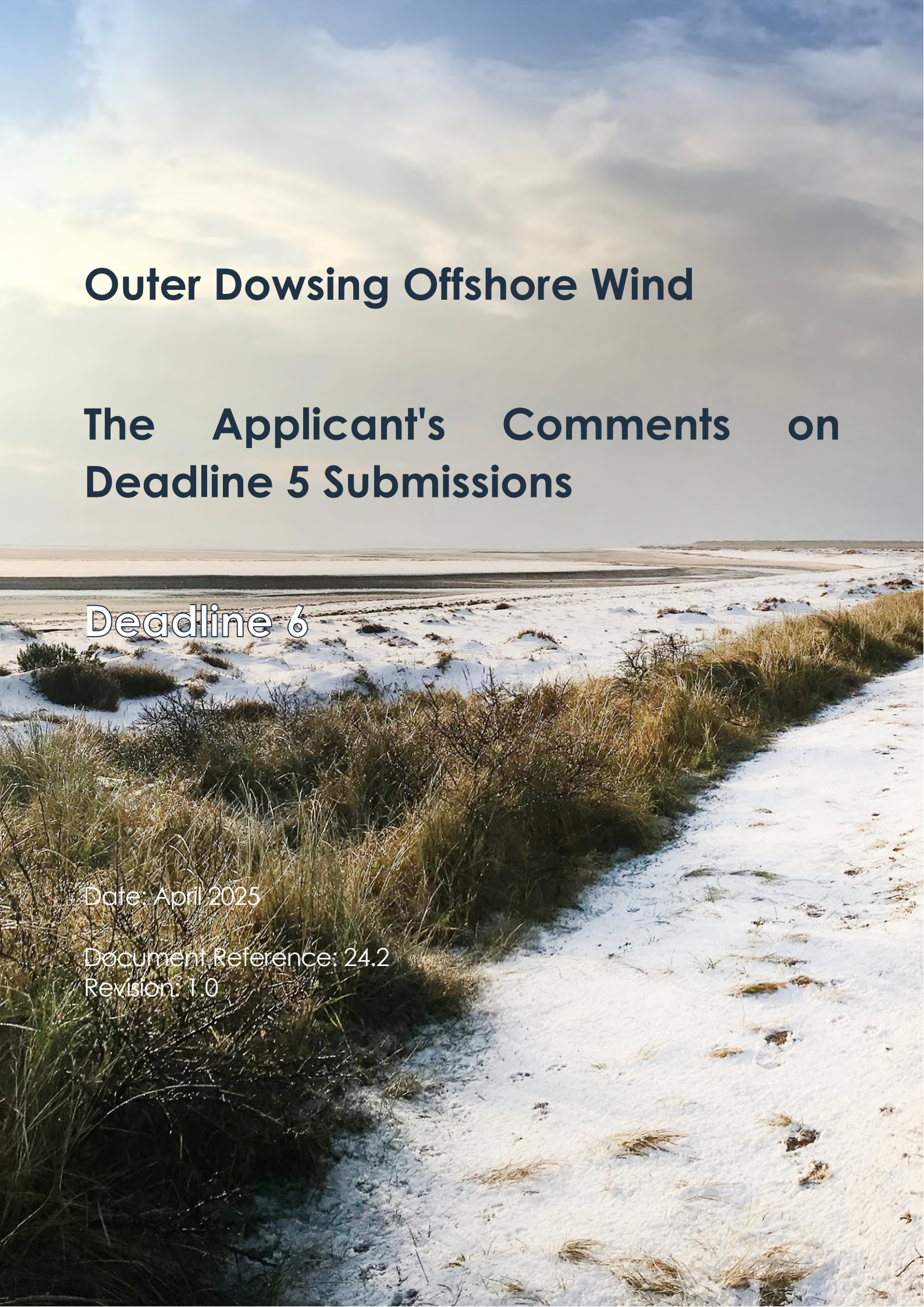

Outer Dowsing Offshore Wind

The Applicant's Comments on Deadline 5 Submissions

Deadline 6

Date: April 2025

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1 Acronyms & Definitions

Abbreviations / Acronyms

Abbreviation / Acronym	Description
ADD	Acoustic Deterrent Device
AEoI	Adverse Effect on Integrity
AHBD	Agriculture and Horticulture Development Board
AL	Action level
ALC	Agricultural Land Classification
ANS	Artificial Nesting Structures
BDMPS	Biologically Defined Minimum Population Scale
BEIS	Business, Energy and Industry Strategy
BTO	British Trust for Ornithology
CEA	Cumulative Effects Assessment
Cefas	Centre for Environment, Fisheries and Aquaculture Science
CGR	Counterfactual of Growth Rate
CI	Confidence Interval
CNP	Critical National Priority
CPS	Counterfactual of Population Size
CRA	Chemical Risk Assessment
CRM	Collision Risk Modelling
CSIP	Cable Specification and Installation Plan
DAERA	Department of Agriculture, Environment and Rural Affairs
DAS	Digital Aerial Survey
DBS	Dogger Bank South
dDCO	draft Development Consent Order
DCO	Development Consent Order
Defra	Department for Environment Food & Rural Affairs
DEP	Dudgeon Extension Project
DESNZ	Department for Energy Security and Net Zero
dML	deemed Marine Licence
EA	Environmental Agency
ECC	Export Cable Corridor
EEA	European Economic Area
EIA	Environmental Impact Assessment
EIAR	Environmental Impact Assessment Review
EPS	European Protected Species
ES	Environmental Statement
EQSD	Environmental Quality Standards Directive
EUNIS	European Nature Information System
ExA	Examining Authority
FCS	Favourable Condition Status
FEM	Finite Element Models
FEED	Front End Engineering Design
FFC	Flamborough and Filey Coast
FFL	Functionally Linked Land
FRA	Flood Risk Assessment

Abbreviation / Acronym	Description
GBS	Gravity Base Structures
GU	Guillemot
GW	Greater Wash
HE	Historic England
HHW	Haisborough Hammond and Winterton
HPAI	Highly Pathogenic Avian Influenza
HRA	Habitats Regulations Assessment
H&S	Health and Safety
HVAC	High Voltage Alternating Current
IAQM	Institute of Air Quality Management
IDRBNR	Inner Dowsing Race Bank and North Ridge
INNS	Invasive Non-Native Species
IP	Interested Parties
iPCoD	Interim Population Consequences of Disturbance
IPMP	In-Principle Monitoring Plan
IROPI	Imperative Reasons of Overriding Public Interest
ISH	Issue Specific Hearing
JNCC	Joint Nature Conservation Committee
KG	Kilogram
KI	Kittiwake
KM	Kilometre
LAT	Lowest Astronomical Tide
LBBG	Lesser black-backed gull
LiDAR	Light Detection and Ranging
LPA	Local Planning Authority
LSE	Likely Significant Effects
M	Metre
MCA	Maritime and Coastguard Agency
MCAA	Marine and Coastal Access Act
mCRM	migratory Collision Risk Model
MCZ	Marine Conservation Zone
MDE	Marine Data Exchange
MDS	Maximum Design Scenario
MEDIN	Marine Environmental Data and Information Network
MGN	Marine Guidance Note
MHWS	Mean High Water Spring
MLA	Marine Licence Application
MLWS	Mean Low Water Spring
MMFR	Mean Max Foraging Ranges
MMMP	Marine Mammal Mitigation Protocol
MMO	Marine Management Organisation
MPA	Marine Protected Area
MPCP	Marine Pollution Contingency Plan
MU	Management Unit
MW&SQ	Marine Water and Sediment Quality
N/A	Not Applicable
NAF	Nocturnal Activity Factor
NAS	Noise Abatement Systems

Abbreviation / Acronym	Description
NCERM2	National Coastal Erosion Risk Mapping 2
NE	Natural England
NNC	North Norfolk Coast
NNRCMP	National Network of Regional Coastal Monitoring Programmes
NNSR	North Norfolk Sandbanks and Saturn Reef
NPS	National Policy Statement
NRA	Navigational Risk Assessment
NSIP	Nationally Significant Infrastructure Project
NSR	Noise Sensitive Receptor
NUIs	Normally Unattended Installations
NVMP	Noise and Vibration Management Plan
ODOW	Outer Dowsing Offshore Wind
ODOWF	Outer Dowsing Offshore Wind Farm
offANS	Offshore Artificial Nesting Structure
O&M	Operations and Maintenance
OnSS	Onshore Substation
OOOMP	Outline Offshore Operations and Maintenance Plan
OOMP	Offshore Operations and Maintenance Plan
ORBA	Offshore Restricted Build Area
ORCP	Offshore Reactive Compensation Platform
OTE	Outer Thames Estuary
OWF	Offshore Wind Farm
OWSI	Onshore Written Scheme of Investigation
PBT	Persistence Bioaccumulation or Toxicity evidence
PCE	Property Cost Estimate
PCM	Post-Consent Monitoring
PEMP	Project Environment Management Plan
PFEER	Prevention of Fire and Explosion, and Emergency Response
PFG	Pink Footed Goose
PINS	Planning Inspectorate
PLONOR	Pose Little or No Risk to the Environment
PVA	Population Viability Assessments
UCI	Upper Confidence interval
UXO	Unexploded Ordnance
RA	Razorbill
REC	Regional Environmental Characterisation
REIS	Report into the Implications for European Sites
R&I	Risk and Issues
RIAA	Report to Inform Appropriate Assessment
ROV	Remotely Operated Vehicle
RR	Relevant Representations
RSPB	Royal Society for the Protection of Birds
RTD	Red Throated Diver
SAC	Special Area of Conservation
SACO	Supplementary Advice on Conservation Objectives
SAS	Stable Age Structure
SD	Standard Deviation
SEP	Sheringham Shoal Extension Project

Abbreviation / Acronym	Description
SIP	Site Integrity Plan
SNCB	Statutory Nature Conservation Bodies
SMP	Soil Management Plan
SNS	Southern North Sea
SoCG	Statement of Common Ground
SoS	Secretary of State
SPA	Special Protection Area
SSC	Suspended Sediment Concentration
SSS	Side Scan Sonar
SSSI	Sites of Special Scientific Interest
ST	Sandwich Tern
TK	Triton Knoll
TNT	Trinitrotoluene
UCI	Upper Confidence Interval
UCL	Upper Confidence Limit
UK	United Kingdom
UKAS	United Kingdom Accreditation Service
USEPA	U.S. Environmental Protection Agency
UWN	Underwater Noise
UXO	Unexploded Ordinance
VMC	Visual Meteorological Conditions
WCS	Worst Case Scenario
WFD	Water Framework Directive
WMS	Written Ministerial Statement
WNNC	Wash and North Norfolk Coast
WTG	Wind Turbine Generators

Terminology

Term	Definition
The Applicant	GT R4 Limited (a joint venture between Corio Generation (and its affiliates), TotalEnergies and Gulf Energy Development), trading as Outer Dowsing Offshore Wind
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, including the ORBA.
Baseline	The status of the environment at the time of assessment without the development in place.
Cumulative Impact	Impacts that result from changes caused by other present or reasonably foreseeable actions together with the Project.
Development Consent Order (DCO)	An order made under the Planning Act 2008 granting development consent for a Nationally Significant Infrastructure Project (NSIP).
Deemed Marine License (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.

