction Noise</b> <b>Assessment</b> [APP-266] identifies that, without mitigation, potentially significant effects associated with noise from trenchless crossing works at night, but not significant during the daytime, are anticipated at the following NSRs:
			<ul> <li>MCR1 and CCRs 2A, 11, 13, 15, 16A, 17A, 20B, 21A, 22B, 22C, 24A, 24C, 24D, 31, 31B, 33, 33A – Medium effect magnitude during night-time working only, effects due to works at other times are not significant.</li> </ul>



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			<ul> <li>CCRs 5, 10, 15B, 16, 19, 20C, 22, 22A, 26C, 27, 28A, 31A and 31C – High effect magnitude during night-time working only, effects due to works at other times are not significant.</li> <li>CCRs 2D, 16B, 16C, 17, 18, 24, 24B, 26B, 29 and 32 – High effect magnitude during night-time working, medium during evenings and weekends, effects due to works at other times are not significant.</li> <li>CCRs 27A and 34 – High effect magnitude during working at night or evenings and weekends, effects due to works at other times are not significant.</li> <li>Night-time HDD working is only anticipated if the cable is crossing a railway line (as required by Network Rail) and the drill</li> </ul>
			is too long to be completed in one daytime shift, or in an emergency response to collapse of the borehole. Any planned night-time working would need to be agreed with the Local Planning Authority in accordance with Requirement 20, referenced above.
			Emergency 24-hour drilling works would constitute the rescue of a drill head and completion of that drill profile; drilling would be at a rate of 80m per day. The longest proposed drill is approximately 600m; hence, the absolute maximum duration of night-time emergency HDD works is 6.25 days, unless multiple drills fail which is extremely unlikely. In any event, two drill failures (and the subsequent need for night-time working) would be separated by a period of daytime only working. On that basis, night-time emergency HDD works is not anticipated to last for more than 10 days in any 15 consecutive days. Therefore, in accordance with the criteria presented in Section 23.4.3.3 of <b>Chapter 23 Noise and Vibration</b> [APP-109], the associated noise effects will be not significant.



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			The only crossings at which night-time HDD works is likely to be undertaken outside of an emergency is a combined trenchless crossing under the A11 (RDX048) and Cambridge to Norwich Railway (Breck) (RLX002), which is 180m long and the crossing of the North Norfolk Railway line (RLX001) which is approximately 120m long. For 24-hour HDD working, the drilling progresses at around 80m per day; hence, to drill one drill profile would take 2.3 days and to complete six completely continuous drills would take 13.5 days. <b>ES Volume 3 Appendix 23.3</b> <b>Construction Noise Assessment</b> [APP-266] identifies the predicted HDD works noise level at the closest NSR to this crossing (CCR31), without mitigation, to be 54 dB <i>L</i> <sub>Aeq</sub> , at night. This constitutes a medium magnitude effect, which is significant.
			The <b>Outline Code of Construction Practice (Revision C)</b> [document reference 9.17], Section 10.1.2 states "Following the application of BPM, should any residual impacts remain, at any of the receptors in the CNMP study area, these would be reduced to non-significant with the addition of site-specific solutions where practicable, such as:
			<ul> <li>increased separation distance of noisy plant to receptors;</li> </ul>
			<ul> <li>works scheduling to avoid high noise levels at receptors for more than 10 days in any 15 consecutive days, or 40 days in any 6 consecutive months; and</li> </ul>
			<ul> <li>the use of temporary noise barriers.</li> </ul>
			The calculated noise level reported in <b>ES Volume 3 Appendix</b> <b>23.3 Construction Noise Assessment</b> [APP-266] includes an assumption that the entry pit will be located as close as possible to CCR31, on the edge of the redline boundary. It may be feasible to increase the distance to NSRs by drilling this crossing from north to south i.e. locating the entry pit on the north side of the railway. The distance from CCR31 to the closest point on the order limits on the north side of the railway identified as a



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			trenchless crossing zone is approximately 255m. At this distance, the predicted HDD noise level is 48 dB <i>L</i> <sub>Aeq</sub> , equating to a low magnitude of effect at night (according to the criteria in Table 23-11 <b>ES Volume 3 Appendix 23.3 Construction Noise Assessment</b> [APP-109]), i.e. not significant.
			In addition, if the cable is at the centre of the corridor (which is 100m wide at this location) and the drills are 5m spaced, the closest edge of the closest drill pit will be 30m from the corridor edge, increasing the distance from the NSR to approximately 270m.
			An additional option would be the use of temporary noise barriers. As the drilling equipment will be in a pit, it should be feasible to block line of sight from the plant to the closest NSR, thereby reducing the construction noise level by 10 dB, which would result in a not significant effect.
			ES Volume 3 Appendix 23.3 Construction Noise Assessment [APP-266] identifies that, without mitigation, potentially significant effects associated with noise from daytime trenchless crossing works are anticipated at the following NSRs:
			<ul> <li>CCRs 25 and 26 – High effect magnitude during working at night or evenings and weekends, medium effects due to daytime working.</li> </ul>
			<ul> <li>CCRs 2, 2C, 8, 17B and 26A – High effect magnitude during working at all time periods.</li> </ul>
			Upon further review of CCR17B, the building selected to define this receptor is not noise sensitive. The closest building to CC17B which is noise-sensitive is a residential dwelling approximately 50m to the south-east of CCR17B. This dwelling is 50m from the Order Limits, whereas the distance used in the calculations presented in <b>ES Volume 3 Appendix 23.3</b> <b>Construction Noise Assessment</b> [APP-266] was 23.4m. Using



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			this updated distance, the predicted construction noise level at the dwelling is 66 dB $L_{Aeq}$ , equating to a low magnitude of effect during the daytime, which is not significant.
			For each of the remaining NSRs at which significant daytime effects were predicted, calculations of the potential mitigated noise levels have been undertaken; these are provided in Appendix B.6 of the Supporting Documents to The Applicant's Responses to the Examining Authority's Second Written Questions [document reference 16.2.2]. This document includes the:
l			<ul> <li>location of the trenchless crossing;</li> </ul>
			<ul> <li>duration of the crossing works (one drill profile and total);</li> </ul>
			<ul> <li>direction of drilling to minimise noise impacts;</li> </ul>
			<ul> <li>assumed drilling design (trefoil, where it has been established that this is feasible, or 5m spacing between each drill profile) to maximise distance from drill pit to NSR;</li> </ul>
			<ul> <li>distance from the closest entry pit to the NSR assuming the above mitigation is incorporated;</li> </ul>
			<ul> <li>predicted crossing works noise level at the NSR incorporating mitigation by increasing distance from the works to the NSR; and</li> </ul>
l			<ul> <li>predicted crossing works noise level at the NSR, incorporating mitigation by increasing distance and screening.</li> </ul>
			The calculations incorporate a reasonable assumption that the cable will be in the centre of the cable corridor. Without screening, the predicted mitigated trenchless crossing noise levels at all NSRs except CCR2C equate to effects of low or negligible magnitude, i.e. not significant. Incorporating



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			screening, all residual effects are of negligible magnitude, i.e. not significant.
Q2.20.4.2	Applicant	<ul> <li>HDD Restrictions and Emergency Works</li> <li>Following discussions at ISH3 [EV-036] [EV-041], in relation to HDD drilling at night: <ul> <li>a) Set out clearly whether HDD drilling at night is required.</li> <li>b) Explain how the dDCO could include night time HDD and whether this is consistent with the working hours set out.</li> <li>c) Clarify what constitutes 'emergency' in the context of any potential night time HDD works.</li> </ul> </li> </ul>	<ul> <li>a) Drilling at night would only be required in an emergency situation when there is a risk of failure to the drill bore/duct installation with the exception of the crossing of Network Rail Infrastructure. See Q2.20.4.1 response above for further details.</li> <li>b) The draft DCO (Revision F) [document reference 3.1] provides for construction hours in Requirement 20 (see Schedule 2, Part 1, paragraph 20). Sub-paragraph (1) and sets out the regular working hours. However, works, including HDD works, can be undertaken outside the regular construction hours in the circumstances set out in sub-paragraph (2): 'continuous periods of operation that are required as assessed in the environmental statement, such as concrete pouring, drilling, dewatering, cable jointing and pulling cables (including fibre optic cables) through ducts'; 'onshore works requiring trenchless installation techniques'; 'onshore works at the landfall'; and 'emergency works' (see further information at c) below). Therefore, Requirement 20 allows for HDD works to be undertaken at night where the provisions of sub-paragraph (2) apply as set out above. See also the Written Summary of the Applicant's Oral Submissions at Issue Specific Hearing 3 [document 16.8] at agenda item 5.v where the Applicant confirmed that night-time HDD works are controlled by Requirement 20(4).</li> <li>c) Examples of situations that would result in the potential for bore failure and the subsequent need for Emergency HDD works that will potentially result in night-time working are listed below:</li> </ul>



