

Application by SMart Wind Ltd for

Hornsea Offshore Wind Farm (Zone 4) - Project Two

The Examining Authority's first round of written questions and requests for information

Issued on 22 June 2015

The following table sets out the Examining Authority's (ExA) first round of written questions and requests for information.

Questions are set out using an issues-based framework derived from the initial assessment of principal issues provided as Annex C to the letter of 15 May 2015. Additional sets of questions are added to the framework of principal issues to address the assessment of the application.

Column 2 of the table indicates **which persons questions are directed at**. The ExA would be grateful if all bodies named could answer all questions directed to them, providing either a substantive response, or indicating that the question is not relevant to them for a reason. The direction of questions in this way does not prevent an answer being provided to a question by a person to whom it is not directed, should the question be relevant to their interests.

Each question has a **unique reference** which combines issue letters and a question number. **When you are answering a question, please start your answer by quoting the unique reference.**

If you are answering a few questions, answers in a letter will suffice. If you are answering several questions, it will assist the ExA if you use a table based on this one. An editable version of this table in Microsoft Word is available upon request from the case team, if you wish to request a word version please email Hornsea2@pins.qsi.gov.uk.

Question to:		Question:
G	General	
G1	Applicant	Please provide, in tabular form, an update on progress towards the granting of all other consents required by the proposed development, including consents already secured.
G2	Applicant	Please provide an update on matters relating to the acquisition of land or rights in land, permanent or temporary.
G3	Applicant	Please provide a report on progress towards securing Statements of Common Ground (SoCG) with various parties.
G4	Applicant	Please provide an update on progress towards agreeing proposed Protective Provisions with various parties.
PN	Principle and nature of development	
PN1	Applicant	<p>The nature of the relationship between the parties involved in the development, in particular between the joint owners (IRMPOL and Siemens) and the joint applicants (Optimus Wind and Breesea) is unclear, particularly in relation to which parties have funding and project management responsibilities, and residual legal liability, throughout all the stages of the project (7.1.1.2) [APP-025].</p> <p>Please explain, using tables and diagrams as appropriate:</p> <p>(a) With who the responsibility lies for securing sufficient necessary funds for delivering</p>

Question to:		Question:
		<p>all stages of the project and associated compulsory acquisition.</p> <p>(b) Who is responsible for managing each stage of the project, including land acquisition construction, operation and decommissioning for all options?</p> <p>(c) How the draft Development Consent Order (DCO) ensures that these responsibilities are identified appropriately for all stages of the project, regardless of any transfers of all or part of the ownership of the project.</p> <p>(d) Which of the parties are statutory undertakers, and by virtue of what existing operation?</p> <p>(e) How and when responsibility for decommissioning, including making possible contributions to a decommissioning fund that DECC might require, is secured?</p> <p>(f) Who has residual legal liability for all scenarios and at all stages of the project, and how this is kept from falling on The Crown Estate?</p>
PN2	Applicant	<p>The nature of the relationship between the parties involved in the development of Hornsea Project 2, in particular between the joint applicants (Optimus Wind and Breesea), is also unclear with regard to the potential options for the sequencing of the two projects in the Hornsea Project 2 application, as set out in Works A and B of the draft DCO.</p> <p>Please explain:</p> <p>(a) The potential options for the sequencing of the various generation and transmission elements of the two projects; and how these will be managed and enforced.</p>

Question to:		Question:
		(b) In response to concerns by the MMO [RR-018] and the ExA, how the offshore generation zone will be apportioned between Breesea and Optimus Wind should the draft DCO be consented. The offshore works plan depicts only one licensed boundary for the construction, operation and maintenance of generation assets even though provision has been made within the draft DCO for two generation Deemed Marine Licences (DMLs).
PN3	Hornsea Project 1 and applicant	<p>The nature of the potential relationships, sequencing and timetabling of the construction of the various elements of Hornsea Project 1 and Hornsea Project 2 are unclear, in particular where co-existence is required and rights may have to be shared. Some of the issues of concern are raised in [RR15].</p> <p>Please clarify what progress has been made in the development of a Co-operative Agreement between Hornsea Project 1 and Hornsea Project 2, with regard to each of the following key issues of concern:</p> <ul style="list-style-type: none"> (a) Overlap of Order limits for onshore temporary workings and compounds; (b) Connection into the N. Killingholme sub-station; (c) Inter-tidal access and working areas; (d) Onshore and offshore cable routes and; (e) Offshore turbine layouts. <p>Please also update the ExA on the current position on a SoCG in relation to these issues, as requested in the Rule 6 Letter, Annex G.</p>

Question to:		Question:
PN4	Applicant	What is the applicant's response to the strong desire expressed by North East Lincolnshire Council for both onshore cable routes of Hornsea Project 1 and Hornsea Project 2 to be installed at the same time to minimise disruption caused by the construction of the trenches and installation of the cable on local residents and users of the highway network? (EN-1 also seeks installation co-ordination between project cables crossing the inter-tidal zone).
PN5	Applicant	<p>Please clarify what narrowing down has there been, if any, in the scope of the Rochdale Envelope provisions for Hornsea Project 2 (7.1.3.1, 2 &3) [APP-027] since the application was submitted, in particular in relation to:</p> <ul style="list-style-type: none"> (a) Number and power of turbines; (b) Layout of turbines; (c) Type of seabed fixing; (d) HVAC or HVDC; (e) Cabling and substations; and (f) Fabrication site and supply port. <p>When, how and by whom will the various options continue to be refined as the project continues?</p>

Question to:		Question:
GE	General ecological issues	
GE1	Applicant	ES Volume 4, Annex 4.5.5 [APP-068] usefully sets out all enhancement, mitigation and monitoring measures committed to in the ES showing how they would be secured in the draft DCO and DMLs. Please advise on any updates to this Annex.
GE2	Applicant	<p>Please provide information on:</p> <p>(a) The procedures and methods used to consult with other EEA States with regard to possible transboundary impacts of the project and;</p> <p>(a) The results of such consultations to date.</p>
GE3	Applicant	<p>Has the applicant considered possible specific implications arising from the application of:</p> <p>(a) The European Marine Strategy Framework;</p> <p>(b) The National Parks and Access to the Countryside Act 1949, the Wildlife and Countryside Act 1981 (as amended), the Countryside and Rights of Way Act 2000 and the Natural Environment and Rural Communities Act 2006;</p> <p>(c) The United Nations Environment Programme (UNEP) Convention on Biological Diversity, with particular reference to Articles 8, 9 and 10?</p>

Question to:		Question:
EOO	Ecology offshore – ornithology	
EOO1	Applicant, Natural England (NE) and RSPB	Further to ongoing discussions post-acceptance, and NE Relevant Representations [RR-021], please provide an update on SoCG for offshore ornithological issues?
EOO2	Applicant, NE and RSPB	<p>Please report on progress made in resolving the baseline data issues raised primarily in the Section 42 Response and Relevant Representations [RR-021] by Natural England and the RSPB [RR-028] in relation to the applicant’s ornithological assessment for the Hornsea Project 2 alone, in particular issues about:</p> <p>(a) Methods used to derive population estimates, with inter alia an explanation of the reasons for the differences between the species counts data for Hornsea Project 1 and Hornsea Project 2.</p> <p>(b) Treatment of incomplete and missing survey data (eg for month of December) and contributions of more recent surveys, subsequent to those completed in 2013, including aerial surveys.</p> <p>(c) Clarification of treatment of unidentified species and their apportioning to various species categories;</p> <p>(d) The accuracy of boat based observations of Percentage of birds at Collision Height (PCH) collected at fine scale resolution, approaches to account for uncertainty in flight height data, plus the over-use of site-specific data rather than more generic data sources (e.g. Cook 2012).</p>

Question to:		Question:
		<p>(e) Data on relevant Biologically Defined Minimum Population Scales (BDMPS) used to assess impacts in EIA.</p> <p>(f) The assumptions used to apportion birds to SPAs in different seasons, for kittiwakes, gannets and auks.</p>
EOO3	Royal Society for the Protection of Birds (RSPB)	Are there any results from the RSPB FAME project on GPS-tagged kittiwakes and their flights from Bempton Cliffs' colony?
EOO4	Applicant, NE and RSPB	<p>What progress has been made in resolving the methodological issues raised primarily in the Section 42 Response and Relevant Representations [RR-021] by Natural England /JNCC and the RSPB [RR-028] in relation to the applicant's ornithological assessment for the Hornsea 2 project alone, including issues in relation to:</p> <p>(a) further allowance for <i>uncertainty</i> around the outputs of the CRM, in particular in relation to density of birds in the project area, flight height of those birds, and uncertainty in PCH figures derived from boat based surveys;</p> <p>(b) <i>Collision Risk Modelling (CRM)</i> methodology:</p> <p>(i) how much weight do the interested parties give to the published findings in the Marine Scotland Report (Dec 2014) on appropriate Avoidance Rates (ARs) for various Band model Options for various species;</p> <p>(ii) further update on this AR work, and responses to it—especially in relation to use of</p>