Term	Definition
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.
EIA Regulations	Infrastructure Planning (Environmental Impact Assessment) Regulations 2017
Environmental Impact Assessment (EIA)	A statutory process by which certain planned projects must be assessed before a formal decision to proceed can be made. It involves the collection and consideration of environmental information, which fulfils the assessment requirements of the EIA Regulations, including the publication of an Environmental Statement (ES).
Environmental Statement (ES)	The suite of documents that detail the processes and results of the Environmental Impact Assessment (EIA).
Evidence Plan	A voluntary process of stakeholder consultation with appropriate Expert Topic Groups (ETGs) that discusses and, where possible, agrees the detailed approach to the Environmental Impact Assessment (EIA) and information to support Habitats Regulations Assessment (HRA) for those relevant topics included in the process, undertaken during the pre-application period.
Export cables	High voltage cables which transmit power from the Offshore Substations (OSS) to the Onshore Substation (OnSS) via an Offshore Reactive Compensation Platform (ORCP) if required, which may include one or more auxiliary cables (normally fibre optic cables).
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 stages of assessment: screening, appropriate assessment, assessment of alternative solutions and assessment of imperative reasons of over-riding public interest (IROPI) and compensatory measures.
High Voltage Alternating Current (HVAC)	High voltage alternating current is the bulk transmission of electricity by alternating current (AC), whereby the flow of electric charge periodically reverses direction.
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)
Landfall	The location at the land-sea interface where the offshore export cables and fibre optic cables will come ashore.
Maximum Design Scenario	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

Term	Definition
	the project design) or secondarily added to reduce impacts in the case of potentially significant effects.
National Policy Statement (NPS)	A document setting out national policy against which proposals for Nationally Significant Infrastructure Projects (NSIPs) will be assessed and decided upon
Offshore Export Cable Corridor (ECC)	The Offshore Export Cable Corridor (Offshore ECC) is the area within the Order Limits within which the export cables running from the array to landfall will be situated.
Onshore substation (OnSS)	The Project's onshore HVAC substation, containing electrical equipment, control buildings, lightning protection masts, communications masts, access, fencing and other associated equipment, structures or buildings; to enable connection to the National Grid
Offshore Restricted Build Area (ORBA)	The area within the array area, where no wind turbine generator, offshore transformer substation or offshore accommodation platform shall be erected.
Offshore Reactive Compensation Platform (ORCP)	A structure attached to the seabed by means of a foundation, with one or more decks (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.
Outer Dowsing Offshore Wind (ODOW)	The Project
Order Limits	The area subject to the application for development consent, the limits shown on the works plans within which the Project may be carried out.
The Planning Inspectorate	The agency responsible for operating the planning process for Nationally Significant Infrastructure Projects (NSIPs).
Pre-construction and post-construction	The phases of the Project before and after construction takes place.
Preliminary Environmental Information Report (PEIR)	The PEIR was written in the style of a draft Environmental Statement (ES) and provided information to support and inform the statutory consultation process during the pre-application phase.
The Project	Outer Dowsing Offshore Wind, an offshore wind generating station together with associated onshore and offshore infrastructure.
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.
Strategic Compensation	Collaborative approach by developers and/or government departments to secure compensation for adverse effects on the conservation objectives of a Marine Protected Area.
Study Area	Area(s) within which environmental impact may occur – to be defined on a receptor-by-receptor basis by the relevant technical specialist.

Term	Definition
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

2 The Applicant's Comments on Deadline 5 Submissions

1. The Applicant has provided comment on Interested Parties (IPs) Deadline 5 submissions, in the sections below.

2.1 The Applicant's Response to Anglian Waters's Deadline 5 Submission

Table 2-1:The Applicant's Comments on Anglian Water's Deadline 5 submission

Ref No	Submission	Applicant Response
AW1	Anglian Water Services (AWS) has previously submitted a Relevant Representation (RR08) on this project. With reference to the content of those previous submissions, I can confirm the Applicant and AWS have agreed Protective Provisions for the benefit of Anglian Water and are included in the draft Order. In addition, a final signed copy of a Statement of Common Ground is being submitted for Deadline 5 on behalf of both parties. This will replace the previous draft version REP1-025 (Document Reference: 18.7 Rev: 1.0 , dated: October 2024) and confirms that there are no outstanding matters of areas of disagreement. Based on the above, we withdraw all existing representations regarding the Application	The Applicant welcomes this confirmation.

2.2 The Applicant's Response to the Eastern IFCA's Deadline 5 Submission

Table 2-2: The Applicant's Comments to the Eastern IFCA's Deadline 5 submission

Ref	Eastern IFCA's Deadline 5 Submission	Applicant Response
	Eastern IFCA provide a response in relation to the export cable route, where it overlaps with the EIFCA district (0-6nm from the coast), and the proposed potential compensatory measures.	
In relation to the export cable route:		
1	There is the potential for restrictions and damage to fishing grounds and displacement of activities during cable works. We have an interest in being involved in the development of the Fisheries Liaison and Co-existence Plan (FLCP) to ensure that there is sufficient engagement with inshore fishers and provide advice on mitigating impacts on inshore fisheries (e.g., through considering seasonal patterns in activities). Eastern IFCA can also provide means for information distribution to inshore fishery users and may be able to facilitate further dialog with fishers throughout the pre-construction and construction process.	As set out in ES Chapter 14, Section 14.7 (APP-069), there is potential for fishing activity to be locally and temporarily excluded at the location of export cable corridor owing to the presence of construction vessels, installation operations and the need to observe The Convention on the International Regulations for Preventing Collisions at Sea, 1972 (COLREGS). Embedded and further mitigation measures will be put in place to manage these potential impacts and delivered via the Fisheries Liaison and Co-existence Plan, an outline of which has been provided to support the DCO application (Document 8.14, APP-288) and which is secured via relevant Conditions of the Applicant's Deemed Marine Licences (Document 3.1, Version 10). The Applicant confirms that they will engage with the Eastern IFCA in developing the FLCP post-consent, prior to its formal approval. The Applicant welcomes confirmation that the Eastern IFCA is happy to support in promulgating project information to local fisheries.
2	Whilst the Applicant has assessed the potential impacts of electro-magnetic fields, Eastern IFCA maintain that not enough is known about electro-magnetic field impacts on marine fauna. We do not consider this can be addressed by a single developer; instead, there is a responsibility for the marine cable industry to investigate and conduct research to reduce uncertainty	The Applicant is confident that an appropriate assessment has been undertaken to establish the potential impacts from EMF on fish and shellfish receptors. As set out in ES Chapter 10 Fish and Shellfish Ecology, paragraph 363 *et seq.,* (REP5-021), there is potential for EMF to affect electro- and magneto-sensitive fish and shellfish species directly, potentially leading to behavioural and physiological changes, with the type and strength of effects depending on the species considered. The impact assessment was supported by a detailed literature review including peer-reviewed studies to present the range and extent of potential responses of sensitive fish and shellfish receptors. It is noted that no significant changes to populations and/or distributions of fish and shellfish species have so far been recorded as a result of EMF generated from subsea cables and that any behavioural changes in diadromous species are unlikely to affect migratory patterns and behaviour in the long-term. It is further noted that whilst EMF will be

Ref	Eastern IFCA's Deadline 5 Submission	Applicant Response
		emitted throughout the operational phase of the Project when the cables are carrying a current, generated EMF are likely to be detectable above background levels only near the cables (i.e. within approximately 10m each side of the cables). Therefore, it was determined that any potential effects on fish and shellfish receptors will be highly localised and will be of minor (adverse) significance, which is not significant in EIA terms.
In relation to the proposed compensatory measures:		
3	Eastern IFCA's agreed position on the proposed compensatory measures is that it will not support compensatory measures that impact fishing opportunities. Proposed compensatory measures that have the potential to impact fishing opportunities, and consequently Eastern IFCA may take this position on, are: o Creation of native oyster beds o Creation of blue mussel beds o Seagrass bed habitat creation o Extensions to SAC's Previous dialog with the Outer Dowsing project team revolved around developing Memorandum of Agreement (MOA) with Eastern IFCA that would formally recognise Eastern IFCA's position in relation to compensatory measures and – if agreed – agreement to work together to develop the compensatory measures and/or fisheries compensation measures. Eastern IFCA is keen to further this discussion.	The Applicant notes Eastern IFCAs position on compensatory measures that may impact fishing opportunities. The Applicant has removed the following compensation measures after the release of the Written Ministerial Statement of 29 January 2025 ("WMS") and related interim guidance: Anthropogenic Pressure Removal: Marine Debris and Awareness Campaign; Alternative measures for Annex I sandbanks and Reef; and Seagrass bed habitat creation/restoration. It is expected that should compensation be required in relation the IDRBNR SAC, then the measure would be Marine Protected Area designations and/or extensions delivered by Defra, in line with the confirmation through the WMS and associated interim guidance, should the SoS deem compensation necessary for the Project. It is expected that any further consultation with stakeholders in relation to this measure will be managed by Defra through the appropriate formal processes. However, it should be noted that until the SoS has made their decision on any necessary compensation and detail on magnitude, cost and timing is available it is prudent for the Applicant to retain the ability to deliver other Project alone measures. It will be for the SoS to make the final decision on which method will ultimately be delivered (if deemed necessary), noting the Applicants agreement on the appropriateness of Marine Protected Area designations and/or extensions delivered by Defra. The Applicant also notes that with the exception of the potential areas proposed for the SAC extension (which will be a process led by Defra and not the Applicant) those areas of seabed which have been put forward for potential creation of biogenic reef (apart from one which crosses the 6nm limit) are outside of the 6nm limit and therefore not within the Eastern IFCAs jurisdiction, as presented in Figure 5.7 of the Benthic Compensation Evidence Base and Roadmap (Document 7.6.3, V4, submitted at Deadline 6). The compensation measures, as detailed in the Benthic Compensation Evidence Base and Roadmap (Document 7.6.3, V4, submitted at Deadline 6), Sandbank Compensation Plan, (REP5-105), Biogenic Reef Compensation Plan (Document 7.6.2, V4, submitted at Deadline 6), have been developed to provide the necessary confidence to the SoS that the compensation measures proposed are viable, securable, and deliverable. The Applicant has undertaken extensive consultation with the relevant stakeholders (namely, Natural England, MMO, the Planning Inspectorate, The Crown Estate, the Wildlife Trusts, Defra, the National Federation of Fisherman's Organisations (NFFO) and relevant Inshore Fisheries and Conservation Authorities (IFCAs), including Easten IFCA. The compensation measures have also undergone additional consultation with members of the Expert Technical Group. The Applicant would welcome continued discussion with Eastern IFCA to establish a Memorandum of Agreement (MOA) to formally recognise Eastern IFCA's position in relation to the compensatory measure should this be necessary and appropriate once the form of any compensation measure required (if

