

THE PLANNING ACT 2008

THE INFRASTRUCTURE PLANNING (EXAMINATION PROCEDURE) RULES 2010

Sheringham Shoal Extension and Dudgeon Extension Offshore Wind Farms

Appendix L3 to the Natural England Deadline 5 Submission

Natural England's Response to The Examining Authority's Third Written Questions

For:

The construction and operation of the Sheringham Shoal Extension and Dudgeon Extension Offshore Wind Farms located approximately 16km and 27km respectively from the Norfolk Coast in the Southern North Sea.

Planning Inspectorate Reference: EN010109

Appendix L3 Natural England's Response and Comments to the Examining Authority's Third Written Questions

This document sets out Natural England's (NE's) responses to the Examining Authority's (ExA) third set of Written Questions and requests for information (WQ2) published on 26 May 2023. Natural England has only included responses directed to Natural England by the ExA or those questions pertain to our remit.

Q3.3. Benthi	ic ecology, Inte	rtidal, Subtidal and Coastal effects	Natural England Response
Q3.3.1 Effec	ts on Marine Lif	e and Benthic Habitats	
Q3.3.1.3	Marine Management Organisation Natural England	Electro-Magnetic Fields If cables were to be buried, but not at a depth of 1.5m and with no cable protection used, would there be an adverse impact from electromagnetic fields on fish, shellfish or other forms of benthic ecology?	Natural England acknowledges the MMO's advice in [REP3-133] advising burial to 1.5m+ should minimise adverse impacts to benthic ecology receptors via electromagnetic field and/or heating. As per our previous advice [REP3-141] the evidence to date remains inconclusive as to the depth of burial. However Natural England advises the deeper the burial, the likelihood of significant impacts occurring is reduced.
Q3.3.1.5	Natural England Applicant	Timing for required Benthic Mitigation Plan/Scheme ExA is not convinced that the assessment of the ES on matters of benthic ecology and mitigation measures can be relied upon without an outline Benthic Mitigation Plan or Scheme. a) Applicant, provide an outline Benthic Mitigation Plan or Scheme setting out what the Applicant could commit to in relation to benthic mitigation and also what other forms of mitigation would likely be, or could be	a) Applicant to respond. b) Natural England advises that recently consented offshore windfarm projects (notably EA1N/EA2) have included a mitigation plan which outlines mitigation measures including benthic that have been committed to by the Applicant. Natural England would wish to see an outline mitigation plan for benthic included as part of the consenting phase. We refer the ExA and the Applicant to Natural England's tabulated list of

Q3.3. Benth	ic ecology, Into	ertidal, Subtidal and Coastal effects	Natural England Response
		 included, subject to pre-commencement surveys for example. If not, please provide further justification why this cannot be done at this Examination stage. b) What is NE's view of the Applicant's response [REP3-107] that there would not be any value to an outline Benthic Mitigation Plan/Scheme until post-consent pre-commencement surveys and detailed design has been undertaken? 	standard benthic mitigation measures provided in our Relevant Representations [RR-063]. This considers how SEP and DEP have adopted the mitigation measures at the time of application.
Q3.3.2 Impa	act on subtidal	chalk features	
Q3.3.2.2	Natural England	HDD Exit Point – Chalk Impact The Applicant has stated [REP3-107] that the HDD exit point will be located in the deep infilled channel cut through the chalk to 17m below seabed level and filled with Weybourne Channel deposits. On this basis, is NE satisfied that the exit point would not adversely impact subcropping or out-cropping chalk?	On the basis of the Applicant's clarification in [REP3-107] Natural England is satisfied that the cable installation works at the HDD exit point will not adversely impact the sub-cropping or out-cropping chalk. In order to resolve this issue we advise this is secured in the DCO/dML. However, Natural England continues to disagree with the Applicant's position in REP3-107 that avoidance of sub-cropping chalk more generally is not an appropriate or necessary action with respect to the environmental assessment. We refer the ExA to our advice in response to WQ2 [REP3-141] at Deadline 2.
Q3.3.2.3	Applicant	Management Plan for addressing exposed chalk a) Condition 13(c)(i) of the DMLs Revision G [REP4-003] includes a condition that there should be monitoring of cables. However,	a) Natural England notes that a condition for monitoring secures that monitoring will be undertaken, but unless the condition specifies action to be taken based on the results of the monitoring then there is no security on additional

