

THE PLANNING ACT 2008

THE INFRASTRUCTURE PLANNING (EXAMINATION PROCEDURE) RULES 2010

Outer Dowsing Offshore Wind Farm

Appendix K2 to the Natural England Deadline 4 Submission Natural England's Response to The Examining Authority's Second Written Questions (ExQ2)

For:

The construction and operation of Outer Dowsing Offshore Wind Farm located approximately 54 km from the Lincolnshire Coast in the Southern North Sea.

Planning Inspectorate Reference EN010130

Appendix K2 to Natural England's Response and Comments to the Examining Authority's Second Set of Written Questions

This document sets out Natural England's (NE's) responses to the Examining Authority's second set of Written Questions (ExQ2) and requests for information published on 13 January 2025. Natural England has included responses on those questions directed by the Examining Authority and/or pertain to our remit.

ExQ2	Question to:	Question:	Natural England Response
GC Gen	eral and Cross-t	opic Questions	
1.	Design, param	neters and other details of the Proposed Developme	nt
Q2 GC 1.2	The applicant interested parties Environment Agency (EA)	National Planning Policy Framework and Legislation The applicant and interested parties are requested to provide comments on any updates or changes to UK Government legislation, policy, or guidance relevant to the determination of this application that	Q2 GC 1.2 Natural England refers the ExA to our Deadline 4 covering letter where we have highlighted recent changes to policy and guidance in relation to under water noise and benthic compensation. We will provide further advice
ı		have been issued since the submission of the application.	on the implications for this project at Deadline 5. In relation to the latest update to the National Planning
		To the applicant and interested parties:	Policy Framework (Dec 2024), Natural England has
		Please include a summary of the implications, if any, for this Examination.	reviewed and our advice remains unchanged. However, we do highlight the increase emphasis for all sectors to avoid and minimise impacts to designated sites.
		To the applicant and the Environment Agency (EA)	
		Paragraphs 173 to 175 of the revised National Planning Policy Framework 2024 outline a sequential, risk-based approach for individual applications in areas currently or potentially at risk from any form of flooding. Provide a summary of implications, if any, for this Examination with respect to Climate Change, Flooding and Coastal Change.	
		Note: Such updates should include, but need not be limited to, the National Planning Policy Framework published on 12 December 2024, the Clean Power 2030 Action Plan published on 13 December 2024,	

ExQ2	Question to:	Question:	Natural England Response
		and other recently published Ministerial statements and policy papers.	
Q2 GC 1.3	The applicant Relevant interested parties	Operational lifetime The applicant's response to ExQ1 DCO 1.9 [REP2-051] sets out that the applicant's assessments have assumed long-term impacts from the proposed development during its operational phase and that therefore its conclusions would apply for an operational lifetime that exceeds 35 years.	Q2 GC 1.3 Natural England notes the question asked by the ExA regarding the operational lifetime of the project and will review the Applicant's response. Natural England will then provide our position regarding this at the next appropriate deadline.
		In this response the applicant also provided a high-level summary of the position for each of the assessments it has carried out. The applicant's Environmental Impact Assessment Methodology [APP-060, paragraphs 50 and 51] determines the time period within which the ES has assessed that a given impact may be experienced. This methodology established that the operation period has been assessed as being up to 35 years.	
		The ExA notes that the applicant states in its response that it is not seeking a time-limited consent and the applicant's statement that it cannot precisely define the lifetime of the proposed development at this time. Nevertheless, the ExA requires clarity to establish what operational time period the applicant has assessed in its ES. For each of the topic areas listed in the applicant's response to ExQ1 DCO 1.9 [REP2-051] (as well as any others that may be relevant), provide signposting which indicates where	

ExQ2	Question to:	Question:	Natural England Response
		an operational lifetime in excess of 35 years has	
		been assessed in the ES and where the	
		methodology for such an assessment is set out.	
		Relevant interested parties are also invited to	
		comment on this matter, if appropriate.	
BE Bent	hic Ecology, Inte	ertidal, Subtidal and Coastal Effects	
Q2 BE	Natural	Updated reports	Q2 BE 1.2
1.2	England (NE)	The applicant has updated Chapter 9 Appendix 2 Benthic Ecology Technical Report [REP3-018] and the Offshore Export Cable Corridor (ECC) Sabellaria	Natural England refers the Examining Authority to our advice provided at Deadline 4 set out in Appendix C4.
		spinulosa Reanalysis Report [REP3-035] at D3 to address the request from NE in Appendix C of its Deadline 1 submission [REP1-059]. Provide a	While Natural England's concerns regarding the presence of existing reef are addressed, Natural England's position
		response and detail any implications arising from the consideration of these reports.	regarding supporting habitat and processes for Annex I Sabellaria spinulosa reef within Inner Dowsing Race Bank
			and North Ridge (IDRBNR) Special Area of Conservation (SAC) as advised in our relevant representations [RR-
			045] and at Deadline 1 [REP1-059] remains unchanged.
			Natural England advises the Applicant undertakes and
			submits into examination an assessment of supporting habitats and processes for potential Annex I Sabellaria
			spinulosa reef to demonstrate that the recovery of this
			feature will not be hindered by the installation of the
			export cable and provide the Secretary of State comfort an adverse effect on integrity to this site feature will be
			avoided.

ExQ2	Question to:	Question:	Natural England Response
Q2 BE 1.3	Natural England (NE)	Sandwave Levelling Study Provide a response to the applicant's Sandwave Study [REP3-047] and detail any implications arising from the consideration of this report.	Q2 BE 1.3 Natural England refers the Examining Authority to Natural England's Deadline 4 advice as set out in Appendix B2 to the Sandwave levelling Study [REP3-047].
Q2 BE 1.4	Natural England (NE)	Applicant's responses to NE The applicant's comments on ExQ1 responses [REP3-054] Table 1.2 signposts a number of documents where the applicant believes they have provided a response to NE's concerns. For example, "Point 4 of Tab B of the Risks and Issues log refers to the Maximum Design Scenario (MDS) seabed disturbance parameters for boulder clearance, pre-lay grapnel run, and UXO clearance. The applicant has responded to this point within Response B10 of Table 1.45.3.2 within PD1-071." • Comment on whether the responses the applicant refers to in Table 1.2 satisfy your concerns, and if not please detail specifically what is required. • In the next iteration of the Risk and Issues Log, please can NE elaborate on the commentary for unresolved issues where "no change" is cited for progression, having regard to the applicant's responses, where given? Please specify where remedy required by the applicant would go beyond NE's general advice that where the applicant considers issues to be resolved "an amendment or commitment will need to be included within the relevant secured named technical document or	Please refer to Annex 1 at the end of this document for Natural England's response to Table 1.2. from REP3-054. Please also see Appendix J4 – Natural England's Risk and Issues log submitted at Deadline 4, where additional information has been provided to assist the Applicant with issue resolution. Please note, where "no change" was cited for progression previously means that Natural England has not seen progression towards issue resolution, therefore Natural England's advice remains unchanged.