Ref	Eastern IFCA's Deadline 5 Submission	Applicant Response
		deemed necessary by the SoS) is understood post consent. The Applicant notes that should this be the case, that activity will take place post consent but will not affect relevant examination documents given any MOA (if indeed necessary) will be a side agreement between parties.
4	Extensions to existing SAC's as a compensatory measure for Annex I biogenic reefs and Annex I sandbanks could have a detrimental effect on fishing communities within the Eastern IFCA district and contribute to the continued squeeze on fishing practices. Eastern IFCA notes that commercial fisheries have been recognised as other users of the proposed extension areas of IDRBNR and HHW SAC. We would request that the impacts on fisheries be taken into account if any MPA extensions are considered.	The Applicant notes Eastern IFCAs position on compensatory measures that may impact fishing opportunities. Commercial fisheries have been recognised as a user of the proposed extension areas of IDRBNR and HHW SAC as set out in Section 3.3.4 of the Benthic Compensation Evidence Base and Roadmap (Document reference 7.6.3, V4, submitted at Deadline 6) and further detailed in Annex 1 of the Benthic Compensation Evidence Base and Roadmap (Document reference 7.6.3, V4, submitted at Deadline 6) Annex I: Commercial fisheries activity review within the IDRBNR SAC and proposed extension areas (NiMa, 2024). It is expected that should compensation be required in relation the IDRBNR SAC, then the measure would be Marine Protected Area designations and/or extensions delivered by Defra, in line with the confirmation through the WMS and associated interim guidance that the strategic extension of Marine Protected Measure will be delivered by Defra, should the SoS deem compensation necessary for the Project. It is expected that any further consultation in relation to this measure will be managed by Defra through the appropriate formal processes. However, it should be noted that until the SoS has made their decision on any necessary compensation and detail on magnitude, cost and timing is available it is prudent for the Applicant to retain the ability to deliver other measures, even in the event there is a lack of agreement on those measures the project is proposing to retain. It will be for the SoS to make the final decision on which method will ultimately be delivered (if deemed necessary), noting the Applicant's agreement on the appropriateness of Marine Protected Area designations and/or extensions delivered by Defra. The Applicant also notes that with the exception of the potential areas proposed for the SAC extension (which will be a process led by Defra and not the Applicant) those areas of seabed which have been put forward for potential creation of biogenic reef are outside of the 6nm limit and therefore not within the EIFCAs jurisdiction. The compensation measures, as detailed in the Benthic Compensation Evidence Base and Roadmap (Document reference 7.6.3, V4, submitted at Deadline 6), Sandbank Compensation Plan, (REP5-105), Biogenic Reef Compensation Plan (Document reference 7.6.3, V4, submitted at Deadline 6), have been developed to provide the necessary confidence to the SoS that the compensation measures proposed are viable, securable, and deliverable. The Applicant has undertaken extensive consultation with the relevant stakeholders (namely, Natural England, MMO, the Planning Inspectorate, The Crown Estate, the Wildlife Trusts, Defra, the National Federation of Fisherman's Organisations (NFFO) and relevant Inshore Fisheries and Conservation Authorities (IFCAs). The compensation measures have also undergone additional consultation with members of the Expert Technical Group. The MPA extension as part of the MRF will be led by Defra; therefore, engagement with the commercial fishing industry will be managed by Defra in accordance with relevant regulatory processes. This will ensure that all stakeholders, including the commercial fishing industry, are appropriately consulted and their interests are considered in the decision-making process. The Applicant will remain aligned with

Ref	Eastern IFCA's Deadline 5 Submission	Applicant Response
		Defra's guidance and contribute to any necessary consultations or assessments as part of the process, if required.
5	Discussions with Kent and Essex IFCA who have a similar Native Oyster restoration project have highlighted that the likelihood of restoration efforts achieving densities high enough to maintain a sustainable Oyster fishery is extremely low and, if ever achieved, would take a very long time.	The Applicant notes Eastern IFCAs comment regarding the timescales and success of native oyster restoration efforts. The Applicant has detailed general approaches to native oyster restoration, including an analysis of the constraints and key environmental considerations required in order to develop native oyster beds using available evidence and literature within the Benthic Compensation Evidence Base and Roadmap (Document 7.6.3, V4, submitted at Deadline 6). The delivery timeframe of biogenic reef creation is proposed in Section 4.3.6 of this report. A Letter of Comfort from the Oyster Restoration Company was received on 29 January 2025. Stating that '*the overall aim of the compensation measure would be to deploy a self-sustaining oyster bed with an average minimum density of 5 live oysters per m^2. The oyster reef will cover a maximum area of 17,280m^2*' (REP4-122). If this compensation measure is required, the Applicant will continue to work with the Oyster Restoration Company and other relevant stakeholders to develop the proposal further.

2.3 The Applicant's Response to the Environment Agency's Deadline 5 Submission

Table 2-3: The Applicant's Comments to the Environment Agency's Deadline 5 submission

Ref	EA's Submission	Applicant Response
1.0 [REP4a-075] Outline Code of Construction Practice		
1.1	The Environment Agency welcomes the inclusion of the final bullet point in paragraph 73 of this document, which confirms that "During HDD works undertaken at landfall, the landfall drill site will be temporarily bunded to the 0.5%AEP 97.5% confidence extreme sea level specified by the EA to minimise flood risk". We now have confidence that the landfall drill site mitigation will be implemented to the required level.	This confirmation is welcomed by the Applicant.
2.0 [REP4a-015] Chapter 23 Geology and Ground Conditions		
2.1	We have reviewed the updated Chapter 23 (Dated February 2025, Rev 2.0) and the updated figures [REP4a-032] and believe this provides a satisfactory assessment of issues within the Environment Agency's remit.	This confirmation is welcomed by the Applicant.
3.0 [REP4a-017] Chapter 24 Onshore Hydrology, Hydrogeology and Flood Risk		
3.1	We have reviewed the updated Chapter 24 (Dated February 2025, Rev 2.0) together with the updated figures [REP4a-033]. This now reflects amendments in other documents we have previously reviewed and commented on. It is our view that this now provides a satisfactory assessment of issues within the Environment Agency's remit.	This confirmation is welcomed by the Applicant.
3.2	In summary, the updated Chapter now references the Noise Bund Hydraulic Modelling Report, includes a summary of conclusions (paragraph 468) and confirms that the Outline Soil Management Plan (SMP) is now a separate document (and DCO Requirement) and not part of the Outline Code of Construction Practice (CoCP). However, during a meeting with the Applicant on 6 March 2025, they advised us that the Outline SMP may be put back under Requirement 18, as an appendix to the CoCP. Regardless of which Requirement this is secured under, as long as we remain a consultee to the discharge of the final document this would not concern us.	This comment is noted by the Applicant. Following confirmation received from Lincolnshire County Council (REP4a-135) and East Lindsey District Council, Boston Borough Council and South Holland District Council (REP4a139) at Deadline 4a that LCC should be the discharging authority in respect of both the Code of Construction Practice (CoCP) and the Soil Management Plan (SMP), the requirement to provide a soil management plan has been reinstated in Requirement 18 (Code of construction practice).

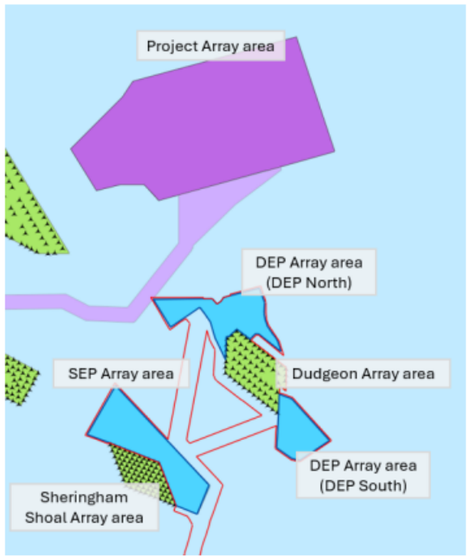
Ref	EA's Submission	Applicant Response
		The Environment Agency is a consultee to the discharge of this document under Requirement 18.
3.3	Table 24.19 (page 87) confirms that 'any stockpiles in all flood risk hazard areas along the onshore ECC will be minimised or avoided where possible in order to mitigate against any increased risk and allow flood flow through and within flood cells, particularly around populated areas (e.g. Wainfleet). These measures have been outlined in the outline SMP (document reference 8.1.3) and will be secured as part of the final SMP'. This mitigation, which is referred to at several points throughout the document, accords with the onshore Export Cable Corridor Flood Risk Assessment (ECC FRA), [REP4-022 (Part 1 of 2) and REP4-024 (Part 2 of 2)].	This confirmation is welcomed by the Applicant.
3.4	Table 24.19 (page 88) also states that 'To ensure that sensitive equipment at the OnSS remains free from flooding in all eventualities, the platform level for the OnSS has been set at approximately 4.2m AOD, with the design level for sensitive equipment to be raised by a further 200mm to a minimum of 300mm above the peak modelled flood level (35 year climate change allowance) through the use of equipment plinth and by raising finished floor levels on the development platform'. The Environment Agency agrees that this is an appropriate level of mitigation based on the assessment provided – please see the additional comments in paragraph 4.2 below regarding the assessment.	This confirmation is welcomed by the Applicant.
3.5	Paragraph 535 confirms that 'the drill site at the TJB will be temporarily bunded during construction to protect against the residual risk of water ingress during drilling and duct installation activities. The bunding will provide protection to the 0.5% AEP 97.5% confidence extreme sea level, as required by the Environment Agency'. This supports our Deadline 4a representation and we are satisfied that there is a sufficient audit trail within the documents to show agreement on this point.	This confirmation is welcomed by the Applicant.
3.6	Paragraph 551 confirms that 'The potential effect of the OnSS development platform remaining in place beyond 35 years has been assessed within the OnSS FRA (document reference: 6.3.24.3). The assessment finds no significant effects to sensitive receptors'. The Environment Agency has now reviewed the assessment supporting this statement and we concur with this statement – please see our comments below in paragraph 4.1	This confirmation is welcomed by the Applicant.
3.7	Paragraph 473 also refers to the Environmental Permitting (England and Wales) Regulations 2016 and that 'Article 7 of the DCO disapplies the relevant legislation and replaces it with the Protective Provisions making the EA the approver of the works that would previously have required consent'. This accords with discussions to date and we hope to be able to confirm our agreement to this disapplication of the legislation when the legal agreement concerning the beach works is complete. Please also see the comments below in paragraph 8.1 regarding Protective Provisions.	The Protective Provisions and beach works agreement have now been finalised, and the Applicant understands that this resolves the EA's concerns regarding Article 7 of the draft DCO.
4.0 [REP4-027] & [REP4-028] Appendix 24.3 Flood Risk Assessment : Onshore Substation (Parts 1 & 2)		
4.1	These documents present an assessment of the lifetime of the development with an uplift from 35 years to 75 years. This work aimed to identify any potential receptors which may be at an increased risk of flooding if the development platform was to remain in situ beyond the 35 year operational lifetime of development. This assessed areas which would move to a higher risk banding as a result of the development. As noted in paragraph 3.6 above, the modelling shows that the impact would be minimal with small isolated areas affected. Having reviewed the revised modelling to support a lifetime of development to 75 years (as required by national planning policy and guidance) we can confirm that it is now considered fit for purpose for both the 35 and 75 year scenarios.	This confirmation is welcomed by the Applicant.
4.2	2 The updated modelling provides a maximum flood depth of 4.290m AOD for the 0.1%AEP plus climate change (75 years) for the higher central climate change allowance. Table 24.19 (flood risk) of Chapter 24 Onshore Hydrology, Hydrogeology and Flood Risk Rev 2 states that the development platform will be raised to 4.2m AOD with the design levels for sensitive equipment raised by a further 300mm. Although the development platform level is slightly lower than the maximum flood depth of 4.290m AOD, it is our view that it falls within model tolerances and additional mitigation is provided for the sensitive equipment. As such, the proposed mitigation measures are considered appropriate.	This confirmation is welcomed by the Applicant.
4.3	Accordingly, we can confirm that all the issues raised by the Environment Agency in respect of this FRA are now resolved. We are of the view that the FRA provides an assessment that is appropriate to the scale, nature and location of the development and is sufficient to inform the Secretary of State's consideration of the flood risk Exception Test, as required by paragraph 5.8.11 of EN-	This confirmation is welcomed by the Applicant.

