



THE PLANNING ACT 2008

THE INFRASTRUCTURE PLANNING (EXAMINATION PROCEDURE) RULES

2010

Norfolk Boreas Offshore Wind Farm

Planning Inspectorate Reference: EN010087

Natural England's responses to Examining Authority's first round of written questions.

10 December 2019

ExQ 1	Question to	Question	NE Comments
1. Archaeology and Heritage Assets			
1.0 Offshore and intertidal archaeology and cultural heritage			
Q1.0.1	The Applicant, Historic England Norfolk County Council Marine Management Organisation North Norfolk District Council Interested Parties	<p>Draft DCO and DML Archaeological WSI in intertidal zone</p> <ol style="list-style-type: none"> 1. Does the dDCO adequately cover archaeological requirements regarding the intertidal zone? (The onshore Archaeological WSI extending to Mean High Water is secured by dDCO Requirement 23.) 2. How is it proposed to secure mitigation measures for the intertidal zone included in the outline offshore Archaeological Written Scheme of Investigation? The DMLs [Schedules 10 and 12 Part 4 Condition 9(1)(h)] secure the offshore Archaeological WSI covering land seaward of Mean LOW Water which therefore excludes the intertidal zone. 3. IPs to confirm they are content with the intertidal zone being excluded from the responsibilities defined via outline Onshore and Offshore Archaeological WSIs; or make suggestions for amendments, additions or deletions as appropriate. 	
Q1.0.2	The Applicant Historic England	<p>Offshore Archaeological Written Scheme of Investigation</p> <p>Historic England to confirm via SoCG with the Applicant whether it is content with the outline offshore Archaeological WSI [APP-697] specifically regarding:</p> <ol style="list-style-type: none"> 1. Definition of commencement; 2. Protection for archaeology during invasive pre-commencement survey works; 	

ExQ 1	Question to	Question	NE Comments
		3. Protection for archaeology during invasive enabling works prior to primary works. 4. Archaeological assessment of UXO survey data; 5. Archaeological data acquisition and management post-consent; 6. Procedures and timescale for notification of new discoveries 7. Monitoring plans.	
Q1.0.3	Historic England	Acceptability of geophysical data to inform ES in offshore order limits Given the limitations of the geophysical data that are acknowledged by the Applicant in ES Chapter 17, paragraphs 57-58, would Historic England comment on the acceptability of the geophysical data to inform the characterisation of the archaeological potential of the offshore area and hence the assessment of effects in the ES?	
Q1.0.4	Historic England	Changes to setting of offshore heritage assets and historic seascape character Is Historic England content with the Applicant stating in APP-574: <i>'The assessment of changes to the setting of heritage assets and historic seascape character section 17.7.6.4 in chapter 17) describes that a change will occur but does not provide a judgement on the significance of that impact.'</i>	
Q1.0.5	The Applicant	Potential effects of development on submarine wreck (ES reference 71480): [APP-577] para 5.2.20 refers to: <i>'Wreck 71480 lies outside NV East but is included in this assessment as the recommended Archaeological Exclusion Zone (AEZ) extends into the NV East area by up to 30m (Figure 11). This feature is the wreck of a submarine and the</i>	

ExQ 1	Question to	Question	NE Comments
		<p><i>UKHO (ID 79542) records that it was last observed in September 2014...'</i></p> <p>Clarify and confirm:</p> <ol style="list-style-type: none"> 1. Location on a chart of this wreck in relation to the Order limits for the Norfolk Boreas application; and 2. if there are any other anomalies in the vicinity of this wreck that have the potential to be associated with it; and 3. what vessel this is considered to be and what assessment has been made of the potential for impact of the Proposed Development (separately or together with other nearby proposed developments) on the wreck of this submarine and what effects may need to be mitigated; and 4. if there are potential effects, is any mitigation proposed in addition to an AEZ; and 5. what dimension of AEZ is proposed for this wreck and why that dimension is considered appropriate; and 6. When the outline WSI would be updated to secure the mitigation proposed. 	
Q1.0.6	Historic England	<p>Xanthe wreck potential designation decision</p> <p>Advise on the likely timescale for a decision on whether the historic wreck site identified within the proposed project development boundary 'Xanthe', has national importance, as flagged in RR-022.</p>	
Q1.0.7	The Applicant	<p>Responsibilities for military remains finds</p> <p>Signpost where in the application documents consultations were undertaken with the relevant executive agency of the Ministry of Defence (MoD) with regard to potential obligations under the Protection of Military Remains Act, and if no</p>	

ExQ 1	Question to	Question	NE Comments
		consultation has taken place, justify why such consultation was not considered necessary in preparing the application.	
Q1.0.8	The Applicant	<p>Archaeological Exclusion Zones (AEZs) in offshore works area</p> <p>Explain why [APP-697] proposes a 50m AEZ around all known wreck sites and A1s and A3s with no differentiation; and why a differential AEZ dimension is not considered appropriate for certain A1s or known wrecks, with specific reference to Feature 70809, Seagull wreck and Feature 70834 Xanthe wreck.</p>	
Q1.0.9	The Applicant	<p>Accumulated Archaeological data as proposed mitigation</p> <p>Clarify how the outline WSI (and dDCO 9(5)(h)) [AS-019] would secure within defined time periods the proposed mitigation with regard to cumulative data gathered from multiple projects, as discussed in the Applicant's response to Historic England [RR-022] regarding commitment to satisfactory completion of: <i>'...archaeological analysis programmes, within defined time periods, to accepted professional standards with publication and access through public archives.'</i></p>	
1.1 Onshore archaeology			
Q1.1.1	Historic England, Norfolk County Council, The National Trust	<p>Outline Written Scheme of Investigation (WSI)</p> <p>Are you content with the Outline Written Scheme of Investigation (OWSI) [APP-696], as secured in dDCO [AS-019] Requirement 23 in dealing with onshore archaeological matters? If not make suggestions for amendments, additions or deletions.</p>	
Q1.1.2	The Applicant	WSI Construction Stage Plan(s), Contractor	

ExQ 1	Question to	Question	NE Comments
		<p>Environmental Action Plan(s) Provide a list of specific measures that could be included in the "<i>construction stage plans</i>" and "<i>contractor environmental action plans</i>" for areas where sensitive and precautionary approaches to construction work would be required; such as the Old Quaker Burial Ground [APP-696, paras 112 to 114] supported by evidence/ consultation or proposed consultation before finalising.</p>	
<p>1.2 Onshore heritage assets</p>			
Q1.2.1	The Applicant	<p>Construction stage effects on listed buildings Notwithstanding your responses on the traffic and cumulative traffic effects in Cawston in your response to RRs [AS-024, Table 19, Nos. 3 and 4] respond to the specific points made regarding construction stage effects on listed buildings in Cawston by certain Interested Parties [RR-018], [RR-019], [RR-105].</p> <p>Where are the construction stage effects on listed buildings and Conservation Areas assessed in the Heritage assessment and the visual and setting effects assessed in the Landscape and Visual Impact assessment?</p>	
Q1.2.2	Norfolk County Council Breckland Council	<p>Listed buildings in Cawston Further to RRs [RR-018], [RR-019], [RR-105], Additional Submission [AS-038] and the Applicant's response to RRs [AS-024, Table 19, No.3] are you:</p> <ol style="list-style-type: none"> 1. satisfied that construction stage effects on listed buildings in Cawston have been adequately assessed; 2. content with the findings in terms of the 	

ExQ 1	Question to	Question	NE Comments
		significance of any identified impacts upon those assets and their settings and the level of any harm and loss of heritage significance?	
Q1.2.3	Norfolk County Council Breckland Council	<p>Listed buildings in Cawston The Applicant has quoted part of your SoCG for Norfolk Vanguard in its response to some RRs which raise matters to do with construction traffic and listed buildings in Cawston.</p> <ol style="list-style-type: none"> 1. Do the “changes” referred to in the SoCG extract include traffic impacts on historic buildings in Cawston? 2. If so, have the “work in progress” amendments arrived at a satisfactory solution? 3. If not, what are the outstanding issues for the listed buildings and conservation area in Cawston? 	
Q1.2.4	The National Trust	<p>Blickland Estate Further to the Applicant’s response to your comments in your RR [RR-084], [AS-024, Table 123, No.1] are you satisfied that the wording set out in the WSI secures an appropriate method to ensure that information from thorough preservation by record, if excavation is necessary, is made available to visitors and the community in a way that enriches experience and understanding of the Blickling Estate? If not is there anything further that you consider needs to be secured in the WSI or elsewhere?</p>	
Q1.2.5	Historic England	<p>Reference to Norfolk Vanguard Regarding point 6. of [RR-022], ensure that any evidence that you may refer to from the Norfolk Vanguard, or any other Examination, is submitted to this Examination.</p>	

ExQ 1	Question to	Question	NE Comments
Q1.2.6	The Applicant	<p>Clarification of non-designated heritage asset</p> <ol style="list-style-type: none"> 1. Is it possible that part of the Bylaugh Park wall [APP-674, RHDHV ID: 1274/ NHER Pref ref: 30496] does in fact enter the red line boundary? The ExA observed on an Unaccompanied Site Inspection, what seems like an estate wall at a point north of the River Wensum on Elsing Lane, the minor road north of Mill Street, where the cable corridor would appear to cross the location of this wall. 2. If not Bylaugh Park, does this wall have heritage value? 3. If Bylaugh Park wall, or another heritage asset carry out an assessment. 	

ExQ 1	Question to	Question	
2. Biodiversity, Biological Environment and Ecology			
2.0 General			
Q2.0.1	The Applicant	<p>The Applicant [AS-024] explained that it has updated numerous assessments and/or plans relevant to ecological matters. The ExA has noted the following are proposed:</p> <ul style="list-style-type: none"> • Updated red throated diver displacement assessment • Updated gannet displacement assessment • Updated kittiwake collision risk assessment • Assessment of combined collision and displacement (alone and in-combination/cumulatively) • Assessment of impacts to seabird assemblage of Flamborough and Filey Coast SPA • Updated ornithological in-combination/cumulative assessment • Revised population viability analysis (PVA) for gannet, kittiwake and greater black-backed gull (at the EIA scale) • Revised PVA for Flamborough and Filey Coast SPA • Updated Haisborough, Hammond and Winterton SAC Site Integrity Plan • Interim Cable Burial Study • Updated Scour and cable protection plan • Updated offshore operations and maintenance plan • Updated Outline Landscape and Ecological Management Strategy • Drilling fluid breakout clarification note. <p>The Applicant is requested to submit these at Deadline</p>	<p>Natural England notes the provision of a significant amount of additional documentation at Deadlines 1 and 2. Natural England refers to our response to the Rule 8 letter regarding the timings of provision of our statutory advice.</p>

ExQ 1	Question to	Question	
		2 of the Examination.	
Q2.0.2	The Applicant, Natural England	<p>Project Description NE [RR-099] states “<i>Many of the volumes assessed in the Environmental Statement project description (disposal, cable protection and scour protection) do not appear to match those used in the DCO/DMLs. Clarification should be requested from the Applicant on these issues.</i>” The Applicant to identify with NE where these discrepancies are and provide corrections.</p>	Natural England has discussed with the Applicant and is reviewing the revised updated reconciliation document submitted at Deadline 1. We will provide further comment at Deadline 3 on if this document resolves the discrepancies.
Q2.0.3	The Applicant	<p>Enhancing biodiversity Explain the consideration that has been given to identifying opportunities to enhance biodiversity through the design of the Proposed Development and how any such opportunities are secured.</p>	
Q2.0.4	The Applicant Natural England, Environment Agency	<p>Net gain While it is accepted that net gain is not a mandatory requirement for NSIPs, do NE and EA accept that the Applicant’s response to the RRs [AS-024] reflect no loss to biodiversity and some elements of net gain? The Applicant may wish to comment.</p>	There may be some short term loss to biodiversity during the construction phase onshore due to construction areas, tree and hedgerow removal etc. The Applicant has agreed to include some environmental enhancements where possible for example at water crossings. However this cannot be considered Net Gain in its true sense unless it is measurable. The Applicant confirmed in recent discussion (21.10.2019) that they will not be attempting Net Gain across the site.
Q2.0.5	Natural England, Norfolk County Council	<p>Ecological data Comment on the acceptability of the onshore ecological survey data [APP-235], in particular the assumptions made by the Applicant in areas which were not accessible for the 2017 and 2018 field surveys.</p>	Natural England understand that the Applicant only had access to approx. 65% of the field survey area and that post consent surveys of the entire area will be undertaken. Natural England are satisfied that any mitigation will be secured through the Outline Landscape and Ecological Management Strategy (OLEMS).

ExQ 1	Question to	Question	
Q2.0.6	Natural England	<p>Norfolk Vanguard SoCG NE is requested to submit the final SoCG for Norfolk Vanguard and include any changes in NE's position since submission of the SoCG.</p>	<p>The SoCG is an Applicant led document led statement which they submitted as part of Vanguard examination Deadline 9 REP9-046 (Link). and therefore it is not our document to update.</p> <p>Changes in Natural England's position since the final submission for Vanguard SoCG are:</p> <p>Benthic: Please be advised that Natural England's advice on benthic matters hasn't changed since the end of the Norfolk Vanguard Examinations i.e. an adverse Effect on Integrity (AEoI) can't be ruled out on the interest features of Haisborough Hammond and Winterton (HHW) SAC. However, we have sought further legal input on the use of a Site Integrity Plan, which has strengthened our position that it is not appropriate under the Habitat Directives to defer consideration of AEoI to post consent. And therefore both the MMO and NE strongly advise against the use of a SIP for benthic SACs to enabling consenting. Please see our Relevant Representation [RR-099] for further details.</p> <p>In addition we have also had a real time situation where a developer hasn't been able to micro route around Annex I reef within a designated site. This has highlighted that micro siting may not be appropriate mitigation especially in the case of Boreas when there is a high probability of this situation occurring, which is significantly greater than with the other project. Please see our Relevant Representation [RR-099], for further details.</p>

ExQ 1	Question to	Question	
			<p>Marine Mammal: No Change</p> <p>Onshore ecology and Ornithology: Due to a number of HDD bentonite breakouts associated with OWF development NE have asked for additional HDD under the Wensum since the end of the Vanguard examination.</p>
2.1 Offshore benthic and marine mammals			
Q2.1.1	Marine Management Organisation, The Applicant	<p>Worst Case Scenarios MMO [RR-069] recommends a table that highlights the worst-case scenarios within each development consent option. The Applicant [AS-024] stated that it is in discussions with the MMO as to what further information it required.</p> <ol style="list-style-type: none"> 1. What is the additional information required? 2. Would the parties give an update regarding agreement of worst cases? 	
2.2 Onshore ecology			
Q2.2.1	The Applicant	<p>Workfront Has the 150m work front defined in the ES [APP-235, APP-236] been relied upon in the assessment and how can the Applicant guarantee that this is implemented?</p>	
Q2.2.2	The Applicant	<p>Cable depth How would the depth of onshore cable burial be secured?</p>	
Q2.2.3	Natural England	<p>Post Construction Monitoring NE in its RR [RR-099] notes that there is no onshore post construction survey or monitoring proposed to ensure protected habitats and species have been successfully reinstated post construction. The Applicant outlines its post construction monitoring proposals in</p>	<p>We note and welcome point 13 Post Construction Monitoring of UK Habitat of Principal Importance and Norfolk Local Biodiversity Action Plan (LBAP) grasslands will be included within an updated OLEMS to include 1 year of post-construction monitoring.</p>

ExQ 1	Question to	Question	
		[AS-024]. Is NE content with these proposals?	Natural England question if 1 years monitoring would be sufficient to establish if the grassland had been successfully reinstated and if not if this allows time for reseeding/reinstatement? As stated in our [RR-099] We advised that monitoring is included with trigger points established for habitat management if grassland has not restored naturally. We are content that there is no post construction monitoring regarding sugar beet areas left as mitigation for Broadland SPA species. We are happy that post construction monitoring of hedgerows, important for commuting and foraging bats for 7 years is included within the OLEMS.
Q2.2.4	The Applicant	<p>Norfolk hawker dragonfly The Applicant to confirm:</p> <ol style="list-style-type: none"> 1. How it would be determined whether there is any risk to the Norfolk hawker dragonfly (a Norfolk LBAP priority species) from any changes to the project, 2. How further surveys in these instances would be secured, and 3. What would be the consequences should surveys identify breeding is taking place? 4. Should these be referenced in the outline CoCP or OLEMS? 	
Q2.2.5	Natural England	<p>Barbastelle bats The Applicant responded [AS-024] to NE's concerns expressed in Appendix 4 of its RR [RR-099] about how the zone of influence has been applied for Barbastelle bats. Is NE content with this explanation?</p>	Natural England are content that a 5km Zone of Influence has been used to assess indirect effects on mobile foraging and commuting Barbastelle species as laid out in [APP-201] Figure 9.3 and suggest the same 5km Zone of Influence is included in the OLEMS and Hedgerow Mitigation Plan.