Question to:		Question:
		<p>the Band Extended Model;</p> <p>(iii) the NE position on the applicant’s CRM approach for migratory species; and</p> <p>(iv) the need for use of a Population Viability Analysis (PVA) in addition to the Population Biological Removal (PBR) approach?</p> <p><i>With regard to the above--please provide the ExA with copies of recent papers on ARs produced by Smart Wind and Forewind (2013) and by SNCB (2014)</i></p>
EOO5	Applicant, NE and RSPB	<p>What progress has been made in resolving the methodological issues raised primarily in the Section 42 Response and Relevant Representations [RR-021] by NE and the RSPB [RR-028] in relation to the applicant’s ornithological assessment for the Hornsea project 2 alone, including issues in relation to:</p> <p>(a) The calculation of <i>displacement rates</i></p> <p>(i) the use of a comparative analysis of levels of sustainable mortality generated by tools such as (PVA); and</p> <p>(ii) the summing of the annual predicted mortality of the colony, or wider population scale used to assess the population level impact.</p> <p>(b) The range of species selected for the impact assessment—collision risk and displacement; and</p> <p>(c) The approach to the assessment of significance.</p>

Question to:		Question:
E006	Primarily for the applicant, but also NE and RSPB	<p>What progress has been made in resolving the impact assessment issues raised primarily in the Section 42 Response and Relevant Representations [RR-021] by NE in relation to the applicant's ornithological assessment for the Hornsea project 2 alone, in particular concerns about:</p> <ul style="list-style-type: none"> (a) The spatial scope of the assessment. (b) The Special protection area (SPA) and Special areas of conservation (SAC) sites which need consideration in relation to Likely Significant Effects on offshore ecology. (c) Evidence the applicant has relied on in reaching conclusion that disturbance will not exceed a 1km buffer around the source of disturbance. (d) Evidence used to select displacement and mortality rates. (e) Various levels of impact assessment classed by the applicant for operational impacts (displacement and collision risk).
E007	Applicant and NE	<p>Overall, following from the points above in E005 and E006, what progress has been made to date with NE in agreeing Hornsea Project 2 alone collision and displacement impacts, as appropriate, for the relevant bird species, including:</p> <ul style="list-style-type: none"> (a) Northern gannet; (b) Common guillemot; (c) Razorbill;

Question to:		Question:
		<ul style="list-style-type: none"> (d) Atlantic puffin; (e) Black-legged kittiwake; (f) Lesser black-backed gull; and (g) Great black-backed gull?
EOO8	Applicant, NE and RSPB	<p>What progress been made in resolving the impact assessment issues raised primarily in the Relevant Representations [RR-021] by NE in relation to the applicant's ornithological assessment for Hornsea Project 2 cumulative and in-combination impacts, in particular:</p> <ul style="list-style-type: none"> (a) Is there now an agreed approach for the <i>re-tiering</i> of Offshore Wind farms (OWFs) used for cumulative and in combination effects assessment? (b) Is there now an agreed approach on the projects to be included in each tier, including the capacity of those projects? (c) With regard to cumulative displacement impacts, has further work been undertaken on the standardisation and use of a 2km buffer size, and if so, with what implications for assessed impacts? (d) Can the discrepancies between the figures for the various North Sea plans and projects calculated as part of the Dogger Bank Teesside and the Hornsea Project 2 application, as identified by NE, be explained?

Question to:		Question:
		<p>(e) What methods have been used to generate population estimates and displacement figures for projects where either no information, or information for the development footprint without a 2km buffer, was available in the relevant ESs?</p> <p>(f) What progress has been made in undertaking further assessment, as recommended by NE, at a North Sea scale across the whole year, for each relevant species?</p> <p>(g) What progress has been made in agreeing</p> <p style="padding-left: 40px;">(i) cumulative impacts at a population scale (displacement and collision) for all relevant species; and</p> <p style="padding-left: 40px;">(ii) in-combination impacts on the Flamborough Head and Filey Coast (FFC) pSPA, for all relevant species?</p>
EOO9	Applicant	Can the applicant please clarify the implications for bird displacement and collision from the proposed edge-weighted approach to the layout of the turbines?
EOO10	Applicant	<p>Has the applicant modelled the offshore ornithological impacts of alternative:</p> <p>(i) Turbine MW size (8MW and 15MW); and</p> <p>(ii) Turbine layouts?</p> <p>If so, what are the implications for ornithological impacts?</p>

Question to:		Question:
EOO11	Applicant	How has mitigation been built into the offshore turbine layout design to reduce the extent of bird collision and displacement? (NPS EN-3, Para 2.6.108)
EOO12	Applicant, NE, Marine Management Organisation (MMO) and local authorities (LAs)	<p>Para 2.6.71 of NPS EN-3 supports ecological monitoring to mitigate where appropriate any adverse ecological impacts of the project under consideration, and to enable further useful information to be provided for future projects.</p> <p>(a) Can the applicant please clarify the nature of the intended offshore ornithological monitoring programme for the full life cycle of the Hornsea Project 2?</p> <p>(b) How will monitoring of the Hornsea Project 1 be built into the development of the Hornsea Project 2?</p> <p>(c) Are the MMO and NE content with the proposed approach to monitoring for Hornsea Project 2?</p> <p>(d) Do the conditions in the DML provide sufficient certainty about the delivery of mitigation and monitoring measures (as specified in the ES)?</p>
EOO13	Applicant	<p>With regard to potential transboundary ornithological issues:</p> <p>(a) Is there any documented evidence of agreement with Statutory Nature Conservation Bodies (SNCBs) in other EEA states;</p> <p>(b) Are there any transboundary ornithological issues extant; and</p> <p>(c) Are any further transboundary consultations envisaged?</p>

Question to:		Question:
EOMM		Ecology offshore – marine mammals
EOMM1	NE	ES 7.2.4, Para 4.2.3 [APP-033], indicates that the extent of site-specific field surveys were agreed with NE and the JNCC in February 2011 following the submission of the Hornsea Project 1 Scoping Report in November 2010. Is NE content that the study area adopted is appropriate for the present project?
EOMM2	NE	Do NE agree with the survey methodology for marine mammals employed by the applicant?
EOMM3	NE	The ES acknowledges that the cable route corridor has not been covered by the site-specific marine mammal surveys, having been characterised by desk study data alone, gathered over a 15-year period, up to 2010. Do NE consider this data used to establish baseline conditions is acceptable?
EOMM4	Applicant and NE	Concern was expressed at the scoping stage regarding the recording of mammals in tandem with undertaking seabird surveys (ES 7.2.4, Table 4.5, comment from Lincolnshire Wildlife Trust/Yorkshire Wildlife Trust) [APP-033], and resultant bias/error is noted in paras 4.5.97-8. As a result of concerns from local fishing operations about interference, the towed hydrophone survey to detect cetaceans was limited by latitude and does not cover the whole extent of the proposed project boundary. Please explain how these limitations have affected the assessment and conclusions drawn.
EOMM5	Applicant and NE	The ES refers to Disturbance Effects on Harbour Porpoise in the North Sea (DEPONS) (paras. 4.6.56-4.6.63) [APP-033] in respect of sound impacts. Regarding the latter model, preliminary results are said to indicate that pile driving at up to 31 offshore wind farms in the south central North Sea over a six-year period would not lead to long-term population-

Question to:		Question:
		level effects on harbour porpoises and that subsea noise disturbance from pile-driving, possibly leading to displacement, is most likely to be a short-term occurrence, though no firm conclusions can be drawn at this stage. The model is still at development stage. Can any further information be provided as to the anticipated progress on this research over the timescale of the project and how this might be expected to inform assessment?
EOMM6	Applicant	Whale and Dolphin Conservation (WDC) express concern in its relevant representation [RR-032] about disturbance and displacement of cetaceans, with particular reference to noise, especially during the construction phase. Can the applicant please comment on its representation?
EOMM7	Statutory Nature Conservation Bodies (SNCBs)	The primary source of underwater noise that may impact on marine mammals during construction is pile driving during foundation installation. ES para 4.6.66 states that there was agreement with the JNCC that only modelling for piling noise was required for Hornsea Project 1 (rather than other activities such as cable installation) and this assumption has been carried forward for the present project. Can the SNCBs confirm that this approach is acceptable?
EOMM8	SNCBs	ES Table 4.17 [APP-033] sets out the 'worst case' spatial and temporal scope of predicted impacts. Do NE consider the assessment to be a realistic worst-case scenario?
EOMM9	Applicant	The Project Description (ES 7.1.3 Section 3.2.34) [APP-027] states that steel anchor wire may be used to brace monopiles but there has been no assessment of potential impacts as a result of their use. In its relevant representation [RR-021] (s 5.2.2.8) NE expresses concern that the use of such wires could pose an entanglement risk to marine mammals. Can the applicant clarify why no assessment of this aspect has been undertaken?