Ref	EA's Submission	Applicant Response
	1. Accordingly, the Environment Agency withdraws its holding objection, outlined in paragraph 13.4.1 of its Relevant Representation [RR-018].	
5.0 [REP4a-142] Chapter 7 Marine Physical Processes		
5.1	We have reviewed the updated Chapter 7 (dated February 2025, Rev 2) together with the updated Figures [REP4a-041 and REP4a-042] and believe that this provides a satisfactory assessment of issues within the Environment Agency's remit. We note that the assessment now includes consideration of the National Coastal Erosion Risk Mapping (NCERM2) data, published by us on 28 January 2025.	This confirmation is welcomed by the Applicant.
6.0 [REP4a-056] Preliminary Land Quality Risk Assessment		
6.1	We have reviewed the updated assessment and we have no comments to make on this.	This confirmation is welcomed by the Applicant.
7.0 [REP4a-058] Groundwater Risk Assessment		
7.1	We have reviewed the updated assessment and this raises no concerns. We look forward to reviewing further updates of this assessment prior to the commencement of development.	This confirmation is welcomed by the Applicant.
8.0 Protective Provisions		
8.1	We are pleased to advise you that the Protective Provisions are now in an agreed format, subject to the legal agreement in respect of the beach works also being agreed upon and completed by the parties. The Applicant will append the agreed draft Protective Provisions to the updated DCO being submitted at Deadline 5. Constructive negotiations are ongoing with respect to the beach agreement, and we will provide a further update on this at Deadline 6.	This confirmation regarding the Protective Provisions is welcomed by the Applicant. The beach works agreement has been finalised and the Applicant understands that this has resolved the EA's concerns regarding this matter.
9.0 Summary & outstanding matters		
9.1	In summary, we can confirm that all outstanding matters in respect of the assessment of environmental matters within the Environment Agency's remit are now resolved – this includes matters 3 and 4 recorded in our Principal Areas of Disagreement (PAD) table [PD1-104]. Matters 1 and 2 in the PAD table are still the subject of ongoing negotiation, and as outlined in our Deadline 3 representation [REP3-064], we are drafting the legal agreement and the Protective Provisions to work hand in glove. As such, resolution of matters 1 and 2 are mutually dependent and we will update the Examining Authority on any further progress at Deadline 6.	This confirmation is welcomed by the Applicant. The Protective Provisions and accompanying beach works agreement are now finalised. The Applicant understands that this has resolved the EA's concerns regarding this matter.

2.4 The Applicant's Response to Equinor's Submissions

Table 2-4 The Applicant's Response to Equinor's Deadline 5 Submissions

Ref	Equinor's Deadline 5 Submission	Applicant Response
1.Introduction		
1.	GT R4 Limited (trading as Outer Dowsing Offshore Wind) ("The Applicant") has made an application for development consent for the construction and operation of the Outer Dowsing Offshore Wind project ("the Project").	The Applicant notes this comment.
2.	Equinor New Energy Limited ("Equinor") is developing the Sheringham Shoal Extension Project ("SEP") and the Dudgeon Extension Project ("DEP") on behalf of Scira Extension Limited ("SEL") and Dudgeon Extension Limited ("DEL") and has submitted a relevant representation on behalf of SEL and DEL.	The Applicant notes this comment.
3.	Dudgeon Offshore Wind Limited ("DOWL") is the owner of the Dudgeon Offshore Wind Farm (Dudgeon) which is located approximately 32 km from the North Norfolk Coast in the Southern North Sea and has been operating since 2017. Scira Offshore Energy Limited ("SOEL") is the owner of the Sheringham Shoal Offshore Wind Farm ("SS"), which is located approximately 20 km from the North	The Applicant notes this comment.

Ref	Equinor's Deadline 5 Submission	Applicant Response
	Norfolk Coast in the Southern North Sea and has been operating since 2012. Dudgeon and SS are operated by Equinor on behalf of DOWL and SOEL.	
4.	Following its review of the Wake Loss Technical Note [REP4-114] Equinor has registered DOWL and SOEL as Interested Parties in the Examination (see [REP4a126] and [REP4a-131]). The Planning Inspectorate confirmed by email on 10 March 2024 that SOEL and DOWL will be treated as Interested Parties for the remainder of the Examination. Equinor's view expressed in [REP4a-128] applies equally to DOWL and SOEL.	The Applicant notes that, despite having engaged with the Equinor IPs pre-application, including meetings since June 2021, no concerns relating to wake effects were raised by the Equinor IPs until 25 February 2025, after Deadline 4 of the Examination.
5.	This representation has been drafted by Equinor on behalf of SEL, DEL, SOEL and DOWL, who will henceforth be referred to as the Equinor interested parties ("Equinor IPs"). This follows a similar approach to that taken by the Orsted IPs.	The Applicant notes this comment.
6.	The distance between the DEP Array area and the Project Array area is 13.3 km. The distance between the SEP Array area and the Project Array area is 25.8 km. The distance between the Dudgeon Array Area and the Project Array Area is 19.9 km. The distance between the Sheringham Shoal Array area and the Project Array Area is 34.0 km. The separation between the Project Array area, the SEP Array area, the DEP Array area, the Dudgeon Array Area and the Sheringham Shoal Array Area is illustrated in Figure 1.	The Applicant notes this comment.
7.	 **Figure 1 - The Project Array area, Sheringham Shoal Array area, Dudgeon Array area, SEP Array area and DEP Array area**	N/A
8.	Equinor has previously made a submission on behalf of SEP and DEP which provides more detail on the discussions that have taken place between these parties and the Applicant to date [see REP4a-128 and REP4a-129].	The Applicant has responded to this comment and to the Equinor IPs' submission on 27 March 2025 (AS-036) in The Applicant's Submissions on Wake Loss Matters (Document 24.12).
2.Wake Effects		
9.	The Applicant submitted an assessment of the impacts of the Project as a result of wake effects on other offshore windfarm developments close to the proposed order limits of the Project at Deadline 4, 21.9 Wake Loss Technical Note [REP4-114]. The Wake Loss Technical Note [REP4-114] makes reference to the predicted impacts on the energy yield of the Equinor IPs as a result of wake effects caused by the Project. The Equinor IPs note the Applicant's view in the Wake Loss Technical Note [REP4-114] that "relevant policy does not require further assessment in the circumstance of its application". However, this assertion is contrary to the Secretary	The Applicant has responded to these comments and to the Equinor IPs' submission on 27 March 2025 (AS-036) in The Applicant's Submissions on Wake Loss Matters (Document 24.12).

Ref	Equinor's Deadline 5 Submission	Applicant Response
	of State's decision in relation to the Awel y Mor Offshore Wind Farm Order 2023, where the SoS endorsed the ExA's view that a wake effect assessment should be undertaken (see section 3 of this submission below).	
10.	Following the publication of the Wake Loss Technical Note [REP4-114] at Deadline 4, Equinor entered into discussions with the Applicant on the issue of wake effects on 25 February 2025.	
11.	At Deadline 4a of the Examination, Equinor submitted Equinor's Comments on 21.9 Wake Loss Technical Note [REP4a-128] which provided Equinor's initial comments on the Wake Loss Technical Note [REP4-114] and on related examination documents on the topic of wake loss submitted by the Applicant, Ørsted IPs and The Crown Estate at Deadline 4.	
12.	At Deadline 4a Ørsted IPs submitted the Outer Dowsing Project Wake Study at Appendix 1 of their Deadline 4a submission [REP4A-125a]. The Ørsted modelling on anticipated wake effects produces different levels of impact than the Wake Loss Technical Note [REP4-114] produced by the Applicant (see Section 4, Technical Analysis).	
3. Materiality of Impacts to the Equinor IPs		
13.	In its Deadline 4a submission commenting on the Applicant's Wake Loss Technical Note [REP4-114], Equinor concludes that the assessment presented in the Wake Loss Technical Note [REP4-114] demonstrates significant impacts on the operation, energy yields and commercial interests of the Equinor IPs resulting in economic loss to them.	The Applicant has responded to these comments and to the Equinor IPs' submission on 27 March 2025 (AS-036) in The Applicant's Submissions on Wake Loss Matters (Document 24.12)
14.	In the Wake Loss Technical Note [REP4-114], the Applicant states that it "does not consider these wake effects to be significant in EIA terms". However, in the view of the Equinor IPs this statement does not correctly reflect the national policy position set out in the NPS.	
15.	The Examining Authority in its written questions "notes the provisions of National Policy Statement (NPS) EN-3, including paragraphs 2.8.197, 2.8.198, 2.8.345, 2.8.347, Requirement (R)25 of The Awel y Mor Offshore Wind Farm Order 2023 and the conclusions of SoS for DESNZ on this project that a wake assessment was required" [PD-013].	
16.	Paragraph 2.8.197 requires that, "where a potential offshore wind farm is proposed close to existing operational offshore infrastructure, or has the potential to affect activities for which a licence has been issued by government, the applicant should undertake an assessment of the potential effects of the proposed development on such existing or permitted infrastructure or activities."	
17.	Paragraph 2.8.198 states that the "assessment should be undertaken for all stages of the lifespan of the proposed wind farm in accordance with the appropriate policy and guidance for offshore wind farm EIAs."	
18.	In the Awel y Mor decision, the SoS endorsed the ExA's view "that NPS EN-3 does apply to offshore wind farm effects on other windfarms" and therefore "existing offshore wind farms do fall within the definition of existing operational infrastructure". The ExA reasoned that "had NPS EN-3 intended to exclude existing wind farms this would have been made explicit." It is therefore uncontentious that SEP, DEP, SS and Dudgeon do fall within the definition of "existing operational offshore infrastructure" meaning that an assessment under 2.8.197 and 2.8.198 is required.	
19.	The SoS decision-making section of NPS EN-1 must be read together with the policy requirements relating to other offshore infrastructure above. In particular paragraph 2.8.342 of NPS EN-3 states that "where a proposed offshore wind farm potentially affects other offshore infrastructure or activity, a pragmatic approach should be employed by the Secretary of State". Paragraph 2.8.345 then goes on to state that "…the Secretary of State should be satisfied that the site selection and site design of a proposed offshore wind farm and offshore transmission has been made with a view to avoiding or minimising disruption or economic loss or any adverse effect on safety to other offshore industries." Paragraph 2.8.345 should be read together with paragraph 2.8.197 as the SoS would not be able to satisfy themselves under paragraph 2.8.345 without having the benefit of an assessment of the potential effects on the existing offshore infrastructure. The SoS therefore requires the wake loss assessment to be undertaken so that it can apply the policies of the NPS EN-3 and exercise its decision-making powers.	
20.	The Equinor IPs therefore respectfully disagree with the Applicant's view that "Paragraph 2.8.345 of NPS EN-3 does not apply to wake effects between proposed and existing or consented offshore wind developments." It is clear from the Awel y Mor decision and the	

