

Outer Dowsing Offshore Wind

The Applicant's Comments on Deadline 1 Submissions

Deadline 2

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Acronyms & Definitions

Abbreviations / Acronyms

Abbreviation / Acronym	Description
ADDs	Acoustic Deterrent Devices
AEoI	Adverse Effect on Integrity
ANS	Artificial Nesting Structure
AON	Apparently Occupied Nests
APFP	Applications: Prescribed Forms and Procedure
CRM	Collision Risk Modelling
DAS	digital aerial surveys
Defra	Department for Environment, Food and Rural Affairs (Defra, not DEFRA)
EC	European Commission
ECC	Export Cable Corridor (offshore ECC or indicative onshore ECC)
EIA	Environmental Impact Assessment
EIA	Environmental Impact Assessment
ES	Environmental Statement
ES	Environmental Statement
ExA	Examining Authority
ExA	Examining Authority
FFC	Flamborough and Filey Coast
FLCP	Fisheries Liaison Cooperation Plan
GIS	Geographic Information System
HPAI	Highly Pathogenic Avian Influenza
HRA	Habitats Regulations Assessment
HRA	Habitats Regulations Assessment
IFCA	Inshore Fisheries and Conservation Authorities
iPCoD	Interim Population Consequences of Disturbance
JNCC	Joint Nature Conservation Committee
KJ	Kilojoule
LBBG	Lesser Black-Backed Gull
LSE	Likely Significant Effect
MDS	Maximum Design Scenario
MMMP	Marine Mammal Mitigation Protocol
MMO	Marine Management Organisation
MMObs	Marine Mammal Observers
NAFs	Nocturnal Activity Factors
NAS	Noise Abatement Systems
NFFO	National Federation of Fishermen's Organisations
O&M	Operation and Maintenance
ORBA	Offshore Restricted Build Area
ORCP	Offshore Reactive Compensation Platform
OTE	Outer Thames Estuary

Abbreviation / Acronym	Description
OWF	Offshore Wind Farm
PAM	Passive Acoustic Monitoring
PEIR	Preliminary Environmental Information Report
PTS	Permanent Threshold Shift
PVA	Population viability analysis
RIAA	Report to Inform Appropriate Assessment
RIAA	Report to Inform Appropriate Assessment
RTD	Red Throated Diver
SAC	Special Area of Conservation
SMRU	Sea Mammal Research Unit
SNCB	Statutory Nature Conservation Bodies
SPA	Special Protection Area
UK	United Kingdom
UWN	Under Water Noise
UXO	Unexploded ordnance
WCS	Worst Case Scenario
WNNC	Wash and Norfolk North Coast
WTG	Wind Turbine Generator

Terminology

Term	Definition
Array area	The area offshore within which the generating station (including wind turbine generators (WTG) and inter array cables), offshore accommodation platforms, offshore transformer substations and associated cabling will be positioned.
Baseline	The status of the environment at the time of assessment without the development in place.
Cumulative effects	The combined effect of the Project acting additively with the effects of other developments, on the same single receptor/resource.
Cumulative Impact	Impacts that result from changes caused by other present or reasonably foreseeable actions together with the Project.
Deemed Marine Licence (dML)	A marine licence set out in a Schedule to the Development Consent Order and deemed to have been granted under Part 4 (marine licensing) of the Marine and Coastal Access Act 2009.
Effect	Term used to express the consequence of an impact. The significance of an effect is determined by correlating the magnitude of the impact with the sensitivity of the receptor, in accordance with defined significance criteria.
Environmental Statement (ES)	The suite of documents that detail the processes and results of the EIA.
Habitats Regulations Assessment (HRA)	A process which helps determine likely significant effects and (where appropriate) assesses adverse impacts on the integrity of European conservation sites and Ramsar sites. The process consists of up to four

Term		Definition
		stages of assessment: screening, appropriate assessment, assessment of alternative solutions and assessment of imperative reasons of overriding public interest (IROPI) and compensatory measures.
Impact		An impact to the receiving environment is defined as any change to its baseline condition, either adverse or beneficial.
Intertidal		The area between Mean High Water Springs (MHWS) and Mean Low Water Springs (MLWS)
Maximum Scenario	Design	The project design parameters, or a combination of project design parameters that are likely to result in the greatest potential for change in relation to each impact assessed
Mitigation		Mitigation measures are commitments made by the Project to reduce and/or eliminate the potential for significant effects to arise as a result of the Project. Mitigation measures can be embedded (part of the project design) or secondarily added to reduce impacts in the case of potentially significant effects.
Offshore Compensation Platform (ORCP)	Reactive Platform	A structure attached to the seabed by means of a foundation, with one or more decks and a helicopter platform (including bird deterrents) housing electrical reactors and switchgear for the purpose of the efficient transfer of power in the course of HVAC transmission by providing reactive compensation
Offshore Build Area	Restricted	The area within the array area, where no wind turbine generator, offshore transformer substation or offshore accommodation platform shall be erected.
Outer Dowsing Offshore Wind (ODOW)		The Project
Receptor		A distinct part of the environment on which effects could occur and can be the subject of specific assessments. Examples of receptors include species (or groups) of animals or plants, people (often categorised further such as 'residential' or those using areas for amenity or recreation), watercourses etc.
Statement of Common Ground		A statement of common ground is a written statement produced jointly between The Applicant and another Interested Party setting out the areas of agreement and /or disagreement between parties.
Statutory Consultee		Organisations that are required to be consulted by the Applicant, the Local Planning Authorities and/or The Planning Inspectorate during the pre-application and/or examination phases, and who also have a statutory responsibility in some form that may be relevant to the Project and the DCO application. This includes those bodies and interests prescribed under Section 42 of the Planning Act 2008.
The Applicant		GTR4 Limited (a joint venture between Corio Generation (and its affiliates), TotalEnergies and Gulf Energy Development), trading as Outer Dowsing Offshore Wind
The Project		Outer Dowsing Offshore Wind, an offshore wind generating station together with associated onshore and offshore infrastructure.

Term	Definition
Trenchless Technique	Trenchless technology is an underground construction method of installing, repairing and renewing underground pipes, ducts and cables using techniques which minimize or eliminate the need for excavation. Trenchless technologies involve methods of new pipe installation with minimum surface and environmental disruptions. These techniques may include Horizontal Directional Drilling (HDD), thrust boring, auger boring, and pipe ramming, which allow ducts to be installed under an obstruction without breaking open the ground and digging a trench.
Wind Turbine Generator (WTG)	A structure comprising a tower, rotor with three blades connected at the hub, nacelle and ancillary electrical and other equipment which may include J-tube(s), transition piece, access and rest platforms, access ladders, boat access systems, corrosion protection systems, fenders and maintenance equipment, helicopter landing facilities and other associated equipment, fixed to a foundation

1 Introduction & Document Purpose

1. This document sets out the Applicant's responses to additional documentation and representations submitted by Natural England and the Marine Management Organisation (MMO) at Deadline 1.
2. Table 1- Table 8 sets out the Applicant's response to the Natural England submissions (REP1-057-REP1-064). Table 9 sets out the Applicant's response to the MMO's submissions (REP-066).

2 Applicant's Responses to Natural England's Deadline 1 Submissions

Table 1 Natural England's Covering Letter

ID	Natural England Comment	Applicant Response
Paragraph 1 (Natural England's Deadline 1 Submissions)	Natural England will not be providing advice at this deadline on the updates regarding the Development Consent Order (DCO) and Deemed Marine Licence (dML), this will be submitted at Deadline 2.	This comment is noted by the Applicant.
Paragraph 1 (Natural England's Deadline 1 Submissions)	Natural England has no comments on Benthic or Offshore Ornithology Compensation aspects, due to the Applicant providing no updates, therefore Natural England's advice provided at Relevant Representations to these thematic areas is unchanged.	This comment is noted by the Applicant.
Paragraph 2 (Natural England's Engagement through Examination)	<p>Natural England wishes to highlight that the focus of our engagement during Examination will be on reviewing relevant updated Environmental Statement (ES) Chapters/technical documents/outline plans or thematic clarification notes submitted by the Applicant only. We will not be responding to commentary on our representations, other interested parties' representations or to comments from the Applicants or other stakeholders on the Risk and Issues Log, unless the ExA questions direct us to do so.</p> <p>Natural England welcomes resolutions to issues highlighted in our Relevant Representations and are keen to see the Applicant making substantial progress earlier in Examination, rather than pushing back on our advice, which will leave issues unresolved until later in Examination.</p> <p>In addition, Natural England highlights that where the Applicant may consider that our issues and concerns have been addressed within the Applicants response to our Relevant Representations, we are not aligned. We reiterate that for these issues to be considered resolved the amendment or commitment will need to be included within/secured within a named technical document or plan and reviewed within the wider context of the Application.</p>	<p>The Applicant continues to engage with Natural England in order to seek agreement on the outstanding issues.</p> <p>The Applicant also wishes to highlight the point that not all issues require an update to the plans/assessments in order to be resolved, that, in some instances, clarification will be sufficient, and that the Applicant would welcome engagement by Natural England on their responses.</p>
Paragraph 3 (Risk and Issues Log and Principal Areas of Disagreement Summary Statement (PADSS))	<p>As outlined within Natural England's representation, Natural England deferred comments on the In-Principle Monitoring Plans (IPMP) [APP-245]. Owing to the volume of documentation submitted since the Relevant Representations deadline, Natural England continue to defer their response to the IPMP until a suitable juncture in the examination timetable.</p> <p>It is anticipated that the Risk and Issues Log and PADSS will be updated and submitted alongside our submissions during examination at each deadline to reflect any progress in issue resolution during examination. Please note for Deadline 1 there are no updates provided to the DCO, Benthic Compensation and Offshore Ornithology Compensation aspects of the log and PADSS.</p>	This comment is noted by the Applicant.
Paragraph 4 (Natural England's Initial Advice on the	Natural England aims to provide a detailed statutory advice at Deadline 2. In the meantime, they provide the following high-level comments:	The Applicant welcomes the support from Natural England on the principle of reducing impacts on auks through the introduction of the Offshore Restricted Build Area.

ID	Natural England Comment	Applicant Response
<p>Offshore Restricted Build Area (ORBA) and Revision to the Offshore Export Cable Corridor (ECC))</p>	<p>Natural England supports the principle of reducing impacts on auks through restricting the area in which above water infrastructure can be installed. However, this may result in increased or different impacts on some receptors, in particular marine processes, which will need to be fully assessed by the Applicant.</p> <p>The Environmental Statement (ES) should function as an authoritative and transparent assessment of the impacts of the development, including the impacts where mitigation has been applied. However, the Applicant does not intend to update the ES or the Report to inform the Appropriate Assessment (RIAA).</p> <p>We strongly recommend that for key chapters, which from Natural England’s perspective are Offshore Ornithology and Marine Processes, the ES itself should be updated to reflect the specific impacts of the ‘post-ORBA’ development, with clean and tracked change versions submitted into the Examination once the impact assessment has been significantly progressed. The RIAA should also be updated in the same fashion. This will allow the ES to inform the post-consent phase as the key reference document for all parties and allow future developments to include an accurate quantification of the ODOW proposal in their cumulative and in-combination assessments, the ES being the standard source of such information. The Applicant’s cumulative and in-combination assessments should also be updated to reflect the post-ORBA development.</p> <p>We note that the Applicant considers that a change request is not required because the ORBA is mitigation. For the ORBA to be relied upon as mitigation in the impact assessment (including the appropriate assessment) it would need to be secured through a robust DCO/dML condition. Subject to clarification from the ExA regarding the status of the ORBA within the Examination, we intend to advise on the proposed DCO/dML wording at Deadline 2.</p> <p>Nevertheless, together with the Applicant’s proposal not to update the ES, Natural England considers a condition-led approach would lead to ambiguity and therefore potential confusion regarding the extent and nature of the proposal in the post- consent phase. Natural England would be more supportive of simply amending the order limits of the array area, as the Applicant is proposing for the northern cable route removal, as this would provide the clearest indication of the extent of the development.</p>	<p>As outlined in section 5 of the Environmental Report for the Offshore Restricted Build Area and Revision to the Offshore Export Cable Corridor (PD1-081), the Environmental Report for the Offshore Restricted Build Area and Revision to the Offshore Export Cable Corridor (PD1-081) and accompanying appendices (PD1-082 to PD1-090) set out an appraisal of the potential for the introduction of the ORBA and the Revision to the Offshore ECC to alter the conclusions previously drawn for the ES which supported the Project’s DCO Application, for all relevant Environmental Impact Assessment chapters. The proposed changes do not alter the conclusions as set out in the ES, with all conclusions drawn remaining unchanged and valid.</p> <p>The Environmental Report for the Offshore Restricted Build Area and Revision to the Offshore Export Cable Corridor and associated appendices (PD1-081 to PD1-090) are certified documents under Part 1 of Schedule 21 of the dDCO.</p> <p>Similarly, the Habitats Regulations Assessment for the Offshore Restricted Build Area and Revision to the Offshore Export Cable Corridor (PD1-091) and accompanying appendix (PD1-092) reviews the conclusions of the RIAA in light of the introduction of the ORBA and the revision of the ECC and confirms that neither the ORBA nor the ECC revision would result in an change to the overall conclusions drawn within the RIAA.</p> <p>The Applicant updated the draft DCO to reflect the introduction of the ORBA (see the tracked change versions of the DCO which introduced the ORBA at PD1-025). Subject to the ExA’s acceptance of the Applicant’s Change Request, the ORBA would be secured by requirement 4(2), Part 3, Schedule 1 of the DCO and the deemed marine licence conditions at condition 1(5), Part 2 of Schedule 10 of the DCO and condition 1(7), Part 2 of Schedule 11 of the DCO. The ORBA is therefore robustly secured.</p> <p>Whilst no wind turbine generators, offshore transformer substations or offshore accommodation platform may be erected in the ORBA, the area may be used for cable installation and ancillary operations during construction (and decommissioning) and operations and maintenance works. The ORBA is therefore required to remain within the Order Limits. The terms of requirement 4(2), Part 3, Schedule 1 of the DCO and the dML conditions at condition 1(5), Part 2 of Schedule 10 of the DCO and condition 1(7), Part 2 of Schedule 11 of the DCO are sufficiently clearly drafted so as to avoid confusion in the post-consent phase as to the extent of the Project.</p>
<p>Paragraph 5 (Offshore and Intertidal Ornithology)</p>	<p>Natural England’s relevant representations [RR-045] identified significant shortcomings with the Applicant’s impact assessment. For Deadline 1 Natural England have only carried out an initial screening of the ORBA assessment with respect to these shortcomings to identify any that the Applicant has not sought to address. Natural England’s findings are presented in Appendix F1. Subject to clarification regarding the status of the ORBA within the Examination, they intend to provide full technical advice at Deadline 2, which will advise on whether their concerns have been addressed, and if they have, their advice on Offshore Ornithology impacts.</p> <p>Natural England highlights that it will not be possible for Natural England to advise the ExA on the extent to which the ORBA has reduced the impacts from the submitted proposal. This is because the impact assessment was based on a methodology that departed from Statutory</p>	<p>The Applicant notes the support from Natural England on the principle of reducing impacts on auks through the introduction of the ORBA.</p> <p>The ORBA report presents impacts for the original Applicant’s approach, the Applicant’s approach with ORBA, and where different, Natural England’s preferred approach to the impacts with ORBA. As such the scale of the change in impact between the original approach and the position with ORBA can be inferred.</p> <p>The Applicant notes that Natural England have advised that they should be able to advise on the impacts of the post-ORBA development in and of itself.</p>

ID	Natural England Comment	Applicant Response
	Nature Conservation Bodies (SNCB) advice, whereas the ORBA assessment has hopefully rectified these issues. The two are therefore not comparable. Subject to their relevant representation concerns being addressed however, Natural England should be able to advise on the impacts of the post-ORBA development in and of itself.	
Paragraph 6 (Noise Abatement Systems)	Natural England would like to draw attention to the announcement made by the Marine Management Organisation (MMO) and Defra in March 2024, that there will be an expectation that all offshore wind pile driving activity in English waters should be able to demonstrate that they have utilised best endeavours to deliver noise reductions through the use of primary and/or secondary noise mitigation methods in the first instance from January 2025. Natural England hopes to provide a position statement on this at Deadline 2.	The Applicant has responded to this point in row 1 of Table 4: Appendix E Natural England's Advice on Marine Mammals.

Table 2 Appendix B1 Natural England's Advice Blockage Modelling Results

ID	Natural England Comment	Natural England's Advice to Resolve Issue	Applicant Response
Section 1, paragraph 1	Natural England acknowledges the following issues raised in our Relevant Representations [RR-045] Appendix B are resolved: <ul style="list-style-type: none"> The Applicant has confirmed in their response in PD1-059 that trenchless techniques only will be employed at landfall and that this is secured in the Development Consent Order (DCO) (3.1), in Part 1 of Schedule 1. The Applicant has confirmed that an updated assessment of spoil mounds [AS-003] was carried out based on the revised Maximum Design Scenario (MDS) parameters and used to inform the assessment presented in the Environmental Statement [APP-062]. 		The Applicant welcomes this comment.
Section 1, paragraph 2-5	A summary of our overarching concerns regarding the introduction of the Offshore Restricted Build Area (ORBA) [PD-081] can be found in our Deadline 1 Cover Letter. With regards to impacts associated with the introduction of the ORBA, given the uncertainty regarding the Realistic Worst Case Scenario (RWCS) as presented in [PD1-084], magnitude of change, and evidence gaps, our concerns remain regarding potential changes to sediment transport processes and seabed morphology over the lifetime of the Project. The presented reduction in significant wave height of up to 1m [PD1-084], over the lifetime of the project (35 years) could have a significant impact on the sediment transport processes that operate on and around sensitive receptors such as the sandbanks within and near the array. We advise the Applicant addresses the evidence gaps and undertakes further modelling to inform the impact		The Applicant has addressed the point in detail in the responses below (B1.1-1.5).