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			• Unexpected ground conditions – ground conditions encountered not anticipated from ground investigations such as peat, gravel or cobble. Unexpected ground encountered with this soil condition often results in difficulty or even failure in completing the bore.
			• Equipment breakdown requiring extended working to complete the ongoing operation to prevent where possible bore failure.
			<ul> <li>Unstable collapsing bore (as indicated by the rigs gauges) that would be lost if works are halted requiring works to continue beyond normal working hours.</li> </ul>
			• Delays during duct installation resulting in extended working to complete the duct installation after starting. Delays could be a result of equipment breakdown / repair / replacement.
			Recovery of seized / stuck cable duct during installation.
			<ul> <li>Clearance of drilling fluid breakout, especially at sensitive crossing.</li> </ul>
			• Labour – issues with personnel sickness requiring personnel to be changed out at short notice with operations requiring completion prior to the end of shifts.
Q2.20.4.3	Applicant	<b>Construction Noise Management Plan Study Area</b> Revision B of the OCoCP [REP1-023] notes that a CNMP will be included in the CoCP and a study area for the CNMP has been identified, which is 300m from the construction works. Applicant, consider whether maps should be included in the OCoCP to clearly show this area?	Please refer to Appendix A of the Outline Code of Construction Practice (Revision C) [document reference 9.17] which contains these maps.



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## Table 21 Applicant's responses to the Examining Authority's Second Written Questions: Q2.21

ID	Question addressed to	Question	Applicant Response			
Q2.21. Oil, G	Q2.21. Oil, Gas and Other Offshore Infrastructure Activities					
Q2.21.1 Heli	copter Access					
Q2.21.1.1	Applicant Perenco	Possible cooperation agreementFor matters pending resolution, parties to consider if a cooperation agreement based on Perenco's involvement at detailed design stage could be a way of working. Provide an update and an outline of the matters that such a cooperation agreement may include.	The Applicant and Perenco are exploring entering into a cooperation agreement. This could facilitate communication and help co-ordinate activities. Such agreement would not include Perenco's involvement in detailed design.			
Q2.21.1.2	Applicant Perenco	Comparative calculationsThe Applicant's submitted Helicopter Access Study [APP-205, Paragraph 54] states that - "If an obstacle free circle of circa 1nm could be provided, then approaches and take-off under Day VMC conditions could be conducted safely. That would increase the daylight access from 	The Applicant and Perenco are in the process of sharing data/methodologies as well as meetings taking place between the technical experts representing both parties to compare and agree assessment parameters. Given that the parties have been using slightly different datasets, the Applicant and Perenco are unable to complete the comparison at Deadline 3. However, the Applicant expects the updated assessments and comparison to be available by Deadline 4.			
Q2.21.1.3	Perenco	Economic effects to Perenco Provide information on the potential effects of the Proposed Development on your business and operations. Draw a distinction between the effects of the Proposed Development on the safety of your operations and the economic effects.	No response required.			
Q2.21.1.4	Applicant	Guidance for helicopter access	At ISH6 the Applicant made reference to the fact that the Secretary of State had requested information from the Civil			



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ID	Question addressed to	Question	Applicant Response
	Perenco	Provide detail on any emerging guidance relating to helicopter access to installations such as that at Waveney from the CAA or that involved with Hornsea Project 4, as referred to in ISH6 [EV-086] [EV-090].	Aviation Authority (CAA) in relation to Hornsea Project 4. In particular, by letter dated 3 March 2023 the Secretary of State asked the CAA to provide an update or further information as to when any new guidance was expected to be published.
			In their response dated 31 March 2023 the CAA advised that it did not have a planned date for proposing changes to the Policy and Guidelines on Wind Turbines (CAP764) and the guidance in respect of Helicopter Main Routes. The CCA noted that any such update is likely to be associated with changes to the Air Operations Regulation, UK Reg (EU) 965/2012 and as such will require legislative proposals through UK Parliament.
			Notwithstanding the fact that it is unlikely that the CAA will publish firm proposals in the near future, the Applicant and Perenco's technical experts have had sight of the CAA's draft proposals and will take these into account when working jointly on a response to the information requested in Q2.21.1.2.
Q2.21.2 Effect	iveness of Propose	d Mitigation	
1		No further questions in this section at this stage.	



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## Table 22 Applicant's responses to the Examining Authority's Second Written Questions: Q2.22

ID	Question addressed to	Question	Applicant Response
Q2.22. Socio	-economic effects		
Q2.22.1 Effect	cts on recreation, to	ourism and business	
Q2.22.1.1	Applicant North Norfolk District Council	<ul> <li>Tourism Reports</li> <li>Following discussions at ISH4 [EV-058] [EV-062], in relation to effects of the Proposed Development on tourism: <ul> <li>a) NNDC submit the evidence supplied to Norfolk Boreas Examination with regards to effects on tourism and disputing the findings of the BIGGAR report.</li> <li>b) The Applicant to consider whether a contribution could be made towards tourism studies to assess the impacts of Offshore Wind developments on tourism and businesses in Norfolk.</li> </ul> </li> </ul>	<ul> <li>a) No response required.</li> <li>b) The Applicant would be willing, in principle, to contribute to further research to understand the impact of offshore wind development on tourism volume and value in North Norfolk. However, this is not considered necessary to support the Examination and would be progressed outside the DCO/Examination process.</li> <li>The Applicant considers the main options for conducting further research on this matter are as follows:</li> <li>Option 1: Longitudinal visitor volume survey. Conduct counts of the number of people in key visitor locations, including a pre-works baseline survey and periodic counts during and after the works. These</li> </ul>
			<ul> <li>would be conducted in areas affected by the works and in areas unaffected by the works (as a control group) to compare change over time.</li> <li>Option 2: Visitor perspectives survey. One-off surveys of visitors in locations affected by the works, asking for their perspectives on how it has affected their visitor experience and whether it will affect the likelihood that they will visit again.</li> <li>Option 3: Business survey. A survey of businesses in areas affected by wind farm development, asking them how their business has been affected by construction works.</li> <li>Option 4: Monitoring of business performance using administrative datasets. This would use firm-</li> </ul>



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ID	Question addressed to	Question	Applicant Response
			level ONS data on the change in turnover and employment in businesses of varying distance from the onshore works. Counterfactual impact evaluation techniques could be used to compare performance over time in the business base as a whole and in specific sectors such as hospitality.
			Of these, the Applicant believes that option 1 and option 4 would offer the most robust approach, as these would be based on observed changes in visitor behaviour or business performance, involving a treatment and control group. These would be more robust than options 2 and 3 where there is a high risk of bias in survey responses, and which would not provide robust evidence on change in visitor volumes.
			The Applicant would be willing to discuss the merit and potential challenges associated with each option further with North Norfolk Council.
Q2.22.1.2	Applicant Local Authorities	<ul> <li>Correlation with Local Planning Policies</li> <li>NPS EN1 at Paragraph 5.12.4 sets out that applicants should refer to how the development's socio-economic impacts correlate with local planning policies.</li> <li>a) Applicant, confirm where this has been undertaken.</li> <li>b) LAs, please set out whether you consider the Proposed Development correlate with your local planning policies that relate to socio-economic</li> </ul>	The policy context relevant to the socio-economic assessment is detailed within <b>ES Appendix 27.2 - Socio-Economics and</b> <b>Tourism Technical Baseline</b> [APP-277, Section 27.2.2]. This includes an overview of key local policy documents (within Section 27.2.2.4) which highlights local planning policies which are particularly relevant to the assessment (of the socio- economics impacts of SEP and DEP). The following local authority district planning documents (and relevant polices) were considered:
		matters.	<ul> <li>Joint Core Strategy for Broadland, Norwich and South Norfolk (Policy 3, Energy and water, Policy 5: The economy and Policy 21 Implementation of proposals in the Broadland part of the Norwich Policy Area);</li> </ul>