Q3.3. Benthi	c ecology, Int	ertidal, Subtidal and Coastal effects	Natural England Response
		provide more information in the form of an outline Management Plan for the scenario where a cable has become exposed in the post-construction stage and how this would be addressed. b) Provide detail as to how such a Management Plan would be secured?	mitigations being undertaken should they be required.
Q3.3.3 Physi	cal Processes,	Coastal erosion effects and coastal processes	
Q3.3.3.1	Natural England	Sediments at HDD offshore exit points The Applicant states that since the excavated sediments at the HDD exit points would be backfilled into the same location that they were removed from, the excavated sediments are likely to be relatively homogenous. Furthermore, the Applicant considers that the cohesive nature of the sediment at the exit point means that when it is sidecast it will be in the form of aggregated clasts that will remain on the seabed rather than being disaggregated into individual fine sediment components [REP3-107]. Does NE agree with this assessment, and expand on your answer?	Natural England is concerned about side-casting. Natural England would welcome any measures that could reduce the impacts to the designated site features i.e., storing on a barge as set out by the Applicant in REP3-107. This would also reduce the likelihood of any sediment being dispersed into the wider marine environment. We advise that a fall pipe is used to direct the sediment as it is returned to the site creating less of an impact. As a mitigation measure we advise this should be secured into the outline mitigation plan.
Q3.3.3.2	Natural England	Secondary Scour The Applicant [REP3-107] has considered that for secondary scour, the limited geographical extent means that the potential impact would be anticipated to be nugatory. Does NE agree with this, or would a full assessment of secondary scour be necessary for this Examination?	Natural England advises that best practice would be for the likelihood and scale thereof of secondary scour to be considered as part of the consenting process to allow for any mitigation measures (where required) to be thoroughly explored and secured. We are currently unable to advise further until this secondary scour assessment is undertaken.

Q3.3. Benthic	ecology, Inte	rtidal, Subtidal and Coastal effects	Natural England Response
Q3.3.3.3	Marine Management Organisation Natural England	Coastal Erosion Impacts Is the point where the HDD exit is proposed at landside set sufficiently far back from the coast to ensure against impact from coastal erosion for the lifetime of the development?	Appendix 3.2 - Cable Landfall Concept Study [APP-176] includes coastal retreat data taken from the National Coastal Erosion Risk Mapping (NCERM) tool on the Environment Agency website. This indicates that the anticipated cliff retreat distance is 10m at the proposed landfall location, in the medium term (20-50 years). We also understand that, based on historical beach profile data (EA 2007), whilst there is a large degree of annual variability in beach profile at landfall, overall beach profile erosion is steady but modest and without significant beach steepening. In addition, further to the east, near the Weybourne car park, the beach profile appears to be stable. In ES Chapter 4, it states that the HDD entry point onshore will be set back approximately 150m inland from the beach frontage. Therefore, based on the information currently available, we are content that the proposed set back of the HDD entry point location onshore (landside) is appropriate.
			At detailed design, it will be important to consider the operational lifetime of the project. For example, in ES Chapter 6, it states that the lifetime of each [SEP & DEP] project is assumed to be a minimum of 40 years. Yet, the Cable Landfall Concept Study [APP-176), provided by the Applicant, assumes a cable design life of 30 years. Consequently, we would advise consideration of predicted cliff erosion profile data associated with the longer term (50-100 years). We would also advise the Applicant to seek the expert advice of