Question to:		Question:
EOMM10	Applicant	NE has expressed concern in its relevant representation [RR-021] (5.2.2.5) regarding assessment of impact from vessel disturbance on cetaceans, in light of a recent study (Pirotta et al (2015)). The applicant has also produced a Marine Mammal Decommissioning Vessels Clarification Note (Appendix T, Applicant's Submission of 27 April 2015) [APP-0209] which shows that the maximum number of vessel movements over the decommissioning phase would be some three times greater than that estimated in the ES. Could the applicant please review this evidence and present consideration of likely increase in vessel traffic?
EOMM11	Applicant	NE has questioned the assumptions about site fidelity of cetaceans and advises that displacement could be more important as an impact than assessed in the ES. Can the applicant please comment on this?
EOMM12	Applicant	The maximum adverse scenario assumed in ES 7.2.4, Table 4.17 [APP-033], for maximum pile energy per strike varies according to the type of foundation proposed. Clause 10(2)(b) of Part 2 of the Deemed Marine Licences requires a construction method statement to be submitted before commencement of construction. Is it the intention that maximum pile energy per strike would be secured in this statement, or by other means?
EOMM13	Applicant	It is not immediately apparent whether all of the assumptions adopted in ES 7.2.4[APP-033] , Table 4.17, 'Design envelope scenario considered within assessment of potential impacts on marine mammals' are consistent with those contained in the DCO and made for other studies in the ES. Could the applicant please provide a table summarising and comparing the information with the clauses and requirements of the DCO and other chapters of the ES to provide confirmation in this respect?

Question to:		Question:
EOMM14	Applicant	Having regard to cumulative impacts with other projects, comments have been received in relevant representations from The Wildlife Trusts (TWT) [RR-029] regarding the omission of offshore wind farms in Scottish waters from the scope of assessment; they consider these have potential to impact on the population of harbour porpoise and should therefore be included in assessment. Even without their inclusion, TWT consider further mitigation is needed to reduce the 'moderate adverse' impact on behaviour for harbour porpoise and minke whale, as predicted in the cumulative impact assessment. NE has also commented in its relevant representation [RR-21] on the scope of projects to be included in the cumulative assessment. Could the applicant please comment?
EOMM15	Applicant	NE, in its relevant representation [RR-021] at para 5.2.1.6, has expressed concern that the cumulative impact assessment has not fully assessed the effects of multiple projects piling simultaneously, resulting in an underestimate of the displacement/disturbance effects on marine mammals. Whilst NE acknowledges that concurrent piling of all wind farms in the area may be unrealistic, concurrent piling of several wind farms is possible and this is not fully described in the ES. Can the applicant please comment?
EOMM16	Applicant	NE comment in its relevant representation [RR-021] (paras. 5.2.2.2/3) on the value of SCANS data for context in assessing cumulative effects on harbour porpoise. Can the applicant please comment on the use of such data?
EOMM17	Applicant	NE comments in its relevant representation [RR-021] (para. 5.2.2.4) that the cumulative assessment appears to lack consideration of a number of activities which have potential to cause cumulative impacts through noise in the marine environment. Can the applicant confirm whether the projects/activities referred to (seismic surveys, decommissioning of several gas fields, construction of the Viking A Gas Field and Dutch military activities) have been considered?

Question to:		Question:
EOMM18	NE and applicant	<p>NE in its relevant representation [RR-021] (paras. 5.2.1.1-5.2.1.4) refers to the development of the interim Population Consequences of Disturbance (PCoD) model developed to forecast the potential disturbance, and collision effects, on marine mammal populations from the construction and operation of offshore marine energy devices. An extension to the original interim model has been commissioned to predict the population consequences of disturbance to harbour porpoises. It is said this project was due to complete by April 2015 and should enable an assessment of whether multiple pile driving operations in the English part of the North Sea are likely to have a population-level effect on the harbour porpoise population in the wider North Sea.</p> <p>(a) Can NE provide an update as to whether the PCoD is complete and whether the outputs indicate that a population-level effect is expected?</p> <p>(b) Could the applicant please produce a note clarifying how its own assessment compares with this work (on the assumption that the PCoD extension project has now been completed)?</p>
EOMM19	Applicant	<p>ES 7.2.4 [APP-033], Annex 4.5.5, Table 1.3 sets out enhancement, mitigation and monitoring commitments in relation to marine mammals, at Table 1.3. Reference 21 includes 'Any mitigation measures such as a piling plan will be discussed and agreed with the statutory advisors prior to construction of Hornsea Project 2 and implemented as part of the CoCP'. Will a piling plan be included at requirement 8(2) of the draft DCO?</p>
EOMM20	Applicant, NE	<p>A Marine Mammal Mitigation Protocol (MMMP), which is required by Condition 10(2)(c) of the DMLs, is anticipated to provide a description of mitigation and justification for the techniques chosen. Can details be provided as to the anticipated timescale and engagement process regarding the production and agreement of a MMMP?</p>

Question to:		Question:
EOMM21	Applicant, NE	<p>It is suggested that the MMMP will include monitoring, the form of which is to be agreed with the SNCBs, to test the predictions of assessment (ES 7.2.4, para. 4.6.314) [APP-033].</p> <p>(a) What specific monitoring is proposed?</p> <p>(b) Who will be responsible for the monitoring?</p> <p>(c) What are the methods by which it would be delivered?</p> <p>(d) How would results be used?</p>
EOMM22	NE	<p>NE in its relevant representation ([RR-021] (para. 4.2.2) indicates that the JNCC has undertaken an analysis of data for harbour porpoises in UK waters with the aim of identifying possible sites for SAC designation, with formal consultation to be launched this summer. Should this be the case, the impacts on the proposed designated features of these sites will become a material consideration in relation to Habitats Regulations Assessment for the project. Can further information be provided as to what stage consultation may have progressed and future timescales in the possible designation process?</p>
EOMM23	Applicant, NE	<p>It is suggested that the MMMP will include monitoring, the form of which is to be agreed with SNCBs, to test the predictions of assessment (ES 7.2.4 [APP-033], para. 4.6.314). What specific monitoring is proposed, who would be responsible and what are the methods by which it would be delivered, and how would results be used?</p>
EOMM25	Applicant, NE	<p>Having regard to Habitat Regulation Assessment, TWT in their relevant representation [RR-29] consider more explicit mitigation should be specified in the outline Code of Construction Practice (CoCP) in order to ensure disturbance to the grey seal feature of the Humber</p>

Question to:		Question:
		<p>Estuary SAC is minimised. Without mitigation more explicitly in place, TWT do not agree that the test for Likely Significant Effect (LSE) and, subsequently, site integrity, has been adequately considered.</p> <p>Can the applicant and NE please comment?</p>
EL	Ecology—onshore and inter-tidal	
EL1	Applicant and the Environment Agency (EA)	<p>In their Relevant Representations [RR-012]the EA raises a number of concerns in relation to the requirements of the Water Framework Directive (WFD). Can the applicant please clarify what progress has been made in terms of resolving concerns about:</p> <ul style="list-style-type: none"> (a) Potential disturbance to sediments in inter-tidal areas in relation to CEFAS mineral action levels. (b) Impacts on fish from noise, turbidity, release of contaminants etc. (c) Approach to consideration of saltmarsh under WFD. (d) Extent of screening threshold for bathing water. (e) Assessment of shellfish water.
EL2	Applicant and EA	<p>In [RR-012], the EA also raises concerns about the apparent datedness of some of the information used in the assessment, and the implications for the project, and in particular for the inter-tidal cable protection. Can the applicant please respond on the potential</p>

Question to:		Question:
		<p>implications for the inter-tidal impacts of/on the project of:</p> <ul style="list-style-type: none"> (a) Tidal movements arising from climate change. (b) Recent beach profile data for Horseshoe Point, post Dec 2013. (c) Coastal and sea bed erosion in the near shore area. (d) Potential changes in the Lincolnshire beach nourishment programme. (e) Drift rates–worst case scenarios. (f) The potential for increased storminess and surges arising from climate change.
EL3	EA	Is the EA content that there are no adverse implications for the coastal cockle beds and the Donna Nook National Nature Reserve (NNR) from the intertidal corridor route and temporary working area?
EL4	NE	Is NE content with the predominant use of baseline data gathered for Hornsea Project 1, for the assessment of the Hornsea Project 2 onshore and intertidal ecological impacts?
EL5	LAs	Are the local authorities satisfied that the Terrestrial Ecology Survey [APP-0108], including information on hedgerows, which was collected in 2011, is sufficiently accurate and up to date to support the conclusions and actions set out in the draft DCO and ES?