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ID	Question addressed to	Question	Applicant Response
			<ul> <li>The Broadland Development Management Development Planning Document (Policy GC5 – Renewable Energy);</li> </ul>
			<ul> <li>North Norfolk Core Strategy (Policies EN7 - Norfolk Coast Area of Outstanding Natural Beauty, SS1 – Spatial Strategy for North Norfolk, SS2 – Development in the Countryside, SS4 – Environment and SS5 – Economy);</li> </ul>
			Great Yarmouth Core Strategy (Key objectives related to socio-economic benefits were considered); and
			• East Suffolk Local Plan (Policy WLP2.2 - Power Park).
			The relevance of the policies listed above to the socio- economic assessment are then summarised within ES <b>Chapter</b> <b>27 Socio-Economics and Tourism</b> [APP-113, Table 27.5].
Q2.22.2 Effe	cts on jobs and skill	S	•
Q2.22.2.1	Applicant Local Authorities	Outline Skills and Employment Plan Following discussions at ISH4 [EV-058] [EV-062], provide an amended OSEP to include the additional measures proposed by the Applicant [REP1-036, Q1.22.2.8].	An updated <b>Outline Skills and Employment Plan (Revision</b> <b>B)</b> [document reference 9.23] has been submitted at Deadline 3 which includes the additional measures proposed by the Applicant.
Q2.22.2.2	Applicant	Outline Skills and Employment Plan Do the figures in the OSEP [APP-310, Paragraph 24] need to be updated, taking into account your response [REP1- 036 Q1.22.1.7]?	Paragraph 24 of the OSEP [APP-310] has been updated to reflect the Figures within Table 27.15 of Chapter 27 of the Environmental Statement: Socio-Economics and Tourism (APP-113)) as follows:
			'During the operational period (expected to be 40 years), and assuming that both SEP and DEP are operational, the Projects are anticipated to generate up to 85 direct and indirect FTE jobs. Of this, 55 FTE's would comprise direct jobs within the East Anglia study region. In addition, further employment opportunities generated throughout the UK (see table 27.15: Potential Employment Impacts During Operation (rounded to



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			the nearest 5) of Chapter 27 of the Environmental Statement: Socio-Economics and Tourism (APP-113))'.
Q2.22.3 Effe	ects on Individuals a	nd Communities	
Q2.22.3.1	Applicant	Impact on Bed Spaces As discussed at ISH4 [EV-058] [EV-062], provide further qualitative evidence regarding bed spaces in terms of price points. Further, revisit the cumulative bed space	The estimated peak demand for visitor accommodation for each of the projects included in the cumulative assessment is shown in the table below. This is based on the following information sources:
		availability assessment given that this did not include the delayed A47 Tuddenham to Easton highway improvement scheme.	a) <b>Offshore wind farms</b> : information is based on the estimated requirement for workers who do not live within commuting distance (the non-home-based workforce) during the peak construction period, according to the Environmental Statement for each project.
			<ul> <li>b) Sizewell C: information is taken from the Accommodation Strategy for Sizewell C which has estimated the potential demand for visitor accommodation to be 800 workers at peak.</li> </ul>
			c) <b>A47 dualling scheme</b> : no information is available on the number of workers required as this is not included in the planning documents. This has been estimated based on the estimated value of the project (£200m), the estimated duration of the construction period (two years) and the average turnover per employee in the road building sector (£190,000 per employee). This gives a total requirement for 1,053 worker years of employment, or 526 workers per annum. It is assumed that roughly half of these workers are either not required onsite (e.g. in design roles), or are drawn from the workforce within commuting distance and therefore do not require accommodation. These assumptions are based on the typical ratio of local and non-local workers on civil engineering projects, and are consistent with the ratio assumed on the offshore wind projects included in the cumulative assessment. This



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				t for 250 non-home based workers, subject to significant uncertainty.
			Anglia Three as the construct	lornsea Project Three or East ction of both of these projects has onstruction period is therefore and DEP.
			workers who would require to a worst-case scenario which construction periods for all p period for SEP and DEP. Th Accommodation Strategy for expected to occur in year se Assuming a start date of 202	nt for 2,366 hon-home based emporary accommodation. This is would only occur if the peak rojects overlapped with the peak is is highly unlikely to occur as the Sizewell C states that the peak is ven of the construction period. 24, the earliest this could occur is nlikely that all of the other projects n at this date.
				Demand for bedspaces at peak
			SEP and DEP	330
			East Anglia ONE North	199
			East Anglia TWO	199
			Norfolk Vanguard	294
			Norfolk Boreas	294
			Sizewell C	800
			A47 dualling scheme	Not known (assumed to be 250)
			Total	2,366



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			Visit England's most recent Accommodation Audit shows there were 24,474 rooms and 68,554 bedspaces in visitor accommodation in 2016. This includes serviced and non- serviced accommodation.
			There is no data available on how the supply of accommodation in the local area has changed since then. Visit England's estimates of the annual change in supply of visitor accommodation for England as a whole have therefore been used; these show the supply of accommodation grows by between 1 and 2% per annum in normal years, although there was a contraction in 2020 to 2021 due to the Covid pandemic. By applying these growth rates, it is estimated there are currently 24,474 rooms and 75,409 bedspaces in East Anglia.
			Visit England's monthly Occupancy Surveys for the East of England show that occupancy of serviced accommodation is at its highest in the month of July. The occupancy rate was 85% in July 2019, which is the most recent year which was unaffected by the pandemic. There is no data available on the occupancy of non-serviced accommodation, however this is also assumed to be 85%.
			That would mean there are around 4,121 unoccupied rooms $(24,474 \times 0.15)$ and 11,311 unoccupied bedspaces (75,409 x 0.15) in East Anglia in the peak month of July.
			In the worst-case scenario, where the peak accommodation requirement for all of the above projects overlap with each other, there would be demand for an additional 2,366 bedspaces. Assuming each worker required their own room, this would increase the occupancy rate to 94% and mean there are 1,755 rooms unoccupied. Therefore, this additional demand could be accommodated, although it would mean that



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			occupancy rates are high, increasing the risk that existing markets are displaced.
			As noted above, this scenario is considered to be unrealistic as it is highly unlikely that the peak construction periods for offshore wind farms would overlap with that of Sizewell C.
			It should also be noted that the calculation above has not assumed any further growth in the supply of visitor accommodation. If the supply of rooms grew at a rate of 2% per annum (which is realistic based on past trends), this would add an additional 988 rooms to the total stock of accommodation in East Anglia by 2025. Although it should be noted that demand for rooms is also likely to grow over the same time period.
			Given that visitor accommodation is a market good, we would expect the supply of visitor accommodation to respond to evidence of demand if there are strong signals that the market is under-supplied.
			Analysis of online booking portals shows accommodation in East Anglia is available at a range of different price points. For example, booking.com shows the following prices for one double room during July:
			<ul> <li>0 to £50 per night: 1% of establishments</li> </ul>
			<ul> <li>£50 to £100 per night: 25% of establishments</li> </ul>
			<ul> <li>£100 to £150 per night: 31% of establishments</li> </ul>
			<ul> <li>£150 to £200 per night: 27% of establishments</li> </ul>
			• £200 and above: 17% of establishments.
			There is no data available on the occupancy rates of accommodation with different price points.