Q3.3. Benth	nic ecology, Int	ertidal, Subtidal and Coastal effects	Natural England Response
			North Norfolk District Council and the Environment Agency with regards to the latest information on coastal erosion and management at landfall.
Q3.3.4 Effe	cts on the Mari	ne Conservation Zone	
Q3.3.4.1	Natural England	 When the MEEB is required NE has advised that the MEEB would be required if there was an adverse impact to sub-cropping chalk or in a circumstance where cable protection is used within the MCZ [REP3-147, Page 4]. a) Applicant and NE, provide a threshold or a set of assessment criteria to determine when a MEEB is required that can be set out for Examination? b) For instance, would the criteria to determine if a MEEB required relate to a construction method, the use and extent of cable protection, what the effects would be on sub-cropping chalk, or a mix of these different aspects. 	 a) Please be advised in our conservation advice, Natural England does not use thresholds in determining impact on the conservation objectives of the site. The test is whether the conservation objectives for the site are likely to be hindered. b) Natural England agrees with the Applicant that cable protection is most likely to be required within mixed sediment areas. Therefore it is assumed that the conservation objectives for that feature will be hindered. The MEEB requirement is to provide a 'reef' like community similar to that of a mixed sediment environment.
Q3.3.4.2	Applicant Natural England	Success thresholds for the MEEB The Applicant has stated that the success metrics of the MEEB would be developed post-consent [REP3-101]. NE has advised that a fully functioning oyster bed would be required for compensation as a MEEB [REP3-147]. This does not provide satisfactory clarity for the ExA is relation to this matter.	a) During pre-application discussions Natural England advised that a fully functioning oyster bed i.e. ecologically self-sustaining is required for compensation and because of this the ratio for MEEB has become irrelevant in this instance. The Applicant, as part of their submission documents has [APP-081], included a description of a fully functioning oyster bed and the size required. Natural England is supportive of this.

Q3.3. Benth	nic ecology, Int	ertidal, Subtidal and Coastal effects	Natural England Response
		 a) Applicant, provide some detailed information as to how a successful oyster bed as a MEEB would be determined, for instance. b) Applicant, does this mean that the oyster bed would have to be approximately 100% successful or could a partial success be also considered a sufficient MEEB? For NE only: 	To inform whether or not further adaptive management is required, there is an expectation from Natural England for the Applicant to develop a success criteria based upon the question of what constitutes a fully functioning oyster bed and develop and undertake a monitoring plan to demonstrate this.
		 a) When should such an assessment be made and who should need to agree the outcome of such an assessment? b) How should such circumstances be suitably considered and at what part of the process? c) Would the contents of Schedule 17, Part 4 of the Proposed Without Prejudice DCO Drafting (Revision B) [REP2-011] sufficiently and suitably secure the MEEB process in your view? 	 b) As this is MEEB, this should be agreed as part of a secured package and signed off by the Secretary of State in consultation with Natural England. We advise the above should be agreed in outline as part of the consenting process, to be refined post consent. c) Please see Natural England's advice on the DCO Schedule 17.
Q3.3.4.3	Applicant Natural England	When a decision on a MEEB is required At what point is there to be a decision on whether a MEEB is required – would this depend on the information provided by precommencement surveys, for example, which would be post-consent, or would the decision need to be pre-decision?	Natural England advises, as per compensation, MEEB needs to be agreed as part of the consenting process. The Secretary of State will need to determine the significance of impact to the features of the MCZ as part of their decision making process. Therefore, an outline plan will need to be agreed and secured as part of the examination process to help and support the Secretary of State decision.

Q3.3. Benthic	c ecology, Inter	tidal, Subtidal and Coastal effects	Natural England Response
Q3.3.4.4	Applicant	Cable protection in mixed sediment areas NE states [REP3-147, Q2.3.4.1] that there is a high likelihood of cable protection within mixed sediment areas. If cables being run through mixed sediment areas cannot be avoided, does this also mean there is a high likelihood of cable protection being used through such areas?	Natural England refers the Applicant to our response to WQ3.3.4.1 above.
Q3.3.4.5	Natural England Marine Management Organisation	Jack-Up Vessel use in MCZ The Applicant has explained [REP3-107] that the use of a jack-up vessel would only be required at the HDD exit pit for construction. The Applicant has also stated that due to the position of the exit-pits there would be no impact to subcropping chalk. NE, respond to these points with an assessment of the potential impacts from this jack-up vessel in this approximate location.	Natural England notes the use of a jack-up vessel will be undertaken at the HDD exit pit only. We note this is located within the area of seabed filled with Weybourne Channel deposits. We advise the onus is on the Applicant to ensure the footprint of the jack-up vessel is placed on the area of sandy clay Weybourne channel deposits and there will be no impact to outcropping or subcropping chalk features of the MCZ. NB: Natural England would have concerns about any jack up leg stabilisation within the MCZ.