ExQ 1	Question to	Question	
Q2.2.6	The Applicant	<p>Paston Great Barn SAC and SSSI What progress has been made regarding the landowner agreements to leave hedgerows important for commuting bats to become overgrown as set out in the Schedule of mitigation [APP-688, item 170] for the Paston Great Barn SAC and SSSI?</p>	
Q2.2.7	Natural England	<p>Paston Great Barn SAC and SSSI Is NE content with the mitigation provided by the Applicant in Table 17 [AS-024] for commuting and foraging areas for bats in relation to the removal and reinstatement of hedgerows, particularly for Paston Great Barn SAC and SSSI?</p>	<p>Natural England understands from discussions with the Applicant that it will not be possible to incorporate temporary planting or screening across gaps which will be open for several years. Natural England is generally content that the mitigation provided in APP-698 OLEMS is sufficient for Barbastelle bats.</p>
<p>2.3 Onshore ornithology</p>			
Q2.3.1	The Applicant	<p>Razorbill and guillemot The Applicant (Table 8 row 33 of [AS-024]) stated it did not agree with NE in relation to cumulative operational displacement to razorbill or guillemot at the EIA scale. The Applicant refers to SPAs, as opposed to EIA scale populations. The Applicant to further justify its position in relation to these species at the EIA scale.</p>	
Q2.3.2	Natural England	<p>Post-construction monitoring Is NE content with the Applicant's explanation [AS-024] of why there is no post-construction monitoring of bird habitat temporarily disturbed during construction?</p>	<p>Issue 20 Birds Habitat Reinstatement RR-099 Natural England is content that there will be no post construction monitoring in relation to the mitigation area for Broadland SPA species which will be set aside for sugar beet during the construction phase.</p>

ExQ1	Question to	Question	NE Comments
3. Compulsory Acquisition			
Q3.0.1	The Applicant	<p>Compulsory Acquisition schedule</p> <p>The Applicant is requested to complete columns 7 to 11 of the Compulsory Acquisition Objections Schedule found at Appendix A to these questions, and make any additions, or delete any entries that it believes would be appropriate, giving reasons for any such additions or deletions.</p>	
Q3.0.2	The Applicant	<p>Protective Provisions</p> <p>The Book of Reference (BoR) [APP-026] includes a number of Statutory Undertakers with interests in land.</p> <ol style="list-style-type: none"> 1. Provide a progress report on negotiations with each of the Statutory Undertakers listed in the BoR, with an estimate of the timescale for securing agreement from them. 2. State whether there are any envisaged impediments to the securing of such agreements. 3. State whether any additional Statutory Undertakers have been identified since the submission of the BoR as an application document. 	
Q3.0.3	Crown Land	<p>Consent is required for any other provision in the dDCO which relates to Crown Land or rights benefiting the Crown in accordance with s.135(2) PA2008. Among other things this includes consent for any Temporary Possession sought over Crown Land.</p> <p>Indicate whether consent for any provisions affecting Crown land or rights is forthcoming and if so, when.</p>	

ExQ1	Question to	Question	NE Comments
4. Cumulative effects of other proposals			
4.0 General cumulative effects, including phasing			
		<p><i>Note this section of questions does NOT include those on in-combination effects that are relevant to Habitats Regulations Assessment. Those are dealt with below in the relevant section.</i></p>	
Q4.0.1	The Applicant All Interested Parties	<p>Relevant projects for cumulative assessment</p> <ol style="list-style-type: none"> 1. A number of the ES aspect chapters explain that the projects identified for potential cumulative impacts were agreed as part of the PEIR consultation (November 2018). Taking into account the time that has elapsed since the PEIR consultation and the potential for developments that might have cumulative effects to have come forward since this date, IPs are asked to confirm that they are content that all the relevant projects have been included in the cumulative effects assessment. If not, list those projects which you think should be included. 2. Specifically, the ExA notes that extensions to the existing Dudgeon and Sheringham Shoal have been received by the Planning Inspectorate for a scoping opinion. Comments in respect of these projects are specifically requested. 3. The Applicant is invited to comment and to set out how the cumulative effects relating to the proposed extensions to the existing Dudgeon and Sheringham Shoal have been considered, 4. With either proposed option, the Dudgeon and Sheringham Shoal onshore cable would cross the Norfolk Boreas onshore cable. How have these 	<p>2. 3 and 4 Dudgeon and Sheringham extension are in the scoping phase, but are not considered to be foreseeable plans or projects to be included in in-combination/cumulative assessment as there is no data currently in the public domain to allow an assessment to occur. This is for all marine and terrestrial elements of the project.</p>

ExQ1	Question to	Question	NE Comments
		cumulative effects been considered?	
Q4.0.2	Interested Parties	<p>Cumulative assessments and other infrastructure users Provide any comments on the Applicant's cumulative assessments offshore [APP-245] and onshore [APP-246] and/or comments on the assessment of infrastructure and other users [APP-231].</p>	Natural England has provided comment within our Relevant Representations [099] and has no further comment to make at this time.
Q4.0.3	Equinor UK Ltd	<p>Relationship with Dudgeon As current operator of the Dudgeon Offshore Windfarm asset are there any specific areas (offshore or onshore) where you have concerns about the cumulative effects of the Proposed Development with the Dudgeon Offshore Wind farm, which have not been considered by the Applicant in its cumulative effects assessments and/ or its baseline?</p>	
Q4.0.4	The Applicant	<p>Offshore and onshore phases Provide flow diagrams for Scenarios 1 and 2 which illustrate which offshore solutions can lead to which onshore phases as described in the Project Description [APP-218] and the Design and Access Statement [APP-694].</p>	
Q4.0.5	The Applicant	<p>Phasing More clarity is required on the proposed phasing of the offshore and onshore works for Norfolk Boreas Scenarios 1 and 2 in relation to how other proposed development might progress. Set out what activities from other proposed developments (if approved) would be critical to phasing decisions for this proposed development. In terms of onshore, refer to the points in the Savills', NFU's and the LIG's RRs on behalf of landowners regarding cable laying.</p>	

ExQ1	Question to	Question	NE Comments
4.1 Onshore cumulative effects of other proposals (construction)			
Q4.1.1	The Applicant	<p>Inter-relationship with Hornsea Project Three Offshore Windfarm</p> <ol style="list-style-type: none"> 1. Provide plans (for Scenario 1 and Scenario 2) on an OS base map, which show where the cumulative construction activities would occur associated with the proposed Hornsea Three Offshore wind farm cable corridor and that of the Proposed Development. The plans to show clearly which are associated with Hornsea Project Three and which with the Proposed Development. Plans to include (but not limited to) mobilisation zones and compounds, cable logistics area(s), cable running tracks, public roads used for HGVs, Public Rights of Way closures and trenchless crossing compounds. (Terminology may differ for the Hornsea Three project). 2. What assumptions have been made in the assessment with regards to the timings of Hornsea Project Three? 	
Q4.1.2	The Applicant	<p>Inter-relationship with Hornsea Three Offshore windfarm: construction traffic</p> <p>Orsted [RR-102] refers to consistent approaches to construction traffic management to minimise cumulative adverse effects with Hornsea Three for both Scenarios. The Applicant states it would continue to work together with Orsted on areas of overlap and cable route interaction [AS-024, Table 19, No. 7].</p> <ol style="list-style-type: none"> 1. What steps have been taken to ensure consistent approaches to construction traffic management and where are these secured in the dDCO? 2. How would ongoing cooperation during the 	

ExQ1	Question to	Question	NE Comments
		<p>construction phases of the two Proposed Developments be secured should the SoS consider granting development consent for both?</p> <p>3. Set out how the mitigation would address the moderate adverse significant effects of the Proposed Development on the B1149 – Norwich road (Link 32), B1145 - west of Cawston (Link 34) and B1149 – Holt Road (Link 36) when considered in combination with Hornsea Project Three.</p> <p>4. What is the Applicant’s role in the development and implementation of the proposed package of measures?</p> <p>5. Is the local highway authority content with the detail of the proposed mitigation package?</p>	
Q4.1.3	The Applicant	<p>Cumulative effects with Norfolk Vanguard: Cable pulling</p> <p>Was consideration given in Scenario 1 to pulling cable for both Norfolk Vanguard and Norfolk Boreas at the same time? If not, why not?</p>	
Q4.1.4	The Applicant	<p>Mitigation for construction traffic</p> <p>Moderate significant, adverse effect is predicted on B1149 – Norwich road (link 32), B1145 - west of Cawston (link 34) and B1149 – Holt Road (link 36) in combination with Hornsea Project Three. The OTMP outlines proposed mitigation in the form of co-ordination, and extension of the Norfolk Boreas Scenario 2 programme relating to the two week primary and secondary peak traffic periods to ensure combined HGV numbers do not meet significant threshold criteria. This reduces the impact to not significant.</p> <p>Explain how such mitigation measures would be agreed and would be implemented taking into</p>	

ExQ1	Question to	Question	NE Comments
		account the independence between the Proposed Development and Hornsea Project Three.	
Q4.1.5	Norfolk County Council	<p>Norfolk County Council's Relevant Representation [RR-037] states that it has assessed the traffic implications arising from scenarios 1 and 2.</p> <ol style="list-style-type: none"> 1. Have the cumulative traffic implications should the Hornsea Three Offshore Windfarm be granted development consent by the SoS been assessed? If not, why not? 2. If so, what are the conclusions from this assessment? What steps have been taken to ensure consistent approaches to construction traffic management and where are these secured in the dDCO? 	

ExQ1	Question to	Question	
5. Development Consent Order and Deemed Marine Licences			
		<i>Interested Parties to note that many of these questions formed the basis of the detailed agenda for the Issue Specific Hearing (ISH) on the DCO held on 13th November 2019 [EV??]. Not all were explored at that ISH. Although questions are mostly directed to the Applicant other Interested Parties are invited to comment if relevant to their case.</i>	
5.0 General			
Q5.0.1	The Applicant	Confirm that the submitted DCO: 1. Has been drafted using the Statutory Instrument (SI) template; 2. Follows guidance and best practice for SI drafting (for example avoiding "shall/should") in accordance with the latest version of guidance from the Office of the Parliamentary Counsel.	
Q5.0.2	The Applicant	References and footnotes Ensure that when amended versions of the dDCO are submitted as the Examination progresses, all internal references and legislative footnotes are checked and updated as necessary.	
Q5.0.3	The Applicant	Explanatory Memorandum Update the Explanatory Memorandum so that it follows best practice drafting guidance from the Planning Inspectorate set out in Advice Note 15 – Drafting development consent orders providing in tabular format, an explanation of how the Explanatory Memorandum addresses each aspect of Advice Note 15.	
Q5.0.4	All discharging authorities	Discharging Requirements and Conditions All discharging authorities are requested to check Schedules in the dDCO for accuracy and provide the ExA	Natural England provided full comment on the DCO in our Relevant Representation [RR-099]. We will

ExQ1	Question to	Question	
		with any suggested corrections and amendments.	provide updated comments at Deadline 3 on the updated Draft DCO submitted by the Applicant at Deadline 1.
5.1 Articles			
Q5.1.1	The Applicant	<p>Definition of commence</p> <ol style="list-style-type: none"> 1. The ExA understands that this definition follows the East Anglia 3 DCO. What are the implications of the included exclusions? 2. Should 'tree protection measures' be added to the operations which can be carried out before commencement and whether the erection of temporary amphibian or reptile fencing should be added – or if this is covered? 3. What is the definition of 'remedial work'? 4. Justify the flexibility afforded by the 'carve outs' for exempted works such as site clearance, demolition etc. Clarify any impacts for these works so that the ExA can consider whether they are justified and/or need to be controlled by requirements. 	
Q5.1.2	The Applicant	<p>Definition of maintain:</p> <p>Explain how this accords with 'maintenance of landscape' used in Requirements 18 and 19. Whether 'landscape maintenance' needs a separate definition.</p>	
Q5.1.3	The Applicant	<p>Are definitions required for:</p> <p>Part</p> <p>Should the interpretations include a meaning of 'part'? Does 'part' refer to a geographical part or could 'part' be replaced with alternative phrasing?</p> <p>Phase</p> <p>Should the interpretations include a meaning of 'phase'? Does phase refer to temporal, geographical or both? (This refers to Requirement 15).</p> <p>Stage</p>	

ExQ1	Question to	Question	
		<p>Should the interpretations include a meaning of stage? Does 'stage' refer to temporal or geographical distinctions; or both? (Relevant for Requirements 15, 18, 20, 21, 23, 24, 25, 28, and the Outline Code of Construction Practice (OCoCP) and elsewhere).</p> <p>Plans</p> <p>Do the various plans secured by different requirements be defined here? Or is the definition of the outline plans sufficient?</p>	
Q5.1.4	The Applicant	<p>Article 6: Benefit of the Order</p> <p>Respond to the Transfer of Benefit concerns from MMO regarding mechanisms for two potential OWF developers working in close proximity; especially with regard to in-combination effects.</p>	
Q5.1.5	The Applicant	<p>Article 11: Stopping up of streets</p> <ol style="list-style-type: none"> 1. Explain the need for the widely drawn powers in 11(1) in terms of 'any street' and in terms of 'any other street' in 11(5)(b). 2. What is the meaning of 'temporary' and 'reasonable' in this context? 3. Is there a need for an article to include the power to alter the layout of streets? 	
Q5.1.6	Local Planning Authorities and others subject to this article	<p>Article 12: Access to works</p> <p>12(2) confers deemed consent for means of access to works if the relevant planning authority does not notify the undertaker of its decision within 28 days. Are the local planning authorities and other Interested Parties who may be subject to this deemed consent time limit content with this arrangement? If not set out why?</p>	
Q5.1.7	The Applicant	<p>Article 16: Authority to survey and investigate the land onshore</p> <p>Is it likely that entry to land might be for purposes other</p>	

ExQ1	Question to	Question	
		than trial holes e.g. excavation and/ or bore-holes, and if this so should be stated in the article?	
Q5.1.8	The Applicant	<p>Article 35: Felling or lopping trees and removal of hedgerows</p> <ol style="list-style-type: none"> 1. Is reference to Part 3 of the 1990 Act for the purposes of regulation 14 of the Town and Country Planning (Tree Preservation) (England) Regulations 2012(b) required? 2. It is necessary to confirm that the powers for lopping or felling trees or shrubs are limited to trees or shrubs within the Order Limits (as is stated for the hedgerows in 35(4)). 3. Should there be a mechanism for notifying landowners of the intention to lop or fell trees or shrubs? 4. Does power over-ride the mitigation set out in the OLEMS [APP-698] and elsewhere to reduce the working width of the cable corridor where hedgerows are crossed to 13m or 16.5m (for crossings at an angle)? 	
Q5.1.9	The Applicant	<p>Article 39: Procedure in relation to certain approvals etc</p> <ol style="list-style-type: none"> 1. Should this article also refer to Requirements 12, 19, 31 and 32? 2. Should the list of organisations in 39(1) also include government departments and other organisations specified in the Requirements? 	
5.2 SCHEDULE 1 PART 1: Authorised Development			
Q5.2.1	The Applicant	<p>Schedule 1 – Part 1 – Authorised Development</p> <ol style="list-style-type: none"> 1. How could the dDCO drafting be improved to provide clarity in relation to the works that apply to the different scenarios, for example in relation to Associated Development? Make appropriate amendments in the next dDCO. 	

ExQ1	Question to	Question	
		2. Should transition pits be included within the 'Authorised development' as described in Schedule 1 of the dDCO?	
Q5.2.2	The Applicant	<p>Work No. 12B:</p> <p>1. In connection with Work Nos. 4C to 12B (c) should the maximum heights for temporary office and welfare facilities be given in the description of 'further associated development'?</p> <p>2. Should associated development which is only required under scenario 2 be cited as such?</p>	
5.3 SCHEDULE 1 PART 3: Requirements			
Q5.3.1	The Applicant	<p>Requirement 5</p> <p>The Project Description sets out parameters for cable protection which must not be exceeded [APP-218, Table 5.7]. It states that the worst-case footprint of export cable protection would be 25,500m², but Requirement 5(4) [AS-019] states 76,436m³ or 132,086m².</p> <p>Requirement 5(4) also sets out project interconnector cable protection of 74,000m², but this figure does not appear in the ES Project Description Table 5.7.</p> <p>1. Clarify these apparent discrepancies and confirm the value that has been assessed within the ES.</p> <p>2. If as stated in Requirement 5(5), that under Scenario 1 Work 3A and Work 3B must not both be commenced, would it be clearer to have two tables in Requirement 5(4) clearly setting out the parameters for the different scenarios?</p>	<p>This relates to question Q2.0.2</p> <p>Natural England notes the Applicant has submitted updated draft DCO and supporting documentation to explain the figures used in the DCO at Deadline 1. In a meeting with the Applicant 28 November 2019, Natural England agreed to review these documents and see if they sufficiently clarify the discrepancies. Our response on the discrepancies will be provided at Deadline 3 following our review of these documents.</p>
Q5.3.2	The Applicant	<p>Requirement 15: Scenarios and stages of authorised development onshore</p> <p>3. Should the title include the word 'phase'?</p>	

ExQ1	Question to	Question	
		<p>4. How could parties can be certain of the meaning of 'commence' in the Norfolk Vanguard DCO, when currently only the final draft dDCO is in the public domain?</p> <p>5. Does para (2) need rewording to avoid use of the word commence (as defined in article 2 of this dDCO) when referring to Scenarios 1 and 2? As proposed, could those other operations specified in article 2's definition of commence could be started for Scenario 2?</p> <p>6. Should para (4) refer to planning authorities in the plural and whether it should require the written scheme's approval by the relevant planning authorities? If so, should there be inclusion of a definition for 'relevant planning authorities'?</p>	
Q5.3.3	<p>The Applicant, Norfolk County Council, Breckland Council, Necton Parish Council, Necton Substation Action Group, other Interested Parties with opinions on</p>	<p>Requirement 16: Detailed design parameters</p> <p>The ExA recognises the need for some flexibility in design parameters. The ExA is exploring the potential need for securing more detail because: there are residual, significant adverse visual effects; comments have been made in RRs and at the Open Floor Hearing [EV4-001] on the appearance and design of the substations; the SoS's scoping opinion stated that dimensions of buildings and site layout should be provided and approvals about the substations are contained in different requirements. Views are sought on:</p> <ol style="list-style-type: none"> 1. whether this requirement contains enough detail on which the future approvals can be based; 2. whether more detail on the design approach for the buildings and surroundings than that contained in the Design and Access Statement [APP-694, section 5.3.3] should be secured in the dDCO; 3. whether the details of the substation required by the 	

ExQ1	Question to	Question	
	the appearance and screening of the substations	<p>Outline Landscape and Ecological Management Strategy (OLEMS) [APP-698, paras 65 to 67], secured in Requirement 18 should be consolidated in one place with those set out in Requirement 16.</p> <ol style="list-style-type: none"> 4. Applicant to explain the different 'existing ground levels' in para (8) and the reference to paragraph (8) in para (10); or whether the reference is to para (9)? 5. Views are sought on whether limits should be contained in this requirement to restrict all but the converter halls to a maximum height of 13m, based on the description of the substation in the ES [APP-218, para 346]. It was explained by the Applicant at the DCO ISH on 13 November 2019 that in its opinion it is not necessary to limit all but the converter halls to 13m because the visual assessment has taken into account all the substation buildings development up to a height of 19m (parameter of the Rochdale envelope). The opinions of other IPs are requested. 6. Should any design parameters for link boxes be set in this Requirement? 7. Should the maximum sizes of temporary compounds (mobilisation areas and their compounds and the cable logistics area) which are set out in the ES be secured in this Requirement? 	
Q5.3.4	The Applicant	<p>Requirement 17: Landfall method statement</p> <p>Should there be a requirement in the dDCO for sea defences around the cabling at landfall in response to various Relevant Representations, in particular Norfolk County Council's [RR-037], and concerns regarding cliff erosion in Happisburgh?</p>	<p>Natural England is content with the coastal erosion modelling that has been undertaken and therefore does not believe that coastal defences are required. If coastal defences should be proposed we would have concern in relation to the potential negative impacts of placing coastal defences at this location and would wish to comment on a full assessment of any such proposal and reserves the right to comment on any proposed additional requirements.</p>

ExQ1	Question to	Question	
Q5.3.5	The Applicant, Norfolk County Council, Breckland Council, Broadland Council, North Norfolk District Council	<p>Requirement 18: Provision of landscaping</p> <ol style="list-style-type: none"> 1. Resolve the timing of approvals and implementation with the article 2 definition of 'commence', in connection with sub para (2)(d) details of trees to be removed, details of trees and hedgerows to be retained and their protection measures – which might be required prior to 'commencement'. 2. Is the intention to submit the Landscaping Management Strategy (LMS) as one complete document for approval or in parts? 3. Should para (1) refer to approval by the relevant planning authorities (in the plural) as the OLEMS refers to agreeing standards with Breckland District Council and Norfolk County Council. 4. Should sub para (2)(a) set out more planting types than trees, such that it is clear that grass and ground flora areas are also covered? 5. Should sub para (2)(d) also secure an auditable system for compliance with approved protection measures? 6. Is it correct that under scenario 1, the existing trees to be removed surveys would have been undertaken by Norfolk Vanguard [APP-698 para 141]? Or does this refer only to areas of woodland? 7. How are hedgerow trees considered? Under R18 or under R24? How does this relate to article 35 (Felling or lopping of trees and removal of hedgerows) and Schedule 14? 8. Should sub para (2)(f) also refer to opportunities for advance planting. If so, should a definition of 'advance planting' be provided in article 2? 9. Does sub para (2)(h) give enough detail about the maintenance operations and duration to be included 	Natural England wish to be consulted on and provided with a copy of the final OLEMS, as part of the DCO requirement.