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ID	Question addressed to	Question		Applicant Response
		No further questions in this section at this stage		Noted
Table 23 Ap	plicant's response	s to the Examining Authority's Second Writ	ten Ques	stions: Q2.23
ID	Question addressed to	Question	Applica	nt Response
Q2.23. Traffi	c and Transport			
Q2.23.1 Effe	cts from Constructio	n Vehicles on the Highway Network and Living (	Condition	S
Q2.23.1.1	Applicant	Outline Construction Traffic Management Plan The Applicant's reply [REP1-036, Q1.23.1.5] states that a revision to Figure 1 of the OCTMP [REP1-021] has been made to explicitly prevent HGVs travelling north of ACC07 on link 12 (towards links 9, 10 and 11) and that the revision would be included within the OCTMP to be submitted at Deadline 1. However, having regard to the revised OCTMP [REP1-021] Figure 1 (Sheet 2 of 4) of the OCTMP this does not appear to be the case, as link 12 is still identified to receive HGV traffic. Is this an error?	traffic to [REP1-0 links wor Applican <b>Traffic M</b> HGVs w identified <b>Manage</b> extends would be	A highlighted that link 12 could be used as a means to allow HGV travel to links 9, 10 and 11. Whilst the Applicant clarified in 036, Q1.23.1.5] that the controls on HGV numbers along these uld prevent an exceedance of the target HGV numbers, the at committed to amended Figure 1 of the <b>Outline Construction</b> Management Plan (OCTMP) [REP1-021] to make it clear that no ould be permitted north of access ACC07 on link 12. It can be d from Figure 1 of the <b>Outline Construction Traffic</b> ment Plan (OCTMP) [REP1-021] that link 12 now no longer north to intersect with links 9, 10 and 11. As such no HGVs e permitted to travel north on link 12 to reach links 9, 10 and 11. Nature of the Construction the excess of the travel north on link 12 to reach links 9, 10 and 11.
Q2.23.1.2	Applicant Norfolk County Council	Matters of Dispute At ISH3 [EV-037] [EV-042], it was evident that there were still some matters being discussed between the Applicant and NCC. Provide an update on such discussions and if there remain any outstanding matters of dispute.	Norfolk there are remainin design o captured (OCTMF discusse the Appl location	Dicant refers to the latest Draft Statement of Common Ground: County Council (Revision B) [REP2-033]. This highlights that e only three areas where parties are still in discussion with the ag areas noted as 'agreed'. Two areas of discussion relate to the of the access to the main compound at Attlebridge and how this is d within the Outline Construction Traffic Management Plan P) (Revision C) [document reference 9.16]. This matter has been ad with Norfolk County Council (NCC) and it has been agreed that icant will submit a minor revision to the access design at this as part of an update to the Outline Construction Traffic ment Plan (OCTMP) (Revision C) [document reference 9.16] at



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ID	Question addressed to	Question	Applicant Response
			Deadline 3. It is anticipated that these amendments will allow these items to be agreed between the parties at Deadline 4.
			The Applicant would clarify that the Statement of Common Ground (SoCG) ID.24 is noted as 'in discussion' (in relation to cumulative impacts), however this is an error and the item has previously been agreed between the parties. The Applicant will submit a revision to the SoCG at Deadline 4 to correct this.
			The Applicant notes that two new issues were raised by NCC at ISH3 [EV-037] [EV-042], however both parties have agreed (at a meeting on the 20.04.2023) that they are matters of clarification rather than 'matters of dispute'. The Applicants response to the queries raised by NCC are addressed at Q2.23.2.1 and Q2.23.2.2 below.
Q2.23.2 Traf	fic management Pro	posals and Impacts on the Highway Network	
Q2.23.2.1	Applicant Norfolk County Council	Ability to Review CTMP At ISH3 [EV-037] [EV-042] NCC set out that there is a need for it to be able to require a review of the CTMP once construction starts. Applicant and NCC, consider an appropriate mechanism within the dDCO and/or CTMP for this to be achieved.	The Applicant confirms that an amendment to the <b>Outline Construction</b> <b>Traffic Management Plan (OCTMP)</b> [REP1-021] to address NCCs comments has been shared and agreed with NCC. The amended wording will be captured within a revision to the <b>OCTMP (Revision C)</b> [document reference 9.16] to be submitted at Deadline 3.
Q2.23.2.2	Applicant	Construction Traffic Roads Following discussions at ISH3 [EV-037] [EV- 042], Applicant please provide a revised CTMP [REP1-021] that includes the names of all roads/links being utilised by the Proposed Development.	The Applicants confirms that an amendment to the <b>Outline Construction</b> <b>Traffic Management Plan (OCTMP)</b> [REP1-021] will be submitted at Deadline 3 to address NCCs comment at ISH3. This amendment will include a list of all roads that will be crossed by SEP and DEPs cables and the method of cable installation, e.g. trenchless techniques or open cut.
Q2.23.2.3	Applicant	Temporary ClosuresOulton PC [REP1-085] has raised concern that even though some crossing routes are by HDD that the road still needs to be stopped up for a	The Applicant has provided a response to this issue within Table 21 of <b>The Applicant's Comments on Responses to the Examining</b> <b>Authority's First Written Questions</b> [REP2-040]. In summary the Applicant notes that:



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ID	Question addressed to	Question	Applicant Response
		temporary period of time. Please explain if this is correct and if so, where and why would this be necessary?	The <b>Crossing Schedule</b> [AS-022] identifies that all roads within the vicinity of Oulton will be crossed using trenchless technologies, such as horizontal directional drilling (HDD). Consequently, the Applicant confirms that there would be no requirement to close or stop up these roads.
			Roads that will be crossed using trenchless technologies are included within in Schedule 3 (streets subject to street works) and Schedule 5 (streets to be temporarily stopped up) of the draft DCO (Revision F) [document reference 3.1] These provisions in the draft DCO (Revision F) [document reference 3.1], together with Articles 8 and 10, will give the relevant undertaker the powers to undertake the HDD works and carry out any alterations required to facilitate access from the cable route. As noted above, at HDD locations, the nature of the works that would be undertaken would not require the road to be stopped up temporarily and access would be maintained.
Q2.23.2.4	Applicant East of England Ambulance Service NHS Trust	East of England Ambulance Service NHS Trust Further to the Applicant's reply [REP1-036, Q1.23.5.6] provide an update on discussions between the parties.	Subsequent to drafting [REP1-036, Q1.23.5.6] the Applicant has engaged with the East of England Ambulance Service NHS Trust to discuss their comments. The Applicant has now received a signed fully agreed SoCG from EEAST and will submit this at Deadline 3.
Q2.23.3 Cum	ulative Traffic Effect	s with Other Local Projects	
Q2.23.3.1	Applicant	Traffic in Corpusty and SaxthorpeThe Parish Council has raised concern [REP1-073] about the impact of additional trafficgenerated by:•The housing developmentsplanned over the next several years atCorpusty and Saxthorpe;	The Transport Assessment (TA) [APP-268] outlines that baseline traffic flows have been captured for all 140 links forming the traffic and transport study area. To take account of changes in traffic flows related to new development (e.g. new housing and employment) and changes in travel patterns, section 24.1.2.3 of the Transport Assessment (TA) [APP-268] outlines the approach agreed with NCC to forecasting future traffic growth using the Trip End Model Presentation Programme (known as TEMPro). The Draft Statement of Common Ground: Norfolk County Council



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ID	Question addressed to	Question	Applicant Response
		<ul> <li>Additional homes recently constructed in Holt;</li> </ul>	(Revision B) [REP2-033] between the Applicant and NCC (local highway authority) confirms that the baseline has been adequately characterised.
		The proposed broiler farm at Edgefield (NNDC planning application	The Parish Council have highlighted three areas within Figure 1 of [REP1-073] as 'choke points'. These are:
		PF/22/1753); and	The B1149 Holt Road, Oulton (link 54);
		<ul> <li>The proposed layer farm at Lime Kiln Farm, Oulton (NNDC</li> </ul>	Reepham Road, Brandiston (link 137); and
		planning application PF/21/0317.	B1354 Bickling Road, Saxthorpe (link 57).
		The representation from the PC also includes a diagram of 'choke points' which it is of the view will be affected. Applicant, please set out how the above developments have been considered in the cumulative assessment and what effect the Proposed Development will have on the 'choke points' identified on the diagram provided by the Parish Council.	<b>ES Chapter 24 Traffic and Transport</b> [APP-110] includes an assessment of the impact of SEP and DEP traffic upon these links and identifies that with the application of mitigation measures (as required) residual impacts would not be significant. Furthermore, the Applicant has undertaken an extensive programme of stakeholder engagement with NCC who have a statutory duty under the Traffic Management Act 2004 to ensure the expeditious movement of traffic on their road network (which includes the three identified links). The <b>Draft Statement of Common Ground: Norfolk County Council (Revision B)</b> [REP2-033] between the Applicant and NCC identifies the parties agree upon the assessment conclusions.
	cts on Recreational	Routes, such as Public Rights of Way	
Q2.23.4.1	Applicant	Pedestrian Delay Assessment The Applicant's reply [REP1-036, Q1.23.4.1] sets out that it would provide a new copy of Appendix 24.3 - Pedestrian Delay Assessment [APP-271] with all figures showing at Deadline 1. This does not appear to be the case. Please provide.	The Applicant apologies for this oversight and will submit a revised copy of Appendix 24.3 - Pedestrian Delay Assessment at Deadline 3. This will be labelled Appendix B.7 of the Supporting Documents to The Applicant's Responses to the Examining Authority's Second Written Questions [document reference 16.2.2].
Q2.23.5 Sus	tainability of Access	Strategy	
Q2.23.5.1	Applicant	Abnormal Indivisible Loads	The Applicant would clarify that with regard to Scaring Bridge, the <b>Abnormal Load Study</b> [APP-271] shows a diversion route via the local