ID	Natural England Comment	Natural England's Advice to Resolve Issue	Applicant Response
	assessment. Natural England seeks further clarification on whether the separation between WTGs and Offshore Platforms (OPs) has been reduced as a result of the reduction in the array area introduced by the ORBA.		
Section 1, paragraph 6	The Applicant has stated in PD1-071 that cable protection measures within the nearshore environment will not take the form of 1.5m high rock berms. Instead, cable protection measures within the inner depth of closure (approx. 7.1m) are unlikely to exceed 0.35m in height (with the exception of cable crossings). If rock protection is to remain the Applicant's chosen external cable protection measure, can the Applicant confirm whether along with a reduction in nearshore cable protection height, they also envisage a reduction in rock berm volume? Natural England requests confirmation as to which document or plan this reduced nearshore maximum cable protection height of 0.35m has been secured.		<p>The Applicant has responded to this point in PD1-071. Full details of the cable protection measures required, including rock berm volume, are not currently available, and will be informed by detailed engineering design work developed post-consent in consultation with relevant stakeholders.</p> <p>It should be noted that the use of remedial protection is a final technical mitigation measure following engineering and installation good practice with a competent contractor. The Applicant wishes to use as little remedial protection as practicable and would only deploy cable protection when target burial depth could not be achieved. However, for operational and safety reasons, the cable must be protected. The Applicant has proposed a range of cable protection measures, including rock placement, concrete mattresses, rock bags and seabed spacers.</p>
B1.1 (Section 1.2)	Potential Impact Increase: The introduction of the ORBA has reduced the array area available for installation of the wind turbine generators (WTGs) and Offshore Substation Platform (OSPs). While Natural England welcomes the removal of this northern section which reduces impacts to seabed morphology; we are concerned that impacts to receptors such as marine processes are likely to be increased.	Natural England draws the ExA to the following points where further evidence is requested to demonstrate that the original WCS and associated assessments remain fit for purpose.	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 and Revision to the Offshore Export Cable Corridor (PD1-081). As outlined in PD1-081, the exclusion of the proposed areas will not result in a change to the assessment scenarios with the exception of slight modifications to the wave and tidal regime. Evidence from updated numerical modelling shows that these changes will not result in any change to the impact magnitudes previously identified. The Applicant consider the significance of effect on Marine Physical Processes receptors to remain unchanged and valid from the ES.
B1.2 (Section 2/Para 11 (and PD1- 071/B2, B15 & B17))	Realistic Worse Case Scenario: The Applicant has stated that the modelled windfarm layout represents the most realistic worst-case scenario (RWCS) based on best available information. However, the (Confidential) Seabed Mobility Report [APP-152] advises that installation of WTG (and presumably OSP) foundations may need to avoid those areas in the array with the greatest potential for bed elevation changes (e.g. 10m/year) over the lifetime of the project, which suggests contention with the conclusions on significance of impact in the original assessment. Moreover, the (Confidential) Seabed Mobility Report [APP-152] advises that more detailed, site- specific data will be needed to assess and better understand bedform migration rates and directions, seabed sediment mobility, scour potential, and infrastructure integrity over the lifetime of the Project. The Applicant highlights the preliminary nature of this report and that "Final layout details will be informed by detailed engineering design work developed post-consent in	<p>Natural England advises that the Applicant should address the evidence gaps identified in our RR/WR [RR-045] during the consenting phase.</p> <p>Further modelling may also be required pre-construction to ensure this remains fit for purpose and we anticipate being re-consulted as/when further information is available.</p> <p>We also advise that monitoring (as mentioned in the In-Principle Monitoring Plan) should be carried out to ensure that there are no unexpected changes to seabed morphology such as sandbanks.</p>	<p>Paragraph 3.8.87 of the National Policy Statement (NPS) for Renewable Energy Infrastructure (NPS EN-3; Department for Energy Security and Net Zero (DESNZ), 2023) acknowledges the flexibility required by offshore wind farm development and states:</p> <p><i>"Owing to the complex nature of offshore wind farm development, many of the details of a proposed scheme may be unknown to the applicant at the time of the application to the Secretary of State. Such aspects may include:</i></p> <ul style="list-style-type: none"> <i>the precise location and configuration of turbines and associated development;</i> <i>the foundation type and size..."</i> <p>As outlined in Paragraph 3.6.2 of NPS EN-3: <i>"Where flexibility is sought in the consent as a result, applicants should, to the best of their knowledge, assess the likely worst-case environmental [...] effects of the proposed development to ensure that the impacts of the project as it may be constructed have been properly assessed"</i> (DESNZ, 2023).</p>

ID	Natural England Comment	Natural England's Advice to Resolve Issue	Applicant Response
	<p><i>consultation with the MMO and relevant stakeholders.”</i></p> <p>Given the uncertainty regarding the RWCS, magnitude of change, and evidence gaps, our concerns remain, and are potentially heightened, regarding potential changes to sediment transport processes and seabed morphology over the lifetime of the Project.</p>		<p>In accordance with NPS EN-3, the potential windfarm layout as presented in the numerical modelling represents the most realistic Worst-Case Scenario (WCS) based on the currently available information. The identification of the WCS has involved consideration of Marine Physical Processes pathways (e.g. prevailing wave directions, water depths, and proximity to the coast) in addition to considerations outwith the topic (e.g. shipping and navigational concerns). The layout was predicated on the basis of full use of the array area (minus the ORBA (PD1-081)), with the WCS for wave and hydrodynamic blockage effects corresponding to an array comprising 100 Wind Turbine Generator (WTG) foundations, 50% of which are slab-based Gravity Base Structure (GBS) foundations, and 50% of which are jackets with suction bucket foundations, in addition to five GBS Offshore Platform (OP) foundations. WTG foundations to the west of the site, closest to shore, were modelled as GBS foundations (rather than suction buckets), in order to assess the greatest potential blockage for coastal receptors. The Applicant consider the modelled layout to appropriately represent a realistic WCS for the purposes of assessment for Marine Physical Processes receptors.</p> <p>The Applicant assumes, with regard to evidence gaps, that Natural England is referring to their concerns raised in relation to the Seabed Mobility Report (APP-152). As outlined in the Applicant's Response to Relevant Representations (PD1-071), APP-152 is based on preliminary site information and the ground models developed for the site to inform final engineering works will continue to be updated as further site data, including deep geotechnical data, is collected prior to construction. APP-152 was not intended either as a comprehensive baseline characterisation of the physical environment for the purposes of EIA, or as an assessment of the environmental effects. The baseline understanding of the Marine Physical Processes within the study area has been developed through consideration of a range of project-specific and existing data sources including but not limited to APP-152, as outlined in Section 7.4.2 of Chapter 7 Marine Physical Processes (APP-062) and Appendix 6.3.7.1 Physical Processes Technical Baseline (APP-150). The Applicant therefore disagrees that there are gaps in the evidence.</p> <p>Given the above, the Applicant does not consider further modelling to be necessary. In-line with best practice, geophysical surveys will be undertaken both pre- and post-construction. The Applicant has committed to carrying out a full sea floor coverage swath bathymetry survey that meets the requirements of MGN654 and its annexes, and side scan sonar, of the area(s) within the Order limits in which construction works were carried out to assess any changes in bedform topography. This is set out at table 3.1 of the In Principle Monitoring Plan (APP-276). DCO Schedule 11 and 12, Part 2 - Condition 13(c) requires the preparation of a monitoring plan, which accords with the in principle monitoring plan, to be submitted and approved in</p>

ID	Natural England Comment	Natural England's Advice to Resolve Issue	Applicant Response
			<p>writing by the MMO. Condition 14(5) requires the licensed activities to be carried out in accordance with the approved plans, unless otherwise agreed in writing by the MMO.</p> <p>Natural England's concerns regarding magnitude of change are addressed in B1.3.</p>
<p>B1.3 (Figures 1.2 and 1.3)</p>	<p>Reduction in Wave Height: In Figure 1.2, the updated blockage modelling results show an increased 'wave shadow' area extending further to the south of the array for northerly waves, and in Figure 1.3 to the southwest of the array for northeasterly waves. Natural England advises that a reduction in significant wave height of up to 1m, over the lifetime of the project (35 years) could have a significant impact on the sediment transport processes that operate on and around sensitive receptors such as the sandbanks within and near the array (e.g. Outer Dowsing Shoal).</p> <p>Natural England also notes that the scale in Figures 1.2 and 1.3 used to represent the greatest potential change in significant wave height is -1 to -0.1m, which is a significant order of magnitude, whereas for the lesser changes in significant wave height the range is much smaller (e.g. -0.05 to -0.025m). Therefore, we advise that a more graduated scale for the greatest predicted change in significant wave height would make interpretation of the results clearer.</p>	<p>We advise that the implications of the updated model results will need to be re- evaluated when the necessary additional information (see comment above) has been gathered.</p>	<p>As requested by Natural England, the Applicant has provided alternative versions of Figures 1.2 and 1.3 using a more graduated scale in Appendix A: Blockage Modelling Results Figure Updates of this document.</p> <p>Using a more graduated scale, reductions in significant wave height (Hm0) of between 0.125m and 0.25m are observed within several kilometres of individual foundations during median baseline conditions. This clarifies that where the reduction in significant wave height was stated to be between -0.1m and -1m, the more precise values are -0.125m and -0.25m, as shown in Figures 1.2 and 1.3.</p> <p>As outlined in Appendix 6.3.7.1 Physical Processes Technical Baseline (APP-150), tidal currents have been identified as the dominant mechanism of bedload sediment transport across the wider area (van der Molen, 2002; Kenyon and Cooper, 2005). The sandbanks identified within and around the array area, including Outer Dowsing Shoal, are identified generally as open shelf sinuous and open shelf linear banks (Kenyon and Cooper, 2005). The morphology of these sandbanks is primarily tidally driven, with wave action understood to limit the vertical growth of sandbanks by planing off the crests (Cooper et al., 2008).</p> <p>Accordingly, a reduction in significant wave height of <0.25m may result in a slight increase in the crest height of sandbanks located within this wave shadow. Given that waves account for a secondary influence on sandbank morphology, this small magnitude of change in wave height, restricted to the near-field environment, is not considered to have a significant effect on sandbank morphology and therefore the conclusions in Chapter 7, Marine Physical Processes (APP-062) are unchanged.</p>
<p>B1.4 (Section 2/Para 17 & Figure 1.1)</p>	<p>ORCP: Natural England notes that Figure 1.1 shows a reduction in current speed of up to 0.1m/s in the ORCP area adjacent to Inner Dowsing sandbank. We remain concerned that the presence of two Gravity Base (GBS) ORCPs with a minimum separation distance of 90m adjacent to Inner Dowsing, could disturb tidal flows, local scour, and overlapping wake effects, in an area of high seabed elevation change [PD1-084]. This could lead to changes to sediment transport pathways and affect sandbank morphology.</p>	<p>Natural England advises that further consideration of potential disturbance to tidal flows, development of local scour, and changes to sediment transport pathways and seabed morphology is required.</p>	<p>As outlined in the Environmental Report for the Offshore Restricted Build Area and Revision to the Offshore Export Cable Corridor (PD1-081), modification to the wave and tidal regime and associated potential impacts to seabed morphology resulting from the presence of the ORCPs was assessed as of minor adverse significance (at worst), which is not significant in EIA terms. This assessment was made with due consideration of the proximity of the proposed ORCP area to the Inner Dowsing sandbank.</p> <p>The Inner Dowsing sandbank is understood to be a relict feature with a veneer of sand bedforms maintained by tidal currents (JNCC, 2010). Tidal flows here are generally oriented north to south, meaning that potentially hydrodynamic blockage impacts resulting from the ORCPs are unlikely to</p>

ID	Natural England Comment	Natural England's Advice to Resolve Issue	Applicant Response
			<p>propagate towards the east. This conclusion is supported by the sediment mobility results presented in Table 6.1 of 15.9B Procedural Deadline 19 September Offshore Restricted Build Area and Revision to the Offshore Export Cable Corridor Appendix B Blockage Modelling Results (PD1-084) (with the locations of extraction points shown in Figure 1.4 (PD1-082)). The installation of Project infrastructure is predicted to result in an increase of 1% (of total time that sediment is mobile) for very fine sand during neap tides at Point 4 (located at the north of the Inner Dowsing sandbank), with no changes in sediment mobility estimated at Point 3 (located to the south of the Inner Dowsing sandbank). The scale of this change is considered to be well within the natural variability of the site, and given that it affects fine-grained sediment is unlikely to represent a controlling influence on sandbank form.</p> <p>The Applicant consider the above to appropriately consider the potential impacts to the Inner Dowsing sandbank from the presence of the ORCPs with regard to potential disturbance to tidal flows and changes to sediment transport pathways.</p>
B1.5 (Section 2/Para 11)	Changes to structure separation distance: Natural England notes that the Applicant states that project parameters including number of structures and foundation types will remain unchanged. However, it is not clear, given the reduction in array area within the ORBA whether the separation between WTGs and Offshore Platforms (OPs) has been reduced.	Natural England advises that further information should be provided on potential changes to structure separation distance within the ORBA and evidence will be required to support any conclusions.	<p>As set out in the Applicant's response to the ExA's request for further information in relation to the proposed ORBA and the revision to the Offshore ECC (REP1-024), although the introduction of the Offshore Restricted Build Area (ORBA) has reduced the area within which turbines will be located from 436km² to 364.7km² (the ORBA covers 16.4% of the array area), all other offshore Project parameters remain the same. This includes the minimum turbine spacing of 605m, as set out in section 4.1.1, paragraph 25 of Chapter 3: Project Description (APP-058) and as secured in DCO Schedule 1, Part 3 - Requirement 2(1)(d).</p> <p>Following the introduction of the Offshore Restricted Build Area (ORBA), updated numerical modelling has been undertaken, details of which are provided in 15.9B Procedural Deadline 19 September Offshore Restricted Build Area and Revision to the Offshore Export Cable Corridor Appendix B Blockage Modelling Results (PD1-084). The separation distance between structures as represented in the Marine Physical Processes numerical modelling has been updated as a result of the introduction of the ORBA, from 2004m between structures to 1800m between structures.</p> <p>In both cases, the layout was predicated on the basis of full use of the array area, with the WCS for wave and hydrodynamic blockage effects corresponding to an array comprising 100 Wind Turbine Generator (WTG) foundations, 50% of which are slab-based Gravity Base Structure (GBS) foundations, and 50% of which are jackets with suction bucket foundations, in addition to five GBS Offshore Platform (OP) foundations.</p>

ID	Natural England Comment	Natural England's Advice to Resolve Issue	Applicant Response
			<p>WTG foundations to the west of the site, closest to shore, were modelled as GBS foundations (rather than suction buckets), in order to assess the greatest potential blockage for coastal receptors. This is based on the normalised blockage factors identified for individual WTG foundation types as presented in APP-150 and PD1-084.</p>

Table 3 Appendix C1 Natural England's Advice on Benthic Ecology

ID	Natural England Comment	Applicant Response
<p>Section 3. Baseline Characterisation and Sabellaria Imagery Analysis [PD1-095 and AS-004]</p>	<p>We welcome the Applicant's response (PD1-071) to Natural England's concerns raised in our relevant representations (RR-045) in relation to the transparency in methods and analytical techniques used to determine the extent and distribution of <i>Sabellaria spinulosa</i> Annex I reef presented in the Appendix 2 Benthic Ecology Technical Report (ECC) v2 (AS-004) and the Envision ECC Sabellaria imagery analysis report (PD1-095). However, these clarifications and commitments have not been incorporated into the technical documents and are therefore not sufficient in themselves to be relied upon both during the consenting phase and post consent for this project and any subsequent projects wishing to reference the reports. Natural England, therefore, advises that for the scientific technical reports to be relied upon, the clarifications provided by the Applicant prior to Deadline 1, should be incorporated into the documents, for example as a forward note or appendix, if not within the relevant sections themselves. While these clarifications (once included within the technical documents) address the majority of our concerns regarding the analytical approach to the determination of Annex I S. Sabellaria reef, the Applicants' response does not address our concerns regarding supporting reef habitat. Natural England intends to provide further detailed advice on this matter at Deadline 2.</p>	<p>The Applicant can confirm that the responses (PD1-071) it presented to Natural England's concerns raised in the relevant representations (RR-045) in relation to the transparency in methods and analytical techniques used to determine the extent and distribution of <i>Sabellaria spinulosa</i> Annex I reef presented in the Chapter 9 Appendix 2 Benthic Ecology Technical Report (ECC) v2 (AS-004) and the Offshore Export Cable Corridor Sabellaria Spinulosa Reanalysis and Report (PD1-095), can be added to the documents (AS-004) and (PD1-095) as appropriate. . The Applicant will update Chapter 9 Appendix 2 Benthic Ecology Technical Report (ECC) and the Offshore Export Cable Corridor Sabellaria Spinulosa Reanalysis and Report at Deadline 3.</p>
<p>Section 4. Removable Cable Protection within IDRBNR SAC</p>	<p>Natural England notes from the Applicant's response (PD1-071) that the Applicant is committing to using removable cable protection within the Annex I Sandbank feature of the IDRBNR SAC. The Applicant has cited Peritus International Ltd (2022) as a reference to support their conclusion of high confidence that cable protection can be removed.</p>	<p>Peritus International Ltd (2022) Scour and Cable Protection Decommissioning Study (NECR403) can be accessed on the Natural England website at: https://publications.naturalengland.org.uk/publication/5938793965420544</p> <p>The Applicant has committed to installing removable cable protection within sandbank features within the SAC, however the Applicant remains confident that, based on all data submitted at Application,</p>

ID	Natural England Comment	Applicant Response
	<p>However, the reference paper has not been provided for review so Natural England is unable to comment on whether we agree with sufficient level of confidence, that cable protection can be removed. Natural England advises that the Peritus International Ltd (2022) paper is submitted into examination for review.</p> <p>While the Applicant has committed to installing removable cable protection within sandbank features within the SAC, Natural England advises that this commitment is extended to the whole of IDRBNR SAC.</p>	<p>and confirmed through additional studies (PD1-098), the absence of any qualifying Annex I reef features within the offshore ECC, plus additional mitigation to avoid any reef which may consequently form, the potential for an AEol on this feature of the IDRBNR SAC can be excluded beyond reasonable scientific doubt. The strategy for mitigating significant impacts to any potential <i>Sabellaria spinulosa</i> reef features will be presented within the Biogenic Reef Mitigation Plan, to be prepared in accordance with the outline Biogenic Reef Mitigation Plan (document 8.22, V3 submitted as part of Deadline 2) and required to be submitted to the MMO for written approval under DCO Schedule 11, Part 2, Condition 13(1)(j)</p>
<p>Section 5. Outline Biogenic Reef Mitigation Plan [PD1-067]</p>	<p>Natural England welcomes the inclusion of pre-application advice within the Outline Biogenic Reef Mitigation Plan Rev 2 (PD1-067).</p> <p>Natural England welcomes the commitment within the Outline Benthic Mitigation Plan (PD1-067) and the Schedule of Mitigation (PD1-059) to avoid cable installation within the Marine Management Organisation (MMO) fisheries byelaw area. The Applicant has stated that ancillary works may be undertaken within the MMO byelaw area. Natural England advises that the mitigation should commit to no works including ancillary works within the byelaw area.</p> <p>The commitment within the Outline Benthic Mitigation Plan (PD1-067) and Outline Cable Specification Installation Plan (CSIP) (PD1-043) to microsite boulders around biogenic reef is welcomed. However, to resolve this issue the Applicant should set out how the placement of boulders will not adversely impact marine physical processes and within the SAC ensure that they are deposited in similar habitat, whilst also replicating the structure and function of the interest feature.</p>	<p>The Applicant can confirm that no works including ancillary works will take place within the MMO fisheries byelaw area, this has been added to the Schedule of Mitigation (v3 submitted as part of Deadline 2) and secured within the revised Outline Biogenic Reef Mitigation Plan (v3 submitted as part of Deadline 2).</p> <p>The Applicant believes that Natural England’s reference to the Outline Benthic Mitigation Plan is intended to be a reference to the Outline Biogenic Reef Mitigation Plan (PD1-066). In relation to relocation of boulders (as detailed within the Applicant’s response to Relevant Representations C12 of Table 1.45.4.2 (PD1-071)), the Applicant stated that for all areas along the cable routes, where a grab is used for boulder clearance, the boulders will be placed nearby, in a similar habitat type. This measure is detailed at references 6 and 38 in the Schedule of Mitigation (PD1-058) and in the Outline Cable Specification and Installation Plan (V3 submitted as part of Deadline 2) (as secured by DCO Schedule 11, Part 2 - Condition 13 (1)(d)(ii)). The placement of boulders in a similar habitat type would ensure that there would be no significant change to marine physical processes and also replicate the structure and function of the interest feature.</p>
<p>Section 5 – Evidence Used</p>	<p>The Biogenic Reef Mitigation Plan (PD1-067) paragraph 9 references the Envision Sabellaria Analysis Report (PD1-095). The Envision report includes a generic statement relating to the evidence used to underpin the report conclusions: “Project specific data, along with any relevant third-party data (e.g. national datasets and archives), were reviewed to assess the likely location and probabilities of Sabellaria reef within the cable corridors”.</p> <p>In the absence of more detailed information relating to the methods used (i.e. targeted/untargeted surveys), age and spatial coverage of Annex I reef data within the ECC, we cannot agree that the evidence presented within the Envision Report (Appendix 9.5; document reference 6.3.9.5) can be used to conclude “no historical presence of <i>S. spinulosa</i> reef”.</p> <p>Natural England advises the statement “no historical presence of <i>S. spinulosa</i> reef occurring within the offshore ECC” either needs to be removed altogether, or further evidence is required (which dates back to the point in time of IDRBNR SAC designation) to support the statement.</p>	<p>The Applicant has amended paragraph 9 within the Outline Biogenic Reef Mitigation Plan (v3 submitted as part of Deadline 2), to read ‘no historical presence of <i>Sabellaria spinulosa</i> reef based on the data reviewed within the Envision <i>Sabellaria</i> Analysis Report (PD1-095)’.</p>
<p>Section 5 – Mitigation Approach</p>	<p>As previously advised (RR-045), Section 5 of the Outline Benthic Mitigation Plan has insufficient level of detail. The Applicant is required to present a robust and well considered approach to benthic mitigation that demonstrates that mitigation is secured and feasible, particularly in relation to Annex I <i>S. spinulosa</i> reef.</p> <p>Noting the importance of potentially supporting habitat, and areas of 'potential reef' in maintaining the total feature extent, Natural England advises that micro siting as mitigation, particularly within the IDRBNR SAC, should be extended to include areas where evidence suggests there is a risk of potentially supporting reef habitat being impacted in the longer</p>	<p>The Applicant believes that Natural England’s reference to the Outline Benthic Mitigation Plan is intended to be a reference to the Outline Biogenic Reef Mitigation Plan (PD1-066). The Applicant has presented a robust and well-considered approach to benthic mitigation and has demonstrated that the mitigation is secured and feasible.</p> <p>The Applicant notes Natural England has stated it will provide a further response on supporting reef habitat at Deadline 2. However, the Applicant does not agree that micro siting as mitigation should be extended to include areas where there is a risk of potentially supporting reef habitat being impacted</p>