Question to:		Question:
EL6	Applicant and EA	Given the predominance of hedgerows of 'important' status along the onshore cable route, should the applicant not give consideration to the use of more trenchless cable installation rather than hedgerow removal and reinstatement?
EL7	Applicant, EA and NE	With particular reference to para. 5.3.18 of EN-1, would the applicant please summarise: (a) How best practice will be specified and ensured during both construction and operation to minimise risks to habitats and species? (b) Which habitats are to be the subject of specific restoration programmes after completion of construction works? (c) Which habitats have been identified as the subject of specific enhancement measures? (d) What if any new habitats are to be created?
EL8	EA and LAs	Are the EA and LAs content with the programme for the replanting and management of reinstated areas as set out in the outline Ecological Management Plan (EMP) [APP-0170]?
EL9	Applicant	The consideration of the cumulative effects of the construction of both Hornsea Project 1 and Hornsea Project 2 under the three scenarios outlined indicates either a higher level or a longer duration of local ecological impacts, or possibly both. (a) But it is unclear from the complex assessment which scenario is the most disruptive, and which is the least disruptive, for the local ecology. Can the applicant please clarify further for the relevant species and habitats in:

Question to:		Question:
		<p>(i) the onshore cable corridor; and</p> <p>(ii) the intertidal zone</p> <p>(b) Can the applicant also establish the link between the construction phase described in ES 7.3.3 [APP-044] Table 3.13 and the relevant works number in the draft DCO as well as in the works plan?</p> <p>(c) Are there any additional control measures that can be applied to the draft DCO to avoid the most damaging aspects of the assessed scenarios (e.g. consecutive years of construction)?</p>
EL10	Applicant	Although the Phillips66 Replacement Pipeline may be completed before the commencement of the Hornsea Project 2 intertidal works, there may be cumulative impacts in terms of a longer period of disturbance to the intertidal area – with potential for both time-crowded and space-crowded perturbations. WILL the applicant please comment on this?
EL11	Applicant	Does Table 3.20 in ES 7.3.3 [APP-044] indicate no residual effects on intertidal and onshore ecology from the project alone and cumulatively with others?
EL12	Applicant	Table 3.15 and paragraph 3.6.8 of ES 7.3.3 [APP-044] demonstrate the point at which effects are considered to be 'significant' in EIA terms and worthy of specific mitigation, but the table does not explain how the 'designed-in' mitigation has been secured having regards to requirements in the draft DCO. It would be helpful for the ExA if the measures specified were either cross referenced to the draft DCO directly or to the information contained in Annex 4.5.5 [APP-068].

Question to:		Question:
EL13	Applicant	<p>The assessment for Great Crested Newts (GCN) makes use of the surveys conducted for Hornsea Project 1; however Figure 2 of Annex 6.3.1[APP-0108] does not include any of the ponds identified in the key reference. It is therefore not possible to know which ponds have or have not been surveyed or where GCN are present.</p> <p>(a) Please resubmit the Figure with all of the relevant features included.</p> <p>(b) Also please clarify for the ExA if there are still ponds in the study area not surveyed and if so why, particularly if those ponds are included within the Order Limits for Hornsea Project 1 and therefore covered by the provisions of Part 4 of the draft DCO.</p>
EL14	Applicant	<p>Amongst the documents to be prepared for mitigation, enhancement and monitoring of ecological effects are: a Code of Construction Practice and an Ecological Management Plan; there are also a number of other plans proposed. Please clarify how the plans relate to each other, including ensuring that there is no unnecessary duplication of information</p>
EL15	Applicant, NE and MMO	<p>Is the applicant planning to use trailer suction hopper dredgers (TSHD) for cable laying, affecting the Humber Estuary SAC? If so, what effects might this have on the destabilisation and redistribution of sediments on the features of the Humber Estuary SAC?</p>
LH	Landscape and Heritage	
LH1	Applicant	<p>Please respond to Historic England’s disappointment, expressed in pg.3 and 4 of their Relevant Representation [RR-016], that the assessment of setting impacts in relation to the proposed converter/substation at North Killinghome and of any significant issues arising from the presence of non-designated archaeological remains along the pipeline route is drawn too narrowly and focused exclusively on visual relationships.</p>

	Question to:	Question:
LH2	Historic England (HE)	The desk based and field evaluations in relation to heritage assets with a potential archaeological interest referred to in Table 6.1 of Chapter 6 of the ES Historic Environment ([APP-048a] were carried out in 2011 (see, for example, para. 6.5.9). Will HE comment on the adequacy of the survey material used in the Hornsea Project 2 ES in relation to the historic environment?
LH3	HE and LAs	<p>Do HE and the LAs agree with:</p> <p>(a) The definitions of 'importance (value or sensitivity)' set out in the tables of assessment 6.14, 6.15, 6.16, 6.17, 6.18 and 6.19 in Chapter 6 of the ES-Historic Environment [APP-048a]?</p> <p>(b) The values set out in the matrix in Table 6.20 to be used for assessments of significance combining receptor sensitivity and magnitude of effect?</p> <p>(c) The use of Highways Agency Guidance Note 208/07 (August 2007) to underpin the definitions of importance in relation to heritage assets in Chapter 6 of the ES-Historic Environment [APP-048a] and if not provide advice on any acceptable alternative approach?</p> <p>(d) The assessment of magnitude of impact and adequacy of the designed in mitigation measures in relation to undesignated heritage assets during the construction phase set out in paras. 6.6.48 to 6.6.126 of Chapter 6 of the ES-Historic Environment [APP-48a]?</p> <p>(e) The assessment of magnitude of impact and adequacy of the designed in and other mitigation measures in relation to Scheduled Monuments, Listed Buildings, conservation areas and Registered Parks and Gardens assets during all phases set out in paras. 6.6.127 to 6.6.272 of Chapter 6 of the ES-Historic Environment [APP-48a]?</p>

Question to:		Question:
		(f) The summary of potential environmental effects set out in Table 6.25 of Chapter 6 of the ES-Historic Environment [APP-48a](particularly in relation to sensitivity of receptor, magnitude of impact, significance of effect including designed in measures and additional mitigation measures and residual significance of effect?
LH4	HE and LAs	Are HE and the LAs satisfied that the potential impacts on all heritage assets impacted by the proposed Hornsea Project 2 proposal in all its phases have been properly assessed and that the proposed mitigation measures are adequate? If not, please outline the nature of the concern and the steps you wish to see taken to deal with it.
LH5	Applicant	<p>The baseline for the assessment is described in section 5.6 of ES-Chapter 5 Landscape and Visual Resources [APP-046]. The same key viewpoint locations are used for Hornsea Project 2 as for Hornsea Project 1 (see Table 5.4). Site visits to collect information on the baseline environment are mentioned at paragraph 5.6.5 of ES-Chapter 5 Landscape and Visual Resources, but the dates on which site visits were carried out are not stated in sections 5.6 or 5.7 of Chapter 5.</p> <p>Site photographs at Figures 5.17 - 5.30 are annotated as having been taken in February 2011, August 2011 or November 2012. Photographs on which the photomontages (Figures 5.36-5.48) are based are stated as having been taken in August 2011 or June 2012. At 5.6.2 it states that <i>'the environmental studies to inform the baseline were designed to inform the EIA for both Project One and Project Two.'</i></p> <p>In view of this please confirm that site visits were carried out for Hornsea Project 2 before the landscape and visual impact assessment was undertaken, to ensure that the description of the baseline environment used in the assessment is up to date and that the photographs</p>

Question to:		Question:
		shown in the assessment represent current baseline conditions. It is possible that changes have taken place in baseline conditions since 2011 / 2012, including the planting or removal of hedgerows and trees, and the construction of new development.
LH6	LAs	Are the local authorities content that the description of the baseline environment and the photographs shown in the assessment in ES-Chapter 5 Landscape and Visual Resources [APP-046] are adequate for the purpose?
LH7	NE, East Lindsey District Council (ELDC), North Lincolnshire Council (NLC), North East Lincolnshire Council (NELC), West Lindsey District Council (WLDC), and Ray Wilson – East Halton Resident	Can the various stakeholders referenced in Table 5.4 of ES-Chapter 5 Landscape and Visual Resources [APP-046] confirm whether or not they have outstanding concerns with regard to the assessment's methodology and the proposals to address the issues raised and if so further outline those concerns and what should be done about them?
LH8	Applicant	Has the potential for mitigation measures set out in ES-Chapter 5 Landscape and Visual Resources [APP-046] to have an adverse impact on another topic been considered within the assessment and if not can this be provided?
LH9	Applicant	(a) In the event the HVDC converter station option is selected (see p4.1.8 and Fig. 2a of the Outline Landscape Scheme and Management Plan [APP-0178]) how is it intended that the residue of Plot No 500 and the unnumbered plot to the north on Land Plan Onshore Plan

Question to:		Question:
		<p>27 are to be used? If appropriate please provide an indicative landscape scheme for this area under this development option?</p> <p>(b) In the event the 900 MW HVDC converter station and 900 MW HVAC substation option is selected (see p4.1.8 and Fig. 2b of the Outline Landscape Scheme and Management Plan [APP-0178] how is it intended that the residue of Plot No 508 on Land Plan Onshore Plan 27 is to be used? If appropriate please provide an indicative landscape scheme for this area under this development option?</p>
LH10	NLC and applicant	Please comment on the status of the on-going discussions in relation to the façade treatment to the proposed onshore HVDC converter/HVAC substation (section 6 of the Outline Landscape Scheme and Management Plan [APP-0178] refers) in the light of the range of possible colours set out in Requirement 15 of the draft DCO [APP-010]. Has agreement been reached?
LH11	Applicant	With reference to para. 5.7.45-5.7.46 of ES-Chapter 5 Landscape and Visual Resources [APP-046] has consideration been given to the provision of additional hedge planting along diverted footpaths and other routes in the vicinity of the North Killingholme HVDC converter station/HVAC substation to provide visual screening for mobile receptors travelling through the area? If not, why not?
LH12	Applicant	<p>(a) With reference to para. 5.7.426 of ES-Chapter 5 Landscape and Visual Resources [APP-046] outline any discussions that have taken place with the owner/occupier of Fairfield and any steps that can be taken to further mitigate the high visual impact magnitude of the onshore HVDC converter stations for this residential receptor.</p> <p>(b) There are no viewpoints from the west of the proposed HVDC converter stations site.</p>