Ref	Equinor's Deadline 5 Submission	Applicant Response
	NPS EN-3 itself that the SoS considers that it does. Consequently, economic loss to the Equinor IPs arising from the Project is relevant to the SoS's decision.	
21.	Where impacts are anticipated, the Applicant must seek to avoid, minimise or compensate those impacts. The Applicant has not demonstrated that their site selection and site design of the Project has been made with a view to avoid or minimise disruption or economic loss to the Equinor IPs. As is usual for offshore wind projects the Applicant has yet to finalise its design and so the SoS cannot be satisfied at this stage that the design of the Project seeks to minimise impacts to the Equinor IPs' operations and avoid any consequential economic loss. Given the complexity of the issue, the view of the Equinor IPs is that the Applicant will not be able to mitigate the impacts due to there being a residual degree of economic loss regardless of any mitigation measures implemented. Moreover the level of impact of the final project design to the Equinor IPs' assets are unknown at this stage and consequently, protection should be provided for SEP, DEP, SS and Dudgeon due to the likely (albeit unquantified) material impacts that the Project will cause to their operations leading to the associated economic loss.	
22.	The Equinor IPs position is that wake loss effects do not need to be significant in EIA terms for the NPS policy to apply. The wake loss effects potentially caused by the Project are likely to result in economic loss to the Equinor IPs and therefore the Project is likely to cause a commercial impact to the Equinor IPs which they consider to be material.	
23.	The Equinor IPs are further concerned that the potential effects caused by the Project to them could affect their viability. Paragraph 2.8.347 of EN-3 of the NPS states that "where a proposed development is likely to affect the future viability or safety of an existing or approved/licensed offshore infrastructure or activity, the Secretary of State should give these adverse effects substantial weight in its decision-making." The policy position is that the economic success of other offshore projects is an important consideration for the SoS and should therefore be given substantial weight. This consideration does not only apply at the point at which such infrastructure become unviable or unsafe. This weighting aligns with broader government policy. The Government has published its strategy paper "Clean Power 2030 Action Plan: A New Era of Clean Electricity" which stipulates broad energy production targets for offshore wind.	
24.	For SEP and DEP the potential wake loss effect could materially affect the projects' competitiveness in securing a Contract for Difference. For SS and Dudgeon, the impact may curtail their ability to keep operating for as long as possible. The potential reduction in energy yield to SS and Dudgeon could impact the ability of these projects to continue to generate electricity economically, thus impacting their future viability to which the NPS EN-3 refers.	
25.	The wake loss effects to the SEP, DEP, SS and Dudgeon projects would reduce the contribution of those project towards the achievement of 2030 targets. Given that the SEP and DEP projects are consented, they should be an important contributor to the 2030 target, this may be compromised if the viability of these projects is impacted.	
26.	The wake loss effects to the SS and Dudgeon projects will commence around the time those projects reach the end of their current support mechanisms (Renewable Obligation Certificates and Contracts for Difference respectively). The continuing operation of these projects (and others of a similar age) form an important contribution to the achievement of Government's Clean Power 2030 targets and longer-term renewable targets. The wake loss effects place a risk on the commercial viability of the continued operation of these projects in a period where they will need to secure new offtake arrangements in an increasingly competitive market.	
4.Technical Analysis		
27.	As outlined above, further to Equinor's submission at Deadline 4a [REP4a-128], DOWL and SOEL have registered as Interested Parties in the Examination. Equinor's views expressed in REP4A-128 in relation to the Ørsted IP's responses to written questions presented in [REP2-076] apply equally to SS and Dudgeon.	The Applicant has responded to this comment and to the Equinor IPs' submission on 27 March 2025 (AS-036) in The Applicant's Submissions on Wake Loss Matters (Document 24.12).
28.	The Equinor IPs have reviewed the Applicant's Wake Loss Methodology Clarification Note [REP4a-119] and Ørsted's IP's - Deadline 4a Submission [REP4A-125a], particularly Appendix 1 of the latter document, and has the following comments in so far as they relate to SEP, DEP, SS, and Dudgeon.	
29.	The Equinor IPs support the views expressed by Ørsted IP's, that the Applicant's Wake Loss Technical Note [REP4-114] does not provide sufficient information on the model settings applied to determine the quality of the Applicant's wake modelling assessment. The	

Ref	Equinor's Deadline 5 Submission	Applicant Response
	Equinor IPs also note the difference in wake estimates provided by Ørsted in REP4A-125a to those presented by the Applicant. The Equinor IPs have similarly run their own wake modelling for SEP, DEP, SS and Dudgeon applying the Equinor IPs' own wake model and relevant assumptions about number of turbines in the Outer Dowsing array, the power curve and applying fewer turbines than the Applicant is consenting as a worst case. This moderate modelling scenario, with respect to input parameters and model settings, presents results similar to those presented by the Applicant as worst-case. Based on the information provided, the Equinor IPs do not therefore consider that the assessment presented in the Wake Loss Technical Note [REP4-114] is likely to represent the worst-case scenario for wake loss impacts on SEP, DEP, SS and Dudgeon.	
30.	The Applicant has applied an Eddy viscosity model with large windfarm correction which can underestimate wake losses, dependent on the assumptions made and model settings being used. Nevertheless, the range of estimates seen in the Equinor IPs' modelling, Ørsted's modelling and the modelling presented by the Applicant are as would be expected in this type of modelling. In all cases, the impacts presented give rise to potentially significant operational impacts for SEP, DEP, SS and Dudgeon.	
31.	The Equinor IPs also agree with Ørsted's comment in REP4A-125a that wake loss calculations have an uncertainty of at least 10%. Results are highly dependent on the chosen wake model and the parameters applied in that model, as well as assumptions about the climatic conditions. Equinor supports the suggestion from Ørsted that estimation of wake impacts are therefore best resolved through engaging an independent party to calculate the effect, ideally consisting of an ensemble wake modelling approach to account for the inherent uncertainties in wake models.	
5.Mitigation		
32.	The Applicant concludes in its Wake Loss Technical Note [REP4-114] that "it's not considered to be appropriate in EIA or policy terms to require any further mitigation" in respect of the wake loss effects anticipated as a result of the Project. From a practical perspective, the Equinor IPs do not consider that any proposed operational mitigation measures will be effective in addressing the impact in any event and therefore are seeking that any economic loss arising from the wake loss effects is offset. Such losses cannot be quantified at this stage and therefore a mechanism will be required to secure protection through the DCO.	The Applicant has responded to this comment and to the Equinor IPs' submission on 27 March 2025 (AS-036) in The Applicant's Submissions on Wake Loss Matters (Document 24.12).
6. Protective Provisions and Side Agreement		
33.	In light of the above, the Equinor IPs will require protective provisions for the benefit of SEP, DEP, SS and Dudgeon to be included in the DCO. The Equinor IPs propose that these protective provisions will provide a framework to govern the principles between the parties.	The Applicant and the Equinor IPs remain fundamentally disagreed on the appropriateness of protective provisions covering wake effects. The Applicant maintains that such provisions fail to meet the required tests for inclusion and would be entirely inappropriate to include in the DCO. The Applicant refers to its submissions in The Applicant's Submissions on Wake Loss Matters (24.12).
34.	The Equinor IPs understand that the Ørsted IPs intend to submit its preferred form of protective provisions into the Examination at Deadline 5, having shared these with the Applicant. Given the in-principle alignment between the Equinor IPs' and the Ørsted IPs' position on the issue of wake loss effects, the Equinor IPs consider it pragmatic to also seek alignment between the Ørsted IPs and the Equinor IPs proposed form of protective provisions. The Equinor IPs will therefore review any protective provisions submitted by Ørsted , and will submit a form of protective provisions in relation to their interests at Deadline 6 of the Examination.	
35.	Given the complexity of the wake loss effects issue, the Equinor IPs anticipate that a commercial side agreement may also be required alongside the protective provisions.	
36.	In terms of timescales, the Equinor IPs will submit a form of protective provisions into the Examination by Deadline 6 thus allowing sufficient time for them to be examined before the Examination closes. Given the early stage of discussions in relation to the side agreement, it is unrealistic to suggest that this could be agreed before the Examination closes.	
7.Cooperation and Proximity		
37.	It should be noted that in accordance with [REP4a-128] Equinor on behalf of SEL and DEL only is continuing to progress discussions with the Applicant with respect to cooperation and proximity and will seek to include provisions in the protective provisions to cover these matters.	The Applicant has proposed an alternative set of PPs for the protection of Dudgeon Extension Limited at Part 15 of Schedule 18 of the draft DCO (3.1) in order to provide sufficient comfort that these projects are protected and co-existence can operate effectively.

Ref	Equinor's Deadline 5 Submission	Applicant Response
		Whilst the terms of these PPs are not agreed, the Applicant is in active negotiations with the relevant IPs with a view to agreeing a proximity agreement to govern the interaction of the Project with Dudgeon Extension Limited. The Equinor IPs have commented that the Applicant should be obliged to enter into a proximity agreement prior to commencement of the works. The Applicant considers that: a. The works controlled by the PPs should be limited to those within the "control area", not the works as a whole; and b. That the approval mechanism set out in the PPs provides sufficient control for the IPs in each case in the absence of a proximity agreement being completed as the relevant works cannot commence until such time as the protected party has confirmed that they are content with the specifications of those works. The ExA and the SoS can therefore be satisfied that the assets of Dudgeon Extension Limited Limited are sufficiently protected such that any effects on third party infrastructure are negated or reduced to a level sufficient to enable the Secretary of State to grant consent in accordance with paragraph 2.8.348 of NPS EN-3.
8.Conclusion		
38.	Given the potential material impacts to the SEP, DEP SS and Dudgeon projects, the Equinor IPs will only be in a position to withdraw this representation once sufficient protection has been secured for them through protective provisions.	The Applicant has responded to this comment and to the Equinor IPs' submission on 27 March 2025 (AS-036) in The Applicant's Submissions on Wake Loss Matters (Document 24.12).

Table 2-5 The Applicant's Response to Equinor's Comments on Deadline 5 Submissions

Ref	Equinor's Comments on Deadline 5 Submissions	The Applicant's Response
1.Introduction		
1.	The Equinor IPs have made submissions on the topic of wake effects in REP4a-126, REP4a-128, REP4a-129, REP4a131, and REP5-157 in relation to potential impacts on the operation and energy yields of the Sheringham Shoal Offshore Windfarm, the Dudgeon Offshore Windfarm, the Sheringham Shoal Extension Project and the Dudgeon Extension Project and the associated impacts on the commercial interests of the Equinor IPs resulting in economic loss	The Applicant has responded to this comment in The Applicant's Submissions on Wake Loss Matters (Document 24.12).
2.	The Equinor IPs provided evidence on the topic of wake effects at Issue Specific Hearing 8, a written summary of which will be submitted at Deadline 6. Further supporting material is presented here in relation to: a. Comments on the **Wood Thilsted Wake Impact Assessment Report** [REP5- 152], Section 2.	

	b. A Wake Loss Financial Impact Assessment on behalf of the Equinor IPs, Appendix 1. c. A form of protective provisions required by the Equinor IPs for the protection of their assets, Appendix 2	
3.	This submission has been made in advance of Deadline 6 to provide additional opportunity for the Applicant and other interested parties to comment prior to the close of examination.	
2.Comments on the Wood Thilsted Report		
4.	The Equinor IPs have reviewed **23.6 Wood Thilsted Wake Impact Assessment Report** [REP5-152] and provide the following comments.	The Applicant notes this comment.
5.	The Equinor IPs welcome the submission of [REP5-152], which has been commissioned from a third party and provides an increased level of independence in relation to the wake assessment methodology used. The Equinor IPs consider that [REP5-152] provides a suitable basis for the assessment of impacts upon its assets and consented projects in relation to wake effects.	The Applicant welcomes this confirmation.
6.	The Equinor IPs note that a further assessment of wake effects will be necessary prior to commencement of construction of the Project and using the final layouts and WTG parameters of the Project, SEP and DEP, the commissioning of such study to be conducted in agreement with the Equinor IPs using information to be provided by the Equinor IPs. This process has been reflected in the Equinor IPs' protective provisions (Appendix 2).	The Applicant has responded to this comment in The Applicant's Submissions on Wake Loss Matters (Document 24.12).
2.1 Scenarios		
7.	The **Wood Thilsted Wake Impact Assessment Report** [REP5-152] presents wake modelling results for a range of scenarios, starting with a wake model of all existing operational offshore windfarms. Additional wake effects due to the operation of ODOW are then modelled for multiple configurations of operational offshore windfarms, consented projects and ODOW; and for cumulative impacts where relevant.	The Applicant notes this comment and notes the submission of a further update to the Wood Thilsted Wake Impact Assessment Report at Deadline 6 to reflect the inclusion of a "no build" zone for the Dudgeon Extension Project and to include points of clarification following further discussion with the Orsted IPs.
8.	The worst-case scenario for the Sheringham Shoal and Dudgeon assets is presented in Table 2 of [REP5-152] as Scenario 0b vs 0a, for a scenario where Hornsea 3, Hornsea 4, SEP and DEP are not constructed. The additional wake losses as a result of the operation of ODOW on Sheringham Shoal and Dudgeon are -0.76% and -0.88% respectively.	The Applicant notes this comment.
9.	The worst-case scenario for SEP and DEP is presented in Table 3 of the report as Scenario 3c vs Scenario 3a. This represents a scenario where Hornsea 3 and Hornsea 4 are not constructed, but SEP and DEP are constructed. The additional wake losses as a result of the construction of ODOW on SEP and DEP are -0.28% and -1.05% respectively.	The Applicant notes this comment.
10.	The Equinor IPs note the caveat in section 2.2.2 indicating the conservative nature of the WTG placement within the SEP and DEP order limits.	The Applicant notes this comment.
11.	The results presented in [REP5-152] are considered suitable for use in the assessment of impacts due to wake effects.	The Applicant welcomes this confirmation.
2.2 Significance in EIA terms		
12.	It is noted that [REP5-152] presents the results of a technical study and does not further present a methodology for assessing significance in EIA terms, such as that suggested in Section 18.6 of **6.1.18 Chapter 18 Infrastructure and Other Marine Users** [REP5-035].	The Applicant has responded to this comment in The Applicant's Submissions on Wake Loss Matters (Document 24.12).
13.	The Equinor IPs note Action Point 1 from the Issue Specific Hearing 8 (ISH8) Action Points list [EV13-008] and will provide more detailed comment on the question of the significance of the impacts in EIA terms in their submission at Deadline 6.	
3.Economic Impact Assessment		
14.	The Equinor IPs economic assessment is presented in Appendix 1. The wake loss values referenced in Section 2.1 from [REP5-152] are used as the inputs to the economic assessment and the methodology reflects that used in Ørsted IP's Deadline 5 submission [REP5-176].	The Applicant has responded to this comment in The Applicant's Submissions on Wake Loss Matters (Document 24.12).