ID	Natural England Comment	Applicant Response
	<p>term. Therefore, Natural England advises that mitigation measures and commitments made, need to appropriately consider sediments with the potential to support Annex I <i>S. spinulosa</i> reef. Detail on how these habitats will be identified and avoided, should be included within the relevant mitigation plans and documents.</p> <p>We continue to advise that the details within the updated mitigation plan are insufficient to provide the necessary level of confidence that the pre-construction surveys be appropriately designed and targeted to provide the data to effectively implement mitigation measures relevant to Annex I reef and supporting habitats.</p> <p>We note the Applicants response to our Relevant Representations (RR-045) "The pre-construction survey will be informed by full coverage (within the Order Limits in which the Applicant is proposed to carry out construction works) geophysical data and designed with detailed enough resolution to give confidence in the data".</p>	<p>in the longer term. It is well documented that <i>Sabellaria spinulosa</i> the species and in reef form do not have a small niche for substratum preferences, which is evidenced by the wide-ranging substrata upon which this species has been recorded (Pearce, 2017). Substratum composition therefore seems unlikely to be a limiting factor in the distribution of this species and therefore providing detail on avoidance of sediments that support this habitat is an approach that is not supported by the literature for this species.</p> <p>The Biogenic Reef Mitigation Plan, to be prepared in accordance with the Outline Biogenic Reef Mitigation Plan (document 8.22, V3 submitted as part of Deadline 2) and required to be submitted to the MMO for written approval under DCO Schedule 11, Part 2, Condition 13(1)(j) will be prepared once more detailed design information is available relating to the nature and extent of the work and the pre-construction surveys have taken place and therefore the submitted Biogenic Reef Mitigation Plan will give appropriate consideration to the avoidance of reef habitat. Pre-construction surveys will be undertaken to further the understanding of the potential for <i>Sabellaria spinulosa</i> reef within the Project array area and ECC. The results of the pre-construction surveys will inform the further development of mitigation measures.</p> <p>As detailed at Table 3.2 of the Offshore In-Principle Monitoring Plan (APP-276), a detailed pre-construction survey will be completed post-consent to determine the location, extent and composition of any habitats of principal importance constituting Annex 1 habitat. Condition 13(1)(c) and 17 of Part 2 of the dMLs set out at Schedules 10 and 11 require details of the proposed pre-construction surveys, including methodologies, timings and format, and which accord with the in principle monitoring plan, to be submitted to the MMO for approval prior to commencement of licensed activities, in consultation with the SNCB. Natural England will therefore have the opportunity to provide comments on the survey proposals and the Applicant is confident the surveys will be appropriately designed and targeted to provide the data to effectively implement mitigation measures relevant to Annex I reef and supporting habitats.</p>
<p>Section 6. Disposal Site Characterisation Report [PD1-097]</p>	<p>Natural England welcomes the characterisation of disposal areas (PD1-097) and advises that this information should be used to inform the mitigation measures within the Schedule of Mitigation V2 (PD1-059). More specifically, the characterisation information should be used to ensure that "dredged material will be deposited within an area of similar sediment characteristics" as detailed in Table of the Schedule of Mitigation (PD1-059).</p> <p>We maintain our advice provided in our Relevant Representations (RR-045) that disposal sites within the IDRBNR SAC should be upstream of the Annex I sandbank feature and be deposited using a fall pipe to help facilitate recovery and minimise wider environmental impacts. We advise this is included within the Disposal Site Characterisation Report.</p> <p>Natural England defers to the MMO and CEFAS to agree the proposals for sediment samples in terms of contaminants.</p>	<p>The Applicant will utilise the characterisation of disposal areas (PD1-097) data to ensure that dredged material will be deposited within an area of similar sediment characteristics as stated within mitigation measures within the Schedule of Mitigation (V3 submitted as part of Deadline 2). At reference 6 of the Schedule of Mitigation (V3 submitted as part of Deadline 2), the Applicant has committed to depositing dredged material within an area of similar sediment characteristics, in close proximity to the dredge location in order to retain sediment within the sediment transport system. The Applicant does not consider further mitigation beyond the existing commitment to be appropriate.</p>
<p>Section 7. Environmental Report and Habitats Regulation Assessment for the ORBA and</p>	<p>As outlined within our Deadline 1 Cover Letter, it is recognised the ExA has set out within the Rule 8 Letter (PD-011) that responses to submissions from the Applicant which relate to the inclusion of an Offshore Restricted Build Area (ORBA) proposed as mitigation and the revision to the Export Cable Corridor (ECC) are not required for Deadline 1. As Natural England had already taken the opportunity to begin our review, we can provide the following high-level advice to the benthic aspects of the proposed changes, with more advice to follow (where necessary) at a later deadline.</p>	<p>The Applicant welcomes the agreement that the proposed inclusion of the ORBA and the removal of the optionality for a northern route of the offshore ECC will not result in a material difference in the impacts upon benthic receptors.</p> <p>As detailed within Environmental Report for the Offshore Restricted Build Area and Revision to the Offshore Export Cable Corridor (PD1-081), the Order Limits for the DCO Application, optionality was retained along a section of the offshore ECC to potentially enable the Project to avoid crossing the Inner Dowsing sandbank, were the option for aggregate area 1805 not taken up by the agreement</p>

ID	Natural England Comment	Applicant Response
Revision to the Offshore ECC [PD1-081, PD1-082, PD1-083, PD1-091]	<p>Natural England agrees that the proposed inclusion of the ORBA and the removal of the optionality for a northern route from the offshore ECC will not result in a material difference in the impacts upon benthic receptors in comparison to those which were assessed within the Applicant's Environmental Statement (APP-064) and RIAA (AS1-096), and included within the HRA for the ORBA and Revision to the Offshore ECC (PD1-091).</p> <p>However, Natural England highlights that the removal of the northern route optionality, also removes the option to avoid impacts occurring on Inner Dowsing Annex I Sandbank, which would have been a key mitigation measure.</p> <p>Thus, Natural England continues to disagree with the Applicants RIAA conclusion and reiterates our advice provided in our relevant representations (RR-045). Even if the Applicant is able to fully microsite the cable to avoid known Annex I reef features, there will still be a loss of Annex I reef supporting habitat which we consider will have an adverse effect and would require compensation. Until this is resolved Natural England does not agree with the conclusions of the RIAA in regard to impacts to Annex I reef from the placement of cable protection. This will have implications for compensation requirements.</p>	<p>holder (Hanson Aggregates Marine Limited), or were the option only taken up over part of the aggregate site. The aggregate option agreement has now been extended by The Crown Estate, and a Marine Licence Application to permit aggregates extraction over the whole site has been submitted to the Marine Management Organisation (MMO) (ML ref: MLA/2024/00227). As the developer of Area 1805 has an Option Agreement from The Crown Estate and intends to exercise those rights in due course for a Production Agreement, the northern route, which passes through the aggregates area, is no longer viable or available to the Project. Hanson Aggregates Marine Limited has priority with regard to seabed rights for aggregate extraction which is not compatible with cable installation and ongoing operation and maintenance. Therefore, colocation is not possible. The site covers the width of the northern route so the aggregate area is unavoidable whilst using the northern route. As such, the Project amended the Order Limits to exclude this section of the offshore ECC from the draft DCO. This includes the northern ORCP area which was positioned along this section of the offshore ECC. This change was accepted by the ExA 5th November (PD-012).</p> <p>The Applicant remains confident that, based on all data submitted at Application, and confirmed through additional studies (PD1-098), the absence of any qualifying Annex I reef features within the offshore ECC, plus additional mitigation to avoid any reef which may consequently form, the potential for an AEoI on this feature of the IDRBNR SAC can be excluded beyond reasonable scientific doubt.</p>

Table 4 Appendix E1 Natural England's Advice on Marine Mammals

ID	Natural England Comment	Natural England's Advice to Resolve Issue	Applicant Response
Section 2. Noise Abatement Systems (NAS) - Noise Reduction at Source Mitigation	<p>Natural England's advice regarding Noise Abatement Systems (NAS) or noise reduction at source as mitigation remains unchanged. Natural England expects to see the Applicant make a commitment to using these as mitigation.</p> <p>Noise abatement systems are proven to reduce the level of noise generated by piling and its propagation through the marine environment. As the noise levels are reduced at or close to the source, the range and area over which noise-related impacts occur will be reduced significantly.</p> <p>In March 2024, the Marine Management Organisation (MMO) and Defra announced the expectation that all offshore wind pile driving activity in English waters should demonstrate that they have utilised best endeavours to deliver noise reductions through the use of primary and/or secondary noise mitigation methods in the first instance from January 2025 and we expect that the majority of piling from 2025 onwards will not be able to go ahead without noise abatement in place.</p>	n/a	<p>The Applicant's response regarding NAS remains unchanged. The Applicant does not consider that there is a need to commit to NAS based on the conclusion of no significant effects within the Environmental Impact Assessment (EIA) (see the Summary of Effects at Table 11.77 of Chapter 11 Marine Mammals (APP-066)), confirmed no AEoI within the Habitats Regulations Assessment (HRA) (see the Conclusions of the Assessment at Table 12.1 of the RIAA (APP-095)) and by the ORBA Environmental Report (PD1-081).</p> <p>NAS have been considered as a mitigation option within the 8.6.1 Outline Marine Mammal Mitigation Plan (MMMP) for Piling Activities (version 3 submitted as part of the Deadline 2 submission) and In-Principle Site Integrity Plan (SIP) (PD1-048). The Applicant is aware of the developments in the management of underwater noise within UK waters, particularly in relation to impacts in marine mammals and are engaging with Department for Environment, Food and Rural Affairs (Defra) on the strategic measures. However, due to the current uncertainties around what the final Government policy position will be, and in the absence of any significant effects from the Project, the Applicant does not consider it necessary to make a commitment to the use</p>

ID	Natural England Comment	Natural England's Advice to Resolve Issue	Applicant Response
			<p>of NAS at this stage of the development. Consequently, piling without NAS remains the Maximum Design Scenario (MDS) for the purposes of the assessment of effects. The inclusion of NAS as a mitigation option in the In-Principle SIP (PD1-048) and Outline MMMP (V3 submitted as part of Deadline 2) ensures that this mitigation option can be considered, in the event that the relevant noise thresholds could be breached by in-combination activities and that this could not be managed by coordination among developers.</p> <p>The Applicant directs the Examining Authority (ExA) to the responses the Applicant has provided on Natural England's relevant representation on NAS in the Applicant's Response to Relevant Representations (PD1-071).</p>
<p>Section 3. Harbour seal population in the Wash and North Norfolk Coast (WNNC) Special Area of Conservation (SAC)</p>	<p>The population of harbour seals in The Wash and North Norfolk Coast (WNNC) Special Area of Conservation (SAC) is in decline. The cause of the decline is unknown; there are several research projects investigating the potential causes, and until the cause of the decline is found, any activities that have the potential to hinder recovery of the population need to be carefully assessed for less impactful alternatives.</p> <p>Natural England wishes to re-iterate our advice as provided within our Relevant Representations [RR-045]. Disturbance impacts to harbour seal from piling which could further hinder the 'restore' objective of The WNNC SAC should be avoided, reduced or mitigated. Natural England advises that if impactful noise from the project reaches the SAC, additional mitigation measures, for example, NAS, should be implemented.</p> <p>In this case, the use of NAS, or other suitable alternative to reduce sound at source, and planning noisy activities to avoid sensitive timings has the potential to reduce disturbance to the population. As advised in RR-045, disturbance at sensitive times should be avoided, for example during pupping season (June, July and August).</p>	<p>n/a</p>	<p>The Applicant notes that the reasons for the decline of the Wash harbour seal colony are currently unknown therefore, there is the potential that reducing disturbance during sensitive times could have no impact on the population decline.</p> <p>The Applicant directs the ExA to the interim Population Consequences of Disturbance (iPCoD) model, undertaken at Natural England's request (RR-045), which has confirmed that no population effects to the harbour seals are predicted from the construction of the Project (PD1-094).</p> <p>The Applicant is not committing to NAS based on the conclusion of no significant effects on harbour seals and no adverse effect on integrity of the WNNC SAC (including the "restore" conservation objective). The Applicant also highlights that the noise contours for harbour seals for monopiles worst case locations in Figure 11.4 of Chapter 11: Marine Mammals (APP-066) do not overlap with the WNNC SAC), and the introduction of the Offshore Restricted Build (ORBA) would not change this conclusion as the closest worst case location in the SW remains the same. Therefore, the Applicant does not consider the commitment to avoid noise generating activities during June, July and August is necessary.</p>
<p>Section 4. Disturbance Contours – Harbour Seal</p>	<p>It is unclear if the disturbance contours for harbour seal in Figure 11.4 [APP-099] of Chapter 11 [APP-066] overlap with The WNNC SAC. Natural England requests to see a figure containing the noise contours as presented in Figure 11.4 of Chapter 11 with the border of The WNNC SAC to understand the extent of the overlap. Furthermore, the barrier impacts from the piling at the Offshore Reactive Compensation Platform (ORCP) was not evident until the</p>	<p>n/a</p>	<p>The Applicant has identified that that both Figure 11.4 (APP-099) and Figure 11.5 (APP-099) of Chapter 11 (APP-066) contained the incorrect dose response curve for seals. The figures incorrectly showed the monopile 5dB SEL_{ss} disturbance contours from 120-180 dB, which is the harbour porpoise dose response curve (Graham et al., 2017), whereas the correct dose response curve for seals is 145-</p>

ID	Natural England Comment	Natural England's Advice to Resolve Issue	Applicant Response
	<p>noise contour figures were published in the Environmental Statement. This new evidence is potentially concerning considering the harbour seal decline.</p>		<p>180 dB as referenced in Whyte et al., (2020). The Applicant will submit revised versions of Figure 11.4 and 11.5 with the monopile 5dB SEL_{ss} disturbance contours from 145-180 dB at Deadline 3. The Applicant can confirm that the correct dose-response curve (Whyte et al., 2020) has been applied in the assessment of impacts to harbour seals and grey seals in section 11.7 of Chapter 11 (APP-066) and the error is only relating to the figures.</p> <p>The Applicant will add the WNNC SAC to the revised versions of Figure 11.4 at Deadline 3. However, the Applicant can confirm that noise contours from the array, artificial nesting structure and ORCP do not overlap with the WNNC SAC. The introduction of the ORBA would not change these conclusions as the worst case scenario piling location in the SW remains the same.</p> <p>The Applicant also considers that barrier effects have been included within the assessment of disturbance from piling (both Wind Turbine Generators (WTG and ORCP) in the assessment of Impact 5 of Section 11.6 of Chapter 11: Marine Mammals (APP-066) which demonstrates that intermittent piling will not cause barrier effects. Natural England previously agreed barrier effects for operational phase could be scoped out at the EIA Scoping stage. Barrier effects are considered within the Cumulative Effects Assessment of disturbance from piling (both WTG and ORCP) in section 11.7 of Chapter 11 (APP-066). Even using a highly precautionary 26km Effective Deterrence Range, the significance of the impact was assessed as minor (not significant) and did not result in an effect on the population trajectory over time.</p>
<p>Section 5. Interim Population Consequences of Disturbance (iPCoD) Modelling</p>	<p>Natural England welcomes the submission of the Interim Population Consequences of Disturbance Modelling (iPCoD). The iPCoD modelling was requested as a tool to support the conclusions in the Impact Assessment that were not supported by robust evidence. Owing to evidence gaps in the relationship between marine mammal ecology, sound, disturbance and population impacts, this modelling makes many assumptions and caution should always be taken when interpreting the outputs of any model. Therefore, although the model can be used as a tool alongside other methods for assessing the long-term population level impacts of disturbance, the results of the iPCoD modelling should not be viewed in isolation or solely dictate the final significance conclusion.</p>	<p>n/a</p>	<p>The Applicant conducted the iPCoD modelling as requested by Natural England.</p> <p>The result of the modelling aligned with the conclusions presented in the Chapter 11 (APP-066). The iPCoD modelling was not intended to be viewed in isolation but to support the conclusions presented in the ES chapter.</p>