ExQ1	Question to	Question	
		<p>for approval by the relevant local planning authority? And should it refer to an aftercare period as set out in the OLEMS?</p> <p>10. Is it necessary to resolve discrepancies between the description of what the landscape management scheme (LMS) would include as set out in R18 and that in the OLEMS, which includes sustainable drainage design and guidance on materials and colour of the substations [APP-698, para 65]. (Also refer to comments under R16</p> <p>11. Should the agreed procedure for joint annual inspection of all planting areas set out in the OLEMS be included as a sub para of R18 (2)?</p> <p>12. Should reference be made to the adoption of all Norfolk Vanguard mitigation planting as set out in the OLEMS [APP-698, para 141] for scenario 1?</p>	
Q5.3.6	The Applicant	<p>Requirement 19: Implementation and maintenance of landscaping</p> <p>Explain why para (2) needs to be 'agreed in writing' rather than approved by the relevant planning authority in the context of Requirement 30.</p>	
Q5.3.7	The Applicant and Interested Parties	<p>Requirement 20: Code of Construction Practice</p> <p>1. Should contact details of the Agricultural Liaison Officer [APP-692, Appendix B] be added to the list of details to be submitted prior to commencement?</p> <p>2. Should relevant local authorities approve all pre-commencement site work and preparation and if so, how?</p> <p>3. Should the OCoCP include details on controlling dust during construction (particularly on parts of the route that are in close proximity to homes and businesses)?</p> <p>4. Does the effect on private water supply needs to be given further consideration in this requirement?</p>	<p>As per our Relevant Representation [RR-099], Natural England requests we be named as consultee on this requirement. We request we are supplied with a copy of the Final CoCP.</p>

ExQ1	Question to	Question	
Q5.3.8	The Applicant	<p>Requirement 23: Archaeological written scheme of investigation</p> <ol style="list-style-type: none"> 1. Has the National Trust’s request in its RR [RR-084] to be named in connection with the Blickling Estate as a consultee along with Norfolk County Council and Historic England in Requirement 23 been agreed? Update the ExA on progress if this point is not agreed? 2. How is Orsted’s suggestion [RR-102] to manage archaeological impacts, if required, where the cable corridors cross with those proposed for the Hornsea Three Offshore Windfarm by adopting a consistent approach to targeted geophysical survey and trial trenching through a consistent approach to (Archaeological) Written Schemes of Investigation (WSI) being agreed with the relevant authorities prior to commencement of the consented works where the cables cross could be secured in the dDCO? Would the Requirement need to add a Hornsea Project Three party to those consulted in para (1)? 3. Does the dDCO adequately cover requirements for WSI regarding the intertidal zone, including needs for consultation with MMO? 4. How is it proposed within the dDCO to secure all mitigation measures included in the outline Archaeological Written Schemes of Investigations (offshore)? 	
Q5.3.9	The Applicant	<p>Requirement 24: Ecological management plan</p> <p>Should para (3) also refer to previously un-surveyed areas and surveyed areas for which existing surveys have time expired?</p>	
Q5.3.10	The Applicant Environment	<p>Requirement 25: Watercourse crossings</p> <p>The EA’s RR [RR-095] notes that Norfolk Vanguard dDCO committed to site-specific water crossing plans, but the</p>	Natural England would welcome the production of site specific water crossing plans, which incorporate

ExQ1	Question to	Question	
	t Agency	<p>Proposed Development's OCoCP does not, although dDCO requirement 25 'Watercourse crossings' does commit to a 'scheme and programme for any such crossing, diversion and reinstatement'.</p> <p>Do site-specific watercourse crossing plans need to be secured in the OCoCP for the Proposed Development as well as in Requirement 25? If not, why not?</p>	environmental enhancements being included within the OCoCP.
Q5.3.11	The Applicant	<p>Requirement 26: Construction hours Explain the approach to determining construction hours and what consideration was given to these in locations near to sensitive receptors.</p>	
Q5.3.12	The Applicant	<p>Requirement 27: Control of operational noise during operational phase dDCO [APP-020] Requirement 27 stipulates a rating level of 32dB must be achieved it at any 'noise sensitive location'. However, 'noise sensitive location' is not defined within the dDCO.</p> <ol style="list-style-type: none"> 1. Clarify what is the definition of a 'noise sensitive location' in the context of dDCO [AS-019] Requirement 27. 2. Should a definition be included in the 'Interpretation' section in Part 1 of the dDCO [AS-019]? 	
Q5.3.13	The Applicant and relevant local planning authorities	<p>Requirement 31: Amendments to approved details</p> <ol style="list-style-type: none"> 1. The Applicant is requested to set out its justification for this Requirement. 2. Are local planning authorities and others responsible for post consent approvals content that the provisions in this Requirement for amendments and variations are justified? 3. If not explain the need for such a requirement and/ or propose alternative wording. 4. Specifically, is the wording "<i>that the subject matter of</i> 	Natural England is content with the principle behind requirement 31. However, questions if it is appropriate for non-material changes to be made through amended plans and not through requesting a non-material change to the DCO.

ExQ1	Question to	Question	
		<i>the agreement sought is unlikely to give rise to any materially new or materially different environmental effects from those assessed in the environmental statement."</i> is sufficiently tightly drawn?	
Q5.3.14	The Applicant	Requirement 32: Operational drainage plan How have allowances for climate change been considered and does the flood risk assessment take account of UK Climate Projections 2018 (UKCP18)?	
5.4 OTHER REQUIREMENTS			
Q5.4.1	The Applicant Interested Parties	Reinstatement Is there provision to ensure reinstatement for areas used temporarily during construction. If not, why not? If so, where is this set out and secured in the dDCO?	
Q5.4.2	National Grid	Electricity into local transmission The Applicant's response to Norfolk County Council's RR [RR-037] request to work with National Grid to feed electricity into local transmission [AS-024, Table 28, No. 2] states that there are no planning or regulatory mechanisms through which the Applicant could identify direct 'infeeds' into the regional distribution network in Norfolk. Advise whether there is precedent; whether such an arrangement could be secured in this dDCO.	
Q5.4.3	Interested Parties	Any other requirements? Interested parties are requested to set out any other areas which they consider should be covered by requirements and to provide initial drafting of such additional requirements. In so doing, IPs are advised that all requirements must be precise and enforceable, necessary, relevant to the development and reasonable in all other respects.	

ExQ1	Question to	Question	
5.5 SCHEDULES 9 to 13: Deemed Marine Licences			
Q5.5.1	Natural England and The Applicant	<p>Natural England (NE) concerns in Relevant Representation</p> <p>NE raised a number of concerns in its relevant rep [RR-099]. These concerns to be reviewed in the light of comments by the Applicant on Relevant Representations [AS-024].</p>	<p>Natural England has had several discussions with the applicant regarding these issues and has made some progress. Please see our updated issues log for an update on our progress. Additionally, we are reviewing the updated dDCO and supporting documentation and will provide a further update on these issues at Deadline 3.</p>
Q5.5.2	The Applicant, Marine Management Organisation	<p>Review Applicant responses [AS-024] to MMO relevant rep [RR-069]:</p> <ol style="list-style-type: none"> 1. concurrent piling both within the project and between Norfolk Boreas and Norfolk Vanguard (underwater noise effects) with recommended consideration of inclusion of a cooperation condition between developers working in close proximity and recommendation of DCO/DML amendment for a worst-case scenario if more than one pile is to be installed within a 24-hour period [Schedules 9-13 Condition 21] expanding on [AS-024 Table 26 row 54]; 2. implication that new cable protection works are considered, by the Applicant, to be licenced for deployment at any time during the operation of the works; [RR-069 2.1.33 to 39]; and proposed requirement for new cable protection and foundation replacement during operations to be separately licenced [Schedules 9-13 Condition 22] expanding on [AS-024 Table 26 row 63]; 3. request for removal of the appeals process in [Schedules 9-13 Part 5 Procedure for Appeals]; 4. 6 instead of 4 month timescale for submission of discharge documents [Schedules 9-13 condition 15(5)]; and 5. appeal process related to applications for discharge 	<ol style="list-style-type: none"> 1. Natural England would refer to our significant concerns regarding the lack of a clear proposed mechanism to co-ordinate noise activities within the Southern North Sea SAC. Although, Natural England does note that applying a co-ordination condition to only one development would not address those concerns. 2. Natural England and MMO are preparing a joint position statement on cable protection and parameters in which it may be consented and deployed. 3. And 5. Natural England supports the MMO position on appeals and arbitration. <p>Natural England Relevant Representation[RR-099], has made clear the need for six months. We note the comments by the Applicant; however, our position remains unchanged. In addition, Natural England notes that the recent East Anglia One North and East Anglia two draft DCOs include six months for similar conditions.</p>

ExQ1	Question to	Question	
		of conditions. [Schedules 9-13 Conditions 14 and 15].	
Q5.5.3	Marine Management Organisation	<p>Disposal of any offshore non-natural material: MMO to comment on Applicant’s response [AS-024 Table 26 Row 11] to MMO’s [RR-069]: <i>‘The Applicant considers that all material dredged or drilled from the seabed would be of natural origin. Furthermore, all material would be disposed of within the vicinity of the dredge location and therefore would not be transported far from source. Therefore, the wording of the DCO should remain in keeping with the precedent set by previous DCO projects.’</i></p>	
Q5.5.4	Marine Management Organisation	<p>Individual structure volumes and areas: MMO to comment on Applicant’s response [AS-024 Table 26 Row 49] to MMO [RR-069] recommendations that the volumes and areas should be included within the face of the DCO <i>‘The Applicant’s position is that as the DML conditions specifically require that the final plan must accord with the outline plan it is not necessary to include the level of detail sought by the MMO on the face of the DMLs...’.</i></p>	Natural England supports the position of the MMO.
5.6 SCHEDULE 15: ARBITRATION RULES			
Q5.6.1	The Applicant	<ol style="list-style-type: none"> 1. Is there a definition in the dDCO for ‘the Arbitrator’ and if so, where? 2. Respond to the MMO’s concerns highlighted in Section 2.1 of its RR [RR-069] relating to timescales for discharge document submission; and to an appeal process related to applications for discharge of conditions. 	

ExQ1	Question to	Question	
5.7 SCHEDULE 16: PROCEDURE FOR DISCHARGE OF REQUIREMENTS			
Q5.7.1	Interested Parties	<ol style="list-style-type: none"> Views of interested parties are sought in relation to the discharge of requirements as set out in Schedule 16. The Applicant to clarify which the post-consent approving bodies would be for Requirement 16. 	
5.8 CONSENTS, LICENCES AND OTHER AGREEMENTS			
Q5.8.1	The Applicant	Comment on Norfolk County Council's suggestion that funds could be made available for the benefit of the resident and business communities affected by construction activities [RR-037].	
Q5.8.2	The Applicant	Provide update on discussions regarding Protective Provisions, including with Cadent Gas Limited, National Grid and the EA.	
Q5.8.3	The Applicant	How should the Informative Note requested by The Coal Authority [RR-005] be addressed in the dDCO?	
Q5.8.4	The Applicant The Environment Agency	<p>Disapplication of legislation relevant to the Environment Agency:</p> <p>The Applicant to comment on the following statement in the SoCG with the Environment Agency [AS-026]: <i>"The Applicant seeks to disapply various pieces of legislation. We are currently considering our position in relation to the legislation which is relevant to the Environment Agency. However, the draft protective provisions contained within part 7 of Schedule 17 of the draft DCO [AS-019] do not correspond with the latest version of the Environment Agency's model protective provisions."</i></p>	

ExQ1	Question to	Question	
6. Fishing			
Q6.0.1	VisNed National Federation of Fishermen's Associations	<p>Assessment of impact on Dutch beam trawling: Submit a position statement to cover:</p> <ol style="list-style-type: none"> 1. comments on the Applicant's assessment of impact on Dutch beam trawling as being of minor significance due to low magnitude and low sensitivity of the fleet to loss of grounds. 2. impacts on Dutch demersal fishing activity. 	
Q6.0.2	Caister Fishermen's Association and Eastern Inshore Fisheries Conservation Association	<p>Potential impact of development on inshore fisheries and fishing: Comment on the Applicant's responses [AS-024] to Relevant Representation [RR-091] in regard to the following issues:</p> <ol style="list-style-type: none"> 1. Impacts of pile-driving: effect on sandbanks and marine mammal populations affecting fishing gear. 2. Cable installation: sedimentation effects on shrimp population affecting inshore fisheries of bottom-feeding fish, crab and lobster. 3. Increased marine traffic: effects of windfarm service vessel traffic on fishing gear and safety of fishing vessels. 	

ExQ1	Question to	Question	
7. Grid connection			
Q7.0.1	The Applicant	<p>HVDC electrical solutions ES Chapter 5 [APP-218, paragraph 166 and 167] explains that three High Voltage Direct Current (HVDC) electrical solutions are being considered., and also another solution that is a variation of solution (c).</p> <p>Provide further information on the specification of the offshore electrical platform solution (c), in order to provide further assurances that it would be within the design envelope assessed.</p>	
Q7.0.2	National Grid	<p>Substation location IPs raise concerns in their RRs and at the Open Floor Hearing [EV4-001] in relation to the proposed expansion of Necton substation, questioning why Walpole substation is not considered to be the preferred location. The Applicant has set out its consideration of alternatives in the application documents [AS-024]. Provide further information in relation to these matters.</p>	
Q7.0.3	National Grid	<p>Necton substation and proposed extensions</p> <ol style="list-style-type: none"> 1. Confirm the current site boundary and function of the existing Necton sub-station. 2. Outline all proposed extensions to the Necton sub-station, and all proposed additional project substations on the same site. Specify the purpose of each extension and additional project substations. 3. Confirm if the parameters (height, boundary) assessed in the ES Chapter 29 Landscape and Visual Impact Assessment [APP-242], for the 	

ExQ1	Question to	Question	
		substations extensions and additional project substations represent the worst-case Scenario.	
Q7.0.4	National Grid CPRE Norfolk Interested Parties who made comment about ORM	<p>Offshore Ring Main</p> <p>The Applicant has responded to matters raised in relation to an Offshore Ring Main (ORM) [AS-024, Table 28, No. 3].</p> <p>Do IPs wish to comment further?</p>	

ExQ1	Question to	Question	
8. Habitats Regulation Assessment			
Q8.0.1	The Applicant	<p>Screening and Integrity Matrices</p> <p>A number of discrepancies have been identified between the features identified in the Applicant’s matrices and NE’s conservation objectives/the Ramsar Information Sheets. The Applicant is requested to perform an audit of its integrity and screening matrices to ensure the correct qualifying features/Ramsar criterion have been identified. Revised matrices, including the revised assessments that are proposed to be submitted by the Applicant, should be submitted where appropriate.</p>	
Q8.0.2	Natural England	<p>Screening and Integrity Matrices</p> <p>The Applicant [APP-201, AS-003, AS-004] has provided revised screening and integrity matrices for North Norfolk Coast SPA/Ramsar site, Broadland SPA/Ramsar site and Breydon Water SPA/Ramsar site which now include the potential effects of collision risk to non-seabird migrants. Does NE agree with the Applicant’s conclusions in relation to these European sites?</p>	<p>NE to provide response to updated screening and matrices for Deadline 4.</p> <p>AS-003 Natural England welcomes that North Norfolk Coast SPA/Ramsar Broadland SPA/ Ramsar and Breydon Water have been screened in for collision risk on non-seabird migrants.</p> <p>For the Broadland SPA/Ramsar site we raised in our Relevant Representation [RR-099] that due to lack of onshore ornithology data and linkages to agricultural patterns direct effects on ex situ habitats or Functionally Linked Land, may occur. The Applicant during Vanguard submitted a Clarification Note with mitigation, therefore suggest that direct effects on ex situ habitats should have been screened in for this site. The Applicant has agreed that Clarification Notes as submitted for Vanguard</p>

ExQ1	Question to	Question	
			will be submitted to ExA as part of Boreas Examination
Q8.0.3	The Applicant	Screening Matrices How have in-combination effects been assessed by the Applicant at screening stage?	
Q8.0.4	The Applicant	Conservation objectives Can the Applicant provide the Conservation Objectives for Outer Thames Estuary SPA, Breydon Water SPA and Ramsar, Broadland SPA and Ramsar, North Norfolk Coast SPA and Ramsar or signpost to where these are provided in the application documents?	
Q8.0.5	Natural England	Mitigation In several areas in the HRA Report, the Applicant has relied upon mitigation to exclude a likely significant effect e.g. trenchless crossing of the River Wensum and lethal effects and permanent auditory injury to harbour porpoise from piling. Can NE comment on whether it considers this interpretation to be consistent with the People Over Wind judgement?	According to the People over wind Judgement measures intended to avoid or reduce harmful effects, generally referred to as 'mitigation measures' cannot be taken into account when deciding whether a plan or project is likely to have a significant effect on a European site. Rather, a competent authority must take account of measures intended to avoid or reduce the harmful effects of a plan or project as part of the appropriate assessment. Only then can a conclusion be drawn as to whether the plan or project will have an adverse effect on the integrity of the site. Where mitigation is relied on to remove impact these sites should be assessed within the AA.
Q8.0.6	Natural England	Cumulative/in-combination assessments for Fishing In its RR [RR-040] TWT states that fishing has not been included in any cumulative/in-combination assessments within any chapters of the Norfolk Boreas application. As a principle, TWT considers	Natural England Relevant Representation to Hornsea 3 stated: Where there is ongoing fishing activity in the site it is important that the impacts of the activity are captured within the assessment in the context of the

ExQ1	Question to	Question	
		fishing should not be considered in any assessments as part of the baseline. What is NEs view?	<p>conservation objectives of the affected designated site(s). This assessment will likely take place as part of the baseline characterisation of the development area, however, as fishing activity is mobile, variable and subject to change, there may be instances whereby fishing impacts are not adequately captured in the baseline characterisation and therefore may need to be considered as part of the in-combination assessment. This could be due to a change in effort; change in management; or a change in legislation amongst other things, and fishery managers (i.e. MMO and IFCAs) would be best placed to advise on this. There may also be occasions whereby there are plans for new fisheries, or changes to existing fisheries which could be captured in-combination. Again the fishery managers would be able to advise on this.</p> <p>In relation to the assessment of impacts on the SNS SCI, Natural England would consider that the impact of ongoing fishing activity in the context of the draft conservation objectives for the site, has been adequately captured for the purposes of the HRA. We are not currently aware of anything that would have significantly altered the levels of fishing activity within the site; any current plans for new fisheries, or changes to existing fisheries that have not been captured, but we would look to fisheries managers to advise more definitively on these points.</p>
8.1 Broadland SPA and Ramsar			
Q8.1.1	The Applicant, Natural England	LSE NE's RR [RR-099] advised that a LSE for Broadland	Topic 17. Applicant has agreed to incorporate the mitigation for Broadland SPA, as agreed for