ExQ2	Question to:	Question:	Natural England Response
		plan and reviewed within the wider context of the Application".	
CM Civil	and Military Avi	ation and Communication	
Q2 CM 1.6	The applicant Natural England (NE)	Aviation and navigation lighting attracting birds The ExA notes the respective responses to ExQ1 CM 1.11 from the applicant [REP2-051] and NE [REP2-074]. The applicant refers to the "Use of white or green lights where possible" as mitigation. In contrast, NE state that "studies suggest that blue, green, and other "cool" colour temperature light may be more disruptive to seabirds than "warm' yellow, or red lights." The applicant's response [REP3-054] to NE's advice does not address this apparent conflict. To the applicant: • The applicant is invited to provide further comments on this matter and put forward revised mitigation, if appropriate. To NE: • NE is invited to comment on the applicant's position.	As noted in our ExQu1 response (Q1 CM 1.11), there is some evidence that 'warm' lighting is less disruptive to seabirds. However, we highlight that the evidence base on the impacts of different coloured lighting is not particularly strong, and further that those species most likely to be affected by lighting (e.g. Manx shearwater) are not at high risk from ODOW OWF, in this particular case we feel there is not a strong case for seeking warmer coloured lights, particularly if that should have any implications for aviation/navigation.
		ore Ecology, including Onshore Ornithology	
Q2 HOE 1.2	Natural England (NE)	Outstanding matters identified on NE's Risk and Issues Log The ExA notes NE's advice outlined in its covering letter to its deadline 3 submissions [REP3-066] that "Where the Applicant considers their response to be sufficient, we reiterate that for issues to be considered resolved, an amendment or commitment	Q2 HOE 1.2 Please see Appendix J4 – Natural England's Risk and Issues log submitted at Deadline 4, where additional narrative has been provided to assist the Applicant with issue resolution. For clarity, where "no change" was cited for progression previously means that Natural England

ExQ2	Question to:	Question:	Natural England Response
		will need to be included within the relevant secured named technical document or plan and reviewed within the wider context of the Application."	has not observed progression towards issue resolution, therefore Natural England's advice remains unchanged.
		The ExA also note that the applicant has provided responses to matters raised by NE, including in its response to NE's relevant representation [PD1-071], responses to ExQ1 [REP2-051] and in its comments on deadline 1 submissions [REP2-053]. However, it is not always clear how NE has considered the applicant's position when it comes to update its Risk and Issues Log. For example, the applicant has provided a detailed explanation of its position in relation to NE's advice on the use of a 200m buffer to assess impacts from construction dust where the onshore order limits pass close to a designated site (NE reference H1). However, the corresponding row on NE's Risk and Issues Log [REP3-074] merely	Where narrative has not been provided, for example H1, Natural England is seeking advice from specialists and will provide a further update at Deadline 5 Natural England understand the Applicant has provided comments to our previous submissions within documents [PD1-071, REP2-053, REP2-051, REP3-054 and REP3-037]. However, as set out in our covering letters and RR/WR [RR-045] until the clarifications/ statements/commitments are secured within the DCO/dML, updated ES Chapters, or named technical document and/or plan, Natural England cannot advise these issues are resolved.
		In response to ExQ1 LU 1.23 [REP2-074], NE did address the applicant's response to issues H19 and H22 from NE's Risk and Issues log appearing to indicate that it had no further concerns. However, the latest version of the Risk and Issues Log submitted at deadline 3 still show both issues as amber with "no change" recorded against progress.	Natural England has reviewed the updated OLEMS [REP-028] submitted at Deadline 3. Please refer to Appendix J4 Risks and Issues Log for updates on outstanding concerns and issues now resolved. Further narrative has been provided for outstanding RR issues as follows: H14 / H15/ H52 / H55 / H56 / H57 / H58 / H63 / H64 and H65. Outstanding concerns remain for lack of proposed mitigation presented within the OLEM for protected species and associated licences required.
		 Please provide clarification on the above In the next iteration of the Risk and Issues Log, please elaborate on the commentary for 	

ExQ2	Question to:	Question:	Natural England Response
		unresolved issues where "no change" is cited for progression, having regard to the applicant's responses, where given. Please specify where remedy required by the applicant would go beyond NE's general advice that where the applicant considers issues to be resolved "an amendment or commitment will need to be included within the relevant secured named technical document or plan and reviewed within the wider context of the Application" Please confirm the extent to which the Outline Landscape and Ecological Strategy (OLEMS) [REP3-028] as updated at deadline 3 resolves outstanding concerns.	
Q2 HOE 1.9	Natural England (NE) Lincolnshire County Council (LCC) East Lindsey District Council (ELDC) Boston Borough Council (BBC) South Holland District Council (SHDC)	Monitoring, aftercare and compliance audits Please provide comments on the applicant's response to ExQ1 HOE 1.14 [REP2-051], its feedback on other responses to ExQ1 HOE 1.14 [REP3-054], as well as the related updates to the OLEMS [REP3-028].	Natural England advises with respect to impacts to protected species where the Applicant is seeking wildlife licences, any habitat management and maintenance activities and post-development monitoring surveys required as specific conditions of any wildlife licence(s) will be fully finalised and secured via said licence(s) when issued. Natural England's Wildlife Licensing Service (NEWLS) has reviewed draft mitigation proposals for water vole and GCN and issued Letters of No Impediment (LONI) to confirm we are satisfied with the approaches being put forward for this project. As part of those mitigation strategies, the Applicant has committed to comply with best practice guidance, including with respect to management, maintenance and monitoring activities.