Question to:		Question:
		<p>Why is this? Can existing and proposed photomontage views be provided from the vicinity of Fairfield, Brick Lane, the eastern-most dwellings in Scrub Lane, the eastern-most dwellings in Swinster Lane, the eastern-most dwellings in Lease Lane and from Townside on open ground between the post office and the Black Bull Inn?</p> <p>(c) In relation to cumulative impact can existing and photomontage images be provided showing the worst case scenario view of both Hornsea Projects 1 and 2, the CGen development and other consented schemes in the vicinity taken from within the 1km buffer from the onshore HVDC converter from existing viewpoints 31, 32, 33, 34, 35, the vicinity of Fairfield Brick Lane, Townside and the eastern-most dwellings in Lease Lane?</p>
LH13	Lincolnshire Wolds AONB Joint Advisory Partnership (JAC) Committee	Is the Lincolnshire Wolds AONB JAC content with the analysis and conclusions set out in ES-Chapter 5 Landscape and Visual Resources [APP-046] in relation to the potential impact of Hornsea Project 2 in all its phases on the AONB and if not please state your reasons?
LH14	(HE	Is HE content with the analysis and conclusions set out in ES-Chapter 5 Landscape and Visual Resources [APP-046] in relation to the potential impact of Hornsea Project 2 in all its phases on Thornton Abbey and Brocklesby Park and if not please state your reasons?
CL	Construction – intertidal and onshore	
CL1	Applicant	ES 7.1.3 Table 3.13 [APP-027] refers to the long duration of the process for installing the intertidal ducts, lasting potentially for up to five sequential years. Is there scope for substantially reducing this duration, whilst remaining within the April to September 'window'? Further, given the potential long duration, should the associated ecological impact be assessed as higher than minor adverse? (ES 7.1.3) [APP-027]

Question to:		Question:
CL2	Applicant	No cable protection measures are proposed to be used in the inter-tidal area. What are the relative merits of this approach, given the climate change and marine processes issues raised in question EL2?
CL3	Applicant	<p>Would the applicant please produce, for the ExA, a schedule (or schedules) indicating:</p> <p>(a) The timing and sequence of the occupation of each of the individual onshore and inter-tidal construction compounds for Hornsea Project 2;</p> <p>(b) The timing and sequence of works around each site for the various stages of construction;</p> <p>(c) The forecast traffic impacts of construction at each site including likely vehicle/type numbers required (the sustainable transport requirements for the project should also be clarified);</p> <p>(d) Hours of working, and forecast numbers of people working at various sites, both for the construction and operational stages of the Hornsea Project 2; and</p> <p>(e) The noise-buffers proposed in relation to residential areas.</p>
CL4	Applicant	What would be the onshore implications for the construction process and for associated impacts if the two developers adopted different technologies for transmission (ie. HVDC and HVAC)?
CL5	Applicant	(a) What determines whether eight separate or two large trenches are used for the HVAC onshore cable installation?

Question to:		Question:
		(b) Are there any significant differences in the impact implications (ecological and others) of these two options?
CL6	Applicant	<p>ES 7.1.3 p3.3.90 [APP-027] states that 'The compounds and side accesses may remain in place for the duration of onshore cable construction, five years'.</p> <p>ES 7.1.3 p3.3.122 [APP-027] states that 'The time delay between cable duct installation and cable pulling could be months or years'.</p> <p>Can the applicant please advise on the scope for reducing the duration of these onshore construction activities, and their local environmental and socio-economic impacts.</p>
CL7	Applicant	Can the applicant please provide for the ExA a table (and diagram if possible) illustrating the indicative construction programme (including timings) of the possible multi-phase approach to onshore construction.
CL8	Applicant	<p>The Operation and Maintenance (O&M) Strategy discusses the use of either an onshore or offshore base, or a combination of both.</p> <p>(a) Is a fully offshore base feasible?</p> <p>(b) What is the current thinking on the location of the O&M base?</p>
CL9	NE, MMO and LAs	(a) Do NE, MMO and the local authorities consider that they have sufficient information on the principles and parameters to be used in drafting the Code of Construction Practice (CoCP) to be confident that the submitted plan will be capable of approval?

Question to:		Question:
		<p>(b) Do NE, MMO and the local authorities consider that they have or will have sufficient information and assurances about monitoring to be confident that the submitted CoCP will be monitored adequately?</p> <p>(c) Do NE, MMO and the local authorities consider that they have or will have sufficient information to be confident about the enforcement of the CoCP?</p>
CL10	NE, MMO and LAs	<p>(a) How will the flood defences, sand dunes and salt marsh be monitored and protected to avoid damage during construction?</p> <p>(b) How is this to be secured through the ecological, construction practice or other plans or draft DCO Requirements?</p>
CL11	Applicant	Has any further progress been made on which port(s) and airport(s) might be used to support the construction and operation of Hornsea Project 2?
CL12	Applicant	What is the current position with Centrica and Hornsea Project 1 regarding the use and upgrade of the potential shared Chase Hill Road access to the Centrica Power Station and Hornsea Project 2 HVDC convertor/HVAC substation?
CL13	Applicant	In several places in the ES Transport Assessment and Annex, there is reference to a signed SoCG between Hornsea Projects 1 and 2 and the A160/A180 Port of Immingham Improvement Projects. Please provide a copy for the ExA.
CL14	NELC, and applicant	Tables 8.14, 8.16 and 8.18 of the ES Traffic and Transport chapter 7.3.8 [APP-050] show a large increase in HGV traffic along stretches of the A18 during construction of Hornsea

Question to:		Question:
		Project 2, substantially accentuated if there is overlap with Hornsea Project 1. Is the NELC content with these calculations, with the implications for the A18 and with the mitigation measures proposed by the developer?
CL15	Applicant and LAs	<p>Data in the Transport Assessment, ES 7.6.8.1 [APP-0143], Tables 9 and 10, shows HGV vehicle flows, for Hornsea Project 2, of one every two to three minutes at peak on some of the cable route sections, and one every minute on some of the highway links , including the A18.</p> <p>(a) What are the implications for these flows of the potential overlap of the construction of Hornsea Project 2 with Hornsea Project 1?</p> <p>(b) Are the local authorities content with these calculations, with the implications for the Lincolnshire road network and with the mitigation measures proposed by the developer?</p>
CL16	Applicant	<p>In relation to the proposed substation(s) can the applicant:</p> <p>(a) In relation to Hornsea Project 2 Works Nos 8a and 8b, supplement the information contained in Figures 3.35, 3.37, 3.38, 3.39, 3.40 and 3.41 of the Project Description [APP-027]; Onshore Land Plan 27/27 [APP-012] and Onshore Works Plan 27/27 [APP-014] with a layout plan of the proposed substation site indicating the proposed access arrangements, areas to be reserved for landscaping, drainage, bunds, cable easements (including alternatives) and any constraints to the location of substation buildings and equipment under the various scenarios?</p> <p>(b) In relation to Hornsea Projects 1 and 2 in combination, provide indicative drawings showing the potential disposition of substation buildings and equipment under all possible</p>

Question to:		Question:
		scenarios and indicate the proposed access arrangements, areas to be reserved for landscaping, drainage, bunds, cable easements (including alternatives) and any constraints to the location of substation buildings and equipment?
CL17	Parishes	Do the parish councils affected by the proposals have any observations they wish to bring to the attention of the Examining Authority (ExA)?
CL18	Applicant	Has a biosecurity risk assessment been carried out and what measures need to be incorporated into the Code of Construction Practice (CoCP) to ensure the onshore construction phase addresses biosecurity?
CS	Construction – offshore	
CS1	Applicant	Please explain the options for the programming and phasing of the construction of the wind farm areas (Works 1A&B, 2A&B and 3A&B), and the offshore cabling (Works 4A&B and 5A&B) as set out in the draft DCO.
CS2	Applicant	(a) Have any Crossing Agreements for the active pipelines using the 'Oil and Gas Crossing Agreement Template' been entered into yet? If not, when do you anticipate obtaining these? (b) Is there an industry standard for the minimum distance between the pipeline and the export cable? Can the cable go either under or over the pipeline?
CS3	Applicant	If maintenance personnel are transferred by helicopter from the shore to an accommodation platform, how will they then travel to the required Wind Turbine Generator (WTG)? Will a

Question to:		Question:
		boat be kept on site continuously? If so, how will it be safely secured?
CS4	Applicant	Up to what wind speed/sea state will maintenance still be able to be carried out safely on the WTG's?
CS5	Applicant	How long will it take for the wind farm area and cable route corridor including the inter-tidal area to return to its' natural state after completion of the works?
CS6	Applicant	Will it be possible to place the WTG's in orderly rows and columns at the western end of Hornsea Project 2 given the large number of wrecks in this area?
CS7	Applicant	In Figure 3.5 of ES 7.1.3 [APP-027], the applicant provides WTG layouts for both 5 and 15 MW turbines, but not for 8MW. Why has this latter option been omitted?
CS8	Applicant and MMO	The MMO has concerns about the potential carrying capacity of disposal sites HU209 and HU210 from the cumulative amount of material arising from Hornsea Projects 1 and 2. What progress has been made to resolve this concern, including the MMO recommendations for a co-ordinated monitoring programme over multiple years?
CS9	Applicant	Are ConocoPhillips satisfied with the conclusions of the Technical Report on the Radar Early Warning System as they affect the Sarurn, Minas and Tethys platforms?
CS10	Applicant	How will the disposal of dredged material in the cable route corridor be managed so as not to impede the progress of Hornsea Project 1 cable laying or vice-versa?
CS11	Applicant	Do you anticipate any conflict with the Donna Nook bombing range whilst cable laying in that area?