4.Protective Provisions		
15.	The impacts due to the operation of the Project on the Equinor IPs' assets and consented projects are significant (Appendix 1) and require protection within the draft development consent order.	The Applicant and the Equinor IPs remain fundamentally disagreed on the appropriateness of protective provisions covering wake effects. The Applicant maintains that such provisions fail to meet the required tests for inclusion and would be entirely inappropriate to include in the DCO. The Applicant has responded to this comment in The Applicant's Submissions on Wake Loss Matters (Document 24.12). The Applicant has proposed an alternative set of PPs for the protection of Dudgeon Extension Limited at Part 15 of Schedule 18 of the draft DCO (3.1) in order to provide sufficient comfort that these projects are protected and co-existence can operate effectively. Whilst the terms of these PPs are not agreed, the Applicant is in active negotiations with the relevant IPs with a view to agreeing a proximity agreement to govern the interaction of the Project with Dudgeon Extension Limited. The Equinor IPs have commented that the Applicant should be obliged to enter into a proximity agreement prior to commencement of the works. The Applicant considers that: a. The works controlled by the PPs should be limited to those within the "control area", not the works as a whole; and b. That the approval mechanism set out in the PPs provides sufficient control for the IPs in each case in the absence of a proximity agreement being completed as the relevant works cannot commence until such time as the protected party has confirmed that they are content with the specifications of those works. The ExA and the SoS can therefore be satisfied that the assets of Dudgeon Extension Limited Limited are sufficiently protected such that any effects on third party infrastructure are negated or reduced to a level sufficient to enable the Secretary of State to grant consent in accordance with paragraph 2.8.348 of NPS EN-3.
16.	The Equinor IPs' protective provisions for the protection of their assets and consented projects in relation to wake effects are provided in Appendix 2.	
5.Conclusion		
17.	The **Wood Thilsted Wake Impact Assessment Report** [REP5-152] provides a suitable basis for the assessment of impacts due to wake effects.	The Applicant welcomes this comment.
18.	The additional wake loss values for Sheringham Shoal, Dudgeon, SEP and DEP [REP5-152] have been used as the inputs to the economic analysis presented in Appendix 1.	The Applicant has responded to this comment in The Applicant's Submissions on Wake Loss Matters (Document 24.12).
19.	A further assessment of wake effects will be necessary prior to commencement of construction of the Project and using the final layouts and WTG parameters, in agreement with the Equinor Ips.	
20.	The Equinor IPs will continue to engage with the Applicant to seek agreement on the form of protective provisions (Appendix 2) and alignment on the policy position.	
21.	The Equinor IPs have contacted the Applicant to request a meeting to discuss these matters and to discuss the points highlighted in ISH8 Action Points 1, 2, and 3. Further submissions in relation to wake effects will be made at Deadline 6.	

2.5 The Applicant's Response to Lincolnshire County Council's Deadline 5 Submission Response

Applicant's latest response	LCC's Submission	Applicant Response
Biodiversity Net Gain		
No alterations to the wording of Requirement 12 – Ecological management plan. EMP prepared which accords with the OLEMS. Updates to OLEMS REP4a-084. Outline Landscape and Ecological Management Strategy Section 3.9 references BNG. 'applicant is committed to delivering a net gain in biodiversity and demonstrating this gain by using appropriate biodiversity metric' … should there be a shortfall in overall biodiversity units… offsite enhancements will be secured through an agreement.	LCC notes the amended wording in relation BNG included at Section 3.9 in Rep4a-084. The Applicant's stated commitment to delivering a net gain in biodiversity is welcomed. LCC agrees that if it is not possible to deliver this with the Project boundary that additional units could be purchased from a third-party supplier. However, LCC advises that the level of detail currently provided in relation to the quantum, nature and location of BNG provision either within the Project boundary or via a third party and the lack of any security in the DCO for any gains is insufficient to allow positive weight to be apportioned to BNG in the planning balance	This response has been noted by the Applicant. The Applicant is continuing to engage with landowners and third-party providers on offsite opportunities. Due to the commercial nature of these discussions, the Applicant is unable to disclose the details of them in the public domain however can confirm negotiations are progressing. The commitment to deliver a net gain in biodiversity is secured in the DCO via Requirement 10 (Landscape management plan) and Requirement 12 (Ecological management plan). Both the landscape management plan to be submitted for approval by LCC under Requirement 10 and the ecological management plan to be submitted for approval by LCC under Requirement 12 are required to be in accordance with the OLEMS therefore the commitment to securing a net gain will be carried through to those documents, and should LCC, as the discharging authority, not be satisfied that a net gain in biodiversity (which is to be calculated using an appropriate biodiversity metric) is being achieved through those plans, it would be in a position to refuse to approve either or both of the management plans.
Landscape management		
Applicants response to action point 32. REP4a-120 The Applicant's Response to ISH 5 Action Points Applicant shared this response with us, LCC agreed in principle with approach but wanted to see the detail Updated OLEMS – REP4a-084, Outline Landscape and Ecological Management Strategy, Management and Maintenance paragraph updated (2.5.5)	Landscape maintenance: LCC are not convinced para 51 in the OLEMS is what was promised. It was understood that at the last ISH we were being told that the landscaping around the OnSS would be subject to a maintenance requirement for the lifetime and that this would include replacement planting for failed trees at any stage across that period. It was suggested that requirement 11(2) was essentially a fallback for areas not expressly dealt with in the OLEMS and so this wouldn't apply to the OnSS planting. As LCC read it now, para 51 just essentially says that requirement 11(2) applies to the ONSS planting LCC had understood it was being offered more than that. Also the OLEMS (latest version: Rev 6): Section 2.5.5 Maintenance and Management and paragraph 51 have been added to the OLEMS.	The Applicant has updated text within Section 2.5.5 (Maintenance and Management) of the OLEMS (Document 8.10, V8, submitted at Deadline 6) to address concerns raised by LCC, which were discussed under Agenda Item 3.5 of Issue Specific Hearing 8. The updated text states that in the unlikely event of external factors causing losses to the OnSS planting (as covered by Works No. 23-Landscaping works in the DCO) during the lifetime of the Project, such that the purpose of screening the OnSS is no longer achieved as a result of gaps in the planting, replacement planting will be undertaken to infill gaps that may arise. This approach will ensure commitments are fulfilled in respect of providing screening of the onshore substation and enhancing biodiversity. This text has been shared with LCC ahead of Deadline 6 and they have confirmed they agree with the updates made.

Applicant's latest response	LCC's Submission	Applicant Response
	This also includes replacement planting period of five years. However Work Order 23 (Landscaping) is not specifically referenced in the paragraph – LCC think it should be for clarity.	
Design		
As a more specific sign posting, in response to your comments at agenda item 3.6 of ISH 5, we have added the following text to the DAD - The contribution of the Design Review Panel will form one of a number of contributions that will be considered in the round when formulating the details of the design to be submitted for the approval of LCC under Requirement 9 of the DCO. Ongoing consultation will involve participation from the DRP, as well as LCC, the Community Liaison Group and the Local Design Panel. Meetings will be programmed post-consent that will enable stakeholders to contribute at critical points in the detailed design process. For example, at stages when options for the detailed design of the landscape planting and options for the application of colour on the onshore substation buildings are being explored. The outcomes of these meetings will be fully and clearly documented, setting out those aspects of the design being explored and highlighting where stakeholder feedback has positively influenced the refinement of the detailed design and presenting reasoning where suggestions from consultees have not been included.	LCC confirm that it is now content with this approach. Welcome that both documents are now going to be secured, and it is also good to see the applicant have included a much more detailed explanation for the design review process including requiring that outcomes of meetings will be documented and explaining reasons where suggestions from the DRP are not taken up.	The Applicant welcomes this confirmation.
DCO Updates- RPA definition/enforcement of requirements		
Applicants' response to action point 29.(REP4a-120). Amending the DCO as suggested by LCC would not address concerns regarding enforcement – proposed Article 48. Article 48 – provides transfer of the enforcement functions under Part 8 of the PA. Located under Part 7 of the dDCO. Refers to Articles 9-16 and Requirements 9, 10, 11, 12, 17, 20, 21, and 22. Explanatory memorandum para 9.19(REP4a-010) Draft DCO Tracked - (REP4a-007)	Welcome the introduction of Article 48 to transfer enforcement functions to LCC but still wish to see that LCC is identified as the Relevant Planning Authority in the DCO now that it is agreed to be the discharging authority for all requirements	The Applicant's position remains as outlined in Row LCC90 of the Statement of Common Ground with LCC (REP5-135), whereby Article 48 of the DCO provides LCC with the necessary enforcement functions of the "relevant local planning authority" under Part 8 of the Planning Act 2008 in respect of the articles and requirements of relevance to LCC.