ID	Natural England Comment	Natural England's Advice to Resolve Issue	Applicant Response
E1.1 (4.3.1. Paragraph 19)	No commitment has been made by the Applicant to conduct pre-piling searches by qualified Marine Mammal Observers (MMObS)	Natural England advises that pre-piling searches by qualified MMObS are adopted, as this is the minimum requirement set out in the Joint Nature Conservation Committee (JNCC) guidelines for minimising the risk of injury to marine mammals from piling noise (JNCC Piling Guidelines (August 2010)).	The Applicant clarifies that the intention of the text in the Outline Marine Mammal Mitigation Protocol for Piling Activities (PD1-045) was that a qualified MMOb would be used. The Applicant has amended the text in paragraph 19 in section 4.3.1 of the Outline Marine Mammal Mitigation Protocol for Piling Activities (version 3 submitted as part of the Deadline 2 submission) in line with the JNCC (2010) guidelines to make this clearer.
E1.2 (4.3.2. Paragraph 22)	The Applicant has stated that Passive Acoustic Monitoring (PAM) can be used to supplement visual monitoring during periods of poor visibility, such as when there is fog, high sea state or at night, to allow piling to commence during these conditions. However, PAM cannot effectively detect harbour porpoises at a distance greater than 300m, and therefore animals could still be within the Permanent Threshold Shift (PTS) onset range without detection.	Natural England does not recommend piling commences during poor visibility conditions. PAM is an effective method to supplement visual observations to detect vocalising animals underwater.	<p>As is common for offshore wind farm construction, there may be occasions where piling needs to start during hours of darkness and therefore PAM would be required as the primary marine mammal mitigation measure. The additional restriction to the piling construction opportunity would risk adding a considerable time to the overall construction programme, which could in turn result in additional environmental impacts overall.</p> <p>The JNCC (2023) guidance accepts that PAM is a suitable primary mitigation measure, and can be used independently of MMOb. JNCC (2023) states the PAM should not be used as a substitute for visual observations, unless the full extent of the mitigation zone cannot be seen. Therefore, PAM is considered appropriate for monitoring the mitigation zone when piling starts at night, as it would not be appropriate to undertake visual monitoring. Additionally, the Applicant will commit to ADDs, if identified as a measure in the final MMMP at the post-consent stage, as detailed in section 4.3 of the 6.8.1 Outline Marine Mammal Mitigation Protocol for Piling Activities (version 3 submitted as part of the Deadline 2 submission). These are considered effective in deterring marine mammals from the area prior to piling, therefore displacing animals beyond the PTS-onset impact range.</p> <p>The Applicant is aware of consented projects currently undertaking piling activities (e.g. Sofia OWF) where PAM has been used as the primary mitigation measure when the piling has commenced at night or in times of reduced visibility.</p>
E1.3 (4.3.7 Paragraph 3)	This project's maximum hammer energy of 6600 kJ is higher than previous projects that have used >10% maximum hammer energy for soft-starts.	Natural England's advice from Relevant Representations remains unchanged. Natural England advice that the soft-start should commence at no higher than 10% of the maximum hammer energy, therefore reducing the proposed soft-start of 15% maximum hammer energy (990 kJ) to 10% of maximum hammer energy (660 kJ).	The Applicant confirms there was an error in the Outline Marine Mammal Mitigation Protocol for Piling Activities (APP-279 and PD1-044) and the correct hammer energy for the soft-start is 10% as stated in Chapter 11 Appendix 2 (APP-161). The text in paragraph 34 in section 4.3.7 of the Outline Marine Mammal Mitigation Protocol for Piling

ID	Natural England Comment	Natural England's Advice to Resolve Issue	Applicant Response
E2.1 (4.2 Paragraph 14)	Natural England supports the increase in mitigation zone. It is important for the final Marine Mammal Mitigation Protocol (MMMP) to consider how this zone can be effectively monitored to ensure all marine mammals can be detected.	This may require using more MMObs and implementing stricter limits on workable weather conditions. If effective monitoring cannot cover the PTS impact zone, other methods of mitigation or sound reduction at source will be required.	Activities (version 3 submitted as part of the Deadline 2 submission). The Applicant has amended the text in paragraph 14 in section 4.2 of the Outline Marine Mammal Mitigation Protocol for Unexploded Ordnance Clearance (version 3 submitted as part of the Deadline 2 submission). Additional text was added stating that if the final noise modelling estimates result in an instantaneous PTS-onset impact range larger than 500 m (the standard mitigation zone size for piling activity), the mitigation zone would be increased to match. This may require more than one qualified MMO to ensure the entire mitigation zone can be observed in line with the JNCC guidance (2010).
E2.2 (4.3 Paragraph 15)	No commitment has been made by the Applicant to conduct a pre-detonation search by a qualified MMOB.	Natural England advises that a pre-detonation search by a qualified MMOB is adopted since this is the minimum requirement from the JNCC guidelines (JNCC guidelines for minimising the risk of injury to marine mammals from using explosives (August 2010)).	The Applicant has amended the text in paragraph 15 in section 4.3 of the Outline Marine Mammal Mitigation Protocol for Unexploded Ordnance Clearance (version 3 submitted as part of the Deadline 2 submission). Additional text has been added, outlining that JNCC (2010) guidance to be followed including commitment to a pre-detonation search by a qualified MMOB(s).
E2.3 (4.3 Paragraph 16)	The Permanent Threshold Shift (PTS) onset range for high order Unexploded Ordnance (UXO) donation (sic), could be larger than the area that can be effectively monitored by visual observers. Therefore, the delay in operations needs to reflect the distance a marine mammal needs to travel to flee the PTS onset range.	Natural England recommends the delay in operations needs to reflect the distance a marine mammal needs to travel to flee the PTS onset range. There should also be consideration for how the remainder of the PTS onset range will be mitigated, for example the distance to which an ADD is effective.	The Applicant wishes to highlight that the text in paragraph 16 of the Outline Marine Mammal Mitigation Protocol for Unexploded Ordnance Clearance (PD1-047) submitted at the Procedural Deadline states 'if a marine mammal is detected during the pre-detonation search, the operation would be delayed until the MMOB confirms its departure from the mitigation zone and ensures a safe distance (defined as the PTS-onset range for the Project)' and that 'the ADD's operation would be checked concurrently, and the MMOB would continue to monitor for sightings and animal behaviour'.
E2.4 (4.3 Paragraph 18)	The Applicant has stated that a Passive Acoustic Monitoring (PAM) system, operated by a trained operator, may be used to supplement visual monitoring during conditions of reduced visibility, such as fog, high sea state or at night. However, the minimum mitigation requirement set out in the JNCC guidelines for UXO operations state that the mitigation zone must be visually observed.	Natural England advises that commencement of UXO detonations should not occur during periods of reduced visibility. JNCC guidelines (2023) state " <i>The minimum mitigation requirement in these guidelines is that the mitigation zone is visually observed for the presence of marine mammals.</i> " PAM can be used to supplement visual monitoring to detect vocalising animals that are underwater.	The Applicant is not seeking consent for Unexploded Ordnance (UXO) clearance in the DCO application, as is typical for offshore wind farms. The Applicant will apply to the Marine Management Organisation under Part 4 of the Marine and Coastal Access Act 2009 for a marine licence to undertake UXO identification survey and at the post-consent stage. Nevertheless, the Applicant understands that due to health and safety and the JNCC guidance, UXO detonations for OWF, typically do not occur during hours of reduced visibility. The Applicant notes PAM can be used to supplement visual observation and will consider inclusion of the commitment suggested by Natural England, and the

ID	Natural England Comment	Natural England's Advice to Resolve Issue	Applicant Response
E2.5 (4.3 Paragraph 23)	No commitment has been made by the Applicant to conduct visual marine mammal watches, conducted by MMObs 30 minutes prior to ADD activation.	Natural England recommends that visual marine mammal watches, conducted by MMObs 30 minutes before ADD application are implemented. This might require the visual watch to be longer than one hour.	relevant guidance post-consent, and will update the final MMMP accordingly. The Applicant clarifies that the intention of the text in the Outline Marine Mammal Mitigation Protocol for UXO Clearance (PD1-047) was that a qualified MMOB would be used. The Applicant has amended the text in paragraph 15 in section 4.3 of the Outline Marine Mammal Mitigation Protocol for Unexploded Ordnance Clearance (version 3 submitted as part of Deadline 2).

Table 5 Appendix F1 Natural England's Advice on Offshore and Intertidal Ornithology

ID	Natural England Comment	Natural England's Advice to Resolve Issue	Applicant Response
Main Comments – Summary of Advice			
F1.0	Natural England welcomes the corrections made by the Applicant to the errors and inconsistencies identified within document 6.3.12.1 Chapter 12 Appendix 1 Intertidal and Offshore Ornithology Technical Baseline [APP-162], which has now been superseded by version 2 [AS1-064]. This issue raised in our Relevant Representations [RR-045] Appendix F is now addressed.		The Applicant welcomes Natural England's confirmation that this issue is resolved.
F1.1	The Applicant has endeavored to present assessment outputs based on Natural England's advised apportioning approach within the new Offshore Restricted Build Area (ORBA) documents submitted on the 19-Sep-2024, as requested by Natural England in our Relevant Representations [RR-045]. This approach is welcomed. The ExA has set out within the Rule 8 Letter [PD-011] that responses to submissions from the Applicant which relate to this matter are not required for Deadline 1. Natural England has however reviewed the Applicant's methodological approach, to ensure that progress is continued towards agreeing the approach to the ornithological assessment. This initial review has identified some methodological issues which are set out within our detailed comments in Table 1 below. Natural England will review and comment in full on these documents at Deadline 2, subject to clarity being provided by the ExA regarding the status of the ORBA within the Examination. Notwithstanding this and as stated above, the documents submitted by the Applicant in response to the Section 51 advice (for the original build area pre-ORBA) were corrected for errors, but not updated to include Natural England's full recommended approach to the assessment, and inclusion of displacement matrices for upper and lower confidence limits, the means of abundance values, along with nocturnal activity factors (NAFs) as set out in Garthe and Hüppop (2004) and clarity of use of the full breeding season. These updated assessment approaches within the ORBA documents are welcomed, though we highlight that until the status of the ORBA within the		The Applicant welcomes Natural England's recognition of the updated assessments as presented in the ORBA documents.

ID	Natural England Comment	Natural England's Advice to Resolve Issue	Applicant Response
	<p>Examination is clarified, these issues will be marked as unresolved in our Risk and Issues log. However, the limitation is that Natural England remains unable to make a judgement on the impacts from the full build area without the ORBA, or a comparison of impacts with and without the ORBA.</p>		
F1.2	<p>The new ORBA documents only present an assessment of the impacts from the array during the Operation and Maintenance (O&M) phase and therefore, Natural England are yet to see an assessment of impacts during the Construction and Decommissioning phases following Natural England's recommended approach. Natural England's advice is that displacement impacts are assumed to be 50% of the impacts during the O&M phase. It is therefore possible to infer the mortality figures for the Construction and Decommissioning phase with the ORBA from the new documents. Nonetheless, the full annual impacts across phases presented for each species are not presented, and this poses difficulty reviewing the overall impacts of the project across its timeline. Similarly, the Applicant has stated they are not intending to update the in-combination assessment because the conclusions of the RIAA have not changed. This will result in no agreed in-combination totals to take forward to use in future projects.</p> <p>To address the above, we strongly recommend that the Applicant submit a fully updated Environmental Statement chapter and RIAA assessment for offshore ornithology, including cumulative and in-combination assessments once the outstanding matters are resolved.</p>		<p>As the addition of the ORBA has not changed the conclusions of the assessments during the O&M phase, and impacts during the construction and decommissioning phases are 50% of those predicted in the O&M phase, impact conclusions for the construction and decommissioning phases will remain the same.</p> <p>The Applicant is intending to update the in-combination assessments that were presented at application to include the more up to date values from other projects which become available during the course of the Examination (also see response at Q1. HRA.1.3). The Applicant considers that updated project position for key projects (such as Rampion 2 and Dogger Bank South) will be available in time for the submission of the updated in-combination assessment at Deadline 4.</p> <p>At the same time, the Applicant will consider any potential changes to the conclusions made in the Environmental Statement (ES). If required, the Applicant will submit an updated ES chapter, including cumulative assessment, thereafter.</p>
F1.3	<p>In our Relevant Representations, we advised that some consideration should be given within the Habitat Regulations Assessment (HRA) process regarding the potential for long-term implications of Highly Pathogenic Avian Influenza (HPAI) which could lead to a reduction in the resiliency of populations. In addition, to how this may impact the need for conditions to allow a population to recover to, rather than be maintained at, a target level.</p> <p>In their response [RR-071], the Applicant has stated why they do not feel this is necessary, specifically that recovery at colonies has already been evidenced by increases in the numbers of Apparently Occupied Nests (AON)s at a select number of colonies. Natural England do not consider increases in the number of AONs alone to provide sufficient evidence that populations are recovering, since it is unclear to what extent non-breeding birds will have 'backfilled' the spaces left by high levels of mortality due to HPAI. Furthermore, it is unclear at this stage what resistance has been developed within populations of different species, how long this will last, and whether further outbreaks of HPAI will impact populations in the future. Natural England advice therefore remains unchanged. Even if the</p>		<p>Consideration of long-term variability in bird populations through stochastic events is beyond the scope of any Environmental Impact Assessment (EIA); such variability would not be an effect of the Project and any attempt to assess this would be highly speculative.</p> <p>Over the decades of seabird monitoring, the AON has been considered as a suitable unit of colony size.</p> <p>The Applicant is not familiar with the term 'backfilling'. At all times, when adult birds die, other birds move into the spaces left within colonies. This is the case for HPAI-related deaths and non-HPAI-related deaths; these 'new' birds may have originated from the same colony or immigrated from a different colony. They may also be breeding and non-breeding terms, hence the use of 'Apparently' when referring to 'Apparently Occupied Nests'. This process occurs at all colonies and helps maintain numbers.</p>

ID	Natural England Comment	Natural England's Advice to Resolve Issue	Applicant Response
	inclusion of HPAI does not alter conclusions within the RIAA, the uncertainties surrounding future impacts from issues such as climate change and HPAI to seabird populations should still be considered in the Applicant's assessments.		
Detailed Comments - Offshore and Intertidal Ornithology Analytical Methodologies presented within Documents relating to the Applicant's proposed ORBA: (PD1-071, PD1-081, PD1-086, PD1-087, PD1-088, PD1-091, PD1-092)			
F2.0	As stated within our Relevant Reps [RR-045], Natural England does not support the use of a theoretical stable age structure (Furness, 2015) to apportion impacts to adults from Special Protection Area (SPA) colonies for Habitats Regulations Assessment (HRA) during the breeding season. The Applicant has provided updated documents presenting Natural England's approach (to use, in the absence of site-specific ageing data, the precautionary approach of assuming 100%) alongside their own approach using the stable age structure.	Natural England welcomes the presentation of our approach to apportioning of adults alongside the Applicant's approach.	The Applicant notes Natural England's comments. The Applicant's position remains that 100% adult apportioning is not appropriate, and that the stable age structures presented in Furness (2015) are the best available evidence regarding adult proportions. As such the Applicant has retained the adult proportions published in Furness (2015) as its preferred approach.
F2.1	<p>The Applicant has derived adult proportions from DAS data for kittiwake, gannet and lesser black-backed gull (LBBG) as the proportion of birds identified as adult out of all aged birds. This has been done by calculating the proportion of adults for each survey that falls within the relevant breeding season for that species, and averaging these to produce the site-specific adult proportions, as follows:</p> <p>Gannet: 0.86 Kittiwake: 0.90 LBBG: 0.50</p> <p>However, this averaging includes surveys when no birds are recorded, and the 'proportion of adults' is therefore 0%. Natural England suggests that this is therefore not a valid calculation and has resulted in an underestimate of the proportion of adults, particularly for LBBG where several surveys during the breeding season recorded no birds.</p>	<p>Natural England advises that a more valid and simple way of calculating proportion of adults from Digital Aerial Survey (DAS) data is to follow the method used by Morgan Offshore Wind Farm, which is to divide the total number identified as adults by the total number of aged birds. This gives the following adult proportions:</p> <p>Gannet: 0.90 Kittiwake: 0.91 LBBG: 0.66</p> <p>We advise that the Applicant's assessment is updated with the above rates.</p>	<p>The method used by the Applicant to calculate adult proportions from the site-specific DAS data is similar to that proposed by Natural England; the Applicant has taken an average of the proportion of adults from each monthly survey, whereas the Natural England preferred method uses the raw data on aged birds and adults across all surveys to calculate the proportion of adult birds across all months. The methods produce similar results (the Applicant's approach uses the following adult proportions: gannet-0.86, kittiwake – 0.90, lesser black-backed gull – 0.5).</p> <p>The Applicant considers that, for kittiwake and lesser black-backed gull, the slightly lower adult proportions (as proposed by the Applicant) are likely to more representative of the actual adult proportion. This is due to the fact that both kittiwake and lesser black-backed gull attain a plumage very similar to that of an adult before they are sexually mature, i.e. birds aged as adults from DAS images should be considered 'adult-like' rather than necessarily 'adult'. As such, a proportion of the population of these species will look like, but not be, adult, leading to a general overestimation of the adult proportion of birds present at the site.</p> <p>For gannet, the likelihood of 'adult-like' birds being included within an adult proportion is lower than for kittiwake but still feasible. The Applicant notes that the initial issue with the method used to calculate the adult proportion which was raised by Natural England (i.e. the use of months where no birds were recorded among those used to calculate an average) does not apply to either gannet or kittiwake as no months were recorded with no birds for these species.</p>

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			<p>As such the Applicant is content that the rates used to date are suitable for all three species.</p> <p>The Applicant can update the assessment based upon the Natural England preferred approach to the calculation of adult proportions at Deadline 4 if required (specific guidance on Natural England's preferred approach was first provided in their Deadline 1 submission (REP1-061).</p>
F2.2	The Applicant has presented displacement matrices for upper and lower confidence limits, as well as the means, of abundance values, as requested in Natural England's Relevant Reps [RR-045].	Natural England welcomes the addition of these.	The Applicant welcomes Natural England's confirmation.
F2.3	For the ORBA, the Applicant has presented an alone assessment for guillemot at Flamborough and Filey Coast (FFC) using Natural England's approach to apportioning using model-based population estimates only. This is in contradiction to the Applicant's response [PD1-071] to comment F14 within our Relevant Reps, where the Applicant states: "The Applicant utilised both design-based and model-based density estimates for guillemot to inform the site refinement work, as advised by Natural England, however the Applicant retained the use of design-based density estimates for the primary assessments."	Natural England requests that the Applicant presents an assessment for guillemot using both design-based and model-based estimates and presents displacement matrices for both.	The Applicant considers that the model-based estimates are more robust and likely to be more accurate than any design-based estimates. Therefore, the Applicant considers that the displacement assessment provided, which uses the more accurate and robust model-based population estimates, uses the best available data.
F2.4	In our Relevant Representations [RR-045], Natural England set out our preferred approach to apportioning for guillemot, including the addition of a bespoke post-breeding season (August – September) and the recommended apportioning rate for this bioseason (68.5%). The Applicant has undertaken an assessment using Natural England's approach (albeit for model-based estimates only, see comment 4). The Applicant however does not state anywhere within the updated ORBA documentation what the apportioning rate is for guillemot during the post-breeding period as advised by Natural England.	An updated assessment should clearly set out what Natural England's preferred approach to guillemot apportioning is, including the apportioning rate that has been used during the bespoke post- breeding period.	The Applicant has utilised Natural England's approach to apportioning adult guillemot (68.5%) during the post-breeding bioseason.
F2.5	At Relevant Representations [RR-045], Natural England advised a bespoke apportioning rate for razorbill during the post-breeding bioseason (August – October) of 70.6% rather than the rate presented in Furness 2015 of 3.4%. The Applicant makes no reference to this recommended rate within their ORBA documentation, and it appears it is not included in the "Natural England approach" presented. Table 4-13 in document 15.10, [PD1-091] only shows a separate 'Natural England approach' line for the 'breeding' bioseason (accounting for differences in the Applicant's and Natural England's adult apportioning rates) and the 'annual total', but not for the 'post-breeding' bioseason.	An updated assessment should clearly set out what Natural England's preferred approach to razorbill apportioning is, including the apportioning rate advised for the post-breeding period and ensure this is reflected in the impact values calculated using the Natural England approach for razorbill.	The Applicant has utilised Natural England's approach to apportioning adult razorbill (70.6%) during the post-breeding bioseason.