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	National Highways	NH has not been able to confirm the route for abnormal indivisible loads [APP-270] as there are two structures of concern (Scarning Bridge and a culvert located between Kings Lynn and Swaffham). Further, to NH reply [REP1-131, Q1.23.5.1] please provide an update on discussions on this matter.	highway network (agreed with NCC) that would allow this bridge to be bypassed (if needed). The Applicant has also employed heavy haul specialist, Wynns, to engage with National Highways structures specialist who have confirmed in writing that the culvert can be passed by contraflowing and plating (temporary placement of steel plates over the culvert whilst the load passes over). This matter has been discussed with National Highways at a meeting on the 18 April 2023 and it has been agreed between the parties that abnormal load movements (and associated mitigation) can be addressed post consent through the established ESDAL processes (Electronic Service Delivery for Abnormal Loads).
			The Applicant will submit a revision to the SoCG with National Highways at Deadline 3 confirming this agreement.
Q2.23.5.2	Applicant	<b>Onshore Substation - Access Strategy</b>	The Applicant responds as follows:
	Network Rail	The access arrangements for the onshore substation are somewhat uncertain. a) Applicant, is there any update on this	a) Further to the Applicant's response to <b>The Applicant's Responses</b> <b>to the Examining Authority's First Written Questions</b> [REP1-036] the Applicant reiterates that:
		<ul> <li>matter?</li> <li>b) One of the potential options is to build a permanent access road at the Norwich Main National Grid substation to maintain operational works and to compart the compartment of the neuronal statement.</li> </ul>	The Applicant wishes to retain all three options to access the onshore substation at this stage. Should new information become available to delimit the number of the options the Applicant will advise the ExA accordingly.
		support the construction of the new substation. NR has set out it is reviewing the proposals for the Access Road to determine whether the offset distance is acceptable and if any other mitigation is required to protect its operational railway. Network Rail, please provide an update on this work?	b) Please refer to the Applicant's response to Q2.23.6.5 below.



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ID	Question addressed to	Question	Applicant Response
Q2.23.5.3	Applicant	Construction Access ACC60/ Early Works Access ACEW99 The landowner has raised concern [REP1-168] about the arrangements for this access. It was discussed at CAH1 [EV-068] [EV-072] that this was due to the characteristics of the area, including the presence of a cycle path. Applicant, provide full justification, including a diagram/map for the access arrangements as proposed.	Access ACC60 proposed by the Applicant is depicted on sheet 34 of the Access to Works Plans (Revision C) [document reference 2.9]. The access proposed by the Respondent within [REP1-168] is located between ACC61 and the existing lay-by (depicted on sheet 34 of the Access to Works Plans (Revision C) [document reference 2.9]) on the northern side of the B1172. The Applicant has provided a response to this issue within Table 4 of The Applicant's Comments on Written Representations [REP2-017] as follows: To minimise landscape impacts the Applicant has sought to keep works away from Ketts Oak and surrounding trees. The access proposed by the Respondent at Point C within [REP1-168] would require works to upgrade the access to provide a new priority junction which would result in the loss of vegetation either side. With regard to the Applicant's proposed access (ACC60), prior to the commencement of construction, the technical approvals for the access design will be submitted to and agreed with NCC (the local highway authority). The technical approval documentation will also include an independent assessment of road safety known as a Road Safety Audit. This commitment is secured by Requirement 15 and 17 of the draft DCO (Revision F) [document reference 3.1] to be submitted at Deadline 3. With regard to the cycle path, the Applicant would clarify that both the proposed access (ACC60) and the access proposed by the Respondent at Point C within [REP1-168] would require construction traffic to pass over the existing cycle path.
Q2.23.5.4	Applicant	Access ACC88 The Applicant's reply to RR's [REP1-033] notes that there is an overlap at Access ACC88 on The Street, Oulton, with Norfolk Vanguard order limits. Provide further detail about how this conflict will be addressed.	Norfolk Vanguard have not raised any specific concerns with the Applicant in relation to these interactions. The Protective Provisions for the benefit of Norfolk Vanguard which are set out in Part 11 of Schedule 14 to the <b>draft DCO (Revision F)</b> [document 3.1] include requirements for the undertaker to submit plans in advance of undertaking works, including plans for use of



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ID	Question addressed to	Question	Applicant Response
			accesses. It is through the approval mechanism of these plans that interactions like this will be managed between the parties.
Q2.23.5.5	Applicant	Access to Bluestone Cottage, Oulton Oulton PC [REP1-085] state that there appears to be no information on how the resident of Bluestone Cottage will be able to exit from their property or consideration of loss of access during works to construct the cable route. Applicant, set out how access will be retained?	The Applicant has provided a response to this issue within Table 21 of <b>The Applicant's Comments on Responses to the Examining</b> <b>Authority's First Written Questions</b> [REP2-040] as follows: The use of temporary traffic signals at access ACC25b has been discussed and agreed with NCC (local highway authority) as a means of safely controlling traffic in this location. These signals would assist in managing the potential for conflict with the resident of Bluestone Cottage and ensure that access can be maintained. Furthermore, the Crossing <b>Schedule</b> [AS-022] also identifies that the track to Bluestone Cottage will be crossed using trenchless technologies, such as horizontal directional drilling (HDD) and therefore access will be maintained at all times.
Q2.23.5.6	Applicant	Access to Weybourne Forest Lodges The owners of Weybourne Forest Lodges [REP1-166] are concerned about traffic on Sandy Hill Lane and access arrangements to Weybourne Forest Lodges. Applicant, provide an explanation for the access arrangements here and how access will be retained.	The Applicant has provided a response to this issue within Table 8 of The Applicant's Comments on Written Representations [REP2-017] as follows: It is the Applicants intention that access ACC11 (the access from the A148 near Bodham) (depicted in the Access to Works Plans (Revision C) [document reference 2.9]) would be utilised for the majority of construction works to the south of the Weybourne Woods with vehicles travelling north along the temporary haul road. However, access ACC09 would also be required to facilitate construction access (prior to installation and/or upon removal of the haul road) to the two HDDs within Weybourne Woods including in part the fire break road to the centre of the two HDDs. The Applicant clarifies that access ACC09 (depicted in the Access to Works Plans (Revision C) [document reference 2.9]) is proposed to the south of the Respondents access ensuring construction traffic would not be in conflict and access would be maintained at all times. Prior to the commencement of construction, the technical approvals for the access designs will be submitted to and agreed with NCC (local



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			highway authority). The technical approval will not be granted until an independent assessment of road safety, is undertaken (known as a Road Safety Audit) and that all recommendations have been addressed in the design. This commitment is secured by Requirements 15 and 17 of the <b>draft DCO (Revision F)</b> [document reference 3.1] to be submitted at Deadline 3.
Q2.23.6 Eff	ectiveness of Propos	ed Mitigation Measures	•
Q2.23.6.1	Applicant National Highways	Mitigation – A47 At ISH3 [EV-037] [EV-042], it was noted that NH are seeking some clarifications in terms of how the OCTMP [REP1-021] and that the impacts of the potential overlap of construction with the A47 Tuddenham to Easton improvement scheme would be managed. Parties provide an update on such discussion and whether NH is content that such matters can be suitably addressed in the OCTMP.	The Applicant would clarify that at ISH3 [EV-037] [EV-042] both parties agreed that the potential for cumulative impacts between the construction of SEP and DEP and with the A47 Tuddenham to Easton improvement scheme can be managed by through the OCTMP [REP1-021]. The Applicant will submit a revision to the SoCG at Deadline 3 confirming this agreement. The Applicant however highlighted at ISH3 [EV-037] [EV-042] that National Highways were seeking clarification on how (conflicting) access for the A47 North Tuddenham to Easton construction works can be managed but anticipated that this will be addressed via a co-operation agreement and/or protective provisions. The Applicant has had a meeting with National Highways on the 20.04.2023 to discuss this matter. During the meeting it was agreed that the parties would agree suitable Protective Provisions and develop a co-operation agreement to address: access arrangements, programming of works, lines of communication, engineering works where relevant, ecological mitigation and road closures.
Q2.23.6.2	Applicant Norfolk County Council	Mitigation – Controls on HGV RoutesThe OCTMP [REP1-021] sets out that there will be no HGV traffic through: Attlebridge, Barford, Blind Lane, Cantley Road, Cawston, Horsford, Oulton, Plumstead and Weston Longville. Should restrictions on LVs also be required through these routes?	The Applicant has made a commitment to prohibit the use of certain links for use by HGV traffic at the request of the highway stakeholders and local communities. These commitments are captured within the <b>Outline</b> <b>Construction Traffic Management Plan (OCTMP) (Revision C)</b> [document reference 9.16] and will be secured by Requirement 15 of the <b>draft DCO (Revision F)</b> [document reference 3.1] to be submitted at Deadline 3. With regard to LVs, <b>ES Chapter 24 Traffic and Transport</b> [APP-110] includes a detailed assessment of LV movements along these