ExQ2	Question to:	Question:	Natural England Response
	Lincolnshire Wildlife Trust (LWT)		With respect to the Applicant's response to Q1 HOE 1.14, NEWLS welcomes the Applicant's commitment to undertake both pre-commencement surveys and further measures as required by any Natural England Protected Species Licence. The LONI responses as referred to previously, also set out where additional survey or monitoring effort will be required to support the formal wildlife licence applications following the granting of the project DCO.
HRA Hab	oitats Regulation	ns Assessment (HRA)	
1 HF	RA General Que	stions	
Q2 HRA 1.1	The applicant	Updates to the Report to Inform Appropriate Assessment (RIAA) As per the advice from Natural England (NE) in Appendix I2 of its deadline 3 submission [REP3-073], please update the Report to Inform Appropriate Assessment (RIAA) [AS1-095] to consider the second year of onshore bird data and NE's advice provided at deadline 1 [REP1-066] and deadline 3 [REP3-073] in relation to potential impacts and the need for further mitigation measures to remove the risk of an Adverse Effect on Integrity (AEoI) on the Wash Special Protection Area (SPA).	Q2 HRA 1.1 Natural England will review the Applicant's updated RIAA once submitted and will provide advice at the next appropriate deadline.
		Also, the offshore restricted build area (ORBA), that has now been accepted into the examination, has resulted in different predicted mortality predictions for a number of species such as guillemot, razorbill and kittiwake. The ExA is aware that action point 4	

ExQ2	Question to:	Question:	Natural England Response
		from ISH 2 [EV6-004] requires the applicant at deadline 4 to update the HRA and compensation documents to reflect the changes to figures as a result of the ORBA introduction and to ensure consistency of presentation for any updated figures with explanations where necessary.	
		In addition to this, for ease of comparison, the ExA requests that the applicant submits a summary document that contains all the appropriate figures that have been amended due to the introduction of the ORBA and a summary of the changes made to the assessments. This should include the predicted offshore and intertidal ornithological mortalities and any associated compensation requirements that have been amended to account for this.	
Q2 HRA 1.2	The applicant	Potential for Adverse Effect on Integrity on The Wash SPA Notwithstanding the above, the ExA notes that NE still identifies a risk of an AEoI on the Wash SPA as reiterated in Appendix I2 of its deadline 3 submission [REP3-073]. In order to take account of the potential situation whereby AEoI on the Wash SPA cannot be ruled out, please provide the necessary information for a derogation case on a 'without prejudice' basis.	Natural England believes that further mitigation measures could be adopted to negate the need for a derogations case. We have drawn the Applicants attention to advice provided into the Sheringham and Dudgeon Extension Project Examination which in part might be relevant for this project. Natural England will consider any further submissions by Applicant which set out how they intend to resolve this matter and advise accordingly.
Q2 HRA 1.3	The applicant and Natural England (NE),	The Applicant's Mid Examination Principal Issues Tracker The applicant's deadline 3 Mid Examination Principal Issues Tracker [REP3-052] would seem to be at odds with the position of NE in its latest Risk	Q2 HRA 1.3 Natural England highlights that due to the different RAG definitions being used by the Applicant in their Mid Examination Principal Issues Tracker and Natural

ExQ2 Question to:	Question:	Natural England Response
The Marine Management Organisation (MMO) and The Royal Society for the Protection of Birds (RSPB)	and Issues Log Deadline 3 [REP3-074] in that in [REP3-052] there are no matters that are colour coded as red (ie the interested party / parties and the applicant are unable to align their positions) whereas in [REP3-074] there are a number of	England's Risk & Issues (R&I) log they are not comparable. Also from our experience of such Trackers (e.g. Rampion 2 OWF's Statement of Commonality of Statements of Common Ground (SoCoSoCG)) the definitions used by Applicant's do tend to give an optimistic impression regarding the 'position gap' between the Applicant and Natural England. Therefore, we advise that the ExA should refer to Natural England PADSS and R&I in the first instance Natural England continues to advise the Applicant on how best to resolve Red/Amber outstanding issues in our R&I log, and we are hopeful of making further progress with resolving these.

ExQ2	Question to:	Question:	Natural England Response
		To the applicant, NE, RSPB and MMO: Based on the colour codings used and their definitions, is the applicant painting an overly-optimistic picture in [REP3-052] in regard to the outstanding disagreements with organisations such as NE, RSPB and the MMO and the likelihood of these matters being resolved during the remaining course of the Examination? If not, then please explain why?	
2 De	erogation Case a	and Compensation Measures	
Q2 HRA 2.1	Natural England (NE)	Assessment of the amount of guillemot and razorbill compensation	Q2 HRA 2.1
	The Royal Society for the Protection of Birds (RSPB)	In its deadline 3 submission Guillemot and Razorbill: Compensation Quanta [REP3-049] the applicant has expressed serious concerns about the multiplier effects that would give rise to what it considers to be a significant degree of over-precaution. In the Executive Summary of [REP3-049] the applicant contends that using NE's preferred approach would require the delivery of compensation for guillemot " at a scale in line with 17% of the English breeding population and to deliver compensation for razorbill at a scale in line with the global population" and that "a compensation calculation method that returns requirements at this scale cannot be considered fit for purpose and does not align with the appropriate use of the precautionary principle." Please comment on this and justify your approach to the calculation of compensation requirements in this	As stated in Appendix G1 of our Deadline 3 submission [REP3-071], Natural England consider that the Hornsea 3 part 2 method of calculating the scale at which compensation should be provided is the most ecologically valid because it takes into consideration the need for the new breeders to recruit into the National Site Network as well as the need for the Artificial Nesting Structures (ANS) to be self-sustaining. Notwithstanding this, the calculation of compensation quanta relies heavily on the use of demographic rates such as productivity, survival/mortality and in the case of the Hornsea 3 part 2 method, natal dispersal or philopatry rate. For some species, published rates for some of these parameters are based on a single or small number of studies and we may therefore have low confidence in their validity or applicability to the species or region in question.