ExQ1	Question to	Question	
		<p>SPA and Ramsar be screened in and the same mitigation commitments incorporated within the Boreas OLEMS as was proposed for Norfolk Vanguard.</p> <ol style="list-style-type: none"> 1. The Applicant responded in [AS-024]. Is NE content with this explanation? 2. Can the Applicant also explain if/how avoidance and reduction measures proposed by NE are to be secured? 3. The Applicant is requested to ensure that the screening and integrity matrix are updated to reflect any changes that result from its responses to parts (i) and (ii) 	<p>Vanguard within the OLEMS. Applicant has submitted 8.7 Outline Landscape and Ecological Management Strategy (Version 2) (Tracked Changes) at Deadline 1. Natural England will provide comment for Deadline 3. NE were content with the mitigation as incorporated for Vanguard.</p>
<p>8.2 River Wensum SAC</p>			
<p>Q8.2.1</p>	<p>Natural England</p>	<p>Air Quality In light of the People Over Wind Judgement, and NE's RR [RR-099] which states that mitigation is necessary to reduce air quality impacts to River Wensum SAC, can NE confirm which features of the River Wensum SAC are susceptible to changes in AQ and whether they are likely to experience LSE as a result of the proposed development?</p>	<p>Water courses of plain to montane levels with Ranunculion and Callitricho-Batrachion vegetation, white clawed crayfish, brook lamprey and bullhead may all be sensitive to Nitrogen levels. The Supplementary Advice on Conservation Objectives SACO for River Wensum includes an aim regarding air quality to Restore, the concentrations and deposition of air pollutants to at or below the site-relevant Critical Load or Level values given for this feature of the site on the Air Pollution Information System.</p> <p>The River Wensum SSSI Fen, marsh and swamp habitat is sensitive to Nitrogen deposition. The River Wensum SSSI is an unfavourable conservation status at this point for among other reasons water pollution and discharge.</p>

ExQ1	Question to	Question	
			<p>The Applicant has since assured Natural England the air quality impacts from traffic at the end of examination of Vanguard, in combination with other plans and projects, was still below the minor impact effect screening threshold level. The Applicant has agreed (21.10.19) to include designated sites in the Traffic Plan, so that any potential impacts to designated sites are considered.</p> <p>If air quality impacts from traffic are below minor impact thresholds based on the final traffic numbers as agreed at the end of the Boreas examination (NE are not consulted on Traffic Plans) in combination with other plans and projects then mitigation will not be necessary. However if the project will contribute in combination with other projects on sites which are already in unfavourable condition then there may be a LSE and an AA should be undertaken.</p>
Q8.2.2	Natural England, Environment Agency	<p>Air Quality With regard to air quality impacts to protected sites; are NE and EA content with the Applicant's response to NE's concerns (Table 17 of [AS-024]) regarding no mitigation at designated sites?</p>	NE understands that there will be dust management measures put in place. Please see comments above with regards mitigation.
Q8.2.3	The Applicant, Natural England	<p>Drilling fluid breakout contingency NE [RR-099] has requested HDD methodology be presented and the potential effects of drilling fluid break out on designated sites and species be assessed. Specifically, it states there is insufficient information on HDD tolerance monitoring, how quickly bentonite release can be stopped or an assessment of a worst-case scenario. It also states that conservation objectives require supporting processes to be maintained. The Applicant in its response [AS-024] states that it has agreed to produce a clarification note for Natural England, when</p>	This has been provided by the Applicant Deadline 1 and Natural England will respond for Deadline 3.

ExQ1	Question to	Question	
		will this note be available to the examination?	
8.3 Norfolk Valley Fens SAC			
Q8.3.1	The Applicant	<p>Narrow-mouthed whorl snail The Applicant's screening matrix [AS-002] identifies a LSE for narrow-mouthed whorl snail for 'Indirect effects on ex-situ habitats functionally connected to the SAC'. However, this feature has not been identified in the integrity matrix nor has a LSE been identified in the HRA Report [APP-201]. The Applicant to clarify whether a LSE should have been identified and to provide revised matrices to clarify this discrepancy.</p>	
Q8.3.2	The Applicant	<p>Semi-natural dry grassland and scrubland The Applicant's screening matrix [AS-002] identifies a LSE for in-combination effects to semi-natural dry grassland and scrubland facies on calcareous substrates, however a LSE has not been identified for this feature in the HRA Report [APP-201]. The Applicant to clarify whether a LSE should have been identified and provide revised matrices to clarify this discrepancy.</p> <p>If there is a LSE, the Applicant is requested to provide information to inform an appropriate assessment.</p>	
8.4 River Wensum SAC, Norfolk Valley Fens SAC and The Broads SAC			
Q8.4.1	Natural England	<p>AEOI NE has stated [RR-099] it cannot rule out an AEOI to River Wensum SAC, but does not make the same statement in relation to Norfolk Valley Fens SAC and</p>	Natural England are content that given the location of HDD and distance to Norfolk Valley Fens and Broads SAC there is unlikely to be an AEOI from

ExQ1	Question to	Question	
		<p>the Broads SAC. However, it states there is insufficient detail in the CoCP for measures to safeguard all of these sites from bentonite breakout. Can NE therefore confirm its position in relation to AEOIs to all of these sites?</p>	<p>bentonite breakout, but until further information is provided we cannot rule out AEoI for HDD directly under the River Wensum.</p>
Q8.4.2	The Applicant, Natural England, RSPB	<p>In combination assessments In-combination assessments for the River Wensum SAC, Norfolk Valley Fens SAC and The Broads SAC have not been undertaken as the Applicant considers there is no potential for AEoI to these sites and no real potential of an in-combination effect occurring with other plans or projects [APP-201]. However, the Applicant has acknowledged the potential for small effects from a number of different projects to add up to an effect of greater magnitude in some of the HRA in-combination assessments e.g. Paston Great Barn SAC, HHW SAC, FFC SPA and Alde-Ore Estuary SPA.</p> <p>The Applicant is requested to provide greater justification for not undertake in-combination effects for the River Wensum SAC, Norfolk Valley Fens SAC and The Broads SAC. Do any Interested Parties have comments on the in-combination assessments for these sites?</p>	<p>During the Vanguard examination Natural England requested further information on in combination effects of the cable route and Hornsea 3 cable route in proximity to Booton Common SSSI/Norfolk Valley Fen SAC. This was provided in a Clarification Note and hydrological impacts were screened out.</p>
8.5 Haisborough, Hammond and Winterton SAC			
Q8.5.1	The Applicant	<p>Seabed Material The Applicant to confirm the mechanism through which the commitments proposed in Table 3 of [AS-024]) to ensure seabed material would be retained within the Haisborough, Hammond and Winterton SAC would be secured.</p>	
Q8.5.2	The Applicant	<p>Plastic frond mattresses In its RR [RR-069] MMO questioned the inclusion of</p>	

ExQ1	Question to	Question	
		plastic frond mattressing in the design envelope. The Applicant [AS-024] agreed to investigate the issue further. The Applicant to provide an update on its findings.	
Q8.5.3	Natural England	AEOI NE does not agree to no AEOI to HHW SAC (both alone and in-combination). Does the Applicant's response in AS-024 satisfy NE's concern and if not, what are the outstanding issues?	Natural England has reviewed AS-024 submitted on 11 th October 2019 and we do not believe that our concerns have been addressed. Both parties have set out cases and there is evidence to support all arguments. However, based on our experience and the best available evidence NE's position as stated in the Relevant Representations [RR-099], remains unchanged in relation to the conclusion that an AEOI cannot be ruled out.
Q8.5.4	Marine Management Organisation and Eastern Inshore Fisheries and Conservation Authority	Fisheries Byelaws MMO and EIFCA to provide an update on the likely timeframes for implementation of the proposed fisheries byelaws?	
Q8.5.5	The Applicant	Compensation If agreement cannot be reached between the Applicant and NE on no AEOI for HHW SAC, what would the Applicant's approach be to the provision of alternatives or compensation and the argument for IROPI?	
8.6 Offshore ornithology			
Q8.6.1	The Applicant, Natural England, RSPB	CRM Assessment The ExA has had regard to the RRs [RR-054, RR-099] raised in relation to offshore ornithology and is aware of the complex arguments and disagreement between the various parties. Noting these positions, the ExA	Noted. Natural England is aware that the Applicant is working on an updated assessment which will be submitted at Deadline 2. We will provide our headline responses to this updated assessment prior to ISH

ExQ1	Question to	Question	
		requests that the Applicant, NE, RSPB and other relevant parties work collaboratively to respond effectively to each of the points raised in RR's on this issue.	with detailed comment at Deadline 4.
Q8.6.2	Natural England	<p>CRM Assessment</p> <p>NE to explain why it considers in [RR-099] the Applicant takes a more narrative approach to CRM assessment and considers the Option 1 outputs for gannet, kittiwake and great black-backed gull in the context of the relevant Option 2 figures for the 95% confidence intervals of the density data, as part of a more range-based approach to consideration of CRM impacts. How does NE consider this approach should be used by the ExA to inform its consideration of HRA matters?</p>	<p>Following submission of our Relevant Representations [RR-099], Natural England had discussions with the Applicant via a Telecall on 10th September to discuss issues raised in RR-099 where the site-specific flight height data and hence Option 1 figures were discussed. During this call the Applicant confirmed that there was no confidence in any of the site-specific flight height data following the survey contractor's statement that heights estimated from digital aerial surveys are inaccurate. Therefore given this it was agreed that the use of generic seabird flight height estimates in Collision Risk Modelling (CRM), i.e. Option 2 is appropriate.</p> <p>However, this highlights the importance and need for a range-based approach. The site-specific flight height data and hence Option 1 values, though potentially suspect, highlight the level of uncertainty around the flight heights of seabirds. In that context, there is a level of risk in basing assessments on a single, central value. Therefore the advantage of a range-based approach is that it encompasses the most likely extent of potential impacts.</p> <p>Therefore, as we have advised the Applicant, consideration of HRA matters should take into</p>

ExQ1	Question to	Question	
			<p>account the range of predicted collision impacts apportioned to relevant designated sites, drawing not just from the mean/central predicted collision figures, but also the range of predicted figures resulting from the Applicant's analysis of the uncertainty/variability in the input data (in the Boreas case, the greatest range results from consideration of the 95% confidence intervals of the seabird density).</p>
Q8.6.3	Natural England	<p>Stochastic Collision Model Confirmation is required from NE that it accepts the inability of the Applicant to use Marine Scotland Science's Stochastic Collision Model, due to issues with the model providing accurate outputs (no timescale for when this model will be fixed), and that NE accepts the Applicant's proposed modelling outputs.</p>	<p>We note that the Marine Scotland Science (MSS) stochastic collision risk model (sCRM) is essentially based on the Band (2012) model, but allows uncertainty in input parameters (e.g. avoidance rate, flight height, bird density etc.) to be fully incorporated into a predicted collision impact with estimated variability. As the sCRM is compatible with the Band (2012) model, for the same mean/central input parameters the sCRM when run as a deterministic model (i.e. standard deviations for all parameters set at 0) should therefore give the same central/mean collision predictions as those predicted by the Band (2012) model for these same input parameters. However, at present it has been identified that this is not the case, due to technical issues with the sCRM. This issue has also been identified by the Applicant. These issues are currently subject to ongoing discussion/investigation between the SNCBs, MSS and the sCRM developers. However the timescales required to resolve the issues are currently uncertain.</p> <p>Hence, at the present time, the Applicant's current approach to the assessment (use of the Band 2012</p>

ExQ1	Question to	Question	
			<p>model and varying each input parameter in turn, i.e. bird density, avoidance rate, flight heights, nocturnal activity) therefore represents appropriate use of the currently recommended collision risk model and the best approach to incorporating uncertainty that is available at this time. Natural England will base our advice on the ranges of predictions for the parameter that predicts the greatest uncertainty in the predictions from the variations of Band model outputs, which as noted above is the variation of bird density.</p> <p>If the issues with the sCRM do get resolved in the timescale of the Boreas examination and updated collision risk modelling is required (e.g. due to modification to design parameters), then we would advise this is undertaken using the stochastic model.</p>
Q8.6.4	The Applicant	<p>Reducing collision impacts The Applicant to provide an update on the additional measures being considered for reducing collision impacts noted in [AS-024] in response to NE's recommendation for raising turbine draught height.</p>	<p>Natural England has previously provided regulators with our advice regarding our concerns about predicted level of cumulative/in-combination collision impacts on North Sea seabirds, e.g. EIA great black-backed gull at East Anglia 3, Flamborough and Filey Coast (FFC) SPA kittiwake at Hornsea 2. These concerns intensified during the recent three offshore wind farm (OWF) examinations (Hornsea 3, Norfolk Vanguard, Thanet Extension), and given three further OWF NSIPs have recently been submitted to PINS (Norfolk Boreas, East Anglia One North, East Anglia Two) with a further project expected to submit in 2020 (Hornsea 4), Natural England considers that without major project-level mitigation being applied to all relevant projects coming forward, there is a significant risk of large-scale impacts on seabird</p>

ExQ1	Question to	Question	
			<p>populations.</p> <p>As stated in our Relevant Representations [RR-099], Natural England therefore recommends that Norfolk Boreas (and all relevant future projects located in the North Sea), considers raising turbine draught height, as has been done by other projects (e.g. Hornsea 2, East Anglia 3 and Vanguard) as mitigation in order to minimise their contribution to the cumulative/in-combination collision totals by as much as is possible. We would also advise that Norfolk Boreas considers a range of possible options of draught heights be presented, to demonstrate due consideration of alternative mitigation options.</p>
8.7 Alde-Ore Estuary SPA			
Q8.7.1	Natural England	<p>Lesser black backed gull</p> <p>The commentary that supports the Applicant's in-combination assessment for lesser black backed gull of Alde-Ore Estuary SPA infers that reliance has been placed on the as-built scenarios for other offshore wind farm developments. The RSPB has raised concerns with this Approach. What is NE's advice??</p>	<p>As Natural England have stated previously during the Vanguard examination (see our Deadline 2 and 8 responses for this examination) Natural England acknowledges that as built scenarios are an important issue with regard to cumulative/in-combination CRM predictions and assessments. However, without a legally secured reduction in the consented Rochdale envelope, and a re-run CRM with the final design parameters, cumulative/in-combination assessments should be based on consented parameters. We note that East Anglia 1 is currently the only project to date to meet these tests.</p>
Q8.7.2	The Applicant	<p>Lesser black backed gull</p> <p>NE [RR-099] and RSPB [R-054] do not agree to no AEOI to lesser black backed gull of Alde-Ore Estuary SPA and Ramsar. NE has concerns on the basis of the</p>	

ExQ1	Question to	Question	
		<p>breeding season apportionment and advises a range of rates. RSPB does not agree no AEOI from collision mortality alone and in-combination. NE explains it could not agree to no AEOI from collision risk to LBBG for Norfolk Vanguard and Boreas adds more birds to these totals.</p> <p>The Applicant [AS-024] states that it will respond to these concerns, when will the response be available?</p>	
8.8 Alde-Ore Estuary SPA and Flamborough and Filey Coast SPA			
Q8.8.1	The Applicant	<p>Compensation</p> <p>NE and RSPB advise that an AEOI cannot be ruled out for Alde-Ore Estuary SPA, Flamborough and Filey Coast SPA. It is acknowledged that NE and RSPB previously reached these conclusions for Norfolk Vanguard and that Norfolk Boreas is proposing to add additional mortalities to those figures. In light of this, the Applicant is requested to present information relevant to the subsequent stages of the HRA process; namely consideration of alternatives, compensation and information to inform an IROPI case for these sites.</p>	
8.9 Greater Wash SPA and Outer Thames Estuary SPA			
Q8.9.1	Natural England	<p>Mortality Rates</p> <p>NE [RR-099] states that definitive mortality rates are unknown, therefore a range of mortality rates between 1% and 10% should be presented. It disagrees with the Applicants evidence review and that a magnitude of 100% out to 4km is over precautionary. NE calculates 0.87-2.46% increase in baseline mortality during construction phase, which it</p>	<p>As definitive mortality rates of seabirds, including red-throated diver (RTD) and auks, are unknown Natural England continues to advise a range of mortality rates of between 1 and 10% are considered in assessments. Critically though, empirical evidence regarding the energetic consequences of displacement for seabirds and wintering waterbirds</p>

ExQ1	Question to	Question	
		<p>states is not insignificant. The Applicant [AS-024] states that the full range of outputs was presented in its assessment. Does NE have further comments?</p>	<p>using the marine environment are very limited, and the role of overwinter survival on seabird population dynamics is poorly understood. Furthermore, we again note that the mortality rates are a crude method of capturing a range of potentially deleterious effects that could arise from displacement, including reduced fitness for migration and reduced productivity during the breeding season. These are particularly relevant when considering displacement effects within sites designated for the species affected, such as the RTD feature of the Greater Wash SPA.</p> <p>We acknowledge that in its assessments of displacement for RTD and auks, the Norfolk Boreas Applicant has considered the range of predicted impacts from the displacement and mortality rates as recommended by Natural England alongside those predicted from their considered 'evidence based' rates.</p> <p>We note that our recommendation to consider up to 100% displacement over a 4km buffer is with respect to displacement of sensitive species such as divers and seaduck from operational offshore windfarms, whilst for all other species it is for a 2km buffer (SNCBs 2017), which have been used by the Applicant in their assessments.</p> <p>The calculations referred to in the question of a 0.87-2.46% increase in baseline mortality during the construction phase are with regard to 100% displacement and up to 10% mortality of RTD in the Greater Wash SPA from a 2km buffer around each</p>

ExQ1	Question to	Question	
			<p>cable laying vessel, based on the RTD density from the data used in the SPA Departmental Brief (Natural England & JNCC 2016). We consider that the use of the upper density figure for the cable route is likely to be appropriate bearing in mind recent surveys of the neighbouring Outer Thames Estuary SPA have identified higher RTD densities when digital aerial surveys have been undertaken. This results in a prediction of up to 8.5 RTD mortalities, equating to up to 2.46% of baseline mortality of the SPA RTD population at the upper range of the NE recommended mortality rates. Therefore, at this level, the predicted impacts are not insignificant and without the mitigation proposed by Norfolk Boreas may not have resulted in no adverse effect on site integrity.</p>
Q8.9.2	Natural England	<p>Red throated diver In its response to NE's RR [AS-024] the Applicant provides proposed mitigation measures for red throated diver of the Greater Wash SPA and Outer Thames Estuary SPA during operation and maintenance. Does the commitment in Schedules 9 & 10 Condition 14(1)(d)(vi) sufficiently alleviate NE's concerns to enable it to conclude no AEOI?</p>	<p>In AS-024 the Applicant confirms that the same mitigation agreed for the operation and maintenance phase of Norfolk Vanguard has been adopted for Norfolk Boreas, specifically:</p> <ul style="list-style-type: none"> • Avoid and minimise maintenance vessel traffic, where possible, during the most sensitive time period for red throated diver (RTD) in January/ February/ March. • During the months of January to March inclusive, construction activities consisting of cable installation for Work No. 4A and Work No. 4B must only take place with one main cable laying vessel. • Restrict vessel movements where possible to existing navigation routes. • Avoid over-revving of engines (to minimise noise disturbance).