2.6 The Applicant's Response to the MMO's Deadline 5 Submission Response

Table 2-6: The Applicant's Comments on the MMO's Comments on the Applicant's Latest Update to the Draft DCO

Reference	DCO Reference	Comments/Rationale for Change	Change Made	DCO Version	MMO Comment	Applicant Response
1	Schedule 10, Part 2, Condition 12 Schedule 11, Part 2, Condition 12 Schedules 12 and 13, Part 2, Condition 9 Schedules 14 and 15, Part 2, Condition 9 Schedule 16, Part 2, Condition 7	The Applicant has reviewed the wording of condition 12 following receipt of comments from the MMO regarding the same. The Applicant has updated the name and content of the condition to clarify that the purpose of this condition is for the Applicant to notify the MMO in the event that an unauthorised deposit is made.	~~Force majeure~~ Notification of unauthorised deposits 12.—(1) If~~, due to stress of weather or any other cause~~ ~~If~~ the master of a vessel determines that it is necessary to make an unauthorised deposit ~~the authorised deposits~~ within or outside of the Order limits because the safety of human life and/or of the vessel is threatened, within 48 hours full details of the circumstances of the deposit must be notified to the MMO. The unauthorised deposits must be removed at the expense of the undertaker unless written approval is obtained from the MMO.	8	Although the removal of the *'or any other cause*' is welcome, if they remove the *'stress of the weather'* too then the condition becomes an any other cause condition without expressly saying so The MMO notes the amendment to this condition to represent a notification to the MMO. However, the MMO still considers that this condition should be removed. The dropped object condition already serves as a notification to the MMO and the MMO requests that the Applicant makes it clear in what they are trying to achieve with the 'notification of unauthorised deposits' condition.	The Applicant maintains that the inclusion of condition 12 (Schedules 10 and 11), condition 9 (Schedules 12-15) and condition 7 (Schedule 16) is appropriate. The MMO argues that the inclusion of these conditions duplicates the requirements of the dropped objects wording in condition 11(10), 11(11) and 11(12). The Applicant considers that these conditions serve different functions. The heading for condition 11 is in connection with chemicals, drilling and debris. There is therefore some ambiguity as to whether that condition would bite in circumstances that are covered in condition 12, i.e. where, as a result of an emergency, a decision has to be taken to make an unauthorised deposit in an emergency. The Applicant, as a reasonable and proper promoter, has included that condition on the basis that it would be best if that situation was clearly regulated. The principle of this condition, in its previous form as "force majeure", has been consistently included in offshore wind farm DCOs made by the Secretary of State, including: - Sheringham Shoal and Dudgeon Extensions Offshore Wind Farm Order 2024; - Hornsea Four Offshore Wind Farm Order 2023;

Reference	DCO Reference	Comments/Rationale for Change	Change Made	DCO Version	MMO Comment	Applicant Response
						- East Anglia One North Offshore Wind Farm Order 2022; - East Anglia Two Offshore Wind Farm Order 2022; - Norfolk Vanguard Offshore Wind Farm Order 2022; and - Norfolk Boreas Offshore Wind Farm Order 2021. However, if the ExA and SoS disagree, then the Applicant would be content for that condition to be removed.
2	Schedule 10, Part 2, Condition 13(1)(3)(vii)	The Applicant has updated the wording of this condition following consultation with the Marine Management Organisation.	~~(vii) in the event that gravity base structure foundations are proposed to be used,~~ a marine biosecurity plan detailing how the risk of introduction and spread of invasive non-native species will be minimised.	8	The MMO welcomes this change.	The Applicant welcomes the MMO's agreement.

Reference	DCO Reference	Comments/Rationale for Change	Change Made	DCO Version	MMO Comment	Applicant Response
3	Schedule 10, Part 2, Condition 14 Schedule 11, Part 2, Condition 14	The drafting of this condition has been updated to clarify the relevant determination timescale.	~~...~~ ~~(4) The~~ Subject to sub- paragraph (6), 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. … (6) Where an application for approval is made under condition 13(1)(f), the MMO must determine the application for approval within a period of six months commencing on the date the application is received by the MMO, unless otherwise agreed in writing with the undertaker.	8	The MMO is satisfied that the MMMP is to be submitted at least six months prior to commencement of piling activities and welcomes the addition to clarify that for the MMMP the MMO has 6 months to make a determination. However, the MMO maintains that the DML should not place determination timescales on the regulator. The MMO will work closely with the Applicant and advisors to determine documents submitted for approval in a timely manner but in a manner that addresses all concerns/impacts and due to evidence from the current post consent offshore wind farms believes that if this should remain this should be 6 months at a minimum.	The Applicant notes the MMO's position that, as a matter of principle, determination timescales ought not to apply to approval of plans by the MMO. The Applicant disagrees with that position. The Applicant also notes that the DCO more widely makes provision for other discharging authorities to be bound to determination timescales. For example, under Schedule 20, the discharging authority must discharge a requirement within 10 weeks. In order to reach agreement with the MMO on this matter, the Applicant updated the DCO at Deadline 5 which will provide for a 6 month timescale for those plans specifically requested by the MMO in the MMO's Written Representation (REP1-056) and the MMO's Deadline 4a Submission (REP4a-133), with the exception of the Ornithology Plans, which are not relevant to the Project or proposed by the Applicant and which the Applicant considers are likely to be related to different proposals. A six-month determination period therefore applies to the following plans: - Marine Mammal Mitigation Protocol - Monitoring Plan - Site Integrity Plan - Operation and Maintenance Plans - Construction Method Statement. The timescales proposed are appropriate and strike the balance between allowing the MMO and consultees adequate time to consider the submissions and the need for speedy deployment of offshore wind

Reference	DCO Reference	Comments/Rationale for Change	Change Made	DCO Version	MMO Comment	Applicant Response
						Critical National Priority (CNP) infrastructure in order to meet the 2030 targets for offshore wind and the net zero targets set by the government.
4	Schedule 10, Part 2, Condition 16 Schedule 11, Part 2, Condition 16 Schedules 12 and 13, Part 2, Condition 13 Schedules 14 and 15, Part 2, Condition 13 Schedule 16, Part 2, Condition 10	The Applicant has updated condition 16 following consultation with the Marine Management Organisation	16.— (1) The undertaker must provide the following information to the MMO, unless otherwise agreed in writing by the MMO— (a) the name, company number (if applicable), address and function of any agent or, contractor or subcontractor appointed to engage in the licensed activities ~~within seven days of appointment~~ not less than ten working days prior to such agent or contractor commencing any licensed activity…	8	The MMO is content with the updated wording and thanks the Applicant for the change.	The Applicant welcomes the MMO's agreement.

Reference	DCO Reference	Comments/Rationale for Change	Change Made	DCO Version	MMO Comment	Applicant Response
5	Schedule 10, Part 2, Condition 22 Schedule 11, Part 2, Condition 22	The drafting of this condition has been updated to clarify the relevant determination timescale and include an obligation on the undertaker to comply with the terms of the approved plan.	… The MMO must determine an application for approval made under condition 22 within a period of six months commencing on the date the application is received by the MMO, unless otherwise agreed in writing with the undertaker. The licensed activities must be carried out in accordance with the SIP approved under condition 22, unless otherwise agreed in writing by the MMO.	8	The MMO welcomes that the Site Integrity Plan (SIP) will be provided six months prior to pilling activities commencing but does not agree with the inclusion of Condition 22 (6) as per the comments in REP4a-133 and in response to the updates of Condition 14 above..	The Applicant refers to its comments at row 3 above.
6	Schedule 10, Part 2, Condition 24 Schedule 11, Part 2, Condition 24 Schedules 12 and 13, Part 2, Condition 16 Schedules 14 and 15, Part 2, Condition 16	The Applicant has included a new condition 24 following consultation with the Marine Management Organisation.	Maintenance reporting 24.—(1) An annual maintenance report must be submitted to the MMO in writing within three months following the first anniversary of the date of commencement of operations, and every year thereafter until the permanent cessation of operation. (2)The report must provide a record of the licensed activities as set out in condition 4 during the preceding year, the timing of activities and methodologies used. (3)Every fifth year, the undertaker must submit to the MMO in writing, within three months of that date, a consolidated maintenance report, which will— (a) include a review of licensed activities undertaken during the preceding five years with	8	The MMO welcomes this addition ad thanks the Applicant for its inclusion in the DMLs. The MMO would highlight that Condition 4 should reference the O&M plan set out in Condition 13(1)(h).	The Applicant welcomes the MMO's agreement. In relation to the reference to the O&M plan set out in Condition 13(1)(h), the Applicant is unclear as to the precise purpose of the required cross reference and does not believe it necessary to include.

Reference	DCO Reference	Comments/Rationale for Change	Change Made	DCO Version	MMO Comment	Applicant Response
			reference to the reports submitted in accordance with condition 24(1) of this licence; and (b) reconfirm the applicability of the methodologies and frequencies of the licensable activities permitted by this licence for the remaining duration of this licence.			
7	Schedule 11, Part 1, Paragraph 1	Following acceptance by the Examining Authority of the change to reduce the maximum design parameters of the offshore reactive compensation platforms (PD-022), the Applicant has amended the definition of offshore reactive compensation platform to remove reference to a helicopter platform, as this is no longer proposed.	"offshore reactive compensation platform" means 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;	8	The MMO notes this change and has no comments to make.	The Applicant welcomes the MMO's agreement.

Reference	DCO Reference	Comments/Rationale for Change	Change Made	DCO Version	MMO Comment	Applicant Response
	Schedule 11, Part 1, Paragraph 1	A definition of offshore reactive compensation platform design principles statement has been added to paragraph 1. This relates to an amendment to Schedule 11, Part 2, Condition 13.	"offshore reactive compensation platform design principles statement" means the document certified as the offshore reactive compensation platform design principles statement by the Secretary of State for the purposes of the Order under article 41;	8	The MMO welcomes this addition.	The Applicant welcomes the MMO's agreement.
8	Schedule 11, Part 1, Paragraph 3	The Applicant has removed the option for gravity base structure foundations for offshore reactive compensation platforms following comments from Natural England	Work No. 7— up to two offshore reactive compensation platforms fixed to the seabed by monopile, ~~gravity base structure~~, pin pile jacket or suction bucket jacket foundations;	8	The MMO notes this change and has no comments to make.	The Applicant welcomes the MMO's agreement.

Reference	DCO Reference	Comments/Rationale for Change	Change Made	DCO Version	MMO Comment	Applicant Response
	Schedule 11, Part 2, Condition 1(5)	Following acceptance by the Examining Authority of the change to reduce the maximum design parameters of the offshore reactive compensation platforms (PD-022), the Applicant has amended condition 1(5) to reflect updated maximum heights of the offshore reactive compensation platforms and the associated masts, lightning protection, radar and antennae, and to remove reference to a helipad.	(5) The dimensions of any offshore reactive compensation platform (including auxiliary structures, such as a helipad, crane, lightning protection, but excluding masts, lightning protection, radar and antennae) forming part of the authorised scheme must not exceed— (a) ~~90~~59.2 metres in height when measured from LAT; 90 metres in length; and 90 metres in width; and any masts, lightning protection, radar and antennae forming part of any offshore reactive compensation platform must not exceed 79.2 metres in height when measured from LAT.	8	The MMO welcomes this change.	The Applicant welcomes the MMO's agreement.
9	Schedule 11, Part 2, Condition 2	The Applicant has removed the option for gravity base structure foundations for offshore reactive compensation platforms following comments from Natural England.	… (2) Offshore ~~electrical installation~~ transformer substation foundation structures forming part of the authorised scheme must be monopile, gravity base structure, pin pile jacket or suction bucket jacket foundations. … (6) Offshore reactive compensation platform foundation structures forming part of the authorised scheme must be monopile, pin pile jacket or suction bucket jacket	8	The MMO notes this change and has no comments to make.	The Applicant welcomes the MMO's agreement.

Reference	DCO Reference	Comments/Rationale for Change	Change Made	DCO Version	MMO Comment	Applicant Response
10	Schedule 11, Part 2, Condition 13(1)(a)	The Applicant has produced an offshore reactive compensation platform design principles statement to inform the design of the ORCPs. The Applicant has therefore secured compliance with this document in condition 13.	… (a) A design plan, which includes… (ii) (ix) a plan showing the indicative layout of all offshore electrical installations and the offshore accommodation platform including all exclusion zones (insofar as not shown in (ix) above) and showing the indicative programming of particular works as set out in the indicative programme to be provided under condition 13(1)(b)(iii); and (jj) (x) any exclusion zones/environmental micrositing requirements; to ensure conformity with the description of Work Nos. 2 to 8 and 11 and compliance with conditions 1 to 12 above.; and (ii) details of the design of the offshore reactive compensation platform, which must accord with the principles set out in the offshore reactive compensation platform design principles statement.	8	The MMO notes this change and has no comments to make.	The Applicant welcomes the MMO's agreement.