Q3.12. Ha	bitats and Ec	ology Offshore	Natural England Response
Q3.12.1 E	ffects on Orn	ithology	
Q3.12.1.1	Applicant Natural England	 Requirements or Obligations Paragraph 5.3.17 of NPS EN-1 states that the ExA should ensure that species and habitats are protected from the adverse effects of development by using requirements or planning obligations. a) Applicant, justify why, in this instance, it is felt that the Requirements suffice and there is not any need for obligations. b) Natural England, do you consider there to be any reason or justification for obligations to be sought in this instance, given the Applicant's approach to mitigation (EIA Scale) at this stage? 	b) Other than the outstanding requirements as regards impacts on red-throated divers associated with the Greater Wash SPA and Outer Thames Estuary SPA, and our outstanding concerns regarding the effectiveness and security of the proposed compensatory measures for SPA impacts, Natural England do not consider there to be a significant justification for obligations to be sought beyond those commitments already made.
Q3.12.1.2	Natural England Applicant	Enhancement of Habitats The Applicant states that embedded mitigation seeks to reduce effects for certain ornithology species (great black-backed gulls for example) and that, no further mitigation is proposed in the ES [APP-097]. However, bullet 4 within Paragraph 5.3.18 of NPS EN-1 states that opportunities will be taken to enhance existing habitats or to create new habitats of value within the site landscaping proposals. Can the Applicant explain why, with reference to the landfall location in particular, opportunities to create new habitats supportive of offshore ornithology species have not/ cannot be taken?	Natural England does not see any realistic potential for enhancing or creating habitats at the landfall or terrestrial locations that would support offshore ornithology species.
Q3.12.1.3	Applicant Natural England	Future Monitoring It is noted from NE's D3 response that there is concern the Requirements in the dDCO specify that	a) Please refer to Natural England's submission at Deadline 5 (Appendix A2) where Natural England

		monitoring should be undertaken, but that no subsequent remedial action is secured if the effects are worser than those originally predicted [REP3-146, points A13 and A19]. The ExA observes that paragraph 2.6.71 of NPS EN-3 states monitoring can identify the actual impact so that, where appropriate, adverse effects can then be mitigated. a) NE, expand on what is expected, in terms of wording, within a dDCO that would secure appropriate remedial actions should monitoring highlight a need for it. Also confirm if such wording has been applied in other DCOs (examples required). b) Applicant, explain if any triggers are being considered for responsive or remedial action as a result of the proposed monitoring, and where such information can be found/ secured? If it is not being considered, why not?	sets out our further advice and comment on the Applicant's IPMP [REP4-015].
	ffects on Aqu Shellfish	atic Wildlife including Mammals, Fish and	
Q3.12.2.3	Natural England Marine Management Organisation	Outline Documents In relation to the OPEMP [REP3-060], OPIMP [REP4-015] and Outline Offshore Operations and Maintenance Plan [APP-296], confirm whether each document is fit for purpose and, if amendments or additions need to be made, bullet-list these for clarity as to what you expect and why.	OPEMP [REP3-060] We note the changes with regard to Otter/Water vole and the mitigation measures provided. However, should water vole be identified we would suggest further mitigation should be considered in the form of making the area temporarily unsuitable/undesirable to water vole/otter prior to the works to ensure they are not in the location of the works during construction and then ensuring the recovery of the habitat following the completion of the works in the area.