ExQ1	Question to	Question	
			<ul style="list-style-type: none"> Avoid rafting birds either in-route to array from operational port and/or within the array (dependent on location) and where possible avoid disturbance to areas with consistently high diver density. <p>This mitigation has been included in the Outline PEMP [APP-705]. Condition 14 (1) (d) (vi) of Schedules 9 and 10 of the updated draft DCO version 2 [AS019] secures that the final project environmental management plan (in accordance with the outline project environmental management plan) covering the period of construction and operation must include details of:</p> <p><i>"procedures to be adopted within vessel transit corridors to minimise disturbance to red-throated diver during operation and maintenance activities."</i></p> <p>Therefore, based on the adoption of best practice vessel operations to minimise disturbance to RTD, we agree that an AEOI from operation and maintenance vessel movements can be ruled out for RTD feature of the Greater Wash SPA and of the Outer Thames Estuary SPA.</p>
Q8.9.3	Natural England	<p>Red throated diver NE [RR-099] recommends avoiding/reducing cable laying activities during the non-breeding season/period of peak red throated diver numbers. The Applicant [AS-024] confirms that the same mitigation agreed for Norfolk Vanguard has been adopted for Norfolk Boreas, as included in the outline PEMP [APP-705]. Does the Applicant's commitment to mitigation for red throated diver of the Greater Wash</p>	<p>As noted in response to question 8.9.2 above, the Applicant confirms that the same mitigation agreed for Norfolk Vanguard has been adopted for Norfolk Boreas, which includes:</p> <ul style="list-style-type: none"> During the months of January to March inclusive, construction activities consisting of cable installation for Work No. 4A and Work No. 4B must only take place with one main

ExQ1	Question to	Question	
		SPA, as included in section 6.1.3 of the outline PEMP [APP-705] enable NE to agree to rule out an AEOI?	<p>cable laying vessel.</p> <p>This mitigation has been included in the Outline PEMP [APP-705], the final version of which is secured through Condition 14 (1) (d) (vi) of Schedules 9 and 10 of the updated draft DCO version 2 [AS019].</p> <p>Therefore, based on this commitment from the Applicant, we agree that an AEOI from displacement due to construction activities from the project alone and in-combination can be ruled out for RTD feature of the Greater Wash SPA.</p>
Q8.9.4	Natural England	<p>Red throated diver</p> <p>Can NE confirm whether its comments regarding cumulative operational displacement to red throated diver in section 6.2 of Appendix 1 of its Relevant Representation [RR-099] also apply to red-throated diver qualifying features of Greater Wash SPA and Outer Thames Estuary SPA?</p>	<p>The comments in 6.2 of Appendix 1 of our Relevant Representation [RR-099] only apply to the cumulative (EIA scale) displacement assessment for RTD.</p> <p>Given the commitment by the Norfolk Boreas Applicant to the same mitigation as at Norfolk Vanguard for RTD displacement (in terms of reductions in cable laying vessels in the Greater Wash SPA during the key periods and to <i>procedures to be adopted within vessel transit corridors to minimise disturbance of RTD during operation and maintenance activities</i>) set out in the Outline PEMP [APP-705], the final version of which is secured through Condition 14 (1) (d) (vi) of Schedules 9 and 10 of the updated draft DCO version 2 [AS019], we can agree that AEoI from displacement due to construction activities in-combination can be ruled out for RTD feature of the Greater Wash SPA and that an AEoI from operation and maintenance vessel movements can be ruled out for RTD feature of the</p>

ExQ1	Question to	Question	
			Greater Wash SPA and of the Outer Thames Estuary SPA.
Q8.9.5	The Applicant	Construction Vessels The Applicant to explain how it would ensure that there would not be more than two construction vessels in use in any one non-breeding season.	
Q8.9.6	The Applicant	Little gull collision risk NE states the Applicant has not considered variability/uncertainty and a range of collision impacts for little gull. What is the Applicant's response?	
8.10 Flamborough and Filey Coast SPA			
Q8.10.1	The Applicant	Kittiwake 1. NE [RR-099] and RSPB [RR-054] do not agree the apportionment of 26.1% of kittiwakes to the FFC SPA to be appropriate. The IPs recommend that a range of apportionment rates should be considered, up to 100%. 2. NE was unable to rule out AEOI for Norfolk Vanguard from in-combination collision risk, and Boreas is adding more birds. 3. RSPB does not agree no AEOI from in-combination collision mortality. The Applicant to respond to these concerns.	
Q8.10.2	RSPB	Gannet RSPB [RR-054] does not agree no AEOI to gannets of Flamborough and Filey Coast SPA from collision mortality from the project alone and in-combination (but it may be able to rule out from the project alone through raising of draught height of turbines). Can the RSPB provide further details as to why it does not consider an AEOI to gannets of the Flamborough and	

ExQ1	Question to	Question	
		Filey Coast SPA can be ruled out as a result of collision risk from the project alone?	
Q8.10.3	Natural England	<p>Breeding birds RSPB [RR-054] advises a 98% avoidance rate for breeding birds as the review from which the SNCB advice of a 98.9% avoidance rate acknowledges the majority of evidence of gannet avoidance behaviour is from non-breeding birds and that breeding birds would behave differently. What is NE's advice regarding RSPB's assertion that a 98% avoidance rate is more appropriate for breeding gannets, than the 98.9% they have advocated?</p>	<p>We acknowledge RSPB's advice regarding this. However, we note that the work underpinning the SNCB advice note (Cook et al. 2014; SNCBs 2014) looked at all the data available and determined that 98.9% across all seasons was the most appropriate advice. We note that there is no empirical evidence to calculate an avoidance rate of 98% for gannet in the breeding season.</p> <p>This again highlights the importance and need for a range-based approach where there is uncertainty regarding CRM input parameters.</p>
Q8.10.4	Natural England	<p>Auk In response to NE's [RR-099] relating to definitive mortality rates for auk (razorbill and guillemot), the Applicant [AS-024] notes that the full range of outputs was presented in the assessment as requested. Using its own preferred rates, does NE consider an AEOI to razorbill and guillemot of the FFC SPA as a result of displacement can be excluded?</p>	<p><u>Razorbill (alone):</u> We agree with the apportionment rates to the FFC SPA used by the Applicant (namely 0% in the breeding season, 3.4% for autumn and spring, and 2.7% for winter) in APP-201. Based on this at the lower end of the range of the Natural England advised rates of 30% displacement and 1% mortality results in an additional 0.15 (range based on 95% confidence intervals of abundance: 0.1-0.2) razorbill mortalities from the FFC SPA from Boreas alone. Whilst at the upper end of the range of the Natural England advised rates of 70% displacement and 10% mortality results in an additional 3.5 (range: 1.5-5.7) razorbill mortalities from the FFC SPA are predicted from Boreas alone. At the upper end of the Natural England advised range (i.e. 70% displacement and 10% mortality, this equates to 0.16% (range: 0.07-</p>

ExQ1	Question to	Question	
			<p>0.26%) of baseline mortality of the razorbill population of the FFC SPA, based on the designated colony size of 10,570 pairs (21,140 adults) and an adult mortality rate of 10.5% (calculated from the adult survival rate of 0.895 in Horswill & Robinson 2015).</p> <p>The Conservation Objective for the razorbill feature of the FFC SPA is to maintain the size of the breeding population at a level which is above 10,570 breeding pairs whilst avoiding deterioration from its current level as indicated by the latest mean peak count or equivalent. Given that the predicted impacts (even using the upper 95% confidence intervals of the abundance data) equates to less than 1% of baseline mortality of the colony, therefore we consider that this level of additional mortality could be considered non-significant and therefore would not be an AEOI. The conservation objectives regarding the razorbill feature would be met and therefore Natural England advises an adverse effect on integrity (AEoI) of the razorbill feature of the FFC SPA can be ruled out for displacement impacts from Boreas alone.</p> <p><u>Guillemot (alone):</u> We agree with the apportionment rates to the FFC SPA used by the Applicant (namely 0% in the breeding season and 4.4% in the non-breeding season) in APP-201. Based on this at the lower end of the range of the Natural England advised rates of 30% displacement and 1% mortality results in an additional 1.8 (range based on 95% confidence intervals of abundance: 1.1-2.6) guillemot</p>

ExQ1	Question to	Question	
			<p>mortalities from the FFC SPA from Boreas alone. Whilst at the upper end of the range of the Natural England advised rates of 70% displacement and 10% mortality results in an additional 42.4 (range: 25.1-60.5) guillemot mortalities from the FFC SPA are predicted from Boreas alone. At the upper end of the Natural England advised range (i.e. 70% displacement and 10% mortality, this equates to 0.84% (range: 0.50-1.19%) of baseline mortality of the guillemot population of the FFC SPA, based on the designated colony size of 41,607 pairs (83,214 adults) and an adult mortality rate of 6.1% (calculated from the adult survival rate of 0.939 in Horswill & Robinson 2015).</p> <p>The Conservation Objective for the guillemot feature of the FFC SPA is to maintain the size of the breeding population at a level which is above 41,607 breeding pairs whilst avoiding deterioration from its current level as indicated by the latest mean peak count or equivalent. Whilst the prediction based on the mean abundance even at the upper end of the Natural England recommended rates equates to less than 1% of baseline mortality, the displacement prediction based on the upper 95% CI of the abundance data does equate to more than 1% of baseline mortality of the FFC SPA colony at the upper range of the Natural England rates. However, the predicted displacement figures using the upper 95% CI of the abundance data equate to 1% or more of baseline mortality of the FFC SPA colony only at the very upper end of the Natural England recommended range at 60-70% displacement and 10% mortality and even then at no more than 1.19%. Alde-Ore</p>

ExQ1	Question to	Question	
			<p>Estuary SPA colony. Therefore based on this, we consider that the conservation objectives regarding the guillemot feature would be met and therefore Natural England advises an adverse effect on integrity (AEoI) of the guillemot feature of the FFC SPA can be ruled out for displacement impacts <u>from Boreas alone.</u></p> <p>Razorbill and guillemot (in-combination): As we noted in our Relevant Representations [RR-099], several relevant offshore wind farms were missing from the in-combination assessments of impacts on the FFC SPA, and updates were required to some of the sites included in the assessments. We understand that these issues are to be addressed by the Applicant in the updated offshore ornithology assessment due to be submitted at Deadline 2. Therefore, we will provide our advice on this following review of this document once it is submitted into the process. However, we note that at the end of the Norfolk Vanguard examination Natural England advised the Applicant that an AEoI could not be ruled out for razorbill or guillemot in-combination operational displacement when Hornsea Project Three was included (see our Deadline 9 response at Vanguard). Since Norfolk Boreas (and it is assumed East Anglia ONE North and East Anglia TWO) will be adding additional mortality to the in-combination figure presented for Norfolk Vanguard it is likely that Natural England will provide similar advice here.</p>
Q8.10.5	RSPB	<p>Auk RSPB [RR-054] does not agree no AEOI to razorbill and guillemot from in-combination operational displacement. Following the Applicant's response [AS-</p>	

ExQ1	Question to	Question	
		024] does RSPB have any further concerns?	
Q8.10.6	The Applicant	<p>Puffin The screening matrix for FFC SPA [AS-002] identify a LSE for puffin from operational displacement, however puffin is not included in the FFC SPA integrity matrix, nor is it identified in the HRA Report [APP-201]. The ExA understands that puffin forms part of the seabird assemblage feature of the FFC SPA, which has not been included on the screening matrix. The Applicant to confirm whether a LSE should be screened in for the seabird assemblage of FFC SPA, and if so, provide information to support the making of an appropriate assessment for this feature.</p>	
Q8.10.7	The Applicant	<p>Sea bird Assemblage The Applicant to explain why it is unable to provide a submission of assessment of sea bird assemblage for FFC SPA as requested by RSPB [AS-030].</p>	
8.11 Marine Mammals			
Q8.11.1	The Wildlife Trust	<p>Request for Consultation TWT [RR-040] requests to be named for consultation on the Marine Mammal Management Plan and SIP. The Applicant [AS-024] agrees to consult with TWT during the process of developing the in-principle SIP [APP-708]. Can TWT confirm that it is content with this?</p>	
Q8.11.2	The Applicant	<p>Harbour porpoise Table 8.3 of the HRA Report states that lethal effects and permanent auditory injury to harbour porpoise from piling would be mitigation, however measures have not been specified. Can the Applicant provide further details on the mitigation measures to be employed?</p>	

ExQ1	Question to	Question	
Q8.11.3	Natural England, The Applicant	<p>Grey Seal NE's RR [RR-099] raised concerns regarding potential impacts on up to 37% of the Humber Estuary SAC. The Applicant's response [AS-024] states that it is more appropriate to use a wider reference population for the assessment; this results in total of 6.6% of the grey seal population being temporarily disturbed, not all of which would be from the Humber Estuary SAC. The Applicant to explain why this figure differs so differently from the originally quoted 37%. Does NE have any comments on the Applicant's response?</p>	<p>Natural England is in agreement with the explanation provided by the Applicant to this point in AS-024. Natural England considers it is reasonable to put the impact to grey seal in the context of the wider in-combination reference population here and agrees it is unlikely that all the grey seal potentially impacted will be from the Humber Estuary SAC.</p>
Q8.11.4	Marine Management Organisation	<p>South North Sea SAC Can MMO advise whether there is likely to be any impediment to granting the licence for UXO clearance?</p>	
Q8.11.5	The Applicant	<p>Piling Hammer Energy A maximum hammer energy of 5,000kJ for driven or part-driven foundations is stipulated in Condition 14(3) (Schedule 9-10), and Condition 9(3) (Schedule 11-12) of the dDMLs [AS-019]. This does not reflect the maximum hammer energies stipulated for quadropod or tripod foundations, as described in ES Chapters 5 and 12. Applicant to comment.</p>	
Q8.11.6	Marine Management Organisation, The Applicant	<p>Piling Provide an update on discussions between the Applicant and MMO regarding the need to prevent concurrent piling between Norfolk Boreas and Norfolk Vanguard and restrict the number of piles to be installed per 24 hour period [AS-027].</p>	<p>Natural England has briefly discussed this issue with both the Applicant and the MMO. We note that the number of piles may be limited through the SIP. However, also note our concerns regarding the mechanism to manage inter-project co-ordination have not yet been addressed by the MMO.</p>
Q8.11.7	The Applicant	<p>Piling WDC [RR-056] and TWT [RR-040] advise that foundations requiring piling should not be used due to noise impacts. The Applicant to advise whether there</p>	

ExQ1	Question to	Question	
		are any areas in the array where piling could be excluded?	
8.12 Benthic Ecology			
Q8.12.1	Natural England	Baseline data The Applicant [AS-024] has provided a response to NE's concerns regarding the baseline data in the HHW SAC. Does NE have any further comments to make regarding the baseline for the assessment of effects?	Natural England has no further comment
Q8.12.2	The Applicant, Natural England	Annex 1 Reef The Applicant [AS-024] explains what action would be required in the event that Annex I reef encountered along the connection route was so extensive that micro-siting was not possible. Can the Applicant explain how any such action would be consistent with the site's conservation objectives? Is NE in agreement with the Applicant that these proposals are consistent with the site's conservation objectives?	Only if impacts to all areas of Annex I reef are avoided would this be consistent with sites conservation objectives, which are to maintain and 'restore' areas of Annex I reef. As the site is already in unfavourable condition any further detrimental impacts to the interest feature is not consistent with the conservation objectives. There would also need to be clear evidence to demonstrate recoverability from similar impacts to the site feature, which currently remain uncertain.
Q8.12.3	Marine Management Organisation	Annex 1 reef The Applicant [AS-024] in response to MMO's concern that the IPMP only proposes monitoring of Annex I reef and not wider benthic impacts [RR-069], states that the findings of benthic ecology assessment do not warrant a full-scale programme. What is MMO's response?	
Q8.12.4	Natural England	Annex 1 reef What is NE's view of the Applicant's commitment regarding disposal of material within the HHW SAC (see Table 3 Row 8 of [AS-024])?	
Q8.12.5	The Applicant	Sandwave levelling NE [RR-099] request that areas of Annex I reef be avoided when depositing sediment from sandwave levelling. Is the Applicant willing to commit to this,	

ExQ1	Question to	Question	
		and if so how would such a commitment be secured?	
Q8.12.6	The Applicant, Natural England, Marine Management Organisation	Haisborough, Hammond and Winterton SAC (HWW SAC) NE [RR-099] and MMO [RR-069] advise that an AEOI cannot be ruled out for HHW SAC and that alternatives and/or compensation should be secured. However, it advises that it is unlikely agreement could be found for compensation for the permanent loss of Annex I reef. The Applicant [AS-024] considers that cable protection is a suitable habitat for Annex I reef communities. Can the Applicant, NE and MMO agree a joint position on AEOI for HWW SAC?	In discussions to date the between Natural England and the MMO, and Natural England and the Applicant no agreement has been reached on this matter. MMO are guided by the advice of the SNCBs on the scale of any impact and mitigation/alternatives/compensation for the impacts. As set of in our relevant representation [RR-099] compensating for impacts on Annex I reef is challenging. And that reef on artificial substrate is not consider to be Annex I habitat on soft/mixed sediments for which the site was designated for.
Q8.12.7	The Applicant	Offshore cable Is the Applicant willing to commit to excluding certain parts of the HHW SAC from the cable route, in particular where known areas of Annex I reef are present and where fisheries byelaws are proposed?	
Q8.12.8	The Applicant	Offshore cable Confirm how often there would be post construction visual inspections of the cable corridor – via Sub Seas Remote Vehicle.	
Q8.12.9	Natural England	Site Integrity Plan (SIP) NE [RR-099] advises the SIP has insufficient detail to absolve the need for a scour and cable protection plan for the HHW SAC. The Applicant referred in [AS-024] to its assessment of scour and cable protection and its SIP. What further information does NE require in the SIP to absolve the need for a scour and cable protection plan?	These are two separate documents that have a different remit. The SIP that the Applicant proposes is only for HHW SAC and the cable and scour protection plan is for the whole project in which methodologies, areas, locations and amount are considered holistically as required under a DCO/DML.
Q8.12.10	Natural England	Disposal location and impacts NE [RR-099] requested an assessment of the disposal location and impacts. The Applicant [AS-024]	The use of a SIP does not address the issues we raised in our Relevant Representation [RR-099]. Natural England have sought further legal input on

ExQ1	Question to	Question	
		<p>explained that the strategy for disposal can only be determined at the detailed design stage and that the HHW SAC SIP would provide an appropriate mechanism for further discussions and agreement. Does NE have remaining concerns, and if so, what are they?</p>	<p>the use of a Site Integrity Plan, which has strengthened our position that it is not appropriate under the Habitat Directives to defer consideration of AEOI to post consent through use of a Grampian condition. Therefore both the MMO and NE strongly advise against the use of a SIP for benthic SACs to enabling consenting. Please see our Relevant Representation [RR-099] for further details.</p>
Q8.12.11	The Applicant	<p>Drill arisings In response to MMO's concerns regarding worst case for drill arisings [RR-069] the Applicant [AS-024] states that the overall figure (16,305m²) is secured within the dDCO at Condition 1 and 3 of the Transmission DMLs.</p> <ol style="list-style-type: none"> 1. Is this correct, or should this refer to the Generating Asset DMLs? 2. Where is the overall figure of 16,305m² secured? 3. What is the consequence of greater than 50% of foundations having to be drilled? 	