ExQ2	Question to:	Question:	Natural England Response
			As we have been unable to replicate the Applicant's calculations, Natural England have been in discussion with the Applicant around the issues highlighted in their deadline submission REP3-049 with regards to the high compensation requirements generated when using the Hornsea 3 part 2 approach. We are awaiting further detail regarding the way in which these values have been calculated, including the specific demographic rates used within the calculations and the calculations themselves. This will assist Natural England in determining whether the high values outlined in REP3-049 are as a result of the demographic parameters used to calculate the requirement or the calculation/formula used. However, as noted in Appendix G1 of our Deadline 3 submission [REP3-071], a pragmatic approach is needed to compensation calculations. Natural England has no intention of setting unachievable targets for the project's compensatory measures.
Q2 HRA 2.3	Natural England Royal Society for the Protection of Birds	Non-material change to the Order regarding lead-in time for Offshore ANS for kittiwakes On 27 November 2024 the applicant indicated in [REP2-064] that it would seek to reduce the lead-in time for the provision of the proposed offshore artificial nesting structures (ANSs) from 3 years down to 2 years. The applicant has provided its Lead-in periods for kittiwake breeding on Artificial Nesting Structures [REP2-060] to provide justification for its proposal. Comment on the acceptability of this proposed reduction and whether, in your view, this would affect in any way the methodology regarding the	Q2 HRA 2.3 Natural England refers the ExA to our advice submitted to the Applicant on 23 January 2025 in response to their Change Consultation request and Natural England's advice provided at Deadline 4 in Appendix G2. Once the additional material requested by Natural England is provided, we will be able to advise the ExA further on this matter. More generally, where it is unavoidable that the benefits of a compensatory measure are not predicted to arise until after the impacts commence, guidance indicates that this should be factored into the design of the measures e.g. multiple interventions, increased level of provision.

ExQ2	Question to:	Question:	Natural England Response
		calculation of the proposed compensation measures for the kittiwake feature of the FFC SPA. If so, then please stipulate what updates to the assessment methodology you would wish the applicant to undertake and which of the submitted examination documents would require updating as a result.	The Applicant's presentation of a range of ratios and calculations has the potential to facilitate that consideration.
LU Land	l Use, Geology a	nd Ground Conditions	
Q2 LU 1.2	Natural England (NE) Lincolnshire County Council (LCC)	Agricultural Land Classification (ALC) survey The applicant's response to ExQ1 LU 1.7 [REP2-051], identifies examples of other Nationally Significant Infrastructure Projects (NSIPs) being approved by the Secretary of State (SoS) prior to ALC surveys being undertaken. In the case of the Hornsea Four Offshore Wind Farm, the applicant also points to the advice given by NE at the time which, whilst expressing a preference for pre- consent ALC surveys, accepted that the matter could be addressed via a planning condition. NE and LCC are invited to comment on whether the approach taken on other NSIPs in terms of the timing of ALC surveys has any implications for their respective positions on this matter.	Natural England advises that for this project which is likely to impact on Best and Most Versatile Agricultural Land the soil survey is essential and should to be completed pre-consent to inform the Environmental Impact Assessment (EIA), Micrositing, soil handling (within Soil Management Plan (SMP)) and restoration criteria. Para 4.2.3 PPG Renewable and low carbon energy contains advice in relation to greenfield land which should be referred to in the Preliminary Environmental Information Report (PEIR) and Environmental Statement (ES), namely i) 'whether the proposed use of agricultural land has been shown to be necessary and poorer quality land has been used in preference to higher quality land'; and ii) the proposal allows for continued agricultural use where applicable and or encourages biodiversity improvements around arrays. The PPG also draws attention to two ministerial statements which provide planning authorities with further advice about protecting the best agricultural land. The ES should present the detailed and semi-detailed ALC survey information. This should include a breakdown of the ALC grades (area, %) in relation to the application

ExQ2	Question to:	Question:	Natural England Response
			site boundary and include ALC and soil data for the cable route and areas of permanent infrastructure and habitat enhancement. A breakdown of the proposed site into disturbed and undisturbed land categories should also be included, split by ALC grade, to help illustrate the potential for impact on agricultural land grade.
			This site-specific detail informed through a site survey is required to assist the decision maker to reach a decision and apply the National Policy Statement for Renewable Energy Infrastructure (EN-3).
Q2LU 1.1	The applicant	Peat identification and management	Q2 LU 1.5
	Natural England (NE)	The ExA notes that the applicant accepts that the information provided by NE in response to ExQ1 LU 1.9 "may indicate that peat may be present in the area of the Order Limits ECC Section 6 crossing into Section 7" but that the presence of peat would be confirmed in the pre-construction soil surveys [REP3-054]. In response to NE's ExQ1 LU 1.9 submission, the applicant states that if peat is identified, mitigation measures be included within the final SMP or a separate Peat Management Plan, if required. In its own response to ExQ1 LU 1.9 [REP2-051], the applicant also refers to the oCoCP being updated to include a commitment for a peat management plan should peat be identified, post consent. However, as peat is not mentioned at all in the current oCoCP [REP3-021], outline Soil Management Plan (oSMP) [REP3-023] or dDCO [REP3-007], it is not clear how the commitment to provide mitigation, if necessary, is secured.	Natural England advises that the soil resource survey will also enable the accurate identification of the extent and boundary of peat and peaty soils for the baseline. Where peat soils are identified, a peat survey should be undertaken to determine the depth and condition of the peat. The Scottish Government, Scottish Natural Heritage, SEPA (2017) Peatland Survey: Guidance on Developments on Peatland, is referred to in both Chapter 13 and Appendix 13A. This guidance states that at scoping, a low-resolution peat survey should be undertaken to determine the depth of the peat at a density of 100m x 100m on a regular grid pattern across the whole area proposed for development, which is consistent with the survey frequency of the detailed ALC survey. Where deep peat soils supporting peat habitat are identified, a higher resolution survey may be necessary. Natural England would welcome the invitation to agree the ALC and soil resource (including peat) survey