Question to:		Question:
CS12	Applicant	Do you agree with the Maritime Coastal Agency (MCA) that agreed layout principles of Hornsea Project 2 should be provided in the DCO?
CS13	Applicant	The MCA require a single authority to have effective overall maritime control in place. Who will be responsible and how will this be accomplished?
CS14	Applicant	How far have your discussions with E.ON E&P progressed towards reaching a satisfactory conclusion regarding co-existence between between Hornsea Project 2 and E.ON oil and gas interests?
CS15	Applicant	Is it possible that two or more WTGs' could require major maintenance with 500m safety zones at the same time? Would this have implications for safe fishing in the wind farm area?
CS16	MMO	Are you satisfied there will be no significant impacts from the dredged arisings being deposited in Areas 2A, 2B and Subzone 2?
SE	Socio-economics	
SE1	Applicant	<p>There are major variations in the predicted local employment effects, for both the construction and operational stages of the project, under the scenario approach adopted by the applicant. In addition Section 11.10 of the ES [APP-053] indicates what effects might be considered significant in ES terms, but not what effects are likely.</p> <p>Given the encouragement in various various policy and plan documents (including NPS EN-1; the Eastern Inshore and Offshore Draft Marine Plans ; local plans and the Humber LEP) to maximize the scale of local employment benefits, can the applicant please provide advice on</p>

Question to:		Question:
		the most likely scenario outcomes, for both the construction and operational stages of Hornsea Project 2.
SE2	LAs, applicant and Humber Local Enterprise Partnership (LEP).	<p>Draft DCO Requirement 18 outlines elements in an employment and skills plan to deliver local employment and supply chain benefits. These relate to the provision of information, presentations and advertising.</p> <p>(a) Does this plan represent the extent of the applicant’s designed in mitigation measures for employment and supply chain impacts?</p> <p>(b) Are the local authorities content with the scope of this current plan in terms of delivering more than the minimum local employment effects set out in the various scenarios?</p> <p>(c) Have the local authorities, LEP and the applicant considered additional elements for the plan in terms of delivering more than the minimum local employment effects set out in the various scenarios? If so, what measures have been considered, and with what outcome in terms of agreement to date?</p>
SE3	Applicant	Given the planned investment by Associated British Ports (ABP), Siemens and others in port and turbine and blade production facilities on the Humber, can the applicant please advise on the likelihood of Hornsea Project 2 using local ports and supply facilities.
SE4	Applicant and LAs	In terms of cumulative impacts, can the applicant and local authorities clarify to what extent the concurrent construction of both Hornsea Project 1 and Hornsea Project 2, together with other likely local developments, may face employment supply constraints in the Local Impact Area?

Question to:		Question:
SE5	Applicant.	What measures does the applicant intend to use to ensure adequate and appropriate local community engagement and liaison, particularly during the construction stage of the project? Have there been discussions about this and, if so, to what effect?
SE6	Applicant and local authorities	What plans does the applicant have in relation to the proposed Community Benefits Fund, including for example: <ul style="list-style-type: none"> (a) Criteria for inclusion; (b) Types of initiatives which might be supported; and (c) The management of the Fund?
SE7	Applicant	What provisions are in place to monitor the local economic impacts (especially supply chain and employment take-up) of the construction and operation of the project?
FNA	Fishing, Navigation and Aviation	
FNA1	MMO, NFFO, HCFIG, DFFO, Redercentrale, Visned ⁱ	As a stakeholder concerned with commercial fisheries do you have any outstanding concerns regarding the fisheries assessment?
FNA2	MMO, NFFO, HCFIG, DFFO, Redercentrale, Visned	As a key stakeholder are you satisfied with the allocation of magnitude and sensitivity throughout the assessment and with the mitigation measures that are proposed?

Question to:		Question:
FNA3	Applicant	Has the potential impact of mitigation been included in the assessment of inter-relationships regarding fishing?
FNA4	MMO, MCA, NE	Do you agree with the plans and projects which have been included in the cumulative assessment of fishing?
FNA5	Applicant	Do you anticipate that trawling will be able to be carried out continuously between Hornsea Projects 1 and 2 without the need to haul in trawling gear?
FNA6	Applicant	Will the Fisheries Liaison Officer for Hornsea Projects 1 and 2 be the same person?
FNA7	Applicant	It is stated at ES 7.2.6 [APP-035] that up to 26% of the inter-array will need to be protected by rock placement. (a) What effect will this have on the fishing effort? (b) Will these areas be clearly marked on the relevant charts?
FNA8	Applicant	Will a fisherman be able to claim compensation if he/she inadvertently snags and loses gear whilst fishing in the wind farm area?
FNA9	Applicant	What, in your opinion, is the likelihood of trawling exposing the inter-array cables over time?
FNA10	Applicant and MMO	What is the applicant's response to MMO concern [RR-018] about the impact of piling on herring spawning in the vicinity of the offshore HVAC substation, and MMO proposed approaches to resolve the issue?

Question to:		Question:
FNA11	MMO	What is the effect on the seabed by trawling over time, particularly, on the benthic ecology?
FNA12	MMO, Maritime Coastguard Agency(MCA) and applicant	(a) Can you confirm that all the requirements of MGN 371 are being complied with as far as they can be at this stage of the consenting process? (b) Will safety zones of 500m around HVAC, HVDC and accommodation platforms be applied for only when these are manned or for the life of the project? (c) What is the 'consideration' that will be given to navigational safety when deciding the height and selecting the location of the bridge links?
FNA13	MMO and MCA	Do you agree that the baseline data in respect of navigational safety provides an accurate reflection of current conditions?
FNA14	MMO, MCA, Chamber of Shipping (CoS), and Trinity House Lighthouse Service (THLS)	Do you agree that the methodology and parameters used in the assessment of navigation in the ES represents a worst case assessment of the potential impacts?
FNA15	MCA, CoS RYA and THLS	Do you agree that the effectiveness of the mitigation measures will reduce the risk to as low as reasonably practicable(ALARP)?
FNA16	Norfolk County Council (NCC)	What mitigation measures would you like to see in place regarding any potential impacts on Norfolk's ports?
FNA17	Applicant	What mitigation do you propose specifically to address Norfolk County Councils concerns?

Question to:		Question:
FNA18	ConocoPhillips	Could you please expand on the 'significant implications' of the project on your marine operations and what mitigation measures would you like to see in place?
FNA19	Applicant	<p>(a) Has the cable route corridor from the Outer Rosse Reach Buoy to the shore been discussed with the Harbourmaster Humber from a navigational point of view?</p> <p>(b) If so, does he have any concerns about this route?</p> <p>(c) Is there any likelihood of cable-laying for Hornsea Projects 1 and 2 being carried out in this area at the same time; and</p> <p>(d) If so, how will it be managed?</p>
FNA20	THLS	Fig 18.1 of 7.5.7.1 [APP-086] shows the anticipated routing pattern when Hornsea Project 2 is completed. This figure shows routes 1, 8 and 7 converging at the South West corner of Hornsea 2. Do you anticipate any extra aids such as a Radar Transponder Beacon (RACON) being required?
FNA21	Applicant)	Fig 13.19 of 7.5.7.2 shows routes 1 and 3 close to the Reactive Substations. How far away are they?
FNA22	Applicant and Civil Aviation Authority (CAA)	<p>(a) Will flying have to cease whilst laying the cable(s) across the southern boundary of North Coates airfield and;</p> <p>(b) if so, for how long?</p>
FNA23	Applicant ,CAA and Ministry of Defence	Will you confirm that there are no significant effects predicted on military or civilian aviation