ExQ1	Question to	Question	
9. Landscape and Visual Effects			
9.0 The Applicant's landscape and visual assessment			
Q9.0.1	Local Planning Authorities Natural England Interested Parties	Methodology and its application Provide comments on the Applicant's landscape and visual assessment methodology, clearly distinguishing between those on the actual methodology and those on its application as described in the ES and supporting documents [APP-242, APP-484 to APP-582, APP-677 to APP-678].	NE has no further comment on this
Q9.0.2	Necton Substation Action Group [RR-014] and [RR-006]	Consideration of cumulative effects on landscape and visual Has the Applicant's response to RRs [RR-014] and [RR-006] which questioned the way in which the baseline and cumulative assessments for landscape and visual effects have considered other existing and proposed substation infrastructure in the area proposed for the Norfolk Boreas substation works [AS-024, Table 1, No. 5] addressed concerns? If not set out what further information is required.	
Q9.0.3	The Applicant	Localised significant effects How extensive geographically can a " <i>Localised significant effect</i> " be [APP-242, assessment tables]?	
9.1 The Applicant's visual assessment			
Q9.1.1	The Applicant	Study area parameters The study areas for the onshore project substation/ substation extension and the landfall site are defined as a 3km radius area and 1km radius area respectively [APP-242, paras 46-48] and [APP-677, para 7]. However, the study area is shown as 500m from all elements of the Proposed Development on most Figures. The representative viewpoints are	

ExQ1	Question to	Question	
		<p>mostly at or within 500m of the onshore project substation/ substation extension, with no discussion of potential impacts to more distant views.</p> <ol style="list-style-type: none"> 1. Explain how the representative viewpoints were selected. 2. Why are there not more viewpoints within the areas of potential visibility shown on the Zones of Theoretical Visibility [APP-488], [APP-489], [APP-500] and [APP-501]? 	
Q9.1.2	Relevant Planning Authorities	<p>Study area parameters Do you have any comments relating to the study areas adopted for the onshore project substation/ substation extension and the landfall site, and the selection of representative viewpoints?</p>	
Q9.1.3	The Applicant	<p>Description of effects Confirm for the benefit of Interested Parties that all effects as stated are adverse unless otherwise indicated.</p>	
Q9.1.4	The Applicant	<p>Distance: susceptibility of a receptor and the magnitude of change</p> <ol style="list-style-type: none"> 1. Confirm whether distance between a visual receptor and the proposed development should (according to the stated methodology [APP-677]) be a factor in influencing the susceptibility of a receptor or the magnitude of change. It appears in some parts of the visual assessment that distance has been used as an influencing factor for both; such as residents of Whimpwell Green [APP-242, Table 29.10, VP8]. 2. Likewise, should screening by existing intervening landform be a factor in determining susceptibility of a receptor or the magnitude of change? It appears in places that screening has been used as 	

ExQ1	Question to	Question	
		<p>an influencing factor for both [APP-242, Table 29.13, VP8].</p> <p>3. Could these instances (and others if they exist) result in a downplaying of the sensitivity of receptors to change, and therefore the assessment of whether effects are significant or not?</p>	
Q9.1.5	The Applicant	<p>Visualisation assumptions</p> <p>Confirm what assumptions have been made for the production of visualisations and the assessment of effects:</p> <ol style="list-style-type: none"> 1. with regards to existing ground levels showing the project substation and the National Grid substation extension, with reference to the existing ground levels defined in Requirement 16 of the dDCO [AS-019], and with reference to ground levels in the OS Terrain 5 DTM data; 2. regarding the maximum height of structures within the project substations, do the blue dotted lines on the visualisations show the proposed maximum height of the buildings at 19m or the masts at 25m? For clarity, please confirm the maximum height AOD of the 'blue Rochdale Envelope' referred to in the Applicant's comments on Relevant Representations [AS-024, Table 4, No.4]. 3. regarding the maximum height of equipment within the National Grid substation extension? Is this 15m? 4. whether or not the potential 2m high (Scenario 1) and 1.5m high (Scenario 2) bunding for planting on the western boundary [APP-698, paras 53 and 58] has been included in the visualisations. 	

ExQ1	Question to	Question	
Q9.1.6	The Applicant	<p>3-D model of substations</p> <p>In responding to [RR-109] regarding the 3-D model of the substation [AS-024, Table 24, No.4] would it be more appropriate to say the 3-D model has been used to give an indication of what the substation “could” or “might” look like (rather than “will” – as all details are subject to post consent approvals?)</p>	
Q9.1.7	The Applicant	<p>Height of vegetation</p> <p>Assumptions are made [APP-242, paras 137, 138 and 200, and Table 29.12] and the OLEMS [APP-698, para 63] on the height of mitigation planting at 20 and 30 years. The methodology for the production of the visualisations [APP-509, Figure 29.23] and [APP-521, Figure 29.35] state that the visualisations show 15 years growth.</p> <ol style="list-style-type: none"> 1. Confirm what has been shown on the visualisations. 2. If this is planting at 15 years growth, what height is mitigation and advance planting expected to achieve at 20 to 30 years? Would the views differ e.g. through clear stems from that shown on the visualisations? 3. With reference to the assessment of VP1 in [APP-242, Table 29.18], confirm what height mitigation planting has been assumed to reach after 25 years. 	
Q9.1.8	Local Planning Authorities	<p>Cumulative effects</p> <p>Are you content with the list of projects included in the assessment of potential cumulative landscape and visual effects [APP-242, Table 29.14]?</p>	
Q9.1.9	The Applicant	<p>England Coastal Path - views</p> <p>Provide comment on the potential for cumulative visual effects to users of the England Coast Path arising from impacts during the construction of the</p>	

ExQ1	Question to	Question	
		proposed development, acting cumulatively with impacts from Bacton and Walcott Coastal Management Scheme and Coastal defence/protection works, Happisburgh [APP-242, Table 29.14].	
9.2 Alternatives considered			
Q9.2.1	Interested Parties (including those who made comments on alternatives)	Signposting document for alternatives considered Has the Applicant's response to the RRs [AS-024, Table 1, No. 2 and 3] provided the information you sought on alternatives? If not, what further evidence do you consider is required?	
Q9.2.2	The Applicant	Policy position for alternatives Set out the legal and policy position concisely for the consideration given to alternatives in the ES and the various reports and that form part of the application; and cross reference how the application for the proposed development has met this. A table might be a suitable way of presenting this.	
Q9.2.3	The Applicant	Construction stage effects Were construction stage effects (including those away from the actual cable corridor alignments) taken into consideration in the assessment of alternatives for the cable route? If so indicate where.	
Q9.2.4	The Applicant	High Voltage Direct Current (HVDC) Were there any changes following the decision to adopt high voltage direct current (HVDC) technology?	
Q9.2.5	CPRE Norfolk [RR-046], East Ruston Parish Council [RR-041], No to Relay Stations	Are you satisfied with the response from the Applicant in its response to RRs, which sets out that HVDC export infrastructure was assessed under the Environmental Statement and therefore the project to be consented is for an HVDC export infrastructure system only; and an HVAC export system could not	

ExQ1	Question to	Question	
	(N2RS) [RR-020] and [RR-053], and the Additional Submission [AS-012]	be constructed under the terms of the draft DCO [AS-024, Table 26, No. 84]. If not set out what further explanation you require.	
Q9.2.6	The Applicant	<p>Cable corridor selection</p> <p>Respond to the point [RR-109] regarding whether consideration was given to the route corridors and connections for Norfolk Boreas and Hornsea Three; whether potential to shorten the length of the cable corridor was taken into account.</p>	
Q9.2.7	The Applicant	<p>Substations' siting</p> <p>NPS EN-5 requires an Applicant's assessment for routeing new overhead lines to follow the Holford Rules. The Holford Rules states that in siting substations, account should be taken of the effects of the terminal towers and line connections and that advantage should be taken of screening features such as ground form and vegetation.</p> <ol style="list-style-type: none"> 1. How have the Holford Rules been considered in the siting of the substations? 2. Provide a copy of the Holford Rules. Also provide a copy of the Horlock Rules. <p>It is noted that the Applicant sets out how the design guidelines in the Horlock Rules have been applied in the Site Selection and Assessment of Alternatives [APP-217, Table 4.4 and other places] and in the Onshore Substation Site Selection [APP-546]. However, these appear to relate mainly to vegetation screening and have made little reference to screening by landform. This point is made by several Interested Parties in their Relevant Representations.</p>	

ExQ1	Question to	Question	
		<p>1. Notwithstanding your response to RRs [AS-024, Table 1, No.3] respond to those comments from Interested Parties in their Relevant Representations that consider insufficient attention has been paid to design principles set out in the Horlock Rules.</p>	
Q9.2.8	The Applicant	<p>Siting of substations [RR-042] is concerned about the adequacy of the consultation regarding the siting of the substations and the apparent lack of consideration of an alternative nearby site put forward by the community. We note you have provided signposting to the consultation which has been undertaken with communities in connection with the siting of the proposed substations [AS-024, Table 1, No.3].</p> <ol style="list-style-type: none"> 1. Provide evidence of (or signposting to) the specific consultation which has been undertaken with the communities local to the proposed substations site for the Proposed Development. Set out how this consultation has informed the substation siting for the Proposed Development. 2. Was consideration given to the alternative substation site to which [RR-042] refers? 3. Is this the same site to which several RRs refer, such as Savills, the NFU and LIG on behalf of landowners; which is described as north of the existing substation site on lower lying ground? 	
9.3 Landscape effects			
Q9.3.1	The Applicant	<p>Tree removal</p> <ol style="list-style-type: none"> 1. Provide a plan which shows the extent of woodland/ trees removed for Scenario 2. 2. Confirm that no additional woodland/ trees would 	

ExQ1	Question to	Question	
		<p>be removed for Scenario 1.</p> <p>3. Is it anticipated that there may be trees other than in the woodland areas or hedgerows described which would be removed in either Scenario?</p>	
Q9.3.2	The Applicant	<p>Hedgerow removal Quantify the hedgerow removal for both Scenarios 1 and 2 (This could be added to dDCO [AS-019] Schedule 14 if appropriate).</p>	
Q9.3.3	The Applicant	<p>Tree and hedgerow replacement NPS EN-1 (paras 5.3.15 and 5.3.18) point to making opportunity for beneficial biodiversity, enhancing existing habitats and creating new habitats of value.</p> <ol style="list-style-type: none"> 1. Explain how the landscape design for the Proposed Development recreates and replaces any ecological connections severed by construction of the onshore project substation [APP-688, item 172], when the details are yet to be agreed, and there is less connectivity than the baseline condition. 2. Is there a proposed ratio for tree and hedgerow replacement? 3. If certain hedgerows are not replaceable, and tree species in hedgerows are restricted because of the cable easement, how do the proposals meet Breckland Council's Adopted Core Strategy and Development Control Policies Development Plan Document (2009), policy DC12: Trees and Landscape [APP-235]? 	
Q9.3.4	The Applicant	<p>Hedgerows Clarify how processes for agreeing hedgerow removal, replanting, aftercare and management and maintenance are undertaken. Refer to the involvement of local planning authorities, Natural</p>	

ExQ1	Question to	Question	
		England and landowners (including the undertaker).	
Q9.3.5	The Applicant, Local Planning Authorities	<p>Hedgerows where removal assessed an adverse significant effect in Scenario 2</p> <ol style="list-style-type: none"> 1. Applicant to plot the hedgerows where significant adverse effects are located in Scenario 2 at Blickling Road, N of Aylsham; Silvergate Lane, NW of Aylsham; Aylsham Road, W of Aylsham; Elsing Road, near River Wensum; B1145, N of Reepham; and B1145, W of Reepham [APP-242, Table 29.11] for 20 years. Marking up relevant sheets of the Important hedgerows plans [APP-018] would be a suitable way of presenting this. 2. Does this significant adverse effect remain for 30 years until decommissioning? The 'duration of effect' column of Table 29.11 is not clear in this regard. 3. Would it assist Local Planning Authorities if more detail was prepared by the Applicant during the examination for these areas in terms of planting reinstatement? 	
Q9.3.6	The Applicant	<p>Trees where removal assessed an adverse significant effect in Scenario 2</p> <ol style="list-style-type: none"> 1. As above, Applicant to plot where significant adverse effects are located in Scenario 2 at Colby Road, N of Banningham; Minor road near Hackford Hall; and Norwich Road, Swanton Morley [APP-242, Table 29.11]. 2. Is this a significant effect in the 'duration of effect' column, as it is reversible only on decommissioning? Is this also the case for The Wensum Way (also Table 29.11)? 	
Q9.3.7	The Applicant	<p>Advance planting</p> <ol style="list-style-type: none"> 1. Notwithstanding the Norfolk Vanguard planting 	

ExQ1	Question to	Question	
		<p>which would be existing in Scenario 1, would there be any other opportunities for advance planting to be implemented in Scenario 1? If so where?</p> <p>2. Can areas for potential advance planting be identified for Scenario 2? If so where?</p>	
Q9.3.8	The Applicant	<p>National Grid planting easements The 1:4,000 landscape mitigation plans [APP-494] and [APP-505] seem to indicate planting located in what might be tree exclusion zones required for the 400kV overhead line.</p> <ol style="list-style-type: none"> 1. Provide dimensioned plans for Scenarios 1 and 2 (which set out the overhead line's lateral limits of deviation (LoD)) at a more detailed scale, to illustrate if this is the case. 2. Seek clarification from National Grid on its tree planting exclusion zones and vegetation height restrictions. 3. If it is the case that the mitigation planting would be compromised from what is shown, provide solutions for Scenarios 1 and 2, including consideration of limiting the lateral LoD secured in Article 4 for Scenario 2. 	
9.4 Visual effects			
Q9.4.1	The Applicant	<p>Height of structures at the substations Is it correct, as stated in [RR-042], that the decision to adopt HDVC technology gave rise to taller structures at the substations? If so, explain how these have been assessed?</p>	
Q9.4.2	The Applicant, [RR-019] and [RR-053]	<p>Effects of lighting</p> <ol style="list-style-type: none"> 1. Has the Applicant's response on lighting [AS-024, Table 24, No.2] responded to the concerns set out 	

ExQ1	Question to	Question	
		<p>by those IPs who submitted RRs in relation to lighting [RR-019] and [RR-053]?</p> <p>2. Applicant to respond to the concerns set out in [RR-053] regarding the mobilisation area (MA11) near Ridlington.</p>	
Q9.4.3	The Applicant	<p>Bunding round substations</p> <p>1. Were concealment options such as a lower ground level and/ or bunding for planting as suggested by [RR-109] considered in the detailed visual mitigation for the substations siting?</p> <p>2. Why is the western boundary planting in Scenario 1 described as "<i>potentially set on an earth bund up to 2m in height</i>" [APP-698, para 53]? What has been assessed?</p> <p>3. Why under Scenario 2 is there uncertainty about the earthworks to be provided? "<i>There is potential to include a subtle earthwork bund of up to 1.5 along the western side of the permanent footprint..</i>" [APP-698, para 58]? What has been assessed?</p>	
Q9.4.4	The Applicant	<p>Long term reversible effects</p> <p>NPS EN-1, para 5.9.16 requires the decision maker to consider whether adverse impacts on landscape is temporary and/or capable of being reversed in a reasonable timescale.</p> <p>Does "<i>long term and reversible</i>", when not elaborated in the 'duration of effect' column of the assessment tables [APP-242] mean that the reversibility is only achieved on decommissioning?</p>	
Q9.4.5	The Applicant	<p>Construction stage views from England Coast Path, PRow RB22 and Happisburgh</p> <p>1. Confirm that views of construction activities from</p>	

ExQ1	Question to	Question	
		<p>the Norfolk Coastal Path, Public Right of Way (PRoW) RB22 and the southern edge of Happisburgh would be limited to 20 weeks [APP-242, Table 29.10] and that this significant adverse effect is the same for Scenarios 1 and 2. Is that 20 consecutive weeks or is it over a longer period, if so what?</p> <p>2. If views would occur for over a longer period does this affect the assessment?</p>	
Q9.4.6	The Applicant	<p>Fencing</p> <p>1. Submit photographs of the proposed 2.4m palisade fencing and the electric pulse fencing [APP-218, para 348].</p> <p>2. Would these fences types occur next to each other or independent of each other?</p>	
<p>9.5 Outline Landscape and Ecological Management Strategy (OLEMS)</p>			
Q9.5.1	The Applicant	<p>Landscape and visual mitigation</p> <p>Is the design of the substations considered to be part of the landscape and visual mitigation? This does not appear to be stated; the mitigation appears to rely upon planting.</p>	
Q9.5.2	The Applicant	<p>Aftercare</p> <p>1. Why is the aftercare period specified as five years [APP-698, paras 20 and 67] when localised, cumulative, significant, adverse landscape and visual effects are assessed as lasting 25 years [APP-242, Table 29.18] before they become not significant?</p> <p>2. Set out the difference between aftercare and management and maintenance? Should this be clarified in places in the documentation?</p> <p>3. Would management and maintenance of the</p>	

ExQ1	Question to	Question	
		planting be required even after 25 years? If so, how is this secured?	
Q9.5.3	The Applicant	<p>Ash dieback in the vicinity of the substations</p> <ol style="list-style-type: none"> 1. In setting out a process to deal with ash dieback [APP-698, para 67], does this relate only to existing vegetation? 2. Has the potential effect of ash dieback been assessed? 3. For how long is the replacement of trees affected by ash dieback with non-native species proposed to extend? 4. Is this for 10 years or for the lifetime of the Proposed Development? 	
Q9.5.4	The Applicant	<p>Monitoring</p> <p>Section 12 of the OLEMS [APP-698] relates to monitoring, but only in respect of trees and hedges specified to be retained which are damaged during construction.</p> <ol style="list-style-type: none"> 1. Why does this not cover mitigation planting? 2. Is the monitoring of that covered elsewhere? 3. If not, propose how and where this could be covered. 	
Q9.5.5	The Applicant	<p>Terminology</p> <p>Some of the terminology in the OLEMS [APP-698] (such as "<i>it is expected...</i>" "<i>would seek to...</i>") lacks certainty in terms of delivery. How could this certainty be provided?</p>	
Q9.5.6	The Applicant	<p>Substations site -specific landscape management scheme</p> <ol style="list-style-type: none"> 1. To whom do the "<i>Recommendations to landowners, for management of trees and hedgerows in the longer term</i>" refer [APP-698, para 67 final bullet]? Is some of the land with 	