			Natural England welcomes the commitment to
			survey for White-clawed crayfish, however we note that there is no commitment to mitigate should the surveys locate white-clawed crayfish. We advise mitigation measures should be proposed in outline and agreed.
			IPIMP [REP4-015]
			Please see Appendix 2 for Natural England's detailed comments on the OIPMP
			OOOMP [APP-296]
			With regard to the deployment of cable protection, we note the changes and accept the deployment of cable protection for five years after construction outside of the site. However, we disagree with the deployment of cable protection for one year, following construction, within the designated site. Furthermore, because there is no agreed definition of completion of construction either within the document or within the DCO the time period remains uncertain and unsecured. Additionally, due to the uncertainty this creates there is a potential for operation and maintenance works to impact on the monitoring required within the IPMP which could potentially invalidate monitoring of the impacts from construction.
Q3.12.2.4	Applicant Natural England	Site Integrity Plans At present, the MMO has expressed that the SIP is acceptable as drafted, would serve its purpose and	c) To clarify, due to our reservations on the SIP, we are not confident that AEoI can be ruled out for the harbour porpoise feature of the SNS SAC due to potential in-combination seasonal

Marine Management Organisation

could be enforced [REP3-133]. Meanwhile NE has said there is no confidence in the SIP process because SIP(s) have limited measures to mitigate the exceedance of seasonal threshold [REP3-146, point D18 and REP3-147 Q2.12.2.1]. The Applicant maintains that the SIP is the established mechanism to regulate and control underwater noise impacts. In this regard:

Applicant:

- a) NE has suggested [REP3-147, Q2.14.1.20] that all mitigation should be set out now, and the SIP is used to discount mitigation that no longer applies at the time the development is commenced. Do you think there is merit in this approach?
- b) Can you reassure the ExA that the SIP (either for this project or taken together with other SIPs) would be effective in its intended function?

NE:

- c) Due to your reservations on the SIP, your response [REP3-146, point D18] suggests that an AEoI cannot be ruled out for the harbour seal and grey seal feature of the SNS SAC. If not the SIP process, what other forms of regulatory control are available to reassure you that AEoI would not occur?
- d) Are you content with the MMMP and the mitigation therein? If so, would this not be enough to reassure you that sufficient mitigation exists to avoid an AEoI? Explain with reasons.

disturbance. Harbour seal and grey seal are not features of the SNS SAC.

We recognise that the Project can only control the underwater noise that it produces. Therefore, measures to mitigate the Project's contribution to in-combination underwater noise disturbance are strongly recommended. Reducing the extent of the interaction with the SAC from the project through a commitment to use e.g. Noise Abatement Systems (NAS) is the most likely method of reducing the risk of future in-combination adverse effects arising.

However, Natural England's confidence in the SIP process could be increased through greater regulatory control. Our experience to date is that HRAs on submitted SIPs are not carried out by the Marine Management Organisation (MMO). This would provide a further element of regulatory scrutiny and potentially identify additional mitigation.

Alternative options could also be considered in the future, for example a cross-regulator Appropriate Assessment prior to the relevant season of the SNS SAC, which identifies all projects that will occur in the season and demonstrates that AEoI will not occur, with additional controls (where appropriate) placed on projects that submit applications for that relevant season but after the AA has been undertaken. However we recognise that the above is not in the gift of the Applicant.

d) Natural England is content with the draft MMMP and the outline mitigation therein, which