Question to:		Question:
	(MoD)	and radar operations or on any communication interests across all stages of the Project?
FNA24	Applicant and CAA	<p>In addition to the 6,406 return helicopter flights to Hornsea Project 2 there is presumably a large number of flights to the nearby oil and gas platforms.</p> <p>(a) How is all this aerial activity, much of it over Hornsea Project 2, to be safely managed?</p> <p>(b) Who is responsible?</p> <p>(c) What is the role of the CAA?</p>
CA	Compulsory Acquisition	
CA1	Applicant	Paragraph 5.2.4 of the Statement of Reasons (SoR) [APP-016] refers to land to be acquired and states that 'this is all the land shown coloured orange and numbered 500 and 508 on the Land Plans'. Land Plan Onshore Plans 27/27 shows Plot No.508 coloured pink and indicated for 'temporary occupation' (and Plot No.506 coloured orange). Can the applicant verify the accuracy of para. 5.2.4 of the Statement of Reasons?
CA2	Applicant	<p>Article 18 of the draft DCO [APP-010] appears to give each undertaker power to acquire the Order land without limit subject to the consent of the other undertaker, such consent not to be unreasonably withheld in order to deliver Project A or Project B. However, the Statement of Reasons [APP-016] makes it clear in para.5.2.4 that acquisition of land is only required in respect of two plots – 500 and 508 (although 508 is queried elsewhere) – in connection with Work Nos. 8A and 8B as set out in Schedule A Part 1.</p> <p>Should Article 18 be limited to the two plots required for acquisition of land to enable Works</p>

Question to:		Question:
		Nos. 8A and 8B to proceed and, if not, can the applicant provide a justification of the wide power in Article 18 for acquisition of any of the Order lands, in terms that meet the requirements of Sections 122 of PA2008?
CA3	Applicant	<p>Article 19 of the draft DCO [APP-010] seeks to confer a wide power on the undertakers to acquire 'such rights or impose such restrictive covenants over the Order land as may be required for any purpose for which the land may be acquired under Article 18 (Compulsory acquisition of land), by creating them as well as by acquiring rights already in existence':</p> <p>(a) Para.5.2.5 of the SoR [APP-016] appears only to justify the need for the rights detailed in Schedule E and not the rest of the Order land. Why is such a wide power needed and how is it justified?</p> <p>(b) Can the applicant provide further explanation of the need for a general power to impose restrictive covenants? In what circumstances are they required? How will they be described and can examples of model wording be provided?</p>
CA4	Applicant	In the draft DCO Explanatory Memorandum (EM) [APP-011] para.20.1 the applicant states that it is not considered appropriate to describe the rights being acquired by the creation of new rights under Article 19 in the Book of Reference (BoR) [APP-018, 019, 020, 021, 022]. Can the applicant explain why this would be inconsistent with regulation 7(1)(a) of the APFP Regulations 2009 and give further consideration to implementing the guidance contained in p.10 of Annex D: The BoR of the DCLG 'Guidance related to procedures for the compulsory acquisition of land' of September 2013 requesting that the proposed compulsory creation and acquisition of new rights should be clearly identified?
CA5	Applicant	Schedule G of the draft DCO [APP-010] sets out the land required for temporary possession and the Crossing Schedule Onshore [APP-058] indicates which plots in Schedule G Part 1(a)

Question to:		Question:
		for the purpose of 'worksite and access for the construction and carrying out of the authorised project' are to be used as 'construction compounds'. Can the applicant provide a justification for the location and proposed boundary of each of these construction compound sites, which consist of a wide range of shapes and sizes, and show by means of plans and drawings how it is envisaged that the plots are to be laid out for the purposes described and, if this is not possible, explain why?
CA6	Applicant	<p>In relation to subsection (5) of Article 26 'Temporary use of land for the carrying out of the authorised project' of the draft DCO [APP-010] can the applicant:</p> <p>(a) Explain the potential worst case period for the undertaker remaining in temporary possession of land under the terms set out in subsection (5).</p> <p>(b) Explain why six months is not a reasonable period for vacating land held in temporary possession.</p> <p>(c) Provide a definition of 'date of completion'.</p>
CA7	Applicant	<p>Subsection (10) of Article 26 'Temporary use of land for the carrying out of the authorised project' of the draft DCO [APP-010] permits the compulsory acquisition of new rights and existing rights in subsoil or airspace in the land listed in Schedule G. In light of this can the applicant:</p> <p>(a) Explain how all the land specified in Schedule G meets the tests of compulsory acquisition set out in sections 122 of PA2008?</p> <p>(b) Indicate if any of the land in Schedule G Part 1 (a) subject to the terms of subsection (10) is included within the compulsory purchase order made in respect of Hornsea Project</p>

Question to:		Question:
		1?
CA8	Applicant	<p>The Explanatory Memorandum [APP-011] at para.1.17-1.19 explains the need for "compensation compounds" for Hornsea Project 1 and describes these as "temporary construction working sites". This is repeated at para.3.4 which explains that "compensation compounds" are defined in the Order and relate to "temporary construction working sites". However, Article 2 of the draft DCO [APP-010] does not use the word temporary in the definition and paragraph 6.8 of the SoR [APP-016] states that Hornsea Project 2 will acquire land and rights necessary in relation to the compensation compounds.</p> <p>Can the applicant explain what rights, if any, are being sought in the land listed in part 1(b) of Schedule G intended to be used for compensation compounds and access?</p>
CA9	Applicant	Do any SU's wish to comment on Article 28 'Statutory undertakers' or Article 29 'Recovery of costs of new connections' of the draft DCO [APP-010] and on the comment in the Explanatory Memorandum (EM) [APP-011] in para.29.2 that 'in practice it is impracticable to show and describe all such apparatus'?
CA10	Applicant	Do the Hornsea Project 1 Companies wish to comment on the proposed compensation compounds subject to Requirement 22 of the draft DCO [APP-010] and set out in the Compensation Compounds Plan (APP-069) and discussed in the SoR [APP-016] in para.6.5 – 6.12?
CA11	Statutory undertakers (SU), and Hornsea Project 1 companies	In relation to Requirement 22 'Compensation compounds' of the draft DCO [APP-010] and set out in the Compensation Compounds Plan [APP-069] and discussed in the SoR [APP-016] in p.6.5 – 6.12 can the applicant:

Question to:		Question:
		<p>(a) Explain what mechanisms will be used to ensure that land earmarked for compensation compounds in Hornsea Project 1 will be made available to Hornsea Project 2?</p> <p>(b) What steps will be taken to ensure that other stakeholders, for example the local planning authorities, are aware of any land transfers and which project operator has control of which plot of land?</p>
CA12	Applicant	Planning Inspectorate Advice Note 15 - Drafting Development Consent Orders – advises against using the powers sought in Article 31 ‘Trees subject to tree preservation orders (TPOs)’ in the draft DCO [APP-010] as a precautionary measure and that they should only be applied to trees subject to TPOs or in conservation areas prior to the making of the Order. Can the applicant therefore explain why the powers in Article 31 are being sought?
CA13	The Crown Estate	In relation to Article 39 ‘Crown Rights’ of the draft DCO [APP-010] and s.135(2) of PA2008, can the Crown Estate confirm its agreement or otherwise to the wording of the draft Article and if necessary propose alternative wording?
CA14	For Secretary of State for Transport, Highways England and applicant	<p>(a) A number of plots are identified in Part 4 of the BoR [APP-022] ‘Crown Land’ as being land in which the Secretary of State for Transport, the Highways Agency and the Highways England Company Ltd is the ‘Owner of Crown Interest’. Can the Secretary of State for Transport, The Highways Agency and Highways England confirm the current and possible future status of this land in the context of the Highways Act 1980 and s15 of the Infrastructure Act 2015 and if necessary and at the appropriate time can the applicant revise the BoR accordingly?</p> <p>(b) In the event that these plots are or will no longer be Crown land can the applicant state its intentions in respect of the land and the rights attached to it in the context of its compulsory acquisition proposals and can Highways England indicate its views on how the</p>

Question to:		Question:
		land should be treated? [The plots in question are: 175-187; 272; 37; 378-388; 392-399; 404-409; 437; 441]
CA15	Applicant and Secretary of State for Defence	Can the applicant clarify their intention in respect of plot nos. 34-44 in the Book of Reference (BoR) [APP-022] which are indicated in Part 4 as having a Crown interest owned by the Crown Estate and Secretary of State for Defence but are also contained in Part 1 without any exception of Crown interests, implying that compulsory acquisition of the Crown interests is intended? Can the Secretary of State for Defence comment as appropriate?
CA16	Applicant, Government Pipelines and Storage System of the Oil and Pipelines Agency The Oil and Pipelines Agency	Can the applicant clarify their intention in respect of plot nos. 461 and 463 in the BoR [APP-022] which are indicated in Part 4 as having a Crown interest owned by the Government Pipelines and Storage System of the Oil and Pipelines Agency and the Oil and Pipelines Agency but are also contained in Part 1 without any exception of the Crown interests, implying that compulsory acquisition of the Crown interests is intended? Can the Government Pipelines and Storage System of the Oil and Pipelines Agency and the Oil and Pipelines Agency comment as appropriate?
DC	Draft DCO	
DC1	Applicant and MMO	Please respond to the following points in relation to Article 2, Interpretation: (a) What is meant by ancillary works, other than those in Schedule A, Pt 2?