ExQ1	Question to	Question	
		<p>mitigation planting returned to landowners? Or does this refer to replacement planting?</p> <p>2. Set out in more detail the type of management recommendations which are to be included.</p> <p>3. Have any landowners been consulted?</p>	
Q9.5.7	The Applicant	<p>Failure of planting scheme to progress to achieve objectives</p> <p>The OLEMS [APP-698, para 73 final bullet] does not set out what the remedy would be if in the opinion of the Local Planning Authority, there was significant failure of the planting scheme or if it was failing to progress to the extent that it would not achieve the objectives of the scheme.</p> <p>Further explanation is required for this Examination and in the OLEMS.</p>	
Q9.5.8	The Applicant	<p>Removal of vegetation</p> <p>What is the difference between a bird nesting season (March to August) [APP-698, para 148] and a bird breeding season (March to October) APP-698, para 142]?</p> <p>What is the significance of the difference in timings for the different vegetation removals?</p>	
Q9.5.9	The Applicant, Natural England, The RSPB	<p>Removal of Vegetation</p> <p>The Project Description [APP-218, para 417] proposes hedge and tree netting because hedge and tree removal is seasonal and removal ahead of the main works provides flexibility to account for seasonal restrictions and mitigates potential programme delays.</p> <p>1. Netting is not mentioned in the OLEMS or the OCoCP. Does that mean it is not proposed to use netting?</p> <p>2. What is Natural England's and the RSPB's view of</p>	<p>Large scale netting [APP-218, para 417]</p> <p>It is for the Applicant to establish working practices that ensure no offence is committed under the Wildlife and Countryside Act 1981.</p> <p>There are no details provided on the specifics or scale of netting proposed and so it is difficult to comment. However, generally netting may come with its own welfare issues and difficulties including regular maintenance to ensure holes to do not occur</p>

ExQ1	Question to	Question	
		the use of netting?	and breeding birds enter and/or become entangled. It may be more effective to ensure breeding birds are not disrupted to remove vegetation in the appropriate season and then reinstate to an equal or better state to ensure no net loss of habitat and preferably net gain. Should the Applicant wish to proceed with netting we would be happy to provide comment on a more detailed proposal.
9.6 Good design			
Q9.6.1	Interested Parties	<p>Policy requirements for good design</p> <p>Do you consider the Applicant has satisfactorily demonstrated how the proposed development would meet the national and local policy requirements for good design in its Planning Statement [APP-693] and Design and Access Statement [APP-694]? If not, what is missing?</p>	
Q9.6.2	Interested Parties and The Applicant	<p>Design and Access Statement</p> <p>Compliance with the Design and Access Statement (DAS) [APP-] is one of the means which would be used in the dDCO [AS-019, Requirement 16 (4)] to secure the onshore detailed design through further approvals. The ExA has noted some differences between the DAS and other application documents (substation descriptions, landscape drawings).</p> <ol style="list-style-type: none"> 1. In the first instance Interested Parties are requested to point out any differences that they have noticed. 2. The Applicant is requested to update the DAS for conformity, providing a track changed version at Deadline 7. 	

ExQ1	Question to	Question	
10. Marine and Coastal processes			
Q10.0.1	The Applicant	<p>Coastal erosion issues The Applicant to provide guidance to where in its Application the assessment of implications of potential worst-case coastal erosion and any Shoreline Management Plan is discussed.</p>	

ExQ1	Question to	Question	
11. Navigation			
11.0 Marine Navigation and Shipping			
Q11.0.1	Maritime and Coastguard Agency (MCA); Trinity House (THLS); UK Chamber of Shipping (UKCoS)	<p>Radar interference effects on navigation deviated around the proposed OWF</p> <p>Section 22.8 of the Navigation Risk Assessment (NRA) [APP-569] discusses potential impacts of the Proposed Development on ship-borne marine radar with specific effects discussed at paras 403 to 408, which the ExA understands to indicate that effects increase significantly within 1.5nm of the OWF WTG array. Figure 22.1 of the NRA shows the deviation of shipping around the proposed OWF that would be an effect of the Proposed Development and shows vessel routes deviating and turning around the north-eastern corner of the proposed OWF through an appreciable angle and within 1.5nm of the Red Line Boundary (RLB).</p> <p>IPs to comment on the implications to navigational safety of vessels passing closer than 1.5nm to the proposed WTG array RLB at the north-eastern extent of the OWF array and whether specific risk mitigation should be considered in this location.</p>	
Q11.0.2	Maritime and Coastguard Agency (MCA); Rijkswaterstaat	<p>Separation distance to Davy gas platform related to safety of deviated navigation</p> <p>APP-228 ES chapter 15 states '<i>There is one gas platform (normally unmanned) within the Norfolk Boreas site, associated with the Davy Field. The platforms associated with the Sean Field are positioned north of the Norfolk Boreas site, with the closest being 1.4nm from the boundary.</i>'</p> <p>Are MCA and Rijkswaterstaat satisfied at this</p>	

ExQ1	Question to	Question	
		separation distance of 1.4nm in relation to safety of navigation for shipping routes that may need to deviate around the north of the proposed Norfolk Boreas OWF as referred to in Table 5.3 of [APP-569]?	
Q11.0.3	The Applicant	<p>Effects of development on adverse weather routing</p> <p>It is understood by the ExA [from APP-228 para 342] that the frequency of deviation southwards of shipping due to adverse weather is assessed as 'reasonably probable' (ranking 4).</p> <p>The Applicant to justify further why the probable occurrence is not rated as 'Frequent', i.e. at least yearly; and if it were to be at least a yearly occurrence, how this would influence the conclusion of the assessment in the north-east corner of the proposed OWF.</p>	
11.1 Aviation and Radar			
Q11.1.1	The Applicant	<p>Consultations with MoD on Military aviation and Air Defence Radar (ADR):</p> <p>APP-229 Table 16.2 Consultation Responses reports: Dec 2018: <i>'In response to statutory consultation the MoD stated that when operational the Norfolk Boreas wind turbines will be detectable to and cause unacceptable interference to the radar. Furthermore, the wind turbines and associated offshore platforms will affect military low flying activities conducted in the area. The MoD have accepted a proposed mitigation solution to mitigate the Norfolk Boreas 'sister project' Norfolk Vanguard impact to the Trimmingham ADR, it is expected that this mitigation solution will also be applicable to Norfolk Boreas.'</i></p>	

ExQ1	Question to	Question	
		<p>The Applicant to provide an update on consultation with the MoD with regard to</p> <ol style="list-style-type: none"> 1. effects on the Trimmingham ADR system; and 2. effects to low-flying activities in the area. 	
Q11.1.2	The Applicant	<p>Consultations with Anglia Radar on Helicopter Main Route aviation: APP-229 para 50 states <i>'Helicopter operators and ATC service providers have been consulted with regard to any potential impact on HMRS with limited response in return. Furthermore, Anglia Radar did not respond to a request for consultation ...'</i>.</p> <p>The Applicant to provide an update on consultation with Anglia Radar with regard to potential effects on Helicopter Main Routes (HMRS).</p>	
Q11.1.3	The Applicant	<p>Mitigation of effects to Civil and Military Radar: APP-229 para 91 states that: <i>'Until mitigation is in place; the impact to [PSR and ADR] radar systems is of major significance. However, mitigation of the radar systems will be agreed with NATS and the MoD prior to offshore construction works which will remove the impact created by Norfolk Boreas and reduce the impact to not significant.'</i></p> <p>The Applicant to provide updated statements of agreement of mitigation from NATS and MoD.</p>	

ExQ1	Question to	Question	
12. Onshore construction effects			
12.0 Cable corridor and ducting			
Q12.0.1	The Applicant	<p>Installation of onshore cable ducts ES Chapter 5 [APP-218, paragraphs 422 and 423] proposes an onshore cable duct installation strategy to minimise impacts. Construction teams would work on a short length (approximately 150m section) and once the cable ducts have been installed, the section would be back filled and the top soil replaced before moving onto the next section. This would minimise the amount of land being worked on at any one time.</p> <p>Have you considered an alternative approach for Scenario 2 should you find the current strategy to not be viable for all or parts of the route? If so, what are the details? If not, why not?</p>	
Q12.0.2	The Applicant	<p>Method statement for crossing of River Wensum: To give clarification to the action point from the HRA and environmental matters Issue Specific Hearing on 14 November 2019: Provide a method statement to explain the cable crossing of the River Wensum, its associated land drainage and streams, works access [APP-011, Sheet 29 of 42, AC130, AC129, AC128] and long distance trail closure; to expand on [APP-010] Works Plan Sheet 29.</p>	
Q12.0.3	The Applicant	<p>Cable corridor width</p> <ol style="list-style-type: none"> 1. Signpost where in the documentation, details for the justification of the width of the cable corridor is set out. 2. What tolerance has been allowed for micro siting? 3. Would it be possible to include a temporary haul 	

ExQ1	Question to	Question	
		<p>road within the current working width? 4. If not, why not?</p>	
Q12.0.4	The Applicant	<p>Cable corridor works where boundary barriers exist How is construction achieved when the cable corridor crosses a solid boundary for example a wall such as that along the minor road along the west side of Elsing Lane, the minor road which runs north/ south between Bawdeswell and Mill Street (just north of the River Wensum)? This is the boundary of a non-designated heritage asset.</p> <p>Is a feature such as this boundary wall retained?</p>	
Q12.0.5	Natural England	<p>Construction near ancient woodland Do you consider there should be specific provision in the outline CoCP and/ or the OLEMS for protection measures in the vicinity of ancient woodland? A requirement for a 15m buffer zone is referred to in the mitigation strategy [APP-688, ref 163], but not secured in either of the aforementioned documents.</p>	<p>As raised in Relevant Representations [RR -099] we note that the onshore cable route will not encroach within 15m of Ancient Woodland. We refer the Applicant to Natural England’s standing advice for ancient woodland and the management of buffers and suggest these are incorporated into the OLEMS. Natural England has discussed the buffer for Ancient woodlands with the Applicant as part of SoCG (AS-028) and recommended that the commitments to buffers should be included within the OLEMS. The 15m buffer is the absolute minimum required and a larger buffer may be required based on site specific circumstances. There is the potential for wording in the OLEMS to be misconstrued and recommend this is amended to more accurately reflect the standing advice and local circumstances. We would also welcome this being included in the CoCP.</p>

ExQ1	Question to	Question	
12.1 Mobilisation areas			
Q12.1.1	The Applicant	<p>Mobilisation areas</p> <ol style="list-style-type: none"> 1. Explain how the location of Mobilisation Area MA5b, on the edge of the settlement of Sparham meets your selection criteria for the location of Mobilisation Areas, in particular properties on Well Lane. 2. Specify when each of the 14 Mobilisation Areas is likely to be installed and uninstalled under Scenario 2 and reference the indicative construction programmes in ES Chapter [APP-218, Table 5.39, Table 5.43]. 3. Is it correct, as set out in the Project Description [APP-218, Table 5.32], that no mobilisation areas are required for Scenario 1? 4. If this is not the case, what is required? 5. Respond to the point made by [RR-053] about the location of MA11 in relation to the B1159 and whether consideration was given to sites immediately off the B road or ones which could be accessed via the running track. 6. Provide detail for the access arrangements for MA2, as the minor road is narrow and the alternative would be access off the A47. 	
12.2 Noise and Vibration			
Q12.2.1	The Applicant Breckland Council Broadland District Council North Norfolk District Council	<p>Location of noise sensitive receptors</p> <p>ES Chapter 25 [APP-238, paragraph 148] states that the study area comprises the entire onshore project area. The assessment has not identified a buffer zone within which effects would be considered, rather Noise Sensitive Receptors (NSR) have been identified, as detailed in Table 25.27 and shown on</p>	

ExQ1	Question to	Question	
	Interested Parties	<p>Figure 25.2. These are stated to have been agreed with relevant stakeholders (Table 25.3 and paragraph 122).</p> <p>With reference to the location of noise sensitive receptors as identified in the ES Chapter 25 [APP-238, Figure 25.2], explain why:</p> <ol style="list-style-type: none"> 1. the majority of NSRs on Map 1 of 9 are located south of the cable route, although there are some potential receptors (e.g. Chimney Farm) to the north; 2. there are no NSRs in North Walsham close to the indicative mobilisation area (see Map 2 of 9); 3. there are no NSRs in proximity of trenchless crossing (TC) 16, although there are residential properties in proximity of this area (see map 2 of 9); 4. there are no NSRs in proximity of TC6, although there are a number of farms in proximity of this area (see Map 6 of 9)? 5. IPs may wish to comment. 	
Q12.2.2	The Applicant	<p>Operational vibration</p> <p>ES Chapter 25 [APP-238, Table 25.3] states that in relation to operational vibration from the onshore project substation, industry standards require the use of vibration isolation pads to prevent transmission of ground borne vibration. It states that the substation would be designed to achieve negligible levels of ground-borne vibration and therefore scoped out operational vibration from the ES.</p> <ol style="list-style-type: none"> 1. Provide further information on the design of the vibration isolation pads, and specify the industry standards that would be adhered to. 	

ExQ1	Question to	Question	
		<p>2. Explain how the implementation of the vibration isolation pads would lead to negligible residual effects.</p> <p>3. Where is this secured?</p>	
Q12.2.3	The Applicant	<p>Construction noise thresholds ES Chapter 25 [APP-238, Paragraph 280] states <i>"Initial calculations determined that with the application of standard mitigation measures as detailed in section 25.8.5.6 and an increased separation distance from the noisiest mobile and stationary plant, would ensure that the BS 5228 daytime construction noise thresholds are not exceeded at CRR1E, CRR3F, CRR10"</i>. This does not concur with para 200 which identifies a moderate to major adverse impact to these receptors following the application of standard mitigation.</p> <p>Explain this apparent discrepancy.</p>	
Q12.2.4	The Applicant	<p>Noise barriers The ES Chapter 25 [APP-238] refers to the use of noise barriers during construction. The Construction Noise Management Plan (CNMP) within the OCoCP states that noise barriers <i>"may be installed to further reduce noise emissions in proximity to noise sensitive receptors"</i></p> <p>1. The ExA acknowledges that detailed design is not yet available for the Proposed Development. Nevertheless, can the Applicant explain why it has not identified the locations at which noise barriers would be implemented?</p> <p>2. Without a firm commitment to the implementation of noise barriers to a given specification, what confidence can the Applicant provide to the ExA</p>	

ExQ1	Question to	Question	
		<p>that the noise reductions identified in Tables 25.34, 25.36, 25.37 and 25.39 are possible through the implementation of noise barriers and construction plant selection?</p> <ol style="list-style-type: none"> 3. Can the Applicant explain what criteria would be applied to determine whether noise barriers would be required? For example, proximity to residential receptors/type of construction activity? 4. Can the Applicant confirm whether there is a minimum specification for the noise barriers, and if so, how is it secured? 5. Would the Applicant agree the location(s) and specification(s) of the noise barriers with the relevant local authorities? 6. Can the Applicant confirm the likely timeframes within which the noise barriers would be in place? What assurances are there that they would not be left permanently in-situ? 7. Can the Applicant confirm whether the potential impacts that the proposed noise barriers would have on other aspects have been assessed within the ES? The Applicant is requested to provide such an assessment where significant effects are likely. 	
Q12.2.5	The Applicant	<p>Piling methods The ES Chapter 25 [APP-238, Paragraph 260] states that in order to prevent cosmetic damage to buildings in the vicinity of the works, priority should be given to piling methods which minimise vibration i.e. augered piling (subject to suitable ground conditions). Explain the criteria used to determine the priority piling method at specific locations and confirm how it would be secured.</p>	

ExQ1	Question to	Question	
Q12.2.6	The Applicant Breckland Council	<p>Monitoring of noise rating levels</p> <p>ES Chapter 25 [APP-238, Section 25.8.2] states that the requirement for monitoring would be agreed with the appropriate stakeholders and included within the final CoCP commitments (to be agreed post-consent as secured through dDCO [AS-019] Requirement 20). The outline CoCP [APP-692] states that 'a programme of monitoring may be required'. It is noted that in relation to the onshore project substation, Requirement 27(3) of the dDCO [AS-019] states that the Applicant must produce a scheme for monitoring compliance with noise rating levels (ie those set for the existing Dudgeon substation). The scheme must be approved by Breckland Council and implemented as approved.</p> <ol style="list-style-type: none"> 1. Explain what action could be taken should monitoring identify that the noise rating levels specified in Requirement 27 are exceeded? 2. Is Breckland Council content that the drafting of dDCO [AS-019] Requirement 27 is sufficient to ensure corrective action be taken should the specified rating levels be exceeded? <p>Complaint monitoring, part of communication liaison process, is included in the outline CoCP [APP-692]; although not specifically under the Noise and Vibration section. ES Chapter 25 [APP-238, Table 25.3] states that if complaints are related to construction noise, any investigation would likely include noise monitoring to determine any requirement for rectifying action. However, this is not included in the outline CoCP [APP-692].</p> <ol style="list-style-type: none"> 3. Explain why details relating to the complaints procedure for noise and vibration, as referred to in ES Chapter 25 [APP-238, Table 25.3], are not 	

ExQ1	Question to	Question	
		reflected in the outline CoCP [APP-692]?	