		MMO: e) Do you have any further comments on the SIP that you wish to bring to the ExA's attention, taking into account all your own submissions and those of NE to date and all of the matters raised above in this question?	will be finalised post-consent. The outline mitigation in the draft MMMP is sufficient to reduce the risk of injury to marine mammals, which also reduces the risk of AEoI to marine mammal designated sites. However, the draft MMMP does not, and is not meant to, include measures specifically aimed at reducing incombination underwater noise disturbance. Our concerns around AEoI are specifically due to incombination underwater noise disturbance.
Q3.12.2.5	Applicant Natural England Marine Management Organisation	Piling Controls The Applicant has confirmed that simultaneous piling (or other form of foundation installation) could occur within the project itself, and this has been taken into account in the worst-case scenarios assessed in the ES [REP3-101]. In respect of cumulative noise impacts to marine mammals, would there be a need to include a condition within the Deemed Marine Licences to prevent concurrent piling between the Proposed Development and other consented offshore windfarms? Explain with reasons.	Mitigation measures to reduce in-combination disturbance, such as a commitment to prevent concurrent piling between offshore windfarms, are controlled by the SIP at present, and would presumably be secured by the MMO during the discharge of the SIP. Natural England does not consider there to be a need to include a condition of this nature within the Deemed Marine Licences for the Proposed Development for marine mammals. However, we note that there may be other reasons why a simultaneous piling may need restriction, such as impacts to spawning fish, we defer to MMO on this point.
Q3.12.2.6	Natural England Marine Management Organisation	Monitoring NE [REP1-136] originally raised concern regarding the OPIMP, particular at points A8 and A19 [REP3-146]. Now that the Examination has moved on, do you agree that appropriate measures are secured, or could potentially be secured in the future, by way of the OPIMP [REP4-015]?	Please see our detailed response to the OIPMP [REP4-015] in Appendix A2 submitted at Deadline 5.

Q3.13. Hab	itats and Ecol	ogy Onshore	Natural England Response
Q3.13.1 Eff	fects on Protec		
Q3.13.1.2	Royal Society for the Protection of Birds Natural England	Weybourne Cliffs Does the Applicant's further evidence [REP4-028, Q1.13.1.2] demonstrate that there are no effects predicted on the living conditions for sand martins in this location as a result of vibration related HDD activity? If not, please expand with further reasoning.	As advised in Natural England's response to the Examining Authority's Second Written Question (WQ2) [REP3-147] Natural England is content with the information provided by the Applicant that there are no effects predicted for sand martins in this location as a result of vibration related HDD activity. As advised in our Relevant Representations [RR-063] Natural England advises pre-construction bird surveys would be required to re-confirm the presence of breeding sand martins. Suitable mitigation measures should be put in place to minimise the impact to these species. Pre-construction surveys would be required to demonstrate this remains the case.
Q3.13.2 Effects on Ancient Woodland, Trees and Hedgerows			
Q3.1.1.2	Natural England Interested Parties	Wensum Woods Does the Applicant's further evidence [REP3-101, Q1.13.2.1] and [REP4-028, Q1.13.2.1] demonstrate that it would provide sufficient protection to protected species, including Barbastelle bats, and that it would adopt best practice measures of mitigation	Natural England defers our response to this question to Deadline 7 at the latest.

	that would future proof the Proposed Development in the event that Wensum Woods was notified as a SSSI?	
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Q3.14. Habitats Regulation Assessment Q3.14.1 Effect of the Proposed Development on its own and In-combination with Other Plans and Projects			Natural England Response	
Q3.14.1.4	National Trust Natural England	The Farne Islands Management Plan NT submitted the draft Farne Islands Management Plan to the Examination, noting that it needs signoff from NE [AS-042]. NT expressed that the management plan may not become a Government document, as alleged by the Applicant, and look to NE to advise [REP3-140]. NT also consider the Applicant's proposals do not represent additionality and the SoCG with the NT [REP2-046] suggests that there need not be any further discussion on the Farne Islands compensation measures with the most recent SoCG [REP4-024] stating resources should be deployed elsewhere. a) When will the draft Farne Islands Management Plan document be endorsed by ME? b) When adopted, will this constitute a Government document?	a) Natural England anticipates signing off the Farne Islands NNR plan later this year, subject to resource constraints. b) NNR management plans have a legal element in that they form the SSSI consent notice that Natural England assesses prior to consenting management activities, but beyond that they do not have a legal status and as such are not generally considered a 'government document'. NNR management plans are not generally published, but they are available from Natural England under Freedom of Information or Environmental Information Regulation on request. d) For the reasons set out in our Relevant Representations [RR-063], we consider that the proposals for the Farne Islands do not provide meaningful benefits. We also note and support National Trust's observation in their letter dated 20th April 2023 that 'Available and suitable space for interventions on the Farne Islands is limited, as most of the area is keenly contested by breeding seabirds. The Sandwich tern nesting area is also very fragile due to puffin burrows.' Even were the measure to have meaningful benefits, the proposed level of provision seems unachievable without potentially negative consequences e.g loss of sandwich tern nesting space, including those areas envisaged to be restored by the management plan, and/or damage to puffin nesting habitat.	