Question to:		Question:
		<p>(b) To clarify some issues around the definition of 'maintain' the MMO, in its [RR-018], suggests that a schedule of maintenance activities is produced, before the close of examination of the application that clearly indicates all types of proposed maintenance and whether or not it is assessed in the ES.</p> <p>(c) The MMO in [RR-018], in relation to the definition of 'undertaker', would welcome the full company name and associated registration number to be incorporated into the definition.</p>
DC2	Applicant, EA, internal drainage boards and lead flood authorities	Article 3 of the PA 2008 seeks the disapplication of legislative provisions for consents which would otherwise be required from the Environment Agency, internal drainage boards or lead local flood authorities under the Water Resources Act 1991 and the Land Drainage Act 1991. The consents referred to in 3(a), (b) and (c) are prescribed consents that can only be included in the DCO if the relevant discharging body consents. Please provide the full list of relevant discharging bodies and the current position in negotiations to secure their consent to this proposed disapplication.
DC3	Applicant	Do you intend to produce a schedule of maintenance activities as suggested by the MMO in their [RR-018] regarding Article 7?
DC4	Applicant	Can the outline landscape scheme and management plan referred to in Article 9 of the draft DCO [APP-010] be incorporated into the CoCP (Article 8) in its finally agreed form?
DC5	LAs as highway authorities	Can the highway authorities confirm they are content with the provisions of Article 11 of the draft DCO [APP-010] in respect of: The powers sought in respect of the Temporary Stopping Up of Streets, including provisions for providing pedestrian access and compensation.

Question to:		Question:
		<p>(a) The suggested time for notifying the undertaker of its decision of 28 days; and</p> <p>(b) The resources required to undertake these responsibilities.</p> <p>And if not state the reasons and the potential remedy?</p>
DC6	LAs as highway authorities	<p>Can the highway authorities confirm they are content with the provisions of Article 12 of the draft DCO [APP-010] in respect of:</p> <p>(a) The powers sought in respect of Access to Works.</p> <p>(b) The suggested time for notifying the undertaker of its decision of 28 days; and</p> <p>(c) The resources required to undertake these responsibilities.</p> <p>And if not state the reasons and the potential remedy?</p>
DC7	LAs as highway authorities	<p>Can the highway authorities confirm they are content with the provisions of Article 13 of the draft DCO [APP-010] in respect of:</p> <p>(a) The powers sought in respect of Agreements with Street Authorities.</p> <p>(b) The resources required to undertake these responsibilities.</p> <p>And if not state the reasons and the potential remedy?</p>
DC8	LAs as highway authorities	<p>Can the highway authorities confirm they are content with the provisions of Article 14 of</p>

Question to:		Question:
		<p>the draft DCO [APP-010] in respect of:</p> <p>(a) The powers sought in respect of carrying out highway improvements to the plot marked 133 on Land Plan Inset Plan 7/21.</p> <p>(b) The suggested time for notifying the undertaker of its decision of 28 days; and</p> <p>(c) The resources required to undertake these responsibilities.</p> <p>And if not state the reasons and the potential remedy?</p>
DC9	EA, Internal Drainage Boards and lead local flood authorities	<p>Article 15 of the draft DCO [APP-010] seeks powers in respect of the Discharge of Water in connection with the carrying out or maintenance of the project.</p> <p>(a) Can the appropriate authorities confirm they are content with the principles and provisions proposed in Article 15 and;</p> <p>(b) The suggested time for notifying the undertaker of its decision of 28 days?</p> <p>And if not state the reasons and the potential remedy?</p>
DC10	LAs as highway authorities	<p>Can the highway authorities confirm they are content with the provisions of Article 17 of the draft DCO [APP-010] in respect of:</p> <p>(a) The powers sought in respect of authority to enter on any land within the Order limits to carry out a range of functions in so far as they impact on the duties of the highway authorities; and</p> <p>(b) The suggested time for notifying the undertaker of its decision of 28 days in respect</p>

Question to:		Question:
		<p>of a highway or street authority; and</p> <p>(c) The resources required to undertake these responsibilities.</p> <p>And if not state the reasons and the potential remedy?</p>
DC11	Applicant	<p>Article 30 'Felling or lopping of tress and the removal of hedgerows' in the draft DCO [APP-010] is a wide power. Planning Inspectorate Advice note 15 on DCO drafting advises that the power to remove hedgerows should only be used for hedgerows that are present and are known to be likely to be removed and these should be identified in a plan or schedule. Para. 4.1.3 of the Hedgerow Report [APP-0110] reports that 24 of the 33 hedgerows surveyed in 2011 were categorised as important. Can the applicant explain why Article 30 is necessary and provide a plan identifying those hedgerows likely to be removed (and replaced) to be attached to the DCO in accordance with Planning Inspectorate Advice Note 15.</p>
DC12	Applicant, Harbour Master and Associated British Ports (ABP)	<p>In respect of Article 37, has the Harbour Master Humber agreed to this disapplication on behalf of Associated British Ports in its role of Humber Conservancy?</p>
DC13	Applicant	<p>NE feels that there is a need within the DCO for sandwave clearance to take place no closer than 50km from the shore because the effects have not been assessed within the ES. Do you agree with this?</p>
DC14	Applicant	<p>NE also feels that there is a need within the DCO to specify the maximum number of vehicle movements into the intertidal area, as 15 per day during cable installation, to ensure the impacts of the works do not exceed the maximum assessed level of disturbance in the</p>

Question to:		Question:
		Humber Estuary SPA. Do you agree with this?
DC15	Applicant, MMO and NE	In Requirement 2 how are the figures for maximum area and volumes of cable protection arrived at?
DC16	Applicant	(a) Do you intend to follow the MMO's recommendation that Requirement 21 includes the Undertakers of Hornsea Project 1 regarding co-operation in the laying of cables? (b) How will the interface between Hornsea Project 2 and Hornsea Project 1, and any other matters of mutual interest, be managed?
DC17	Applicant	In Requirement 5 how are the areas of scour protection arrived at; what is the average thickness of this protection?
DC18	Applicant	Has the applicant considered the need for a Requirement relating to air navigation safety, additional to Requirement 24 for North Coates airfield?
DC19	Applicant	NE consider that a new Requirement should be included in the DCO covering a method statement for the landfall aspects of the cabling works, including method of installation and access at the landfall. This to be submitted to the LPA and agreed in consultation with NE and the MMO. Do you agree with this?
DC20	Applicant	NE requires an 'In Principle Monitoring Plan' to be included in the DCO as a Requirement. Do you agree with this?
DC21	Applicant	Explain how the following topics are to be regulated within the DCO? (a) Artificial light emissions from the HVDC converter/HVAC substation site during its

Question to:		Question:
		<p>operational phase?</p> <p>(b) Restoration of land used temporarily for construction?</p> <p>(c) Emergency response plan in relation to both the Hornsea Project 2 installation and the adjoining National Grid and other power generation/transmission developments?</p> <p>(d) European protected species?</p> <p>(e) Detailed design approval of the onshore works including ensuring the project is carried out within the Order lands and to the design specifications set out in principle in the ES and to be agreed in detail by the local planning authorities?</p>
DC22	Applicant	With respect to dredging the MMO feel that additional text should be added to Condition 2(1) of the DMLs for clarity. Do you agree?
DC23	Applicant	Condition 7(10) (a) of the DMLs. The MMO is of the view that it is unclear how often notification will be made to the UKHO during the progress of Hornsea Project 2. Do you intend to amend this Condition to make this clear?
DC24	Applicant	Condition 8(8) of the DMLs. It is the opinion of the MMO that the onus should be on the undertaker to report to the MMO any of the materials not accounted for on the audit sheet. Do you agree?
DC25	Applicant	Condition 15(2) (a) of the DMLs. It is unclear to the MMO and the ExA what the objectives of a high resolution bathymetric and side scan sonar survey are. Please provide clarity.
DC26	Applicant	Conditions 15(2) (e) and 17(2)(c) of the DMLs state that the surveys will be undertaken in

Question to:		Question:
		parts of the wind farm area where construction is proposed or has been undertaken. The MMO feels that the use of buffers or reference areas may also be required. What is your view of this?
DC27	Applicant	The MMO is of the view that the proposed upper limit of maximum hammer energy used in piling should be inserted into Part 2 of the DMLs to ensure that this restriction is included as a fixed parameter. Do you agree with this?
DC28	Applicant	The MMO is concerned about missing debris remaining on the sea bed because of relying on the audit sheet and not accounting for items that may be lost through malfunction. Furthermore, there does not appear to be a Condition in any of the DMLs for reporting of any dropped objects. What is your view of these concerns of the MMO?

¹ National Federation of Fishermen's Organisations (NFFO), Holderness Coast Fishing Industry Group (HCFIG), Danish Fishermen Producer Organisation (DFFO), Belgium Fishermen's Organisations (Redercentrale), Cooperative Kottvisserji Nederland U.A (Visned), Radar Transponder Beacon (Racon)