ExQ2 Question to:	Question:	Natural England Response
	Should the oCoCP, dDCO and/or the oSMP be updated now to ensure that mitigation is secured, should the need arise? If not, why not?	Natural England welcomes the proposal to prepare a Soil Management Plan (SMP) and a Peat Management Plan (PMP). However, an outline SMP should be provided as part of the consent and should contain site-specific soil mitigation measures in line with the Defra Construction Code of Practice for the Sustainable Use of Soils on Construction Sites (publishing.service.gov.uk). The embedded measures and best practice for the protection of peat soils needs to be set out in detail in the PMP in line with the SEPA Guidance on the Assessment of peat volumes, reuse of excavated peat and minimisation of waste: guidance - gov.scot (www.gov.scotwww.gov.scot). Although aimed at windfarms in Scotland, the principles apply to all developments on peat and this needs to be referred to and drawn from. Natural England advocates the use of best practice on all restoration, particularly given the linear nature of the ODOW proposal. Natural England advises the use of the peat hierarchy. Peat performs an important role in carbon storage and water catchment management, and development on peat should be avoided as far as practicable. The reuse of the surplus peat resources should be secured in the PMP; and the re-use of mineral soil resources should be secured in the SMP. These definitions are used on soil maps, including the Soil Survey of England and Wales Lowland Peat Survey ^(a) , the National Soil Map (see Webmap2) and other more detailed soil maps, published by the Soil Survey of England and Wales Isand

ExQ2	Question to:	Question:	Natural England Response
			Classification system (MAFF,1988)., which is used by Natural England to support its statutory planning remit also uses these definitions, as does Natural England for the England Peat Map, currently in development.
Q2 OR	hore and Intertid	Over-precaution and the application of the	Q2 OR 1.2
1.2	England (NE) and The Royal Society for the Protection of Birds (RSPB)	precautionary principle in relation to the assessment of collision and displacement effects In its deadline 2 submission 'Levels of precaution in the assessment and compensation calculations for offshore ornithology' [REP2-057] and also in sections 3 and 4 of the Guillemot and Razorbill: Compensation Quanta [REP3-049] the applicant has set out what it considers to be a number of elements of methodological precaution. Whilst the applicant accepts the need for a precautionary approach, it contends that when taken together these layers of precaution would result in assessment outputs that are "unrealistic compared to the environmental risk in question" and which are "likely to result in a requirement for considerable over-compensation" due to the compounding of multiple precautions. " Please comment on the applicant's argument that has been set out in [REP2-057], and in particular justify the position that all the elements of precaution are required to be considered together in the assessment of potential impacts. Highlight any	Please refer to Appendix F3 at Deadline 4. We wish to emphasise that Natural England generally takes a range-based approach to considering impacts that have a significant amount of certainty associated with them. For example, by asking Applicants to present a range of displacement and mortality rates when considering displacement impacts or considering the confidence limits for collision risk assessments as well as central impact values in our integrity judgements. We consider this approach better reflects the level of uncertainty inherent in the assessments of OWF impacts, in turn allowing the decision-makers to, as the Applicant puts it, 'make a reasonable assessment of the associated risk using the best scientific evidence available'. We consider a range-based approach better reflects the purpose of the precautionary principle, rather than requiring decision-makers to base their decisions on single impact values that have a high risk of false precision associated with them.

ExQ2	Question to:	Question:	Natural England Response
		available evidence to support the view that all of these levels of precaution are reasonably likely to be applicable at the same time?	
		Furthermore, in section 2 of [REP3-049] the applicant has provided its interpretation of how the precautionary principle should be applied. Comment on this.	
SV Seas	scape and Visual		
Q2 SV 1.1	The applicant Natural England (NE) Lincolnshire County Council (LCC)	Duty to further the purposes of National Landscapes The ExA notes the respective responses from the applicant [REP2-051], LCC [REP2-069] and NE [REP2-074] to ExQ1 SV 1.1. On 16 December 2024, the Department for Environment Food and Rural Affairs (DEFRA) published new guidance on the duty to further the purpose of National Landscapes. To NE and LCC: Please comment on whether the new DEFRA guidance has any implications for responses to ExQ1 SV 1.1.	Q2 SV 1.1 Natural England advises that we do not consider the new guidance of the LURA duty has any implications for the proposal, given our conclusions regarding the absence of impacts to designated landscapes.
		Please provide comments on NE's position as set out in its response to ExQ1 SV 1.1 that the duty does not apply as the project "will not be having significant impacts on the setting of the designated landscape"?	

Annex 1 ExA Q2 BE 1.4 Response to the Applicants comments on ExQ1 responses [REP3-054] on benthic ecology, intertidal, subtidal and coastal effects

[REP3-054]	Table 1.2: Benthic Ecolo	I Effects	Natural England's position	
Question ID	Question	Natural England's Response at Deadline 2	ODOW's comments on Deadline 2 response	
Q1 BE 2.2	Environmental Statement (ES) conclusions The Applicant in ES Chapter 7 Marine Physical Processes [APP-062], Chapter 8 Marine Water and Sediment Quality [APP-063 superseded by AS1-038] and Chapter 9 Benthic and Intertidal Ecology [APP-064] concludes no likely significant effects. The ExA notes NE's concerns in relation to the assessment and conclusions in relation to Sabellaria Spinulosa reef and Sandbanks. For all other issues in these Chapters, in Environmental Impact Assessment (EIA) terms does NE agree with the Applicant's conclusions of no	Until further information and mitigation commitments are provided by the Applicant as set out in our Relevant/Written Rep [RR-045] Natural England is unable to advise further on the significance of impacts on marine processes and benthic receptors in relation to the EIA. We also draw the ExA attention to Natural England's Deadline 1 Appendix B1 [REP1-058] where we provide further advice on EIA concerns with regards to; - Potential changes to sediment transport processes and seabed morphology (including seabed level changes) over the lifetime of the Project; and - remaining uncertainty regarding impacts to the Lincolnshire Coast Submerged Forest and future coastal behaviour/change should the beach management strategy change and beach nourishment cease.	Potential changes to sediment transport processes and seabed morphology The Applicant has provided a detailed response to Natural England's Deadline 1 Appendix B1 (REP1-058) in The Applicant's Comments on Deadline 1 Submissions (REP2-053). This includes responses to issues raised in relation to potential changes to sediment transport processes and seabed morphology (including seabed level changes) over the lifetime of the Project. Lincolnshire Coast Submerged Forest Local Geological Site (LGS) The Applicant has provided a response in Row B22, Table 1.45.3.2 of the Applicant's Response to Relevant Representations (PD1-071). The Lincolnshire Coast Submerged Forest LGS has been considered within Chapter 23 Geology and Ground Conditions (6.1.23) (APP-078). The use of Horizontal	As set out below Natural England (NE) is currently unable to agree with the Applicant's Environmental Impact Assessment (EIA) conclusions: 1. MDS Changes to Seabed Levels Natural England advises that the Applicant assesses seabed disturbance impacts due to precable installation/seabed preparation activities such as pre-lay grapnel run, Unexploded Ordnance (UXO) clearance, boulder clearance. The Applicant also needs to assess seabed level changes due to cable repair and replacement. 2. Seabed Mobility and Bedform Migration Direction and Rates In document [REP2-053] the Applicant maintains that the windfarm layout as represented in the original Environmental Statement (ES) modelling [APP-151] and revised modelling [PD1-084] is the realistic Worst Case Scenario (WCS) for the Marine Physical Processes impact assessment. However, the Seabed Mobility