		 c) If yes to b) above, is the Applicant justified in relying on that document and what is said in the Energy Security Bill with respect to the arguments of providing compensation on the Farne Islands (the 'additionality' point) [REP3-111]? d) Given the lack of certainty about the status and efficacy/additionality of the management plan, should the proposals at the Farne Islands be discounted from the Applicant's package of compensatory measures for sandwich terns? Explain with reasons. e) In light of the SoCG [REP2-046] is NT, as the owners and managers of the Farne Islands, stating that the Farne Islands are not available to the Applicant? 	
Q3.14.1.7	Applicant	Kittiwake Tower	a) Natural England advises that the layout of Saltmeadows
	Natural England East Suffolk Council	The HPAI is purported [REP4-042] to have resulted in the death of 965 kittiwakes. It is recognised that HPAI is difficult to contain and prevent transmission. Nonetheless, the ExA are concerned regarding the HPAI and the efficacy of the proposed kittiwake tower as a compensatory measure. a) Would the clustering of nests together, as would be the case in	tower (a series of parallel, horizonal ledges on three faces) is designed to 'mimic' that of cliff ledges, and is in an open air environment. On that basis we do not consider the provision of these artificial structures increases the risk of infection. There is also the possibility to implement a disinfection regime pre-breeding at the artificial structure that would be hard or impossible to implement at most natural sites. b) n/a c) Assuming this relates to HPAI mortality - we are waiting confirmation from HPAI specialists at Natural England, but it

		c) Is there any data regarding the artificial structures in Lowestoft to suggest whether or not the kittiwake accommodation there has been subject to higher, lower	
		or similar levels of mortality? d) When the kittiwake tower designs get submitted at Deadline 5, set out how the design takes into account the health and well-being of the species.	
Q3.14.1.13	Natural England	RTD Effects Can you confirm whether your conclusions on AEoI for this species applies only to the Greater Wash SPA, or also to the Outer Thames Estuary Estuary SPA. Can an AEoI be ruled out on the latter designated site or not? Explain with reasons.	The potential impacts on the red-throated diver feature of Outer Thames Estuary SPA (OTE SPA) relate to vessels transiting through the SPA associated with i) the construction phase and ii) operations & maintenance traffic. An adverse effect alone on the OTE SPA can be ruled out, but until further information regarding vessel movements is provided, Natural England is not able to advise whether there will be an AEOI in-combination with other plans and projects. This information is scheduled to be submitted by the Applicant at Deadline 5.
Q3.14.1.14	Applicant	Implementation or completion	 a) Natural England considers that, as the author of the DCO, it is for the applicant to define what they mean by