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F2.6	<p>The Applicant has clarified that both design- and model-based population estimates were produced for guillemot only, and that the modelled population estimates were used to inform the area for the ORBA. The full methods employed have been presented within 15.9G ORBA MRSea Modelling for Offshore Ornithology [PD1-089].</p>	<p>Subject to clarification from the Examining Authority (ExA) regarding the status of the ORBA within the Examination, Natural England will provide comments on this at Deadline 2.</p>	<p>Natural England's comment is noted by the Applicant.</p>
F2.7	<p>In our Relevant Representations [RR-045], Natural England advised the potential for Likely Significant Effect (LSE) to red-throated diver (RTD) and common scoter in the Greater Wash SPA as a result of vessel movements during the O&M phase and that these impacts should be considered. The Applicant had not identified LSE during the O&M phase, stating that impacts within the ECC will be lower in the O&M phase compared to the Construction/Decommissioning phase. The Applicant has not added this consideration into the new ORBA documentation.</p>	<p>Natural England's advice remains unchanged and continues to advise that full consideration should be given to the potential for displacement and disturbance to RTD within the Greater Wash SPA during the O&M phase as a result of vessel movements.</p>	<p>The Applicant retains the position that the impacts on RTD from vessel movements during the O&M phase will be lower than those during Construction and Decommissioning phases. The Applicant considers that the assessment provided at Report to Inform Appropriate Assessment (RIAA) (AS1-095) remains valid and that there is no Adverse Effect on Integrity (AEol).</p>
F2.8	<p>The Applicant has included in the ORBA documentation further detail on their assessment of LSE of the Offshore Reactive Compensation Platforms (ORCPs) on RTD and common scoter, specifically the potential impact of the ORCPs presence within the Greater Wash SPA for the lifetime of the project. This considers current evidence for the extent of displacement of RTD by offshore structures such as military forts, lighthouses and offshore structures associated with Sizewell Nuclear Power Station within the Outer Thames Estuary (OTE).</p> <p>Natural England agrees that there is a lack of peer reviewed studies looking at the potential for anthropogenic static structures to displace divers and sea ducks. However, Natural England are not in agreement that a direct comparison can be made between the proposed ORCPs and the anthropogenic structures within the Applicant's assessment, the majority of which are substantially smaller in height than the ORCPs, for which (APP-048) outlines as having a maximum width of 90m and a maximum height of 90m each.</p> <p>Natural England agrees that the data presented within Lawson et al 2016, and more recent surveys of the Greater Wash SPA (see below), suggests that the proposed ORCP area overlaps with areas of low density of common scoter. Natural England does not agree, however, with the Applicant's statement that "Figure 4-1 shows the distribution of red-throated diver within the Greater Wash SPA and the low level of overlap with the proposed ORCP area." The proposed ORCP area overlaps with areas of medium relative density for RTD as per Lawson et al 2016.</p>	<p>Natural England advises that an assessment of the potential for the ORCP's to cause displacement to RTD should consider both the estimated mortality, and the area (km²) and the proportion of the SPA where RTDs have the potential to be displaced from by such a structure. Previous HRAs for artificial nesting structures (ANS) have assumed a 2km displacement buffer around the ANS, similar to what would be predicted for vessels. Natural England advises that, due to the ORCPs being substantially larger in size than an ANS and the majority of the structures assessed within 15.10, the displacement distance is likely to be between 2km (as per a vessel/ANS) and 10km (as per a turbine). We therefore recommend that an updated impact assessment presents displacement assessments for both these values so that a plausible range of impacts can be considered. At this stage, Natural England continue to advise that the Applicant considers alternative locations for the ORCP outside the SPA to avoid impacts to the RTD feature.</p>	<p>The Applicant welcomes Natural England's agreement that the proposed ORCP areas overlap with areas of low-density common scoter. When considering RTD, in its assessment the Applicant has reviewed potential displacement from single static structures, e.g. lighthouses and military forts, within both the OTE SPA and the GW SPA; and the data show no evidence of displacement. There is no reason why taller single static structures would have a greater displacement range than smaller single static structures and therefore the assessment within the RIAA AS1-095 and the HRA ORBA document PD1-092 remains valid. This said, the Applicant is undertaking a technical engineering review of the parameters used for the ORCP maximum design scenario and will submit updated information to the Examination no later than Deadline 4.</p> <p>The Applicant maintains its position that the proposed ORCP area is within an area of low density RTD, i.e. the ORCP area is approximately 4km from the Lincs Offshore Wind Farm (OWF) and therefore well within the 10km displacement buffer proposed by Natural England. This position is based on post construction monitoring at the Lincs OWF (Lincs OWF 2017) which shows that approximately 60% of RTD are displaced within the 4km buffer of the OWF, an area which broadly coincides with the proposed location of the ORCP. The Applicant notes that distribution of RTD shown in Figure 4-1 uses data collected prior to the construction of the Lincs OWF and that the RTD distribution post-operation of the Lincs OWF will be different. The Applicant therefore considers that the conclusions of the assessment provided in document reference 15.10 (PD1-091) remain valid.</p>

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F2.9	The collision risk appendix [PD1-087] presents wind turbine parameters and summary of CRM results for both a 'low' and 'high' scenario, but does not provide any context as to why multiple scenarios are being considered. It is also not clear which scenario has been carried through to the assessment presented within the Environmental Report (which does not present multiple scenarios).	Please could the Applicant clarify in an updated assessment why multiple scenarios are being considered, how these differ from the scenarios presented in the original ES, and which scenario has been carried through to the latest assessment.	Multiple scenarios are considered in order to show a range of impacts which include (but is not restricted to) the impacts of the worst-case scenario (WCS). The scenario that has been carried through to the assessment is the worst-case scenario ('high').
F2.10	As requested by Natural England in our Relevant Representations [RR- 045], the Applicant provided two reports for the kittiwake offshore platform census surveys conducted in 2022 and 2023 (within AS1-064), within their response to the Section 51 advice. These reports provide an overview of the survey details and methods, in addition to the number of active and trace nests recorded on each platform; this is also summarised in (PD1-092) Section 6.3. It is not clear, however, exactly how the data from these surveys has been used to inform the Applicant's approach to apportioning of kittiwakes to offshore colonies, specifically how the rate of 61.3% apportioning to Flamborough & Filey Coast (FFC) SPA has been calculated.	Natural England requests that the Applicant clearly presents how the data from the offshore platform census surveys has been used to calculate a count of 1,672 as per Table 12 in Annex A, and how a summed proportional weight of the four FFC SPA colonies of 0.64 has resulted in an apportioning rate of 0.613 or 61.3% to the SPA.	An updated apportioning annex that addresses this point will be provided at Deadline 3.
F2.11	The Applicant has clarified that the full breeding season for gannet (March to September) has been used throughout the assessment and this is reflected within both (PD1-081) and (PD1-092). The Applicant also states that they have used the full breeding season (April to August) for Sandwich tern, and this is shown within Table 2.1 in document PD1-092. However, the Environmental Report [PD1-081] shows the breeding season as May to August.	Please could the Applicant correct the information within Table 4.21 and/or the assessment as appropriate.	The Applicant wishes to confirm that the full breeding season for Sandwich tern is April to August. The full breeding season has been used in the assessments; the text in Table 4.21 (ie showing the breeding season from May to August) is incorrect. The Applicant proposes to correct the information in Table 4.21 of the Environmental Report (PD1-081) and provide the updated version of this report in due course
F2.12	The Applicant has rerun collision risk modelling for the area excluding the ORBA and presented updated collision risk estimates for gannet, kittiwake, sandwich tern, herring gull, lesser black-backed gull and great blacked gull. This is using the nocturnal activity factors (NAFs) as set out in Garthe and Hüppop (2004) as recommended by Natural England.	Natural England welcomes the Applicant's use of these parameters.	The Applicant notes Natural England's comments. The Applicant position is that that the recommended NAFs are precautionary for birds from the FFC SPA and therefore considers that the use of these rates adds a further level of precaution to the assessment.
F2.13	Updated collision risk modelling has not been presented for common tern and little gull, either in respect of the introduction of the ORBA, or in response to Natural England's comments at relevant representations [RR-045] regarding having used the incorrect NAF. Furthermore, migratory collision risk modelling has not been rerun for the ORBA and Natural England therefore do not have updated collision risk impacts for migratory species, including little gull and common tern.	Natural England advises that migratory collision risk modelling is rerun for the revised array area in light of the introduction of the ORBA	The Applicant considers that the reduction in area resulting from the ORBA can only mean a reduction in migratory collisions. As such, all conclusions presented in the RIAA in relation to migratory collision risk are still valid. Collision risk for little gull and common tern have been considered within the migratory collision risk assessment (APP-166).
F2.14	The Applicant has clarified the reason for not including a burn in within the Population Viability Analysis (PVA) for LBBG; that there were no material differences to outputs with and without.	Natural England maintain that it would be useful for the Applicant to present the full results with burn in, as per the	It is not anticipated that there will be a material difference between the outputs of the LBBG PVA with and without burn in, therefore the Applicant considers that the PVA

ID	Natural England Comment	Natural England's Advice to Resolve Issue	Applicant Response
		advised approach to PVA, even if they are not considered by the Applicant to be materially different.	provided is appropriate. A revised PVA, including burn in, will be provided at Deadline 4, and results included within the updated in-combination assessment.
F1.16 (PD1-071) 15.3, (PD1-092) 15.10A, paragraph 60)	Natural England welcomes the Applicant's change to paragraph 60 in the ORBA HRA Appendix A apportioning [PD1-092], clarifying that the modelled distributions of guillemot presented in Cleasby et al, 2020 do not include tracking data from FFC SPA. Natural England wish to reiterate our position that April should be considered as part of the breeding season for guillemot as defined by Furness (2015), and that this advice is based on the best available evidence. There is currently no clear evidence to support the idea that birds are substantially less bound to the nest site in April than at other times during the breeding season. We note that Dunn et al., (2020) is referenced several times by the Applicant as evidence that colony attendance is low in April, but this reference also states that by early April (at the Isle of May) "an increasing proportion of sites were occupied".	As previously stated, a prolonged debate about our position and the evidence that underpins it has the potential to distract the Examination from focusing on resolving the outstanding issues with the Applicant's assessment. We consider that it would be more beneficial to focus effort on addressing them.	The Applicant considers that Dunn <i>et al.</i> , (2020) presents clear evidence of a behavioural change in guillemot between April and May. The paper states ' <i>There was high variability in daily energy gain between individuals, and values tended to be lower during May and June, when guillemots incubate their eggs and rear their chicks</i> '. Thus, the Applicant concludes that guillemot behaviour is different in April compared to May, with the breeding constraint in May resulting in lower energy uptake. This breeding constraint cannot therefore exist in April. The Applicant also notes that Dunn <i>et al.</i> , (2020) consider that April is not part of the guillemot breeding season. The Applicant notes the statement regarding an increasing proportion of sites being occupied in April. However, the Applicant considers that an increasing proportion of sites is not the same as a large proportion of, or a majority of, sites.
F1.17 (PD1-071) 15.3 Applicant's response to RR)	The Applicant's view is that where impacts are considered as very minor, in terms of increase to baseline mortality, the Applicant believes they do not need to be carried through to a cumulative/in-combination assessment.	It remains Natural England's position that where there is a prospect of a contribution to an in-combination adverse effects, small impacts need to be carried through to an in-combination assessment.	The Applicant notes that this point relates specifically to Sandwich tern at the North Norfolk Coast SPA and lesser black-backed gull at the Alde-Ore Estuary SPA. For both species, using the Applicant's approach the RIAA (project alone) concluded that impacts would be less than 0.3 birds. Any impacts assessed for these species are likely to be extremely precautionary (more precautionary than for assessments for other species) as the Project is well beyond the mean-maximum foraging range in both cases. In addition, for Sandwich tern, there is no connectivity between the Project and the breeding colonies at the North Norfolk Coast, however this assessment was carried out on a precautionary basis based on the distance between the closest points of the Project and the boundary of the SPA. As such, the Applicant considers that results of assessments are likely to have over-estimated impacts. The Applicant considers that carrying impacts that are less than 0.3 birds, which are highly likely to be over-estimates, through to an in-combination assessment is unnecessary. Given the levels of precaution in the assessment and the very small size of the project alone impact (i.e., the contribution of the Project is 0.031% of baseline mortality of Sandwich tern and 0.039% of baseline mortality of lesser black-backed gull), there are no circumstances where the project alone impact could materially contribute to the in-combination total for these species.

ID	Natural England Comment	Natural England's Advice to Resolve Issue	Applicant Response
F1.18 ((PD1-071) 15.3 Applicant's response to RR)	The Applicant has clarified that they have no intention of updating their cumulative and in-combination assessments as more up to date values from other live projects will become available during examination.	For the ExA to provide up-to-date recommendations to the Secretary of State regarding the cumulative and in-combination impacts of the proposal, we consider that these assessments should be updated to reflect the latest impact estimates from the Five Estuaries, Dogger Bank South, and North Falls projects. In order to minimise the number of iterations of these assessments, we recommend the Applicant collaborate with the above developers to agree how updated impact values (based on Statutory Nature Conservation Bodies (SNCB) advice) can be efficiently incorporated into each other's assessments as the Examinations of all four projects progress.	The Applicant wishes to highlight that Natural England's interpretation of the Applicant's comment was not as the Applicant intended. The Applicant is intending to update the in-combination assessments that were presented at application to include the more up to date values from other projects which become available during the course of the Examination (also see response at Q1. HRA.1.3). The Applicant considers that updated project position for key projects (such as Rampion 2 and Dogger Bank South) will be available in time for the submission of the updated in-combination assessment at Deadline 4. At the same time, the Applicant will consider any potential changes to the conclusions made in the ES . If required, the Applicant will submit an updated ES chapter, including cumulative assessment, thereafter.

Table 6 Appendix H1 Natural England's Advice on Onshore Ecology

ID	Natural England Comment	Applicant Response
Preliminary Land Quality Risk Assessment [AS1-059]		
H1 para 2	In the updated Chapter 23 Appendix 1 Preliminary Land Quality Risk Assessment [AS1-059], the assessment notes ecological receptors to include water dependent Sites of Special Scientific Interest (SSSIs), some of which underpin designated sites within the National Site Network. However, Table 23.6 is missing some relevant water-dependent designated sites including The Wash SSSI, and Sea Bank Clay Pits SSSI. In addition, the Applicant has given no indication that the impacts to Functionally Linked Land associated with the mobile designated species of these SSSI's has been considered.	Whilst the Wash SSSI and Sea Bank Clay pits are not explicitly stated in Table 23.6, they have been considered as part of the conceptual model and qualitative risk assessment in the Preliminary Land Quality Risk Assessment (PLQRA). The PLQRA deals primarily with terrestrial sources of contamination and it's immediate handling at source. The receptors identified to be at potential greater sensitivity in the risk assessment were associated with local watercourses and drainage networks within relatively close proximity to the site boundary. If the Wash and Sea Bank Claypit SSSI designated sites were to be impacted as a result of pollution mobilised by the Project, the primary pathway for such pollution would be through these local watercourses and drainage networks. As such, the mitigation measures identified for the local watercourses and drainage networks would also therefore be protective of the designated sites that they would ultimately hydraulically connect into. Given the sensitivity of the water dependant habitats identified however, the impacts to the Wash and Sea Bank Claypit SSSI designated sites have been identified and assessed within the hydrology and flood risk chapter of the EIA (APP-077) and its associated appendices, rather than the preliminary land quality risk assessment. This includes the groundwater risk assessment (APP-210) and the water quality management and mitigation plan which will form part of any final code of construction practice (COCP), as provided for in the outline CoCP [PD1-038] for the protection of the Wash and Sea Bank Claypit SSSI designated sites. Potential impacts on the designated bird species of The Wash SSSI and Sea Bank Clay Pits SSSI have been considered within Section 22.8 of the Chapter 22 (APP-077).

ID	Natural England Comment	Applicant Response
H1 para 3	Natural England advises that the Land Quality Risk Assessment is updated to include these designated sites to inform appropriate mitigation where impacts are identified in the Code of Construction Practice (CoCP) management plan	Recommendations are provided in Section 23.7 (page 67 of the PLQRA) in relation to mitigation to be implemented within the CoCP for the protection of the water environment (and thereby water sensitive habitats which they connect to). Due to the water dependence of these habitats, the required mitigation measures are detailed within the hydrology and flood risk chapter of the EIA [APP-079] and its associated appendices; which includes the groundwater risk assessment (APP-210) and the water quality management and mitigation plan which would form part of the future code of construction practice
H1 para 4	Natural England also advises updates to the Land Quality Risk Assessment should ensure that designated sites within the National Site are included to inform the Report to Inform Appropriate Assessment [AS1-096] Habitat Regulations Assessment (HRA).	<p>Relevant Special Protection Areas (SPAs), Special Areas of Conservation (SACs) and Ramsar sites have been included in the Report to Inform Appropriate Assessment (AS1-096).</p> <p>Section 9.5.3.3 of the RIAA (AS1-096) already considers the The Wash and Sea Bank Clay Pits SSSI, although the Sea Bank Clay Pits SSSI has been referred to as Wolla Bank Pit, which is located within the same site.</p>
Outline Code of Construction Practice [PD1-039) – Water Quality Management and Mitigation Plan (WQMMP)		
H1 para 5	Natural England welcomes the addition of a Water Quality Management and Mitigation Plan (WQMMP) within the Outline Code of Construction Practice (CoCP) [PD1-039]. We note that this includes commitments by the Applicant for mitigation and monitoring to be implemented to manage any potential impacts to Sea Bank Clay Pits SSSI during construction. . However, the Outline CoCP does not provide any details on the specific mitigation measures that will be implemented, if an impact is identified (e.g., pollution, de-watering). As such, Natural England is not able to assess the feasibility and suitability of any mitigation.	<p>As outlined in the Outline Code of Construction Practice (OCoCP) (document 8.1 version 3) a WQMMP will be submitted prior to construction which will set out the methods to monitor and control changes to the quality and quantity of groundwater and surface water which could be impacted during the construction phase of the Project.</p> <p>The Groundwater Risk Assessment (GWRA) (APP-210) concluded the impact on the local groundwater regime at Sea Bank Clay Pits SSSI is considered to be minor. Monitoring and mitigation measures are outlined within Section 24.7.4 of the GWRA (APP-210). It is recommended that monitoring of Sea Bank Clay Pits SSSI is undertaken throughout the construction period for landfall and the initial onshore ECC phase from landfall. In the highly unlikely event that a notable drop in water levels or flows is recorded at the SSSI, any dewatering activity at landfall would be ceased until appropriate assessment of impact or suitable mitigation can be put into place.</p>
H1 para 6	Whilst we note the Applicant intends to provide full details of mitigation measures within the CoCP prior to construction; we advise as the regulator for SSSIs that information outlining the mitigation should be provided at the consenting phase to demonstrate that mitigation measures can be implemented. As advised in our relevant representations, we would then expect to be consulted on this by the Local Planning Authority (LPA)/ Marine Management Organisation (MMO) on the final WQMMP in the CoCP prior to construction, with full details on the identified mitigation measures and designated sites listed to ensure the efficacy of the proposed mitigation measures.	<p>Potential mitigation measures have been outlined in the Applicants response to H1 para 5 above.</p> <p>Requirement 18 (Code of construction practice) of the draft DCO (document 3.1, version 5) which secures the CoCP requires the relevant planning authorities to consult, as appropriate, with Lincolnshire County Council, the Environment Agency, the relevant statutory nature conservation body and the MMO therefor NE, as the statutory nature conservation body, will be consulted on the CoCP, which will include the final WQMMP.</p>