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ID	Question addressed to	Question	Applicant Response
			links. This assessment has not identified any significant impacts and therefore the Applicant does not consider that restrictions upon LVs are required. Notwithstanding, the Applicant have consulted with NCC who have identified the routes they would wish to see LV restrictions. These include, Blind Lane and Oulton. No SEP and DEP traffic is forecast to travel via Blind Lane and the Applicant has included additional measures within a revision to the <b>Outline Construction Traffic Management Plan</b> ( <b>OCTMP</b> ) [REP1-021] to be submitted at Deadline 3 to manage the potential for LV movements through Oulton.
Q2.23.6.3	Applicant	Mitigation – Link 61 Is the assertion [REP1-036, Q1.23.6.5] that the	The Applicant notes an incorrect table reference in REP1-036, Q1.23.6.5 which should have read:
	main cause of impacts on this link would be LV's and not HGVs justified, having regard to [APP-110, Table 24-30].	Table 24-30 Table 24-33 of Chapter 24 Traffic and Transport of the ES [APP-110] outlines that there would be an intensification of vehicle movements for two hours a day when construction personnel are arriving and departing. It is identified that during these hours the major contributor to increases in traffic demand [and therefore amenity impacts] is associated with LVs, hence the mitigation directed at LVs.	
Q2.23.6.4	Applicant	<b>Royal Mail</b> Royal Mail [REP1-160] has set out that the OCTMP [REP1-021] should include additional	The Applicant has provided a response to this issue within Table 5 of <b>The</b> <b>Applicant's Comments on Written Representations</b> [REP2-017] as follows:
		provisions including a months notification of highway works that might affect it being able to deliver mail. Is the Applicant in agreement that such provisions are required? If so, provide suitable wording.	Section 2.4 of the <b>Outline Code of Construction Practice (Revision C)</b> [document reference 9.16] outlines that a Stakeholder Communications Plan will be developed as part of the Code of Construction Practice and will ensure effective and open communication with local residents, businesses, the local community and the emergency services that may be affected by the construction works. As a potentially impacted local business, the Royal Mail will be included within the Stakeholder Communications Plan and made aware of type and timing of works. Furthermore, both National Highways and NCC as the relevant highways authorities have confirmed that they give Royal Mail advance notifications of any road closures.



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ID	Question addressed to	Question	Applicant Response
Q2.23.6.5	Applicant	Network Rail Network Rail [REP1-140] raise concern that the Promoter intends to route construction traffic over the Hickling Lane Overline Bridge (Bridge), which is positioned above the Anglian Railway line and that the use of the Bridge does not appear in the OCTMP [REP1021]. Applicant, is such a provision necessary?	The Applicant clarified at ISH3 [EV-037] [EV-042] that during the development of the SEP and DEP the Applicant explored potential options to access the onshore substation. One option being considered was to use an existing access from the A140 along Hickling Lane. This route would have required construction traffic to pass over a Network Rail bridge on this route. Consequently, the Applicant engaged with Network Rail to understand any constraints in relation to this structure. This option was included within the applicants Preliminary Environmental Information Report. Prior to submission of the DCO application the option was however rejected and <u>no access</u> is proposed via Hickling Lane. The Applicant further clarify that Network Rail have confirmed that they no longer have a concern regarding the Hickling Lane overbridge access and will write into the Examining Authority with that confirmation at Deadline 3.



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## Table 24 Applicant's responses to the Examining Authority's Second Written Questions: Q2.24

ID	Question addressed to	Question	Applicant Response		
Q2.24. Water	Q2.24. Water quality and resources				
Q2.24.1 Effect	cts on Flood Risk a	nd Drainage, including Adequacy of Sequential and Excep	tion Tests		
Q2.24.1.1	Applicant	Sequential Test and Little Barningham Further to discussions at ISH3 [EV-038] [EV-042], provide full details to demonstrate that the course of the cable corridor route through the area of flood risk west of Little Barningham could not be avoided.	Please refer to Appendix A.1 of the Supporting Figures to The Applicant's Responses to the Examining Authority's Second Written Questions [document reference 16.2.1] which shows the Order Limits and constraints in the area around Little Barningham.		
			The routing of the onshore cable corridor near Little Barningham was restricted by a number of constraints including the existing Sheringham Shoal cable to the west, and the ecological, archaeological and technical constraints, including buried utilities, to the east. The onshore cable corridor has been located to avoid interactions with these features so far as possible.		
			The Applicant acknowledges that the onshore cable corridor interacts with an area of flood risk to the south west of Little Barningham. However, as can be seen on <b>Appendix A.1</b> of the <b>Supporting Figures to The Applicant's Responses to</b> <b>the Examining Authority's Second Written Questions</b> [document reference 16.2.1] the area of flood risk in this area extends in a broadly north west to south east direction. On this basis, the onshore cable corridor would be required to pass over the area at flood risk in a perpendicular manner, regardless of whether it was to pass through the area to the west or east of Little Barningham.		
			Therefore, within the parameters of other environmental constraints the onshore cable corridor cannot wholly avoid crossing watercourses (especially Ordinary Watercourses) and the area to the west of Little Barningham is an example of this.		



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ID	Question addressed to	Question	Applicant Response
			Both the Environment Agency and the Lead Local Flood Authority (LLFA) have confirmed they are content with the information provided by the Applicant in the Deadline 2 <b>Flood</b> <b>Risk at Matlaske Road Technical Note</b> [REP2-054].
			The LLFA noted there are some maintenance issues outside the Order Limits, which will be progressed with the relevant riparian owners. Any works to be undertaken by the riparian owners will need to be considered by the Applicant in the context of timings of the works; however, the mitigation measures in the <b>Outline Code of Construction Practice</b> <b>(Revision C)</b> [document reference 9.17], submitted at Deadline 3, will continue to be relevant regardless of whether the maintenance works have been undertaken or not.
Q2.24.1.2	Applicant	Hornsea Project 3 – Onshore Substation Drainage Following the Applicant's change request documentation to determine that an infiltration method would be used to manage surface water arising from the onshore substation site, provide details of cumulative drainage effects (infiltration) with HP3 at the onshore substation, whether the infiltration solution is viable if HP3 are seeking to do the same and whether this has been factored into the hydraulic modelling?	<ul> <li>Please refer to Appendix A.2 of the Supporting Figures to The Applicant's Responses to the Examining Authority's Second Written Questions [document reference 16.2.1] which shows the location of the Hornsea Project 3 Energy Balancing Infrastructure (EBI) and Onshore Converter Station (ONCS).</li> <li>Following a review of the hydraulic modelling undertaken for SEP and DEP, as well as the Environment Agency Risk of Flooding from Surface Water mapping, the Applicant notes that the Hornsea Project 3 EBI and ONCS are located in a separate hydrological catchment to SEP and DEP i.e. drain in a different</li> </ul>
			direction and to an alternative receiving watercourse. This is reflected in the overland flow path which drains from Hornsea Project 3 in a northerly direction and the reviewed outline of the Flood Estimation Handbook (FEH) catchment boundary for SEP and DEP which drains in a south easterly direction, both of which are identified on <b>Appendix A.2</b> of the <b>Supporting Figures to The Applicant's Responses to the</b>