[REP3-054]	Table 1.2: Benthic Eco	ology, Intertidal, Subtidal and Coasta	l Effects	Natural England's position
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	likely significant effects? If not, why not?	Natural England also highlights that further responses to this question will need to take into account potential impacts to marine processes from the implementation of the ORBA Change Request should it be accepted.	Directional Drilling (HDD) for landfall installation will avoid interaction with any surface features located between the entry and exit points of the drill, therefore interaction with any exposures or near-surface layers of submerged forest within the intertidal zone and within 500m of Mean Low Water Springs (MLWS) will be avoided. Detailed targeted site investigation will inform the final detailed design and will be carried out prior to construction.	Report [APP-152], highlights the potential for large bed elevation changes in some areas that could in turn affect infrastructure stability. This means_that uncertainty remains regarding the realistic worst case scenario layout, as modelled. Owing to this uncertainty, we advise the Applicant will need further information (e.g. bathymetric data, bedform stability, seabed stability) to validate the EIA assumptions and support EIA conclusions.
			Future coastal behaviour/change The Applicant has provided a response in Row B23, Table 1.45.3.2 of PD1-071. The Applicant does not consider that coastal change rates in the complete absence of beach nourishment provides a realistic worst-case scenario (WCS) for the purposes of assessment. If beach management were to be stopped in the area (an unrealistic worst case), the scale of potential changes in the shoreline are such that any effects attributable to the project would be	3. Coastal Behaviour/Nearshore Sediment Transport — We advise that further clarification is needed regarding the WCS parameters for cable protection measures within the shallow nearshore (specifically maximum cable protection height, area, and volume). This will help inform the assessment of impacts on coastal processes and morphology. We also note that uncertainty exists
			unobservable. The Applicant notes that the concern raised by the Environmental Agency as far as the consideration of the ongoing beach replenishment works was primarily	regarding long-term beach management and future coastal change at landfall. Continuation of beach nourishment in the long-term is not guaranteed and the beach

[REP3-054]	Table 1.2: Benthic Ecole	Natural England's position		
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			associated with positioning of the cable joint bays (i.e. onshore infrastructure, rather than coastal processes implications) and as such the Applicant considers this matter resolved with that organisation (point 4.3 of the Environmental Agency Written Representation REP1-048). As outlined in REP2-053 (Row B1.1, Table 1.2), the Applicant considers that potential impacts to Marine Physical Processes receptors have been appropriately considered within the Environmental Report for the Offshore Restricted Build Area (ORBA) and Revision to the Offshore Export Cable Corridor (ECC) (PD1-081).	management strategy may change over the lifetime of the project. If beach nourishment were to cease at landfall, then there could be a period of rapid beach erosion, potentially affecting coastal receptors. However, we note that the Applicant has committed [REP2-051] to install landfall cables at a depth of approximately 15-17m and approximately 11-12m deep under the beach, as discussed with the Environmental Agency (EA). While this is a positive step, it remains unclear where this commitment is secured. This commitment needs to be included in a named plan/document. We advise that the Applicant should continue to liaise with the EA through the lifetime of the Project, and should the beach management strategy change, they will need to assess the potential for beach elevation change and coastal retreat rates. The Applicant does not appear to have considered the potential for sink hole formation during cable

[REP3-054]	Table 1.2: Benthic	al Effects	Natural England's position	
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		Deadline 2	response	4. Lincolnshire Coast Submerged Forest - There remains an erosional pathway to this important geological feature below the surface. Therefore, Natural England advises that the Applicant will need to establish the depth below the present beach that this feature can be encountered to avoid damaging this sensitive and scarce feature. Thus, we advise that this avoidance should be committed to and secured in a named document or plan. 5. Seabed Scouring We remain concerned that the highly mobile seabed conditions across the array survey area could present a significant risk to both marine process receptors and asset integrity in terms of seabed scour.
				Furthermore, scouring around Gravity Base Structures (GBS) or suction caissons is not well
				understood. Therefore, we advise that post-construction monitoring should be carried out to test the assumptions made in the ES.