ID	Natural England Comment	Applicant Response
Schedule of Mitigation v2 [PD1-059]- Bats		
H1 para 7	Natural England welcomes the commitments in the Schedule of Mitigation v2 [PD1- 059] for the retention and protection from direct impacts for hedgerows 186, 1405, 1541 and 1931, in addition to Trees 4217 and 4954.	This comment has been noted by the Applicant.
H1 para 8	Furthermore, Natural England is pleased to see the Applicant has made a commitment to minimise impacts on migrating Nathusius and other bat species, by minimising night-time working. The Applicant states should night-time working be deemed necessary, all lighting will follow a sensitive lighting design as per the IPL and BCT Guidance Note 08/23 and avoid key bat habitat, e.g. hedgerow	This comment has been noted by the Applicant.
H1 para 9	Within the Schedule of Mitigation [PD1-059], for commuting and foraging bats the Applicant has stated hedge gap filling will be done overnight between April and October to reduce impact to flights lines. However, it is important to note that depending on local weather conditions many bat species may be active through November and into early December and may emerge from hibernation in March. There are also species such as barbastelle that may be active for periods throughout the winter. If there are sections of hedgerows to be removed and evidence indicates (via remote detectors/activity surveys etc.) they may be used for commuting by bats throughout the seasons, then Natural England would expect to see overnight hedge gap filling continued. We advise the mitigation measures are updated as appropriate.	This comment has been noted by the Applicant. The timings stated within the OLEMS (PD1-057) and the Schedule of Mitigation (V3 submitted as part of Deadline 2) relating to the provision of artificial flightlines will be updated to reflect the recommendations i.e. these will be provided throughout the year where required. An updated OLEMS will be submitted at Deadline 3
Outline Landscape and Ecological Management Strategy V3 [PD1-056]- Species Licencing		
H1 para 10	Since our Relevant Representations [RR-045], Natural England has issued the Applicant with a Letter of No Impediment (LoNI) for Great Crested Newts (GCN) and water vole	The Applicant has received Letters of No Impediment for Great Crested Newts and Water Vole.
H1 para 11	However, for both Otter and Badger, Natural England has not been asked by the Applicant to provide a LoNI. Instead, as stated within the Outline Landscape and Ecological Management Strategy (OLEMS), the Applicant is relying on a A45 licence for Otters only. Natural England agrees that avoidance measures should be applied in the first instance for both species. However, as the scheme progresses, and where the avoidance of impacts is not possible Natural England would welcome discussions over a licensed mitigation approach for both Otter and Badger. In addition, agreement on outline mitigation measure strategies which could be implemented if required, should be sought during the consenting phase to give the Secretary of State comfort that effective mitigation measures can be implemented	<p>The OLEMS (PD1-057) sets out the latest survey and design information and concludes that, assuming the mitigation measures committed to are implemented, no licensable impacts are likely to occur for Otter or Badger. Mitigation strategies are presented within the OLEMS (PD1-057) for both species.</p> <p>Outline mitigation strategies to prevent offences in relation to otter are presented in Section 3.7.8 and Annex A.4 of the Outline Landscape and Ecology Mitigation Strategy (PD1-057). These include employment of an ECoW, pre-commencement surveys, sensitive scheduling of work, minimising noise and control of lighting, localised reduction of traffic speeds to 10mph, the immediate re-instatement of habitats, as well as the installation of visual and acoustic screening during potentially disturbing activities at two sensitive locations. With this collective mitigation in place, disturbance levels are effectively minimised, rendering it unnecessary to apply for a A45 licence, as no disturbance offence is predicted.</p> <p>Outline mitigation strategies to prevent offences in relation to badger are presented in Section 3.7.7 and Annex B (section A.6.4) of the Outline Landscape and Ecology Mitigation Strategy (PD1-057). Annex B provides the results of the most recent badger survey (dated July 2024). In summary, mitigation measures include exclusion zones around setts, the protection of individual badgers (e.g.</p>

ID	Natural England Comment	Applicant Response
		<p>through the installation of escape planking in deep trenches) and acoustic and visual screening at three locations. Annex B concluded that with appropriate mitigation in place, no impacts on badger are predicted and therefore a letter of no impediment would not be necessary.</p> <p>Section 3.5 states that <i>"The results of the pre-commencement surveys would be used to identify whether any updates to the measures proposed in Sections 3.6 – 3.9 or additional mitigation measures are required and the EMP would be updated to reflect the survey results, as required."</i> The ECoW would analyse the pre-commencement survey results and work closely with the principal contractor to understand whether an offence under the Wildlife and Countryside Act 1981 would be possible. If the ECoW considers that an offence under the Wildlife and Countryside Act 1981 could occur, the appropriate licence would be applied for at that time.</p> <p>Further, Section 3.7.7.1 of the OLEMS (PD1-057) commits the Project to undertake pre-commencement surveys to provide up-to-date survey information to guide the production of Reasonable Avoidance Measures (RAMS) to be included in the Ecological Management Plan (EMP). Pre-construction survey would include territorial analysis using the bait-marking method in the event that a main sett is identified as likely to be impacted.</p> <p>All of these measures, which are secured through Requirement 12 of the DCO, provide effective mitigation of potential effects on otter and badger, and should provide the ExA with confidence that effective mitigation will be implemented, if required.</p>
Natural England's Advice on Biodiversity Net Gain (BNG)		
H1 para 12	We note the Applicant's additional submissions since application have specified they will follow standard best practice. Once the Applicant has secured their commitment to BNG in the OLEMS and thus the DCO, we consider our concerns raised at relevant representations resolved. Natural England has no further comment to make during application.	This comment has been noted by the Applicant.

Table 7 Appendix H2 Natural England's Advice regarding Soils

ID	Natural England Comment	Applicant Response
Summary of Advice		
H2 Summary	Natural England's advice remains unchanged as per Appendix H to the Relevant and Written Representations of Natural England [RR-045], regarding pre-consent surveys for Agricultural Land Classification (ALC) Grade and the requirement for further assessment of Deep Peat presence. In the absence of a detailed, site-specific soil and ALC survey and assuming that all mapped ALC Grade 3 land is BMV (i.e. Subgrade 3a), it is impossible to provide an accurate baseline and demonstrate the likely potential impacts. Without these surveys the Applicant cannot demonstrate how the project will avoid or minimise impacts on best and most versatile (BMV) agricultural land nor the design of potential mitigation to safeguard the soil resources. These surveys are required as part of the consent process for Outer Dowsing Offshore Windfarm.	<p>As set out in the Applicant's response to Relevant Representations (PD-071) the undertaking of an ALC survey would most likely lower the identified ALC grades in some sections to non BMV due to splitting Grade 3 into 3a and 3b classifications, 3b thereby being excluded as BMV. The Applicant's position is therefore that the ES demonstrates a worst case scenario of the impacts on BMV.</p> <p>The Applicant's position is that it is not common practice for ALC surveys to be required as part of the consent process, and these surveys will be carried out post consent, as set out in the Applicant's response to para 7 below.</p>

ID	Natural England Comment	Applicant Response
Development on Peat		
H2 para 1-3	<p>England’s peatlands are our largest terrestrial carbon store and are vital for capturing and storing carbon. They provide a range of other valuable benefits including biodiversity rich ecosystems, improved water quality and natural flood management, the protection of historic environment features and connect people with nature.</p> <p>Following the publication of the England Peat Action Plan (England Peat Action Plan, May 2021) and the Greater Manchester (GM) Peat Pilot, Natural England has a better understanding of the impact of carbon loss from damaged and unmanaged peat as well as the opportunity costs of not restoring peat as functioning ecosystem. The England Peat Action Plan states ‘We want our peatland to meet the needs of wildlife, people, and the planet. All uses of peatland should keep the peat wet and in the ground. We will work to ensure all our peatlands, not just deep or protected peat, are responsibly managed, or, in good hydrological condition or under restoration management.’</p> <p>Natural England therefore does not support the principle of development on any peat soils, and strongly advises maximising the extent of peat omitted from the development footprint and highly recommend retaining peat in situ. We advise that in the absence of detailed survey’s it will not be possible to avoid impacts on deep peat.</p>	<p>A review of publicly available data confirmed that no peat was present within the ‘Order Limits’ of the Project, as shown on Figure 23.2 Superficial Geology in Chapter 23 Geology and Ground Conditions Figures (APP-078). The majority of the route comprises arable farmland which, by its usage, does not contain peat. The ‘Peat Coverage’ dataset presented on the UK Soil Observatory does not indicate peat deposits within the Order Limits. The peat references within the existing environment section are descriptions of the recorded soil types, which is sourced from the UK Soil Observatory datasets. The references to ‘peaty surface’ indicate that the soil may contain a layer or layers of partially decomposed organic matter. Peaty surfaces do not necessarily mean that the overarching deposit is peat.</p> <p>The baseline information and methodology for assessment was presented during the Expert Topic Groups (ETGs), copies of the minutes for which have been submitted as Appendix 6.1 of the ES (APP-149). The Applicant has received no comments or objections from stakeholders in respect of the baseline environmental data during these meetings, and no stakeholders provided information regarding peat nor raised any concerns regarding the baseline environment data. Natural England were invited to participate in the ETGs and received copies of the minutes.</p> <p>The requirement for a Peat Management Plan, which would be produced in the event that peat is identified during post consent soil surveys, will be added to the OCOCP. If during pre-construction soil surveys peat is identified, a Peat Management Plan will be prepared, taking into account requirements of the National Planning Policy Framework (2023), the England Peat Action Plan (2021); and Decision support framework for peatland protection, the establishment of new woodland and re-establishment of existing woodland on peatland in England (2023).</p>
Agricultural Land Classification		
H2 para 4	<p>Due to the extent of the temporary disturbance from many developments and the drive to maintain and strengthen BMV protection as set out in the 25 Year Environment Plan, It is considered important for a detailed ALC field survey to be undertaken in line with the MAFF 1988 ‘Agricultural Land Classification of England and Wales: Revised criteria for grading the quality of agricultural land’. The potential impacts of temporary disturbance on soils and BMV land should be considered.</p>	<p>The Applicant has committed through the oSMP to carrying out detailed pre-construction soil surveys to inform soil management, storage and restoration methods, in order to minimise the impacts to soil health and condition through temporary disturbance. ALC field surveys will be undertaken following the methodology set within the MAFF 1988 ‘Agricultural Land Classification of England and Wales: Revised criteria for grading the quality of agricultural land’.</p>
H2 para 5	<p>A detailed ALC and soil survey of the agricultural land should be undertaken across the full Study Area to inform the Environmental Impact Assessment (EIA) as a single field effort. Both surveys can be undertaken at the same time drawing on the same 3 information, avoid duplication of survey effort and be available to inform design, EIA and environmental management plans.</p>	<p>It is intended that the detailed ALC field survey as described above will be used to inform final design, and the final Soil Management Plan, which as described within the outline Soil Management Plan (oSMP) will be undertaken pre-construction.</p>
H2 para 6	<p>Detailed soil and ALC data is necessary to provide a baseline for the ALC grade as well as soil properties to inform soil handling. This is important for areas of permanent and temporary land take. The inappropriate management of the soil resource can result in a permanent degradation of the land, including a change in the ALC Grade, which can ultimately result in the permanent loss of BMV agricultural land. Appropriate mitigation to prevent the potential loss of BMV land (including the degradation of agricultural land through inappropriate soil handling) includes the</p>	<p>Although the Applicant agrees with Natural England’s position that ALC surveys are important for defining soil properties and thus informing appropriate soil handling and reinstatement during construction, the applicant does not agree that such survey data is necessary prior to consent being granted. As illustrated below there are numerous examples of Nationally Significant Infrastructure Projects being consented with the commitment to undertake ALC surveys post-consent secured via an</p>

ID	Natural England Comment	Applicant Response
	<p>restoration of disturbed land to the baseline ALC Grade. In the absence of a characterisation study informed by a detailed soil and ALC survey, the restoration cannot be assured.</p>	<p>outline plan, of which a final plan must be submitted to and approved by the relevant discharging authority prior to commencement of development.</p> <p>Undertaking ALC surveys prior to determination would not change the outcome of the EIA or any of the mitigation proposed, but would impose a financial burden on the Applicant at this stage, which is disproportionate to the outcome that would be achieved . The final mitigation which would draw on the findings of the ALC surveys can only be determined following detailed engineering design, once a contractor has been appointed. As such, even if ALC surveys were undertaken pre consent it would not be possible to design soil mitigation required as stated by Natural England as the final plan would be bespoke to the soil conditions in the locations where the final infrastructure will be sited.</p> <p>It is for these reasons that the Applicant has committed to undertaking these surveys once DCO consent has been granted. The commitment to undertake ALC surveys is set out in the outline SMP (PD1-040). Requirement 31 (Soil management plan) of the draft DCO (document 3.1, version 5) requires a soil management plan (which must accord with the outline soil management plan) to be submitted to and approved by the relevant planning authority in consultation with Lincolnshire County Council prior to any stage of the onshore works commencing.</p>
H2 para 7	<p>In some circumstances, pre-construction, ALC surveys are required in the absence of pre-consent ALC surveys. This is usually due to the inability to access sections of a site pre-consent. However, this is usually a small area of site, with the remaining land subject to an ALC survey to inform the EIA.</p>	<p>The Applicant has always committed to detailed soil surveys through the oSMP for which the procedure adopted by other projects has been followed. In regards to BMV land, the worst-case scenario has been adopted, with detailed surveys required pre-construction to inform soil management and restoration.</p> <p>There are examples available of Nationally Significant Infrastructure Projects approved by the Secretary of State, all of which will have received a similar representation from NE, as detailed below.</p> <p><u>Hornsea Project Four Offshore Wind Farm</u> Volume A3, Chapter 6: Land use and Agriculture Chapter stated in Table 6.4 “assessments have been based on the assumption that all Grade 3 land within the available ALC data is 3a (not 3b) – thereby falling in to the BMV category. This is a highly conservative and protective approach which overestimates the area of BMV land. As such it is considered that ALC surveys are not required”. Commitments were made in the Outline CoCP and Outline Soil Management Plan for the mitigation measures in relation to agricultural land and soils, which included pre-commencement soil surveys. As part of responses to Hornsea ExQ1 in March 2022 – SEL 1.5 Natural England stated “The publicly accessible ALC data is mainly to aid strategic and scoping assessments, and also to help determine survey effort and methodology. We would therefore have preferred it if ALCs surveys were part of the assessment. However, we are satisfied that there is a commitment to surveys and mitigation, and consider that this is adequate to prevent significant harm to BMV soils.” The Statement of Common Ground between the Hornsea Project Four and Natural England (Dated 10 August 2022, REP7-062, Page 22, Table 7 – G3.5-6.1.3) similarly demonstrates that NE preferred an</p>

ID	Natural England Comment	Applicant Response
		<p>approach that includes ALC surveys to be undertaken prior to DCO determination, but accepted that “we [Natural England] are satisfied this can be dealt with as part of a planning condition.”</p> <p><u>Sheringham Shoal and Dudgeon Offshore Wind Farm Extension Project.</u> The assessments were undertaken and submitted during the currency of the 2011 NPS policy documents, however the revised 2023 NPS documents were published during the examination period. This project did not undertake ALC surveys pre-consent. As part of the assessment they assumed all land Grade 3 could be Grade 3a and therefore BMV, therefore assuming a worst case scenario. It is important to note that the Secretary of State mentioned in their decision (section 4.3) that there is nothing in the new NPS that would have changed the decision.</p> <p><u>Viking CCS Pipeline.</u> Policy referenced at the time was the NPS EN-1 (DECC 2011) However, any differences within the draft NPS documents published in November 2023 were highlighted within Environmental Statement, Volume II - Chapter 10: Agriculture and Soils (EN070008 – Viking CCS Pipeline APP-052). The chapter, paragraph 10.4.20 states that the provisional ALC mapping was used in conjunction with aerial photography to identify any land use change and development since the mapping was undertaken to obtain a more robust baseline for soils and agricultural land. To inform the assessment the provisional ALC mapping and the post 1988 ALC data were used, no surveys were undertaken.</p> <p><u>Triton Knoll Offshore Wind Farm</u> has been used within representations as a comparative route in regard to soil types. The ExA’s Report of Findings and Conclusions issued on 3rd June 2016 indicates that the order was recommended to be granted using solely provisional ALC data (the indication being Grade 3 is not broken down into subgrades), with no further indication that ALC Surveys were required.</p>
H2 para 8	<p>In the pre-application phase, Natural England clearly set out advice to the Applicant on Assessing BMV agricultural land specifying that detailed surveys should be carried out and that a worst-case scenario was an unsuitable approach. Subsequent advice was presented in our Relevant Representation’s in Appendix H [RR-045] stating the ES should present ‘site specific’, both detailed and semi detailed ALC surveys to inform the decision maker in their application of NPS EN-3. This remains our position.</p>	<p>The Applicant has noted Natural England’s comments, the Applicant’s position is as set out in the responses noted above.</p>

Table 8 Appendix I1 Natural England's Advice on Onshore Ornithology

ID	Natural England Comment	Applicant Response
Summary of Advice		
	<p>Natural England welcomes the provision of the second year of onshore bird survey data [AS1-108]. Having reviewed this data in light of the first year of bird data, we do not agree with the Applicant’s assessment of significance of impacts on SPA interest features namely Pink Footed Goose, Dark Bellied Goose, Golden Plover, Lapwing and Curlew whilst located within Functionally Linked Land (FLL) to The Wash SPA/Ramsar. We also believe that further mitigation measures could be adopted to minimise the impacts. We will review all the mitigation measures included within various</p>	<p>The Applicant is pleased to note Natural England’s acceptance of the second season of winter bird survey data. The Applicant will consider additional advice on the mitigation measures. The Applicant’s position is that the assessment of adverse effects on The Wash SPA/ Ramsar was carried out appropriately and that the proposed measures are adequately tailored to maintain integrity of the SPA/ Ramsar. More details are provided in the individual responses below, further to previously submitted responses to Natural England Relevant Representation (RR-045 Natural England Appendix I</p>