ExQ1	Question to	Question	
13. Socio-economic effects			
13.0 Skills and Employment Strategy			
Q13.0.1	The Applicant	<p>Skills and Employment Strategy Scenario 1 The Outline Skills and Employment Strategy (OSES) [APP-713, para 15] states that the SES for Scenario 1 would be developed on behalf of both projects, according to the OSES submitted to the Norfolk Vanguard Examination and secured pursuant to Requirement 33 of the Norfolk Vanguard DCO.</p> <p>Submit the OSES submitted to the Norfolk Vanguard Examination.</p>	
Q13.0.2	Norfolk County Council	<p>Skills and Employment Strategy Scenario 2</p> <ol style="list-style-type: none"> 1. Are you content with the high-level principles and commitments in the Scenario 2 OSES [APP-713]? 2. If not, list and explain concerns. 3. What further detail could be reasonably requested from the Applicant to resolve any concerns during this Examination (if relevant)? 	
Q13.0.3	The Applicant Norfolk County Council	<p>Supply chain planning</p> <p>ES Chapter 31 Socio-economics [APP-244, Paragraph 138] states that the Applicant is committed to developing a Supply Chain Strategy to promote the use of local supply chain and support services, where applicable.</p> <ol style="list-style-type: none"> 1. When would the Supply Chain Strategy be produced? Where is this secured? 2. Who has already been or would be consulted in the production of the Supply Chain Strategy? <p>The OSES [APP-713, Appendix D] outlines a number</p>	

ExQ1	Question to	Question	
		<p>of meetings and events with supply chain organisations that were held during the pre-application stage.</p> <ol style="list-style-type: none"> 3. Have the findings of these meetings, particularly those that are relevant to the local businesses, been shared with Norfolk County Council? 4. If so, does Norfolk County Council have any comments? 5. If not, does the Applicant intend to share the findings of these meetings with NCC? If so when? If not, why not? 	
Q13.0.4	The Applicant	<p>Benefits for the local area Have you forecast the implications of implementing the Scenario 2 OSES [APP-713] on the likely long-term effects on the wider NOMIS (Office for National Statistics service providing Official Labour Market Statistics) and Business Register and Employment Survey (BRES) indicators assessed in Appendix 31.1 [APP-680]?</p>	
13.1 Jobs			
Q13.1.1	Norfolk County Council	<p>Construction jobs ES Chapter 31 Socio-economics [APP-244, table 31.30] sets out the local content of jobs created and supported in each year by onshore construction under Scenario 2.</p> <ol style="list-style-type: none"> 1. Are you content that the jobs can be created and supported each year? 2. How would these local jobs be secured? 	
Q13.1.2	The Applicant	Role of other stakeholders	

ExQ1	Question to	Question	
		<p>ES Chapter 31 Socio-economics [APP-244, Paragraph 282] states, "Under Scenario 1 the direct employment reduces slightly to 425FTE jobs. These would create a major beneficial impact for the region as it is assessed that the relevant stakeholders are preparing to develop skills to supply them."</p> <ol style="list-style-type: none"> 1. Specify who the 'relevant stakeholders' are, referred to above and how would locally based skills be developed? 2. How would this be secured in the dDCO? 	
13.2 Tourism			
Q13.2.1	Norfolk County Council North Norfolk District Council	<p>Effects on tourism and recreation</p> <p>In light of the significance of tourism to the local economy, particularly tourism along the coast, are you content that the ES Chapter 30 Tourism and Recreation [APP-243] sets out in adequate detail the effects of the Proposed Development and proposed mitigation on the tourism industry and recreational activities?</p>	
13.3 Land use and agriculture			
Q13.3.1	National Farmers' Union Interested Parties	<p>Link Boxes</p> <p>Given the Applicant's response to RRs [AS-024, Table 2, row 3] do you have further concerns and questions about the location and design of link boxes?</p>	
Q13.3.2	National Farmers' Union and other Interested Parties	<p>Access Routes</p> <p>RRs [RR-044, RR-049 to RR-051, RR-055, RR-057 to RR-062, RR-064 to RR-068, RR-070 to RR-083, RR-086 to RR-089, RR-092 to RR-094, RR-097 to RR-098, RR-108] refer to a difference in ground levels which would mean some of the Applicant's proposed</p>	

ExQ1	Question to	Question	
		<p>access routes are not physically possible.</p> <ol style="list-style-type: none"> 1. Identify which access routes you consider problematic and explain concerns. 2. Where relevant indicate alternative access points which could be preferable and why. 	
Q13.3.3	National Farmers' Union and other Interested Parties	<p>Voluntary Option Agreement and CoCP RRs [RR-044, RR-049 to RR-051, RR-055, RR-057 to RR-062, RR-064 to RR-068, RR-070 to RR-083, RR-086 to RR-089, RR-092 to RR-094, RR-097 to RR-098, RR-108] refer to wording from the CoCP that you wish to see in the Voluntary Option Agreements.</p> <ol style="list-style-type: none"> 1. Does the OCoCP, as submitted, set out in sufficient detail the areas of wording you are looking for? 2. As the CoCP would be subject to post-consent approvals based on the OCoCP, are there any areas which you think need more detail at this stage? If so what and why? 	
Q13.3.4	The Applicant	<p>ES Chapter 5 [APP-218, Tables 5.35 and 5.41] commit to burying the onshore cable to 1.05m in 'normal' agricultural land and 1.2m in areas of 'deep ploughing' to top of duct.</p> <p>Explain how this commitment is secured in the dDCO [AS-019] and what constitutes 'normal' agricultural land.</p>	
13.4 Public Health			
Q13.4.1	The Applicant	<p>Mental Health</p> <ol style="list-style-type: none"> 1. In the ES Chapter 27 Human Health [APP-240], how has the impact of the volume and frequency of construction traffic movement on the mental health and well-being of children, vulnerable 	

ExQ1	Question to	Question	
		<p>users and other users been considered?</p> <p>2.</p>	
Q13.4.2	The Applicant National Grid Public Health England	<p>Effects of electromagnetic fields (EMF)</p> <ol style="list-style-type: none"> 1. In light of the representations made at the OFH on 13 November 2018 [EV4-004], can the Applicant confirm that the EMF exposure of the Proposed Development, especially at the location where the cable route crosses with the underground cables of Hornsea Project Three, is within the limits prescribed by the NPS EN suite and all other relevant UK regulations? 2. National Grid, to confirm the Applicant's assumptions and assessment regarding EMF in ES Chapter 27 Human Health [APP-240]. 3. Public Health England, to confirm the Applicant's assumptions and assessment regarding EMF effects on Human Health in ES Chapter 27 Human Health [APP-240]. 	
13.5 Other offshore industries and activities			
Q13.5.1	The Applicant Eni UK Limited	<p>Offshore petroleum production</p> <p>NPS EN-3, para 2.6.176 to 2.6.188 requires decision makers to be satisfied that offshore wind farm site selection and design has been made to avoid or minimise disruption or economic loss or adverse effect on safety to other offshore industries.</p> <ol style="list-style-type: none"> 1. Eni UK Limited to set out any specific geographic areas where you have concerns that the siting of infrastructure associated with the Proposed Development could / would have a significant adverse impact on your ability to carry out your proposed activities. 	

ExQ1	Question to	Question	
		<p>2. Are there any provisions you feel necessary for inclusion in the dDCO [AS-019]?</p> <p>3. Confirm whether the Applicant has engaged with you with the aim of resolving issues.</p> <p>4. The Applicant's views are also sought.</p>	
Q13.5.2	Interested Parties	<p>Other offshore industries</p> <p>Set out any concerns that the siting of infrastructure associated with the Proposed Development could / would have a significant adverse impact on your ability to carry out your proposed activities covered in NPS EN-3 para 2.6.176 to 2.6.188 (ie excluding commercial fisheries and fishing and shipping and navigation – which are covered elsewhere in these questions).</p>	

ExQ1	Question to	Question	
14. Traffic and transportation			
Q14.0.1	Norfolk County Council	<p>Outline Traffic Management Plan (OTMP) The OTMP [APP-699] is the same as that submitted for the Norfolk Vanguard application.</p> <p>Norfolk County Council is asked to confirm if the submitted OTMP [APP-699] is up to date and relevant for the Proposed Development.</p>	
Q14.0.2	Norfolk County Council Highways England (HE)	<p>Operational traffic impacts ES Chapter 24 [APP-237, section 24.5.1.3, paragraph 75] states that operational traffic impacts are scoped out of the assessment through agreement at the Expert Topic Group (ETG) meeting due to the limited traffic movements required. However, in paragraph 373, the Applicant identifies the potential for adverse road safety impacts from new access points on the highway network. The Applicant explains that the detailed design of each access point would be set out in the AMP, which would be agreed post-consent based on the OAMP (which includes generic designs).</p> <p>Norfolk County Council and Highways England to confirm that they are content with the approach undertaken by the Applicant and that the level of detail in the OAMP is sufficient to inform future approvals. If not, what additional information should be included in the OAMP?</p>	
Q14.0.3	The Applicant	<p>Cumulative peak traffic impacts ES Chapter 24 [APP-237, paragraph 91] states that as part of HE's road investment strategy (RIS) six improvement schemes are proposed along the A47 corridor with an expected start date of 2019/2020.</p>	

ExQ1	Question to	Question	
		<p>Paragraph 45 states that due to information available at this stage, it is not possible to provide a meaningful assessment of cumulative impacts. Furthermore Table 24.45 states that if consent was granted, the Applicant and its contractors would engage with stakeholders to establish opportunities to coordinate activities and avoid cumulative peak traffic impacts.</p> <p>This commitment would be contained in the OTMP which would be contained in the final dDCO submission. The OTMP [APP-699] refers to the OCoCP [APP-692] for this commitment. However, there is no evidence of this specific commitment within the OCoCP [APP-692].</p> <p>How would this commitment be secured?</p>	
Q14.0.4	The Applicant	<p>Collision site cluster</p> <p>Mitigation is applicable to each collision site cluster, including the introduction of high friction surfacing. While this is secured through the OTMP [APP-699] and dDCO [AS-019], it is not specified that this mitigation should be carried out before construction commences.</p> <p>Set out when this mitigation would be carried out and where this is secured.</p>	
Q14.0.5	The Applicant	<p>Mitigation for Link 69 (Little London Road from the B1145 Lyngate Road junction to an access point approximately 210m east)</p> <p>ES Chapter 24 [APP-237, paragraph 238] states that that the mitigation for link 69 may comprise of mitigation measures that include: extended construction programme, location of trenchless</p>	

ExQ1	Question to	Question	
		<p>crossing points, and sequential planning for construction activities.</p> <ol style="list-style-type: none"> 1. How would certainty of the mitigation measures be provided? <p>There would be residual significant adverse effects on Link 69 in terms of pedestrian amenity and severance for Scenario 2 despite mitigation, but no residual significant adverse effects identified following mitigation for Scenario 1. ES Chapter 24 [APP-237, paragraph 241] states that the contractor would engage with the community to further mitigate residual adverse effects on Link 69 in terms of pedestrian amenity and severance.</p> <ol style="list-style-type: none"> 2. Clarify if the appointed contractor would undertake community engagement to identify periods that are particularly sensitive to HGV movements. 3. How would the appointed contractors' commitment to undertake community engagement be secured? 4. Explain how this would influence the assessment of significant adverse effects. 5. What confidence can the Applicant provide that the measures would be effective? 6. Would monitoring be required and what remedial measures could be implemented? 7. Where is the mitigation and monitoring secured? 	
Q14.0.6	The Applicant Norfolk County	<p>Traffic effects in Cawston and Oulton The RRs from Broadland District Council [RR-028],</p>	

ExQ1	Question to	Question	
	<p>Council Broadland District Council Cawston Parish Council Oulton Parish Council Corpusty and Saxthorpe Parish Council</p>	<p>Cawston Parish Council [RR-016] and Oulton Parish Council [RR-017] raise concerns about the traffic assessment surrounding the villages of Cawston and Oulton. This includes concerns regarding the same access routes to Norfolk Vanguard, the Proposed Development and Hornsea Project Three during potentially the same time frame, and traffic impacts on the B1145 through Cawston.</p> <p>The Applicant's response to the RRs [AS-025, Table 19, row 3] refers to a 'highway intervention scheme' developed by Orsted for the objective of mitigating the construction traffic impacts of Hornsea Three and cumulative impacts with Norfolk Vanguard and Norfolk Boreas through Cawston.</p> <ol style="list-style-type: none"> 1. The Applicant to confirm if it would adopt the same 'highway intervention scheme' to mitigate the construction traffic impacts through Cawston. If yes, the Applicant to provide details of the 'highway intervention scheme'. 2. How has the impact of the proposed 'highway intervention scheme' been assessed in the ES Chapter 24 [APP-237]? 3. In the response to the RRs [AS-025, Table 19, row 3], you refer to 'the final SoCG (REP9-047) with Norfolk County Council at the close of the Norfolk Vanguard examination'. Submit the final SoCG with NCC for the Norfolk Vanguard Examination. 4. NCC, to provide comments on the 'highway intervention scheme'. List any changes necessary for the Proposed Development, Scenario 1 and Scenario 2. 5. Has the proposed 'highway intervention scheme' 	

ExQ1	Question to	Question	
		<p>been adequately secured through mitigation set out in the ES Chapter 24 [APP-237] and in the dDCO [AS-019]?</p> <p>6. Broadland District Council, Cawston Parish Council, Oulton Parish Council and Corpusty and Saxthorpe Parish Council to highlight the specific areas of the Applicant's assessment that you have concerns with. Outline what else the Applicant would need to take into account when assessing the effects of traffic in Oulton and Cawston.</p>	
Q14.0.7	The Applicant Norfolk County Council Interested Parties	<p>Assessment of Link 34 (B1145 from the B1149 Holt Road junction, through Cawston village to the eastern town extents of Reepham)</p> <p>1. Link 34 is assessed as a medium sensitive route [APP-237, paragraph 500]. Justify this classification in light of the highway width, direct frontage development, narrow footways, resident parking, and frequency of use of footways by children and other users.</p> <p>2. The Proposed Development Scenario 2's HGV third peak in combination with Hornsea Project Three's peak construction HGV traffic is stated as 260 daily movements [APP-237, paragraph 504]. Justify how a 896.5% increase in HGVs on Link 34 is assessed as an impact of moderate adverse significance.</p>	
Q14.0.8	The Applicant Norfolk County Council Interested Parties	<p>Construction traffic route through Cawston</p> <p>1. Were other construction traffic routes considered, that would eliminate the need for construction traffic to go through the settlements of Cawston and Oulton Street?</p> <p>2. Explain why Link 34 was the preferred option for construction traffic movement.</p>	

ExQ1	Question to	Question	
		<p>3. Could or was a haul route within the cable corridor of the Proposed Development from the B1145 (north east of Reepham) to the B1149 (north east of Cawston) [APP-462, Map 5 of 9] considered? If not, why not?</p>	
Q14.0.9	Highways England	<p>A47 The RR from HE [RR-025] states that it would be interested in any transport assessment or hearing where the A47 is involved either with construction traffic or HGV movements.</p> <p>Do you have specific concerns surrounding the A47 and traffic and transport with the development as proposed that can be highlighted for examination?</p> <p>It is not currently clear whether access proposals for MA2 would be from the A47. But if so, do you have any views on the potential accessing of mobilisation areas such as MA2 from the A47?</p>	
Q14.0.10	Norfolk County Council	<p>The RR from Norfolk County Council [RR-037] states that for Scenario 1, it has no comments other than those made on the Norfolk Vanguard application, and for Scenario 2, it has the same comments made for the Vanguard scheme.</p> <p>Submit all relevant comments and concerns for both Scenario 1 and Scenario 2 into this Examination.</p>	

ExQ1	Question to	Question	
15. Water matters			
Q15.0.1	The Applicant	<p>Crossings of watercourses within SPZs The Applicant to clarify how crossings of watercourses within SPZs are secured in the dDCO [AS-019] other than those specified as requiring trenchless installation techniques for the purposes of passing under the River Wensum, King's Beck, Wendling Beck, the River Bure and North Walsham and Dilham Canal in Requirement 16</p>	

ExQ1	Question to	Question	
16. General and cross-topic questions			
16.0 General			
Q16.0.1	The Applicant	<p>Guide to the Application Provide updates of the Guide to the Application [APP-004] at Deadlines set out in the Examination timetable. The level of detail will necessarily need to be presented to the level of each document or drawing to ensure all updates and/ or superseding is accurately recorded. You may wish to note an example document of this type at https://infrastructure.planninginspectorate.gov.uk/application-process/example-documents/</p>	
Q16.0.2	The Applicant	<p>Response to points made at an Open Floor Meeting Provide responses to points made by Interested Parties and others who spoke at the Open Floor Hearing on Wednesday 13 November 2019 at the Kings Centre in Norwich.</p>	
Q16.0.3	The Applicant	<p>Red line boundary of offshore generation area Explain or signpost to an explanation of the small circular red line near the northern extremity of the Norfolk Boreas proposed offshore generation array that appears on the Land Plan (Offshore) [APP-007].</p>	
16.1 Environmental Statement (ES)			
Q16.1.1	The Applicant	<p>Significant adverse residual effects In respect of the significant adverse residual effects identified in the ES, the Applicant to provide a robust justification as to why further mitigation has not been possible.</p>	
Q16.1.2	The Applicant	<p>Changes have been made to the dDCO on 4 November 2019 relating to worst case scenarios. There may therefore be discrepancies between the ES and the DCO.</p> <p>How can this be resolved in the Examination of the dDCO?</p>	Natural England will be reviewing the latest draft DCO submitted at Deadline 1 and the updated reconciliation document and will advise on this issue further at Deadline 3.
16.2 Ground conditions, contaminated land and ground and surface			

ExQ1	Question to	Question	
water			
Q16.2.1	The Applicant	<p>HDD trenchless crossings of rivers: Assist understanding of concerns and further information required, related to possible HDD drilling mud breakouts, particularly in relation to the River Wensum SAC.</p>	
Q16.2.2	The Applicant	<p>Request for Ground investigation Report(s): The Applicant's response [AS-024] to EA's [RR-095] states: '<i>A copy of the Terra Consult (2017) report were provided to the Environment Agency during the Norfolk Vanguard examination and appended to Norfolk Vanguard's Responses to the ExA's First Written Questions (Appendix 16.2 to- 16.7, Norfolk Vanguard reference REP1-023 to 028).</i>'</p> <p>The Applicant to submit a copy of the Terra Consult Ground Investigations report to the Norfolk Boreas Examination.</p>	
Q16.2.3	The Environment Agency	<p>Ground Conditions and Contamination issues in EA's RR Section 2 of the Environment Agency's [RR-095] identified a number of issues in relation to Ground Conditions and Contamination which it considers have not been addressed to its satisfaction, relating to construction phase impacts on:</p> <ol style="list-style-type: none"> 1. the quality of surface water fed by groundwater; with particular regard to its observation that the ES does not provide the locations of where groundwaters and surface waters are hydrologically connected in relation to where construction activities are anticipated to take place; 2. unlicensed water supplies; 3. land quality; 4. impacts on groundwater quality in the principal aquifer from trenchless crossings and piling; 5. impacts on shallow groundwater due to changes to hydraulic regime as a result of soil compaction; and 6. data sources. 	

ExQ1	Question to	Question	
		The Environment Agency to comment on the Applicant's responses [AS-024] to these concerns submitted in response to the ExA's Rule 6 letter.	
Q16.2.4	The Applicant	<p>Ground conditions and contamination potential impacts addressed in Norfolk Vanguard case: Provide an update of progress on agreeing common ground with the Environment Agency on EA "<i>concerns that some issues concerning raised during the Norfolk Vanguard examination process have not been addressed in the Norfolk Boreas application ES Chapter 19.7 Potential Impacts</i>".</p>	
Q16.2.5	The Applicant	<p>Assessment of contamination pathways: Provide an update of progress on agreeing common ground with the Environment Agency on procedure and timescales for:</p> <ol style="list-style-type: none"> 1. identification of locations where the surface water and the groundwater systems are in hydraulic connection and cross-correlated with the extent of the construction works; 2. identification of potential contaminants and their receptors and pathways; and 3. local risk assessments to clarify the potential impacts on controlled waters and associated specific mitigation measures. 	
Q16.2.6	The Applicant	<p>Assessment of contamination sources at landfall location: Provide an update of progress on agreeing common ground with the Environment Agency on: more detailed assessment of contamination sources, current status, extent of contamination, and potential receptor and transport (pathway) of the contaminants.</p>	
Q16.2.7	The Applicant	<p>Development impact at shallow wells: Provide an update of progress on agreeing common ground with Environment Agency on:</p> <ol style="list-style-type: none"> 1. potential for a significant impact at any shallow wells in 	

ExQ1	Question to	Question	
		close proximity to the excavations. 2. assessment of abstractions within the study area to ensure that local water supplies are not compromised.	