[REP3-054]	Table 1.2: Benthic Ecolo	ogy, Intertidal, Subtidal and Coasta	l Effects	Natural England's position
Question ID	Question	Natural England's Response at Deadline 2	ODOW's comments on Deadline 2 response	
				This advice has also been provided in our updated Risk and Issues Log at Deadline 4, Appendix J4.
Q1 BE 2.3	Suspended Sediment Concentration and Seabed Level Changes NE's Relevant Representation (RR) [RR-045 NE Ref B1] states that 'Natural England is concerned that impact pathways to key receptors due to construction-related suspended sediment concentration (SSC) and seabed level changes have not been thoroughly considered by the Applicant.' The Applicant has responded [PD1- 071 NE Ref B26]. Is NE satisfied with the response? If not, please detail specifically what is required.	Natural England draws the ExA to Rows/Points 4 and 19 on Tab B of our Risks and Issues long where we highlight that this issue remains unresolved. Clarification is needed on the MDS seabed disturbance parameters for boulder clearance, prelay grapnel run and UXO clearance.	As stated by the ExA, the Applicant has responded to Natural England's Relevant Representation (RR-045 NE Ref B1) within Response B1, B25, and B26 of Table 1.45.3.2 within The Applicant's Responses to Relevant Representations (PD1-071). As outlined, all Marine Physical Processes receptors (as identified in Section 7.10 of APP-062) are insensitive to increases in SSC resulting in elevated turbidity and consequential changes to seabed levels. This approach is outlined in Section 7.12.1 of APP-062 and is in line with industry best practice for Marine Physical Processes. The potential for these changes to impact other EIA receptor groups (i.e. Non-Marine Physical Processes receptors) is considered elsewhere within the ES, where appropriate. Point 19 of Tab B of the Risks and Issues log refers to this point, which the Applicant considers has been appropriately addressed.	Natural England is in agreement with the Applicant that construction-related elevations in Suspended Sediment Concentrations (SSCs) are primarily a concern for impacts to ecological receptors. However, associated seabed level (or sediment type) changes due to subsequent sediment deposition, could affect sediment transport processes and lead to morphological change. Owing to uncertainties regarding seabed mobility and seabed recovery, it is unclear whether significant changes to seabed topography (e.g. due to material disposal) could influence patterns of sediment transport, alter sediment composition, and cause morphological change. This could have implications for designated features. Consequently, we advise post-construction monitoring should be used to demonstrate seabed recovery and to validate ES predictions. Please also see our advice in Appendix B2 of our

[REP3-054]	[REP3-054] Table 1.2: Benthic Ecology, Intertidal, Subtidal and Coastal Effects			Natural England's position
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			Point 4 of Tab B of the Risks and Issues log refers to the Maximum Design Scenario (MDS) seabed disturbance parameters for boulder clearance, pre-lay grapnel run, and UXO clearance. The Applicant has responded to this point within Response B10 of Table 1.45.3.2 within PD1-071.	Deadline 4 submission regarding the Applicant's Sandwave Levelling Study [REP3-047].
Q1 BE 2.4	Operations and Maintenance Activities Is NE satisfied with the Applicant's response to its concerns relating to the effects of operations and maintenance activities on marine physical processes? [PD1-071 NE Ref B4] If not, please detail specifically what is required.	Natural England notes that the Applicant considers that the spatial impact generated by Operation and Maintenance (O&M) activities will be lower than the Maximum Design Scenario (MDS) for construction activities, thus there will be no significant effects and in turn no need to assess them [PD1-071, NE Ref B4 (and B19)]. Natural England advises that operation and maintenance activities may exert the same pressures on the environment as those activities carried out during the construction phase. However, the O&M activities may compound existing pressures impacting upon marine processes and in turn protected features. We advise that, unless it can be otherwise demonstrated, O&M activities have the potential	The Applicant has provided a response in Row B19, Table 1.45.3.2 of the Applicant's Response to Relevant Representations (PD1-071). The Applicant consider that based on the spatial and temporal scale, as well as potential frequency of repair/reburial events, O&M activities will not be of greater scale than the MDS assessed and are not considered likely to compound existing pressures (beyond that already assessed). The Applicant therefore considers the assessment presented in APP-062 to be appropriate.	Natural England welcomes the Applicant's signpost to further information on the cable repair and replacement WCS in [APP-275]. However, the potential impact to marine process and benthic receptors due to cable repair and replacement activities has not been fully considered or assessed. Therefore, we advise that if cable repair and replacement activities are deemed necessary over the lifetime of the Project, the Applicant should commit to providing the WCS impact on each affected marine process receptor (e.g. sandbanks), benthic receptor and assess the impact. Furthermore, in line with NE/ Joint Nature Conservation Committee (JNCC) (2022) subsea cable best practice guidance pressures during the Operation and Maintenance

[REP3-054] Table 1.2: Benthic Ecology, Intertidal, Subtidal and Coastal Effects			Natural England's position	
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		Consequently, we advise that this needs to be taken into account for relevant environmental assessments.		(O&M) phase are likely to compound existing pressures to features and therefore have the potential to slow the ability of the feature to recover. Consequently, we advise that these impacts should be assessed for remedial and maintenance activities which may affect marine process receptors (e.g. seabed morphology).
Q1 BE 2.5	Scour Volumes Maximum Design Scenario (MDS) Is NE satisfied with the Applicant's response to its concerns relating to the results of the scour assessment for the Wind Turbine Generator (WTG) foundations? [PD1- 071 NE Ref B8] If not, please detail specifically what is required.	The Applicant has clarified the rationale for providing an estimate of scour depth, radius, and volume for only 65% of Wind Turbine Generators (WTG) locations. No scour estimates have been provided for the remaining 35% of WTG locations because no scour is expected to develop here. Natural England is therefore satisfied with the Applicant's response in relation to scour protection around turbines but advise that these scour predictions should be validated through monitoring to ensure there are no unexpected changes.	This comment is welcomed by the Applicant. Post-construction asset monitoring will be undertaken, as secured in condition 19, Part 2 of the deemed marine licence at Schedule 10 of the DCO. Changes in bedform topography, including scour processes, will be monitored at the post-construction phase, as stipulated within the Offshore In-Principle Monitoring Plan (APP-276).	This specific issue is resolved. Please see our advice in Appendix B1 of our Deadline 1 submission. Reference B8.
Q1 BE 2.6	Cumulative Assessment Can the Applicant please explain in further detail why it has not used the recommended NE	The NE/ Joint Nature Conservation Committee (JNCC) tiered system for scoping projects into cumulative/in-combination assessments is more detailed with seven tiers as opposed to the	As stated in Response Q1 BE 2.6 of Table 1.2 in REP2-051, the Applicant maintains that the 3-tier approach, as recommended by PINS Advice Note 17 – Cumulative Effects Assessment (the version of the advice note which	In Natural England's response to the ExA Q1 BE 2.6, we advised that the NE/JNCC tiered system for scoping projects into cumulative/incombination assessments is more detailed with seven tiers as opposed