ID	Natural England Comment	Applicant Response
	<p>documentation in order to provide further advice on mitigation requirements to avoid an Adverse Effect on Integrity. Currently, there is minimal resolution on the risks and issues presented on our Joint Relevant/Written Representation [RR-045]. Please see Appendix J of written representation to track issue resolution</p>	<p>Onshore Ornithology) (PD1-071) (I1-I5), and in relation to Habitat Regulation Assessment (H47-H49). This includes the additional information requested by Natural England in relation to crop preferences in 13.2 Addendum Winter Bird Survey 2023-2024 (AS1-108) and crop availability and rotation in Additional Clarifications Relating to Natural England’s Relevant Representations (Appendix I) (PD1-093). This shows that the most common crop types utilised by the five key qualifying species were found to be bare/ploughed land, cereal crops, grass and stubble (fallow land). PD1-093 evidences that these crops are common and widespread within the Order Limits plus 400m buffer, which is reflected in the widespread distribution of pink-footed goose, lapwing, golden plover and curlew. Therefore, the mitigation set out in the EIA and RIAA specifically regarding a localised working restriction is sufficient, as it means that alternative foraging resource will remain available.</p>
<p>[AS1-108] 13.2 Addendum Winter Bird Survey 2023-2024</p>		
<p>I1 para 1</p>	<p>Natural England welcomes the provision of the second year of onshore bird survey data [AS1-108]. And confirms that a sufficient level of data has now been provided by the Applicant to characterise passage and over-wintering bird usage of FLL at the landfall and along the ECC.</p>	<p>The Applicant welcomes this comment.</p>
<p>Comparison between first and second year of wintering bird data</p>		
<p>I1 para 2</p>	<p>Natural England notes that there is a significant increase in SPA Pink Footed Goose (PFG), golden plover, lapwing and curlew flock sizes between 2022/23 and 2023/24. These increases range from 2,205% increase for PFG and 83% increase for Curlew. Within AS1- 108 the Applicant contests that these differences are not significant because there is no significant change in the distribution and number of flocks, concluding that mitigation measures remain fit for purpose due to birds only utilising fields for a short duration, with no specific preference.</p> <p>However, Natural England advises that with more birds being reliant on FLL there is heightened sensitivity to disturbance. This is particularly true along the ECC running parallel to A52 and then around the RSPBs Freiston and Frampton nature reserves, the Rivers Witham (the Haven) and Wellend.</p>	<p>The Applicant acknowledges that the size of the individual flocks of the The Wash SPA/ Ramsar designated pink-footed geese, golden plover, lapwing and curlew recorded during the Winter Bird Survey 2023/24 were larger than in 2022/23 (AS1-108). However, the Applicant’s position is that the proposed mitigation, in the form of seasonal and localised working commitments, remains sufficient. This takes into account the following:</p> <p>A total of 27 and 23 records of pink-footed goose were recorded in 2022/23 and 2023/24 winter bird surveys respectively during 14 visits between September and March (2022/23) and during 16 visits between September and April (2023/24). This is on average 1.9 flocks per visit in 2022/23 and 1.4 flocks per visit in 2023/24 along the 70km Order Limits plus 400m, ranging between zero and three flocks per visit. In 2023/24 season when larger flocks were recorded, pink-footed goose were recorded during only seven visits (out of 16) and within nine ECC sections (out of 14) with most of the sighting locations recorded only once. This suggests that pink-footed goose were using the Survey Area infrequently, utilising evenly distributed and widely available food resources.</p> <p>Apart from golden plovers, which were recorded during only six of 16 visits during the 2023/24 season, lapwing and curlew were recorded throughout the season and all three species were widespread across the whole Survey Area. However, there was only one visit when more than ten golden plover flocks were recorded, and two and four visits when more than 15 flocks of lapwing and curlew were recorded respectively. This suggests that these species typically utilise very few fields at any one time in the context of the whole 70km Survey Area. In most cases, flocks were recorded at specific locations only once suggesting that the three species have widespread distributions utilising widely available food resources along the Survey Area. The survey results are considered in the context of the 70km Order Limits, the proportion of the cable corridor where work will be carried out at any one time and availability of alternative habitat within the Order Limits and in the wider area:</p>

ID	Natural England Comment	Applicant Response
		<ul style="list-style-type: none"> ○ As stated in the EIA report (APP-077) paragraph 250: “...works between November to February inclusive will be carried out by several small teams at discrete locations along the route, such as joint bay or link box installation, trenchless crossings, cable installation (pulling of cables through pre-installed ducts) and other non-intrusive earth works (e.g. cable testing). Assuming a works area of 100m at these sites and 10 active sites, this would account for approximately 1,000m of works or (1km/70km) or 1.4% of the cable corridor at any one time. Activity on the remaining 98.6% of the corridor will be confined to the operatives taking daily access to the work site where this involves the use of a haul road and moving the drilling plant to the next site once the work at any location is complete”. ○ As stated in the updated Outline Landscape and Ecological Management Strategy (OLEMS) (AS1-103) paragraph 153: “For conventional cross-country construction methodologies involving soil handling, the primary construction period is March – October. During November to February period, works will continue at trenchless crossing sites and joint bays that can be accessed by temporary haul roads and hard-standings. No trenched excavation works for duct installation will be undertaken throughout November – February”. ○ As stated in the updated (OLEMS) (AS1-103) paragraph 149: “The additional mitigation for The Wash SPA and Ramsar, comprising a seasonal restriction to construction activity, to avoid works during the period of October to March inclusive within 400m of The Wash SPA, will reduce the potential disturbance impact to this species”. ○ As stated in the Additional Clarifications Relating to Natural England’s Relevant Representations (Appendix I) with regards to crop availability (PD1-093) the most utilised types of crop by the four qualifying features discussed here were also the most common and widespread within the Order Limits plus 400m. <p>Natural England advises that it is particularly true that there are more birds reliant on FLL in the following locations: the ECC running parallel to A52 and then around the RSPBs Freiston and Frampton nature reserves, the Rivers Witham (the Haven) and Wellend. These areas encompass the majority of the Order Limits and only exclude the section between Skegness and the landfall, which is the section furthest away from The Wash SPA and Ramsar. This description therefore corresponds with the description in the Season 2 Addendum (AS1-108), which describes a widespread distribution across the survey area for pink-footed goose, golden plover, lapwing and curlew.</p> <p>Natural England advises that with more birds being reliant on FLL there is a heightened sensitivity to disturbance. The proposed mitigation remains effective however, as they will ensure that only a small area relative to the foraging ranges of these species is affected at any one time and alternative foraging habitat remains available (as evidenced in PD1-093).</p>

ID	Natural England Comment	Applicant Response
		<p>In summary, the Applicant’s position is that the proposed mitigation measures in relation to FLL are sufficient to maintain the integrity of the Wash SPA/ Ramsar because: (a) a total of 98.6% of the 70km cable corridor will be left without construction activity at any one time between November and February; (b) a very small proportion of fields within the Order Limits plus 400m are utilised by the four species at any one time; (c) potential disturbance will be temporary and highly localised; and (d) large areas of alternative foraging habitats exist within the Order Limits and the wider area (within foraging range of the estuary).</p>
Mitigation Measures		
I1 para 3	<p>Natural England advises that the principal mitigation measure for overwintering birds is a seasonal restriction to avoid disturbance during sensitive periods. However, where that is not possible management plans will be required to ensure Adverse Effects on Integrity can be avoided. Natural England aims to provide further advice on the feasibility and effectiveness of the Applicants proposed mitigation measures at the next suitable deadline.</p>	<p>The Applicant will consider further advice on the proposed mitigation measures. See reply to I1 para 2, above, for justification for the proposed mitigation strategy.</p>
Preferences within Functionally Linked Land		
I1 para 4	<p>Natural England advises that there is likely to be inter-annual variation in FLL preference locations due to crop rotation, environmental factors and disturbance. Generally, there is a trend for an increased number of species and abundance the closer to The Wash, in the vicinity of freshwater courses and RSPB Nature reserves, something which the Applicant has identified may require more intensive mitigation measures. However, for some species such as PFG it has been observed by the Applicant that there is a preference to forage within fields of winter wheat. This information is critical to determining management measures to minimise impacts from loss/reduction in available FLL particularly where seasonal restrictions have not been presented as a mitigation option. Natural England will advise further on this at the next suitable deadline.</p>	<p>The Applicant’s position is that the alternative suitable habitats of pink-footed goose, lapwing, golden plover and curlew will remain available, in relation to the area of temporary loss of agricultural habitat resulting from construction works along the cable corridor and considering an ongoing reinstatement of habitats.</p> <p>As presented in the Additional Clarifications Relating to Natural England’s Relevant Representations (Appendix I) with regards to crop availability (PD1-093), the favoured crop types used by the five key qualifying species of The Wash SPA/ Ramsar were bare earth/ ploughed fields, cereals and grassland. Sample crop survey within the Order Limits plus 400m showed that fallow land, which includes bare ground/ ploughed and stubble fields is the second most common land use type (after wheat) covering an estimated 926 ha. Wheat and grass are the first and the third most common crop types within the Order Limits plus 400m with an estimated coverage of 2,915 ha and 700 ha respectively. All these crops were evenly distributed along Order Limits plus 400m with a total estimated area of 4,541 ha.</p> <p>Wheat and grass were also most common within sample crop polygons taken from the CROME database covering up to 18km from the Wash SPA/ Ramsar, with an average 14,141 ha of wheat and 12,251 ha of grass in the three reference years (2019, 2020 and 2021). Fallow and non-vegetated or sparsely vegetated land represented on average 8,149 ha in the three reference years.</p> <p>Therefore, the Applicant’s position in relation to the temporary loss of FLL, including from potential disturbance displacement, is as set out in PD1-093 paragraph 11 that <i>“the mitigation set out in the EIA and RIAA specifically regarding a localised working restriction is appropriate, as alternative foraging resource will remain available”</i>.</p>

ID	Natural England Comment	Applicant Response
Dark-bellied brent goose		
I1 para 5	<p>Natural England welcomes the additional mitigation measures for dark-bellied brent geese. The mitigation measures include, avoiding work around the Haven, between October and March, to avoid disturbance to dark-bellied brent geese in this hotspot area. In addition, works within 400m of the Haven during April, will be limited to soft start works, and no drilling will take place in April. But, the Applicant states that vegetation clearance and maintenance works, could occur between October to March seasonal restricted area. Natural England will consider if further real time mitigation measures could be adopted if DBBG are located outside of the seasonal restriction area.</p>	<p>The Applicant is pleased to note that Natural England welcomes this additional mitigation measure.</p> <p>With regards to vegetation clearance, as stated in the in OLEMS paragraph 152: <i>“Within the October to March seasonally restricted area works would be limited to vegetation clearance and maintenance, in order to avoid clearance during the nesting bird season and to minimise the risk of birds establishing nests within the working area. Usual agricultural operations will continue. Essential non-intrusive survey works would also be permitted within the seasonally restricted periods”.</i></p> <p>Vegetation clearance and maintenance work will be undertaken in those sections of the seasonally restricted area where trenched works will take place. These sections are presented on Figure 22.4 (APP-113) and are located further away from the River Haven. Nonetheless, the Applicant commits to employing an Ecological Clerk of Works (ECoW) to undertake a survey for brent geese prior to vegetation clearance works commencing in a discreet area. No clearance works will commence whilst brent geese are present within 400m of the area to be cleared. Once clearance works have commenced, they will continue until works have been completed in that location. This commitment will be added to the OLEMS. An updated OLEMS will be submitted at Deadline 3.</p> <p>In relation to dark-bellied brent geese occurring outside of the seasonal restricted area, AS1-108 paragraph 50 states <i>“A notable flock was recorded in a new location in ECC 10, further away from the cluster around The Haven, on a single occasion, utilising cereal fields. It is considered that the existing mitigation, including a commitment to localised working, will minimise disturbance impacts outside of the hotspot at the Haven”.</i></p>

3 Applicant's Responses to the MMO's Deadline 1 Submissions

Table 9 MMO's Deadline 1 Submission

ID	MMO Comment	Applicant Response
Marine Plans		
1.1.1	The MMO acknowledges that the Applicant has produced a Policy Compliance Document (AS-012). Section 6, Table 1 includes an assessment of Marine Plan Policies. The MMO welcomes the signposting provided by the applicant and considers that the creation of an additional document would be duplication. However, policies E-ECO-1 and E-TR-3 appear to be missing.	<p>The Applicant welcomes the MMO's support of the Policy Compliance Document (AS-012) submitted as a response to the Rule 17 Letter.</p> <p>The Applicant agrees with the MMO that the submission of an additional document would be duplication. In relation to policies E-ECO-1 and E-TR-3, the Applicant understands these policies are directed at decision / plan makers but confirms as follows for completeness:</p> <ul style="list-style-type: none"> ▪ E-ECO-1 – <i>"Cumulative impacts affecting the ecosystem of the East marine plans and adjacent areas (marine, terrestrial) should be addressed in decision-making and plan implementation."</i> Although the Applicant is not the decision maker or plan implementation, cumulative impacts affecting the ecosystem of the East marine plans and adjacent areas have been considered throughout the Environmental Statement (ES) in each of the assessment chapters. The approach to assessing cumulative effects is set out in Appendix 2 Offshore Cumulative Effects Assessment Approach (APP-147) and Appendix 3 Onshore Cumulative Effects Assessment Approach (APP-148) ▪ E-TR-3 – <i>"Proposals that deliver tourism and/or recreation related benefits in communities adjacent to the East marine plan areas should be supported."</i> As the Project does not deliver tourism and/ or recreation related benefits, this policy is not considered relevant for the Applicant to comment on.
Timing of Works		
1.2.1	The MMO notes condition 13(1)(b) of Schedules 10 and 11 which details the submission of a Construction Programme to the MMO. We have made a further comment regarding this in point 1.20.2 below.	Please refer to the Applicants response to 1.20.2 below.
Unexploded Ordinance		
1.3.1.	The MMO notes that the Applicant has stated that they are not seeking consent at this stage for the investigation of and clearance of Unexploded Ordinance (UXO) due to the degree of uncertainty regarding the number of UXO which require clearing.	The comment is noted by the Applicant.
1.3.2	1.3.2. The MMO notes the Applicant intends to apply for a marine licence application for the investigation of potential UXOs and their clearance prior to the commencement of offshore construction. A formal UXO Clearance Marine Mammal Mitigation Protocol (MMMP) will be drafted and submitted as part of the marine licence application. The MMO agrees with this approach.	The MMO's agreement of the approach is welcomed by the Applicant.
Arbitration		
1.4.1.	The MMO understands that arbitration does not apply to the MMO in this application. The MMO thanks the Applicant for clearly setting out that the Arbitration and Appeals procedures set out in the DCO do not apply to the DMLs. This is reflected in Article 38 (2):	The MMO's position on Arbitration and Appeals is welcomed by the Applicant.

ID	MMO Comment	Applicant Response
<p><i>"38...(2) Any matter for which the consent or approval of the Secretary of State or the Marine Management Organisation is required under any provision of this Order shall not be subject to arbitration."</i></p>		
<p>Transfer of Benefit of the Order</p>		
1.5.1	<p>The MMO position in RR-042, points 3.4.1 - 3.4.5 has not changed. The MMO disagrees with the Applicant stance on this. The MMO is reviewing the comments made and will respond in due course.</p>	<p>The comment is noted by the Applicant.</p>
<p>Materially</p>		
1.6.1	<p>The MMO notes the Applicant's response and is reviewing the comments made and will respond in due course.</p>	<p>The comment is noted by the Applicant.</p>
<p>Determination Dates</p>		
1.7.1	<p>Schedule 10 and 11, Part 2, Condition 14(4), includes a timescale to discharge documentation. <i>...(4) The MMO must determine an application for approval made under condition 13 within a period of four months commencing on the date the application is received by the MMO, unless otherwise agreed in writing with the undertaker.</i></p> <p>The MMO maintains that it is inappropriate to put a timeframe on decisions of such a technical nature. The MMO would not willingly seek to constrain our ability to make an appropriate decision on post consent sign-off of plans and documentation, we would never include such a restriction on any other consent. With such tight timeframes, the MMO cannot be confident that all concerns during consultation can be sufficiently addressed.</p>	<p>The Applicant notes that condition 14(2) of Part 2 of Schedule 10 of the draft Development Consent Order (dDCO) provides for an approval period of at least four months unless otherwise stated. Following consultation with Natural England and the MMO, the Applicant revised the draft DCO to increase the approval period from four to six months for those plans which may have particular complexities, as requested by Natural England. Of particular concern to the MMO, the MMMP (condition 13(1)(f) of Part 2 of Schedule 10 of the draft DCO) and the SIP (Condition 22(3) of Part 2 of Schedule 10 of the draft DCO) provide for a six month period (3.1).</p>
1.7.2	<p>The MMO understands that the Applicant wishes to ensure there is a specific time scale by which a decision is made, and that the decision does not continue without resolution. However, if discharge was not granted, the undertaker would have to provide updated documentation which would restart the process and potentially cause unnecessary delay.</p>	<p>The Applicant wishes to highlight that the provisions of Condition 14(4), Part 2 of Schedules 10 and 11 would apply in the event that the MMO neither approved nor refused the relevant application for approval made under condition 13, Part 2 of Schedules 10 and 11, within the four month period. As the wording of condition 14(4) specifically allows the Applicant and the MMO to agree a different period, the Applicant would anticipate that, in the event of updated documentation being required, this would be requested by the MMO and a reasonable adjustment to the timescale would be made, rather than the application for approval being refused and the process recommenced causing unnecessary delay.</p>
<p>Maintenance Reporting</p>		
1.8.1	<p>The MMO notes the Applicant's comments regarding Schedule 10 and 11, Condition 13(1)(h) of the DMLs which requires an Offshore Operations and Maintenance Plan (OOMP), in accordance with the outline OOMP, to be submitted to the MMO prior to commencement and resubmission every three years during the operational phase. As the Applicant states, this is a forward- looking document. The MMO's request was to have an annual maintenance report submitted every three years (and a summary in year five) to provide a record of the licenced activities during the preceding years. The MMO maintains that it is imperative that this is submitted in order to reconfirm the applicability of the methodologies and frequencies of the licensable activities permitted by the licence and provides valuable information on whether further marine licences are required throughout the lifetime of the Project.</p>	<p>The Applicant does not consider it necessary or appropriate to include a dML condition for the provision of an annual maintenance report to the MMO every three years. As set out in the Outline Offshore Operations and Maintenance Plan (APP-275), the Applicant will notify the MMO where maintenance will take place, as such the MMO will be aware of all maintenance activities that have been undertaken under each dML. This provision is secured by the relevant condition each deemed marine licence (excluding Schedule 16 as no reasonably foreseeable maintenance activities will take place) and provides for a review and resubmission of the Offshore Operations and maintenance Plan every three years. This condition is secured in:</p> <p>DCO Schedule 10, Part 2, condition 13(h) DCO Schedule 11, Part 2, condition 13(h)</p>

ID	MMO Comment	Applicant Response
		<p>DCO Schedule 12, Part 2, condition 11(f) DCO Schedule 13, Part 2, condition 11(f) DCO Schedule 14, Part 2, condition 11(f) DCO Schedule 15, Part 2, condition 11(f)</p> <p>The Applicant therefore considers that the MMO will have sufficient records of all relevant maintenance activities undertaken under each dML and that the condition proposed by the MMO is unnecessary. NPS EN-1, paragraph 4.1.16 provides that, in relation to requirements, requirements should only be included where they are necessary, relevant, enforceable, precise and reasonable. The Applicant considers that this policy also applies to marine licence conditions. The Applicant does not consider such a condition to be either necessary or reasonable.</p>
Stages of Construction		
1.9.1	The MMO notes Schedules 10 and 11, Condition 13(1)(b) of which details the submission of a Construction Programme to the MMO. We have made a further comment regarding this is point 1.20.2 below.	Please refer to the Applicant's response to 1.20.2 below.
Force Majure		
1.10.1	The MMO position in RR-042 point 3.9.1 has not changed. The Applicant maintains their position that the provision can be enforced alongside Section 86 of the Marine and Coastal Access Act (2009) as it is just a notification. The MMO is reviewing this response and will respond in due course.	The comment is noted by the Applicant.
Adaptive Management		
1.11.1	The MMO notes the Applicant's comments, however, the MMO considers the proposed wording to be precise, enforceable, necessary, relevant to the development and reasonable and this has recently been included in the Sheringham and Dudgeon Extension Order 2024. The MMO notes the Applicant's comments that a specific environmental effect to give rise to a concern has not yet been identified, leading the Applicant to consider the proposed condition wording to be unjustified, however sometimes impacts are unforeseen and further clarity is required in what is necessary from parties should impacts exceed what was assessed at this stage.	<p>The Applicant refers to its detailed response to the MMO's comments at RR-042.024. The Applicant reiterates that the additional limbs are unnecessary given the MMO's power to vary a deemed marine licence under section 72 of the Marine and Coastal Access Act 2009 in such circumstances.</p> <p>In addition, the Offshore In-Principle Monitoring Plan (APP-276) states, at section 2.1 that an adaptive approach to monitoring is a key principle of the monitoring proposed by the Applicant. In relation to benthic impacts specifically, Table 3.2 states "<i>Where significant impacts are observed, an adaptive management process may need to be implemented to ensure that so far as possible, the effects are brought back within the range of those predicted.</i>"</p> <p>Condition 13(c), Part 2, Schedules 10 and 11 of the dDCO requires the preparation of a monitoring plan, which accords with the in principle monitoring plan, to be submitted and approved in writing by the MMO. Condition 14(5) requires the licensed activities to be carried out in accordance with the approved plans, unless otherwise agreed in writing by the MMO.</p>
1.11.2	It is understood that Natural England will be providing further comment on the Project Environmental Monitoring Plan (PEMP) at Deadline 1. If Natural England are to state that monitoring doesn't fully link to outstanding risks and issues and the need to test effectiveness of mitigation measures, then the MMO advises that the adaptive management condition is considered.	The comment is noted by the Applicant. The Applicant refers to its comments at 1.11.1.