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ID	Question addressed to	Question	Applicant Response
			Examining Authority's Second Written Questions [document reference 16.2.1].
			This understanding is in accordance with the direction of the proposed surface water drainage from Hornsea Project 3 EBI, as noted in paragraph 4.3.1.3 of the Ørsted Energy Balancing Infrastructure - Drainage Strategy Technical Note, Version A, dated 14/04/2022 which states:
			"Discharge is proposed to be to the existing deep surface water drain that runs along the northern boundary of the site, and the route of which is marked on-site by a series of manholes. The onwards route is currently uncertain but is believed to be to the north or west with eventual discharge to Intwood Stream or Mill Stream."
			With regard to the potential for a cumulative impact related to surface water and overland flow between SEP and DEP and Hornsea Project 3, the Applicant concludes that as these are in separate hydrological catchments, there is no interaction between the two projects and therefore no resulting impact.
			In addition, a review has been undertaken with regard to the proposed drainage solution to be adopted for the Hornsea Project 3 ONCS. It is noted in Appendix B of the Hornsea Project 3 Environmental Statement Volume 6, Annex 2.1 - Onshore Infrastructure Flood Risk Assessments (Ørsted, May 2018) that:
			"No soil infiltration testing was undertaken on the onshore HVDC converter/HVAC substation area at the time of writing due to access restrictions. Reference to BGS online mapping (1:50,000) indicates that the onshore HVDC converter/HVAC substation area is underlain by superficial deposits from Lowestoft Formation. This particular deposit forms an extensive sheet of chalky till together with outwash sands and



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			gravels, silts and clays. The onshore HVDC converter/HVAC substation area is shown to be underlain by bedrock deposits from the Lewes Nodular Chalk Formation which is comprised of rock.
			Reference to BGS borehole records indicates a borehole log on site (BGS reference: TG20SW14). The borehole scans shows that the onshore HVDC converter/HVAC substation area is underlined by boulder clay.
			Based on the information above, discharge of surface water runoff into ground via infiltration is considered not feasible."
			It then goes on to note in the following section that:
			"The River Tas is located approximately 1.25 km away from the onshore HVDC converter/HVAC substation area eastern boundary. The River Yare meanwhile, is approximately 1.5 km from the onshore HVDC converter/HVAC substation area northern boundary.
			Based on information provided from onshore HVDC converter/HVAC substation area, there are local ditches at the edges of the proposed onshore HVDC converter/HVAC substation area. A deep drain, with depth of up to 1 m, runs along the northern boundary of the development area, separating the onshore HVDC converter/HVAC substation area from the A47 dual carriageway. It is believed that the drain is used to intercept overland surface water runoff generated on onshore HVDC converter/HVAC substation area from overflowing offsite, into the A47.
			On this basis, the possibility to discharge surface water runoff generated from the onshore HVDC converter/HVAC substation area to the deep drain will be considered."



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			It is therefore the understanding of the Applicant that surface water drainage from the Hornsea Project 3 ONCS does not propose to adopt an infiltration approach.
			Confirmation of the above is provided in paragraph 4.1.1.4 and 4.1.1.5 of the Ørsted Energy Balancing Infrastructure - Drainage Strategy Technical Note, Version A, dated 14/04/2022, which notes that the Hornsea Project 3 EBI will adopt a similar drainage approach to the Hornsea Project 3 ONCS, as it states:
			"Although separate planning permission is sought for the proposed development the drainage principles are consistent with, and therefore make reference to those approved for the Hornsea Three ONCS.
			The information provided in the Hornsea Three Environmental Statement (ES) (Ørsted, 2018) (Volume 6, Annex 2.1) established the approved principles for the drainage of the Hornsea Three ONCS (Ørsted, 2018)."
			It then notes in Section 4.3 Surface water discharge of the Ørsted Energy Balancing Infrastructure - Drainage Strategy Technical Note, Version A, dated 14/04/2022 that:
			"Previous drainage strategies for the Hornsea Three ONCS have identified that site surface water will be attenuated and then discharged to a suitable watercourse. The EBI draft drainage strategy is therefore provided on that same basis, assuming that the EBI is attenuated separately prior to combination with the Hornsea Three ONCS drainage for ultimate outfall.
			Preliminary site investigation for the site indicates that infiltration is unlikely to be a suitable basis for the drainage design due to the low permeability of the superficial geology.



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			Hence, the draft drainage strategy is based on attenuation and discharge to a suitable watercourse.
			Discharge is proposed to be to the existing deep surface water drain that runs along the northern boundary of the site, and the route of which is marked on-site by a series of manholes. The onwards route is currently uncertain but is believed to be to the north or west with eventual discharge to Intwood Stream or Mill Stream."
			The proposed location of the discharge point from Hornsea Project 3 has been highlighted on <b>Appendix A.2</b> of the <b>Supporting Figures to The Applicant's Responses to the</b> <b>Examining Authority's Second Written Questions</b> [document reference 16.2.1] for ease of reference.
			Therefore, on the basis that neither Hornsea Project 3 EBI or ONCS propose to utilise an infiltration approach for surface water drainage, and that the Hornsea Project 3 EBI and ONCS are located in a separate hydrological catchment to SEP and DEP the Applicant concludes there is no interaction with the proposed infiltration approach to be adopted by SEP and DEP and no cumulative drainage effect as a result of the two projects. As such, there is no requirement to consider this further within either the hydraulic modelling or outline drainage design.
Q2.24.1.3	Applicant	Detailed Maintenance Plan The OODS [REP2-029, Paragraph 35] refers to a detailed maintenance plan being developed during detailed design once the drainage design is finalised. Is this appropriately secured in the dDCO?	The Applicant notes that sub-paragraph (3) of Requirement 17 of the <b>draft Development Consent Order (Revision F)</b> [document reference 3.1], submitted at Deadline 3, includes reference to the need for the Operational Drainage Strategy to include provision for the maintenance of any measures identified.
			On this basis, the Applicant concludes that the need for a detailed maintenance plan is appropriately secured within the



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			<b>draft Development Consent Order (Revision F)</b> [document reference 3.1], submitted at Deadline 3.
Q2.24.1.4	Environment Agency	Flood Risk Effects from Trenched Crossings of Ordinary Watercourses that are in Fluvial Flood Zones 2 and 3a.	Noted – no response required.
		Further to the issues raised by the EA [RR-032] and the Applicant's reply [REP1-036, Q1.24.1.12], is the EA now content that such matters have been suitably assessed?	
Q2.24.2 Effect	ts on Water Resour	rces and Water Quality, Including Measures to Prevent Pol	lution of Aquifers
Q2.24.2.1	Applicant	<b>Drinking Water Protected Areas</b> The Applicant's response [REP1-036, Q1.24.2.1] appears to be missing the first map for Drinking Water Protected Areas. Please provide this.	The Drinking Water Protected Areas map was omitted from the Applicant's response to Q1.24.1.24 [REP1-036, Q1.24.2.1] due to an error during the creation of the PDF file. The figure has therefore been included within <b>Appendix A.3</b> of the <b>Supporting Figures to The Applicant's Responses to the</b> <b>Examining Authority's Second Written Questions</b> [document reference 16.2.1].
Q2.24.3 Effect	ts on Rivers, Stream	ms, Canals and Ditches from Proposed Construction Meth	ods and Crossing
Q2.24.3.1	Applicant	Drainage Strategies	Noted.
	Environment Agency Lead Local Flood Authority	The Applicant's response [REP1-036, Q1.24.1.9] sets out that drainage strategies for the construction phase, including temporary compounds, will be agreed with the EA and NCC, in their role as the LLFA, as appropriate. Are the EA and LLFA content that this is appropriate post consent?	The Applicant notes that no concerns have been raised during the ongoing dialogue with regard to the drainage strategies for the construction phase by either the Environment Agency or the LLFA. Furthermore, the Applicant notes that this is secured under Requirement 19 of the <b>draft Development Consent Order</b> (Revision F) [document reference 3.1], submitted at Deadline 3.
Q2.24.3.2	Applicant	Spring Beck Mr Hay-Smith raised concerns at OFH2 [EV-074] [EV-075] about the potential impacts of the Proposed Development	The Applicant understands that Spring Beck is a globally rare chalk stream, and has taken this into account in <b>ES Appendix 18.3 – Geomorphological Baseline Survey Technical</b>