[REP3-054]	Table 1.2: Benthic Ecolo	Natural England's position		
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	and Joint Nature Conservation Committee (JNCC) best practice? [PD1- 071 NE Ref B20]. Can NE explain the difference between the Applicant's current approach and NE's recommended best practice and the likely implications of not following the best practice?	three-tier approach adopted by the Applicant. This has implications for the projects and level of data included and considered in the cumulative impact assessment (EIA) and in-combination assessment (HRA). For example, Tier 1 in the NE/JNCC system includes built and operational projects where they have not been included in the environmental characterisation survey, i.e. they were not operational at the time the baseline surveys were undertaken and/or any residual impacts may not have yet fed through to, and been captured in, estimates of baseline conditions. Conversely, the Applicant's Tier 1 includes projects under construction, plus permitted and submitted applications. A further difference between the two approaches, is that the NE/JNCC best practice recommends including a figure or map showing the location of projects scoped into the cumulative assessment from across the wider region, in addition to a further figure or map showing this information overlaid with designated site boundaries or	was in place at the time of application) and which continues to be recommended by Nationally Significant Infrastructure Projects: Advice on Cumulative Effects Assessment (Planning Inspectorate, 2024) is appropriate. The Applicant has undertaken a robust cumulative assessment which takes into account the level of certainty of each third party project and level of detail available to allow an assessment to be undertaken. The Applicant wishes to highlight that neither the recently consented Sheringham and Dudgeon Extension project (Equinor 2022). nor Hornsea Project Four (Orsted, 2021) used the seven-tiered approach recommended by Natural England for their Marine Physical Processes assessments. The Applicant is clear that Planning Inspectorate guidance more appropriately identifies best practice in this case. Updates to Figure 7.27 of APP-094 could be provided, however the Applicant would note that designated site boundaries are presented in Figure 7.9 (APP-093) and Annex I sandbanks are presented in Figure 7.8 (APP-093). These could be added to Figure 7.27 however the	to the three-tier approach adopted by the Applicant. This has implications for the projects and level of data included and considered in the cumulative impact assessment (EIA) and incombination assessment (HRA). For example, Tier 1 in the NE/JNCC system includes built and operational projects where they have not been included in the environmental characterisation survey, i.e. they were not operational at the time the baseline surveys were undertaken and/or any residual impacts may not have yet fed through to, and been captured in, estimates of baseline conditions; and Tier 2 in the NE/JNCC system, encompasses Tier 1 + projects under construction which includes Tier 1 data, but not post-construction survey data. For comparison, the Applicant's Tier 1 includes projects under construction, plus permitted, and submitted applications (i.e. the NE/JNCC tiered approach is more detailed). A further difference between the two approaches, is that the NE/JNCC best practice recommends including a figure or map showing the location

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		other important areas for protected habitats and species. It is also useful to identify receptors. However, with regards to the marine physical processes impact assessment [APP062], the figure showing the projects included in the cumulative impact assessment did not overlay designated site boundaries (plus buffer) or other important areas/features for protected species/habitats or marine processes receptors.	Applicant considers that the resulting figure would be difficult to interpret due to the quantity of features being depicted on one figure. Furthermore, it would not result in any change to the conclusions of the assessment provided in Section 7.13 of APP-062.	of projects scoped into the cumulative assessment from across the wider region, in addition to a further figure or map showing this information overlaid with designated site boundaries or other important areas for protected habitats and species. It is also useful to identify receptors. However, with regards to the marine physical processes impact assessment [APP-062], the figure showing the projects included in the cumulative impact assessment did not overlay designated site boundaries or other important areas/features for protected species/habitats or marine processes receptors. We note the Applicant's response [REP3-054] on this matter, that updates to Figure 7.27 of [APP-094] could be provided, however, an updated figure is unlikely to change the impact assessment conclusions.
Q1 BE 2.8	Secondary Scour The Applicant has highlighted the relative lack of evidence (numerical, empirical and post monitoring studies) concerning	Natural England advises that whilst we welcome the further evidence provided by the Applicant, we are not currently satisfied that secondary scour and the need for further scour prevention is appropriately assessed. Natural England acknowledges the relative lack of	As outlined in Response B31 in Table 1.45.3.2 of PD1-071, secondary scour has been considered within Section 7.12.2.2 of APP-062 with evidence provided from Hornsea One Offshore Wind Farm (OWF) in the absence of empirical assessment methodologies. Given the lack of	Natural England remains concerned that the highly mobile seabed conditions across the study area could present a significant risk to both marine process receptors and asset integrity in terms of seabed scour. Furthermore, scouring around GBS or suction caissons is not well understood. Therefore, we advise

[REP3-054]	Table 1.2: Benthic Ecolo	Natural England's position		
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	secondary scour formation. - Is NE satisfied with the Applicant's justification of evidence the Applicant has used? [PD1-071 NE Ref B31] - If not, what evidence would NE like to see the Applicant use?	evidence regarding secondary scour formation and prediction. We also welcome the rationale provided by the Applicant for the use of Hornsea One as a suitable analogue with regards to potential secondary scour effects. The Applicant reports the relatively minor changes in bathymetry around foundations that may indicate secondary scour processes. However, it is unclear whether the degree of seabed mobility across the Hornsea One windfarm site is comparable to the areas of high seabed mobility at ODOW and in particular the turbine layout included in the ORBA Change Request should it be accepted by the ExA.	evidence regarding secondary scour formation, the Applicant maintains that Hornsea One is an appropriate analogue due to similar hydrodynamic forcing and ground conditions. The Applicant would like to clarify that the potential windfarm layout presented as part of PD1-081 is the most realistic WorstCase Scenario for the purposes of numerical modelling for hydrodynamic blockage effects and should not be interpreted as a confirmed final layout. The evidence provided for secondary scour within Section 7.12.2.2 of APP-062 has been provided in relation to the potential environmental effect of the secondary scour only.	that post-construction monitoring should be carried out to test the assumptions made in the ES.