	Natural England	The Sandwich Tern OCIMP [APP-070], section 3.6 relates to the implementation and delivery programme, to be forthcoming post-consent. Similarly, section 2.6 does the same in the Kittiwake OCIMP. Schedule 17, parts 6 and 15 both specify that the Applicant must implement the measures and, particularly for kittiwakes, this implementation must be done several breeding seasons in advance. a) Define what is meant be 'implement' or 'implementation' in these circumstances. b) Does 'implement' equate to completion? c) In respect of b) above, is there any risk that technical implementation (similar to technical commencement) could be instigated by the Applicant, but then the measures are not completed or in place prior to the operation of any turbine? d) What gives you confidence that the measures would be provided in time to ensure they are functioning before effects on sandwich terns occur?	 implementation. We will review and respond to their interpretation. b) As per response to a) we will respond to the Applicant's response. c) Based on the current wording within the schedule Natural England notes that the compensation must be implemented prior to operation for Sandwich Tern and 3 full breeding seasons for Kittiwake. However, depending on the definition of implementation this may not be sufficient. Natural England considers that as a minimum the compensation measures should be implemented 2 full breeding seasons prior to first generation, but, subject to review of additional documentation, this could be increased up to 4 full breeding seasons. With regard to Kittiwake, we refer to the previous decisions for Hornsea 3 and other relevant OWF projects where it was determined that installation of the compensatory measures four full breeding seasons prior to operation was appropriate d) In addition to our comments above, please see our response in Appendix C3 at Deadline 5, specifically our comments around mortality debt relating to sandwich terns.
Q3.14.1.15	Applicant Natural England	Gannet, Guillemot and Razorbill The Examination so far has suggested that an AEoI upon the Gannet feature	a) Natural England's Deadline 5 response confirms that we have ruled out AEOI on the FFC SPA gannet population, both alone and in-combination.

of the FFC SPA potentially could be ruled out, whilst there remains a dispute between the parties as to whether an AEoI can be ruled out for guillemot and razorbill.

The Applicant provided a contextual note for HPAI [REP4-042] within which are summaries of the effects of HPAI upon relevant seabird populations. In each case it is assumed that a reduction in the population of a species would result in less collisions and displacement effects, which NE confirmed would be a logical position [REP3-147, Q2.14.1.2]. However NE also highlighted: "However, where a population has been significantly depleted, it should be considered whether an equivalent level of impact would have greater implications for the newly reduced population."

Taking all the above into account, as well as all other information before the Examination:

- a) Applicant and NE Can an AEoI be ruled out for Gannet?
- b) Applicant If the answer to a) is yes, does the Applicant propose keeping Gannet named within the relevant (without prejudice) compensatory documents [APP-075] in case the Secretary of State concludes otherwise or should this

- b) and c) for the Applicant.
- d) Natural England's current position for guillemot is that AEOI cannot be ruled out in-combination with other plans and projects. We are awaiting an updated assessment of the in-combination totals from the Applicant, which is scheduled to be submitted at Deadline 5. Natural England will confirm its position at Deadline 7 on 10th July following review of that submission.
- e) Natural England's current position for razorbill is that AEOI cannot be ruled out in-combination with other plans and projects. We are awaiting an updated assessment of the in-combination totals from the Applicant, which is scheduled to be submitted at Deadline 5. Natural England will confirm its position at Deadline 7 on 10th July following review of that submission.

		be removed in the final version prior to close of the Examination? c) Applicant - If the answer to a) is no, would the Applicant consider making the compensatory measures for Gannet official in a separate document (i.e. removing the 'without prejudice' status and committing to undertaking such measures) and providing relevant text for Schedule 17 of the dDCO?	
		The following responses are required, but may be deferred until Deadline 6 following review of the Applicant-promised 'Apportioning and HRA Updates Technical Note' at Deadline 5.	
		d) NE - can an AEoI be ruled out for Guillemot? Explain with reasons.e) NE - can an AEoI be ruled out for	
		Razorbill? Explain with reasons.	
Q3.14.1.17	Applicant Natural England	Pink-Footed Geese Provide an update on the ongoing dialogue between the Applicant and NE regarding pink-footed geese.	Natural England continues to engage with the Applicant in providing advice to formulate a pink-footed geese management plan.

Q3.17. Landscape and Visual Effects			Natural England Response
Q3.1.2 Effectiveness of mitigation proposals			
Q3.17.3.2	Local Authorities Natural England	Removal of Existing Trees and Hedgerows, Replanting and Management Would it be acceptable for tree and hedgerow replacement, designed to mitigate for the loss of existing planting, to be carried out off site at a location outside of the Order limits?	Natural England advises this is acceptable for trees. We would require this to be greater than the number removed for BNG However, for hedgerows, Natural England advises these should be replaced at the location of removal.