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		on Spring Beck, which it is asserted is one of only 200 chalk streams globally. Applicant, will the use of HDD avoid any potential impacts on the Spring Beck and is	<b>Report</b> [APP-212] and the assessment of potential impacts presented in Section 18.6 of <b>ES Chapter 18 Water Resources and Flood Risk</b> [APP-104].
		there any precedence for undertaking such works underneath chalk streams?	In order to minimise the potential for impacts associated with the crossing of Spring Beck and other chalk streams, the Applicant has selected a trenchless crossing technique that will avoid direct physical disturbance of the watercourses. This is set out in Table 18-3 of <b>ES Chapter 18 Water Resources and</b> <b>Flood Risk</b> [APP-104].
			The Applicant recognises that trenchless crossing techniques could potentially have some impact upon groundwater- dependent surface watercourses such as chalk streams, for example by changing groundwater flow patterns or releasing drilling fluids (see Sections 18.6.1.3 and 18.6.1.4 of <b>ES</b> <b>Chapter 18 Water Resources and Flood Risk</b> [APP-104]). The Applicant has therefore committed to undertake a site- specific hydrogeological risk assessment at each trenchless crossing location, as stated in Section 7.1.3 of the <b>Outline</b> <b>Code of Construction Practice (Revision C)</b> [document reference 9.17] submitted at Deadline 3, which is secured under Requirement 19 of the <b>draft Development Consent</b> <b>Order (Revision F)</b> [document reference 3.1], also submitted at Deadline 3. The results of the hydrogeological risk assessment will allow the trenchless crossing to be designed to minimise risks to groundwater-bearing strata and groundwater-dependent surface water features associated with them. Furthermore, Section 7.1.4 of the <b>Outline Code of</b> <b>Construction Practice (Revision C)</b> [document reference 9.17] submitted at Deadline 3 sets out a suite of measures that would be adopted during construction to minimise the risks of bentonite breakout on chalk streams and other surface watercourses. The Applicant therefore believes that the



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			proposed trenchless crossing technique will not result in any significant adverse impacts upon Spring Beck.
			The Applicant has undertaken extensive consultation with the Environment Agency during the development of the project, and they have supported the commitment to use trenchless techniques to cross chalk streams rather than alternative open trench techniques (cf. the <b>Draft SoCG: Environment Agency</b> (Revision B) [document reference 12.10] submitted at Deadline 3).
			The Applicant notes that there is established precedent for crossing chalk streams using trenchless techniques such as HDD. The onshore transmission infrastructure for the Dudgeon Offshore Windfarm follows a route from Weybourne beach on the north Norfolk coast to the National Grid connection point at Necton. This scheme used HDD to cross chalk streams along the onshore cable corridor, including the River Wensum SSSI and SAC. Other projects that have recently been consented, including the Norfolk Vanguard and Boreas offshore wind farms, have also proposed to cross chalk rivers along their cable route using trenchless crossing techniques. The Applicant therefore believes that there is a strong precedent for using trenchless techniques to cross sensitive chalk streams, which is supported by the relevant competent authorities.
Q2.24.3.3	Lead Local	Ordinary Watercourses	Noted – no response required.
	Flood Authority	The Applicant has replied [REP2-040] to a number of concerns raised by the LLFA in their response to first written questions [REP1-079, Q1.24.3.1. Does the reply overcome the concerns of the LLFA?	
Q2.24.3.4	Applicant	Temporary Works	The Applicant notes that additional text has been provided as clarification in Section 7.1.3 Watercourse Crossings of the <b>Outline Code of Construction Practice (Revision C)</b>



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		The LLFA's reply [REP1-079, Q1.24.3.4] states: "The applicant must always consider the weather and the appropriate methods for ensuring the continuity of flow	[document reference 9.17], submitted at Deadline 3, in relation to the provision of appropriate measures to maintain flow conveyance during high flow events.
		along the ordinary watercourses. A schedule would be required by the LLFA for the temporary works. In addition, the applicant would be requested to provide an out of hours management approach and ensure there was adequate facility to over pump high flows around the temporary works". Applicant, is this suitably controlled in the OCoCP?	In addition, the Applicant notes Table 1-1 of the <b>Outline Code</b> of <b>Construction Practice (Revision C)</b> [document reference 9.17], submitted at Deadline 3, already confirms that Construction Method Statements and the Watercourse Crossing Scheme will identify the method for each phase of works, as well as a programme for each watercourse crossing.
			Measures related to Working Hours and Timing of Works are set out in Section 3.1 and information related to Flood Warning and Evacuation is set out in Section 7.1.8 of the <b>Outline Code</b> <b>of Construction Practice (Revision C)</b> [document reference 9.17], submitted at Deadline 3.
			As such the Applicant concludes that the items identified by the LLFA in their reply [REP1-079, Q1.24.3.4] are adequately controlled in the <b>Outline Code of Construction Practice</b> ( <b>Revision C</b> ) [document reference 9.17].
			Furthermore, details related to the final Code of Construction Practice are secured under Requirement 19 of the <b>draft</b> <b>Development Consent Order (Revision F)</b> [document reference 3.1], submitted at Deadline 3.
Q2.24.4 Effe	ctiveness of Mitigat	ion Measures	
Q2.24.4.1	Applicant	<b>Transfer of Mitigation</b> Further to discussions at ISH3 [EV-038] [EV-043], set out the full mitigation measures listed in the FRA in relation to landfall and the onshore substation within the OCoCP.	As requested at ISH3 [EV-038] [EV-043] the Applicant has reviewed the information contained within the <b>Flood Risk</b> <b>Assessment</b> [AS-023] with regards to the mitigation measures at the landfall and onshore substation.
			The Applicant notes that the majority of the construction phase mitigation measures were already contained within Section 7 of



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			the <b>Outline Code of Construction Practice (Revision C)</b> [document reference 9.17], submitted at Deadline 3.
			However, additional text and clarification related to mitigation measures identified within the Flood Risk Assessment [AS-023] has been included within Section 2.5.7 and Section 7.1.8 of the <b>Outline Code of Construction Practice (Revision C)</b> [document reference 9.17], submitted at Deadline 3.
			In addition, the Applicant notes that final details related to mitigation measures will be set out in the final Code of Construction Practice which is secured under Requirement 19 of the <b>draft Development Consent Order (Revision F)</b> [document reference 3.1], submitted at Deadline 3.
Q2.24.4.2	Applicant	Protective Provisions Having regard to discussions at ISH3 [EV-038] [EV-043], set out a draft of protective provisions agreed with the EA, LLFA and Water Management Alliance on behalf of the relevant IDB and incorporate into a revised version of the dDCO as appropriate.	The Applicant has been in continuing discussions with the Environment Agency, LLFA and Water Management Alliance (WMA), as the Internal Drainage Board. The LLFA and the WMA have agreed to include a joint set of protective provisions for the benefit of the LLFA and the Norfolk District Internal Drainage Board. The <b>draft Development Consent Order</b> (Revision F) [document reference 3.1] has been updated to include the current draft of these joint provisions at Part 5 of Schedule 14. These joint provisions are not yet in final agreed form, but good progress is being made and the Applicant anticipates that these will be in agreed form by Deadline 5. Protective provisions for the benefit of the Environment Agency are included in Part 4 of Schedule 14 of the <b>draft Development Consent Order</b> (Revision F) [document reference 3.1]. The Environment Agency has confirmed that it prefers to retain separate protective provisions and the Applicant understand from the Environment Agency that there are limited points between us in respect of the Environment Agency's protective provisions and therefore the Applicant also hopes to



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			be in a position to provide agreed provisions with the Environment Agency at Deadline 5.
Q2.24.4.3	Applicant Environment Agency Local Lead Flood Authority	Outstanding Concerns It was evident from discussions at ISH3 [EV-038] [EV-043] that there are still some outstanding matters being discussed between the Applicant, the EA and the LLFA. Provide an update on these discussions, setting out any areas that remain in dispute.	<ul> <li>The Applicant notes the discussions during ISH3 [EV-038] [EV-043].</li> <li>With regard to the Environment Agency, it is the Applicant's understanding that there are no remaining areas of concern beyond finalising the discussion related to the Protective Provisions. A Statement of Common Ground between the Applicant and the Environment Agency is currently being discussed and will be submitted at Deadline 3.</li> <li>Furthermore, the Applicant does not consider there to be areas of dispute with the LLFA, instead through ongoing dialogue the Applicant has provided clarification on a number of queries raised by the LLFA.</li> <li>It is noted that further clarification, to address a number of additional queries raised by the LLFA with regard to the surface water hydraulic modelling and surface water drainage design, will be addressed at Deadline 3 with updated versions of the following reports submitted:         <ul> <li>Onshore Substation Drainage Study (Revision C) [document reference 6.3.18.2.1]</li> <li>Outline Operational Drainage Strategy (Revision C) [document reference 9.20]</li> <li>Addendum to the Flood Risk Assessment (Revision B) [document reference 14.31]</li> </ul> </li> <li>In addition, the Applicant notes there will be a further update to the Statement of Common Ground with Norfolk County</li> </ul>



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			Council, including their role as the LLFA, which is targeted for submission at Deadline 5.



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