ID	MMO Comment	Applicant Response
1.11.3	The MMO would highlight that if any monitoring shows an impact higher than predicted within the Environmental statement (ES) the MMO may require additional monitoring or mitigation at the post consent stage.	The Applicant believes that the MMO intends to refer to post-construction monitoring in this comment as the Project cannot have had an impact before works commence. The Applicant therefore refers to its comments at 1.11.1.
1.11.4	The MMO will review the monitoring requirements, NE's comments and provide further updates in due course.	The comment is noted by the Applicant.
Coastal Processes		
1.12.1	MMO 4.2.2 and 4.2.3: With regard to the Applicant's responses to MMO points 4.2.2 and 4.2.3, the MMO is consulting with our technical advisors and will provide comments on these sections at Deadline 2.	The comment is noted by the Applicant.
1.12.2	MMO 4.2.8: The MMO welcomes the Applicant's consideration of our comments relating to figure scales and colour schemes in future. The MMO notes that the Applicant does not intend to revise these figures.	The comment is noted by the Applicant.
1.12.3	MMO 4.2.9 to 4.2.11: With regards to the Applicant's responses to MMO points 4.2.9 to 4.2.11, the MMO is consulting with our technical advisors and will provide comments on these sections at Deadline 2.	The comment is noted by the Applicant.
Dredge, Disposal and Chemical Use		
1.13.1	MMO 4.3.3 and 4.3.4: The MMO welcomes the Applicant's assurance regarding all chemicals which have the potential to enter the marine environment to be listed within the Chemical Risk Assessment (CRA) produced post-consent.	The Applicant welcomes the MMO's agreement on the CRA.
1.13.2	MMO 4.3.10 to MMO 4.3.18: With regards to the Applicant's responses to MMO points 4.3.10 to MMO 4.3.18, the MMO is with our technical advisors and will provide comments on these sections at Deadline 2	The comment is noted by the Applicant.
Benthic Ecology		
1.14.1	MMO 4.4.1 to MMO 4.4.9: With regards to the Applicant's responses to MMO points 4.4.1 and 4.4.9, the MMO is consulting with our technical advisors and will provide comments on these sections at Deadline 2	The comment is noted by the Applicant.
Fish Ecology		
1.15.1	MMO 4.5.1 to MMO 4.5.4: With regards to the Applicant's responses to MMO points 4.5.1 to MMO 4.5.4, the MMO is consulting with our technical advisors and will provide comments on these sections at Deadline 2.	The comment is noted by the Applicant.
1.15.2	MMO 4.5.10: The MMO welcomes the applicant's submission of revised figures showing IHLS heat maps for the most recent 10 years as requested by the MMO (RR-042). the MMO is consulting with our technical advisors and will provide comments on these sections at Deadline 2.	The comment is noted by the Applicant.
1.15.3	MMO 4.5.13 to MMO 4.5.33: With regards to the Applicant's responses to MMO points 4.5.13 to MMO 4.5.33, the MMO is consulting with our technical advisors and will provide comments on these sections at Deadline 2	The comment is noted by the Applicant.
Shellfish Ecology		
1.16.1	MMO 4.6.1 to MMO 4.6.8: With regards to the Applicant's responses to MMO points 4.6.1 to MMO 4.6.8, the MMO is consulting with our technical advisors and will provide comments on these sections at Deadline 2.	The comment is noted by the Applicant.

ID	MMO Comment	Applicant Response
Underwater Noise		
1.17.1	MMO 4.7.1 to MMO 4.7.5: With regards to the Applicant’s responses to MMO points 4.7.1 to MMO 4.7.5, the MMO is consulting with our technical advisors and will provide comments on these sections at Deadline 2.	The comment is noted by the Applicant.
1.17.2	MMO 4.7.8: The MMO welcomes the agreement that the presentation of noise levels at 750 metres is more useful than the source levels.	The Applicant welcomes the MMO’s agreement on the presentation of noise levels.
1.17.3	MMO 4.7.9 to MMO 4.7.10: With regards to the Applicant’s responses to MMO points 4.7.9 to MMO 4.7.10, the MMO is consulting with our technical advisors and will provide comments on these sections at Deadline 2.	The comment is noted by the Applicant.
Commercial Fisheries		
1.18.1	MMO 4.10.1: The MMO welcomes the Applicant’s continued engagement with NFFO, IFCA and local fishers.	The comment is noted by the Applicant.
Outline Fisheries Liaison and Coexistence Plan (FLCP)		
1.19.1	MMO 5.5.1 to 5.5.4: The MMO welcomes the updated Outline Fisheries Liaison Cooperation Plan (FLCP) (PD1-061) which now includes updates recommended by the MMO.	The Applicant welcomes the MMO’s agreement on the updated Outline FLCP (PD1-061).
Document Reviewed		
Draft Development Consent Order Tracked (AS1-025)		
Timescales		
1.20.1	<p>Timescales – Pre-Construction plans and documentation, Schedule 10 and 11, Part 2 Condition 13 (1) (c), Condition 13 (1) (g) and Condition 13 (1) (h) refers to a timescale of four months to submit documentation.</p> <p><i>13.—(1)...(c) A monitoring plan (which accords with the in principle monitoring plan) to include details of proposed pre-construction surveys, baseline report format and content, construction monitoring, post-construction monitoring and related reporting in accordance with conditions 17, 18 and 19 to be submitted to the MMO in accordance with the following—</i></p> <p><i>at least four months prior to the first survey, detail of the pre-construction surveys and an outline of all proposed monitoring;</i></p> <p><i>at least four months prior to construction, detail of construction monitoring;</i></p> <p><i>at least four months prior to completion of construction, detail of post- construction (and operational) monitoring;</i></p> <p><i>unless otherwise agreed in writing with the MMO.</i></p> <p><i>...(g) A written scheme of archaeological investigation in relation to the offshore Order limits seaward of mean high water, which must be submitted to the statutory historic body at least six months prior to commencement of the licensed activities and to the MMO at least four months prior to commencement of the licensed activities and which must accord with the outline marine archaeological written scheme of investigation and industry good practice, in consultation with the statutory historic body.....</i></p> <p><i>...(h) An offshore operations and maintenance plan, in accordance with the outline offshore operations and maintenance plan, to be submitted to the MMO at least four months prior to commencement of operation of the licensed activities and to provide for review and resubmission every three years during the operational phase.</i></p> <p><i>14.—(2) Each programme, statement, plan, protocol or scheme required to be approved under condition 13 must be submitted for approval at least four months prior to the</i></p>	The Applicant refers to its comments at 1.7.1 above.

ID	MMO Comment	Applicant Response
	<p><i>intended commencement of licensed activities, except where otherwise stated or unless otherwise agreed in writing by the MMO.</i></p> <p><i>The MMO have concerns that this is not enough time to fully assess and review documents and request this is changed to six months. Comments on timescales are below from 1.16.2 and 1.16.3</i></p> <p>Conditions 13 (1) and 14 (2) set out the requirements for the Applicant to submit all preconstruction documentation at least four months prior to the commencement of the construction works. The MMO does not agree that a four- month timescale provides sufficient time for the post consent documentation to be considered prior to the start of commencement of works. The MMO believes that a four-month pre-construction submission date is unrealistic and even counterproductive, as the pre-construction sign off process is not always straight forward. The documents in question require in depth analysis by both MMO staff and statutory consultees. There needs to be as much time as practically possible to allow this process to take place.</p> <p>It is quite common that these documents are subject to multiple rounds of consultation and a more appropriate timeframe of six months would allow for this to take place. By allocating this time now, this will avoid delays to the construction timetable and thus reduce cost implications of this happening</p>	
1.20.2	<p>The MMO notes that the timescales presented are much shorter (three months) in Schedules 12, 13, 14 and 15. The MMO requests that the following should have a six-month timescale stipulation in all of the DMLs; Marine Mammal Mitigation Protocol, In Principle Monitoring Plan, Site Integrity Plan, Ornithological Plans and Operation and Maintenance Plans. The MMO would highlight that for some documents even six months is becoming difficult to consider all the impacts and requirements due to the information provided in the first instance or information gathered through consultation.</p>	<p>The Applicant wishes to highlight the scale and complexity of works (up to two artificial nesting structures) to be undertaken under Schedules 12, 13, 14 and 15 is not comparable to that of an offshore wind farm as detailed in Schedule 10 (generation assets) and Schedule 11 (transmission assets) and therefore considers the timescales proposed to be appropriate and does not agree that it would be difficult to consider requirements from a maximum of two ANSs. The Applicant notes marine licences granted by the MMO for similar activities most often require pre-construction plans and document to be submitted six weeks prior to construction. The Applicant therefore considers three months is more than appropriate.</p>
Definitions		
1.21.1	<p>The MMO requests clarity on the Applicant’s definition of ‘inert’, for example in Schedules 10 and 11 Part 2 Condition 11(5) and Schedules 12-15 Part 2 Condition 8(5). The MMO requests that the definition of ‘inert’ is added to the DMLs. If samples contain fine material, these may contain contaminants. It needs to be clear that any material containing contaminants cannot be disposed of within the disposal sites when listing the licensable activities under Part 1 of the DMLs.</p>	<p>The Applicant disagrees that further clarification as to the meaning of the term “inert” is required in the dDCO and that the term ought to have its ordinary, natural meaning. The Applicant notes that under condition 11(5), Part 2, Schedule 10, the Applicant must ensure that only inert material of natural origin, drilling mud and dredged material, produced during the drilling installation of or seabed preparation for foundations, and sandwave clearance works is disposed of within the disposal sites. Any material of anthropogenic origin is required to be screened out and disposed of at an appropriate waste facility onshore.</p> <p>Condition 11(5), Part 2, Schedule 11 also requires that the Applicant must ensure that only inert material of natural origin, drilling mud and dredged material, produced during the drilling installation of or seabed preparation for foundations, sandwave clearance works and the excavation of trenchless technique exit pits is disposed of within the disposal sites. Any material of anthropogenic origin is required to be screened out and disposed of at an appropriate waste facility onshore.</p> <p>Condition 8(5), Part 2, Schedules 12-15 also requires that the Applicant must ensure that only inert material of natural origin, drilling mud and dredged material, produced during the drilling installation of or seabed preparation for foundations is disposed of within the disposal sites.</p>

ID	MMO Comment	Applicant Response
		Any material of anthropogenic origin is required to be screened out and disposed of at an appropriate waste facility onshore.
1.21.2	The MMO requests that the definition of the term ‘static’ is added to Part 1 of the DMLs.	The Applicant disagrees that a definition of the term “static” is required in the dDCO and that the term ought to have its ordinary, natural meaning. The Applicant considers that the meaning of the term is sufficiently clear.
Comments on oral submissions made and written summaries of oral case put at the Open Floor Hearing (OFH) (10 October 2024)		
2.1.1	The MMO has no comments to make on the Open Floor Hearing held on the 10 October 2024. The MMO will maintain a watching brief on future hearings and provide comments where required	The comment is noted by the Applicant.
Comments on the Applicant’s draft Statement of Common Ground (SoCG)		
3.1.1	The MMO received the Applicant’s draft Statement of Common Ground (SoCG) with the MMO on 08 October 2024. The MMO is in the process of reviewing the Applicant’s Procedural Deadline submissions along with its technical advisors to determine the status of ongoing discussions more accurately. The MMO will continue to work with the Applicant on the SoCG and provide comments when required.	The Applicant welcomes the MMO’s continued engagement on the SoCG. The Applicant will continue to have regular meetings with the MMO to progress the SoCG.
Comments on any further information / submissions accepted by the ExA		
4.1.1	<p>The MMO notes that there have been updates to Ordnance Survey (OS) mapping within the Order Limits and subsequent changes to Mean High Water Springs (MHWS) and Mean Low Water Springs (MLWS) that result from these updates.</p> <p>The MMO notes the Applicant has updated relevant documents to account for these changes. This includes Land Plans and the Draft DCO. The MMO welcomes the submission of the Schedule of changes to the DCO (AS1-026) to detail the changes made to the Draft DCO. The MMO is content that the grid coordinates have been updated within the relevant Deemed Marine Licences (DMLs) Schedules 10, 11, 12, 13, 14, 15 and 16 to reflect the updated position of the mean low and mean high water marks.</p> <p>The MMO welcomes the updated documents and is satisfied with these refinements. The MMO considers that this does not change the assessment conclusions presented in the DCO application.</p>	The Applicant welcomes the MMO’s agreement on the updated documents provided.
Any further information requested by the ExA under Rule 17 of the Examination Procedure Rules		
5.1.1	A Rule 17 letter was issued on 31 July 2024. The MMO provided a response at the Procedural Deadline of 19 September 2024 (PD1-115) which included comments on Relevant Representations.	This comment is noted by the Applicant.
5.1.2	The MMO acknowledges the amendments made by the Applicant following the Rule 17 letter. The MMO is currently reviewing the updated documents and will provide comments on the other changes made by the Applicant, which are not outlined in this letter.	This comment is noted by the Applicant

Additional Concerns

ID	MMO Comment	Applicant Response
Examination		
6.1.1	<p>The MMO is working with the Applicant to resolve the issues highlighted in our Relevant Representations (RR-042) and would highlight that a lot of the issues have been ongoing throughout the Evidence Plan Process and further information requested has not been provided. At this stage the MMO would welcome any additional information requested in RR-042 to be provided as soon as possible and earlier in Examination, rather than the Applicant pushing back on our advice.</p> <p>The MMO’s experience is that the Examining Authority generally request this information during Examination, and this would be welcomed at the earliest opportunity as leaving major unresolved issues until later in Examination causes a risk to both the advice being provided and resource issues.</p> <p>The MMO would highlight that even where the Applicant may disagree with our position that a without prejudice position would be welcomed to enable full review and provide the most robust response.</p>	<p>The Applicant will endeavour to provide further information requested by the MMO where it is considered necessary and relevant to do so, and will continue to engage with the MMO throughout the Examination to negotiate and find agreements where possible. However, the Applicant wishes to highlight that there a likely to be situations where the Applicant disagrees with a request from the MMO; due to the availability of the information requested, or where the Applicant feels that a request is not justified by evidence, and, as it has done in its response to relevant representations (PD1-071), the Applicant will respond to each of these requests on a case by case basis.</p>
Offshore Restricted Build Area (ORBA) and Revision to the Offshore Export Cable Corridor (ECC)		
6.2.1 6.2.2 6.2.3	<p>The MMO is reviewing any information relating to this change and will provide comments in due course. We would highlight that any large change to the project should be fully assessed and included in the Environmental Statement chapters which become certified documents.</p> <p>The MMO notes that previously the MMO has accepted ES addendums by applicants rather than redoing ES chapters. The MMO would highlight that this change may require further assessment to the impacts for different topics (e.g. Marine Processes) and this should be within the ES chapters to ensure the updates are transparent should the Secretary of State grant the consent.</p> <p>The MMO will also review the documents and see how the changes will be secured within the DML.</p>	<p>The Environmental Report for the Offshore Restricted Build Area and Revision to the Offshore Export Cable Corridor (PD1-081) sets out an appraisal of the potential for the introduction of the ORBA and the Revision to the Offshore Export Cable Corridor to alter the conclusions previously drawn for the ES which supported the Project’s DCO Application, for all relevant EIA chapters. The proposed changes do not alter the conclusions as set out in the ES, with all conclusions drawn remaining unchanged and valid. The Environmental Report for the Offshore Restricted Build Area and Revision to the Offshore Export Cable Corridor and associated appendices (PD1-081 to PD1-090) are certified documents under Part 1 of Schedule 21 of the dDCO.</p>

4 References

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5 Appendix A: Blockage Modelling Results Figure Updates

3. As outlined in the response to Natural England's comment B1.3, the Applicant welcomes the advice of Natural England with regard to a more graduated scale on figures displaying the results of blockage modelling. Figure 1.2 and Figure 1.3 (as submitted in 15.9A ORBA and Revision to the Offshore ECC Appendix A Figure Part 1 (PD1-082)) are included below to reflect the use of a more graduated scale.
4. While responding to this advice a data processing error has been identified in relation to the figures as they were presented both within PD1-082 and 6.2.7 Chapter 7 Marine Physical Processes Figures Part 2 (APP-094). This error relates to the scale bar, and therefore values, shown for the Difference 1 in 100-Year Hm0. The updated figures shown below therefore represent a correction in these values.
5. These changes do not represent a change to the conclusions of the ES. In significant wave height for both northerly and northeasterly waves, changes in significant wave height during 1 in 100-year extreme events are not detectable close to the coastline. This is the case for the OCP foundations as well as those foundations within the array area. The magnitude of impact to the wave regime is therefore assessed as negligible.
6. Changes in the wave regime may contribute to changes in seabed morphology due to the alteration of sediment transport patterns. Within the study area, sediment transport is dominated by the action of tidal currents, with wave-driven sediment transport only becoming important in shallow coastal waters, distant to the array area and outside the influence of the ORCP location. As the numerical modelling results indicate that any meaningful change to the wave height dissipates far from the coast, and therefore there is no pathway of effect on the nearshore wave climate, the potential impact on coastal erosion or marine physical processes is limited.