Reference	DCO Reference	Comments/Rationale for Change	Change Made	DCO Version	MMO Comment	Applicant Response
11	Schedule 11, Part 2, Condition 25	The Applicant has included a new condition 25 following consultation with Natural England.	Seasonal restriction 25. The undertaker must not carry out any offshore cable installation works or works associated with the installation of the offshore reactive compensation platforms within the site designated as the Greater Wash Special Protection Area between 1 November to 31 March inclusive, unless otherwise agreed with the MMO, in consultation with the statutory nature conservation body.	8	The MMO notes this addition and will liaise with Natural England regarding the dates stated. The MMO maintains a watching brief regarding any comments from Natural England. The MMO would request that the condition is updated to include 'approved in writing'.	The Applicant has incorporated the requested amendment in the updated version of the DCO submitted at Deadline 6 (3.1).
12	Schedules 12 and 13, Part 1, Paragraph 1	During Issue Specific Hearing 5, the Examining Authority questioned whether there was a definition of artificial nesting structure. On review following the hearing, the Applicant confirmed there was no such definition and has therefore provided one.	"offshore artificial nesting structure" means a structure attached to the seabed by means of a foundation, providing nesting facilities for birds;	8	The MMO welcomes this addition.	The Applicant welcomes the MMO's agreement.

Reference	DCO Reference	Comments/Rationale for Change	Change Made	DCO Version	MMO Comment	Applicant Response
13	Schedules 12 and 13, Part 2, Condition 11(e) Schedules 14 and 15, Part 2, Condition 11(e)	Following consultation with the Marine Management Organisation, the determination timescale for approval of the marine mammal mitigation protocol has been increased.	… (e) In the event that driven or part-driven pile foundations are proposed to be used, a marine mammal mitigation protocol in accordance with the outline marine mammal mitigation protocol (piling), the intention of which is to prevent injury to marine mammals, following current best practice as advised by the relevant statutory nature conservation body, to be submitted to the MMO at least ~~three~~ four months prior to commencement of piling activities…	8	The MMO welcomes the increase from three to four months for the submission of the MMMP (piling) for the Artificial Nesting Structures (ANSs), however the MMO maintains its position that it must be six months for all MMMPs regardless of the scale of the activity. The reasoning has been provided in Table 4 in the MMO's Deadline 4a response (REP4a-133). The MMO stresses the difficulties in managing noise in the Southern North Sea (SNS) Special Area of Conservation (SAC) and the importance of a thorough in-combination assessment with other activities taking place.	The Applicant refers to its comments at row 3 above. The Applicant maintains that a general three month approval period for pre-construction plans relating to the ANS is appropriate, given the more straightforward nature of the proposals for the ANS compared to the array or the offshore transmission assets. The Applicant does recognise that those plans which relate to piling, i.e. the marine mammal mitigation protocol and the site integrity plan, involve an element of coordination among different developers and proposed a four month determination timescale for those plans. The Applicant considers the four month determination timescale to strike the appropriate balance between the need for speedy determination of pre-construction plans to facilitate the rapid deployment of CNP infrastructure, whilst allowing sufficient time for the MMO to give full consideration to the plan, including the in-combination elements.

Reference	DCO Reference	Comments/Rationale for Change	Change Made	DCO Version	MMO Comment	Applicant Response
14	Schedules 12 and 13, Part 2, Condition 12	The drafting of this condition has been updated to clarify the relevant determination timescale.	… (3) ~~The~~ Subject to sub- paragraph (5), the MMO must determine an application for approval made under condition 11 within a period of three months commencing on the date the application is received by the MMO, unless otherwise agreed in writing with the undertaker. … (5) Where an application for approval is made under condition 11(1)(e), the MMO must determine the application for approval 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.	8	The MMO maintains that the DML should not place determination timescales on the regulator. The MMO will work closely with the Applicant and advisors to determine documents submitted for approval in a timely manner but in a manner that addresses all concerns/impacts and due to evidence from the current post consent offshore wind farms believes that if this should remain this should be 6 months at a minimum. The MMO welcomes the increase from three to four months for the submission of the MMMP (piling) for ANSs, however the MMO maintains its position that it must be six months for all MMMPs regardless of the scale of the activity.	The Applicant refers to its comments at row 3 above.
15	Schedules 12 and 13, Part 2, Condition 15 Schedules 14 and 15, Part 2, Condition 15	The drafting of this condition has been updated to clarify and increase the relevant determination timescale following consultation with the Marine Management Organisation and include an obligation on the undertaker to comply with the terms of the approved plan.	… (3) The SIP must be submitted to the MMO no later than ~~three~~ four months prior to the commencement of piling activities. … (6) The MMO must determine an application for approval made under condition 15 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. (7) The licensed activities must be carried out in accordance with the SIP approved under condition 15, unless otherwise agreed in writing by the MMO.	8	The MMO welcomes the increase from three to four months for the submission of the SIP for ANSs, however the MMO maintains its position that it must be six months for all SIPs regardless of the scale of the activity. The reasoning has been provided in Table 4 in the MMO's Deadline 4a response (REP4a-133). The MMO stresses the difficulties in managing noise in the SNS SAC and the importance of reducing impacts and keeping noise below the set thresholds..	The Applicant refers to its comments at row 3 above.

Table 2-7: The Applicant's response to the MMO's comments on the ExA's recommended changes to the dDCO.

Ref	DCO Reference	Text as set out in the draft DCO	ExA's recommended amendment	ExA's note	MMO Comment	Applicant Response
1	Schedule 10, 12 and 13.	No text has been proposed by the applicant.	Insert additional condition for the wind turbine generator array area: No piling of any type shall be permitted between 1 September and 16 October each year within the area of Work No 1a, Work No. 2 and Work No. 3. For ANSs in Schedules 12 and 13: No piling of any type shall be permitted between 1 September and 16 October each year for the northern artificial nesting structure.	To protect spawning Banks herring and their eggs and larvae during their spawning season.	The MMO has been liaising with the Applicant regarding a proposed piling restriction area. The MMO requests that the following condition is added: *No piling activity can commence within the spawning array area, as defined in Work No 1a, Work No. 2 and Work No. 3. during the herring spawning season between 1 September and 16 October until a spawning piling restriction plan (in accordance with the outline spawning herring piling restriction plan) containing updated underwater noise modelling has been submitted to and approved by the MMO. The updated underwater noise model shall be based on final project parameters to be used to install piles in the spawning herring piling restriction area and shall include details of any verified mitigation measures to be employed.* *If the underwater noise modelling demonstrates that noise levels associated with piling activity in the array area during the herring spawning season will exceed the levels shown on the spawning herring piling restriction plan then no piling activity may be undertaken within the array area during the herring spawning season without the approval of the MMO.* *All piling activity within the array area during the herring spawning season must be undertaken in accordance with the details approved under sub-paragraph (1) or as required as a condition of approval under sub- paragraph (2).* *In this condition:* *"herring spawning season" means 1 September and 16 October inclusive; "outline spawning herring piling restriction plan" means the plan certified as the outline spawning herring piling restriction plan by the Secretary of State for the purposes of the Order under article 41; and*	The Applicant and the MMO are now agreed on the spatial extent of the proposed temporal piling restriction in the WTG Area (see Spawning Herring Piling Restriction Plan (8.24)). The Applicant and the MMO are also now agreed on the drafting of the DCO condition securing the restriction. Following engagement with the MMO between Deadline 5 and 6, the Applicant proposed alternative drafting at condition 25, Part 2, Schedule 10 of the DCO (3.1) The MMO confirmed on 4 April 2025 that they are in agreement with the drafting at condition 25, Part 2, Schedule 10 of the DCO.

Ref	DCO Reference	Text as set out in the draft DCO	ExA's recommended amendment	ExA's note	MMO Comment	Applicant Response
					"spawning herring piling restriction area" means the area identified as the spawning herring piling restriction area within the spawning herring piling restriction plan. For the ANSs in Schedules 12 and 13, the 'array area' is to be replaced with the 'northern artificial nesting structure.' Further discussions are continuing with the Applicant on a possible east/west boundary for the array area. The MMO requests that a clear diagram of the spawning array area is provided along with a Work No defined which could be referenced in any future updated condition.	
2	Schedule 10 Part 1,1	"environmental statement" means the document certified as the environmental statement by the Secretary of State for the purposes of the Order under article 41;	"environmental statement" means the document certified as the environmental statement by the Secretary of State for the purposes of the order under article 41 (certification of plans etc.);	For consistency with other similarly structured definition within article 2. Where applicable, change in Schedule 11 to Schedule 16.	The MMO welcomes this update.	The Applicant welcomes the MMO's agreement.

Ref	DCO Reference	Text as set out in the draft DCO	ExA's recommended amendment	ExA's note	MMO Comment	Applicant Response
3	Schedule 10 Part 1,1	"in principle monitoring plan" means the document certified as the in principle monitoring plan by the Secretary of State for the purposes of the Order under article 41;	"in principle monitoring plan" means the document certified as the in principle monitoring plan by the Secretary of State for the purposes of the Order under article 41 (certification of plans etc.);	For consistency with other similarly structured definition within article 2 Where applicable, change in Schedule 11 to Schedule 16.	The MMO welcomes this update.	The Applicant welcomes the MMO's agreement.
4	Schedule 10 Part 1,1	"in principle Southern North Sea SAC Site Integrity Plan" means the document certified as the in principle Southern North Sea SAC Site Integrity Plan by the Secretary of State for the purposes of the Order under article 41;	"in principle Southern North Sea SAC Site Integrity Plan" means the document certified as the in principle Southern North Sea SAC Site Integrity Plan by the Secretary of State for the purposes of the Order under article 41 (certification of plans etc.);	For consistency with other similarly structured definition within article 2 Where applicable, change in Schedule 11 to Schedule 16.	The MMO welcomes this update.	The Applicant welcomes the MMO's agreement.

Ref	DCO Reference	Text as set out in the draft DCO	ExA's recommended amendment	ExA's note	MMO Comment	Applicant Response
5	Schedule 10 Part 1,1	"maintain" includes inspect, upkeep, repair, adjust, and alter and further includes remove, reconstruct and replace (including Replenishment of cable protection), but does not include the removal, reconstruction or replacement of foundations associated with the offshore works, to the extent assessed in the environmental statement; and "maintenance" must be construed accordingly;	"maintain" includes inspect, upkeep, repair, adjust, and alter and further includes remove, reconstruct and replace (including replenishment of cable protection), but does not include the removal, reconstruction or replacement of foundations associated with the offshore works, to the extent assessed in the environmental statement; and "maintenance" and any derivative of "maintain" must be construed accordingly;	To ensure consistency with other similarly structured definition within article 2 Where applicable, change in Schedule 11 to Schedule 16.	The MMO welcomes this update.	The Applicant welcomes the MMO's agreement.
6	Schedule 10 Part 1,1	"works plans" means the plans certified as the works plans by the Secretary of State for the purposes of the Order.	"works plans" means the plans certified as the works plans onshore and works plans offshore by the Secretary of State for the purposes of this Order under article 41 (certification of plans etc.).	For consistency with other similarly structured definition within article 2Where applicable, change in Schedule 11 to Schedule 16.	The MMO welcomes this update.	The Applicant welcomes the MMO's agreement.

Table 2-8: The Applicant's Response to the MMO's comments on Coastal Processes

Ref No	Submission	Applicant Response
3.1.1	The MMO thanks the Applicant for expanding on the ES and referencing the similarities in depth and sediment type to justify the numerical order of the expected scour impact. The MMO considers the response given by the Applicant (PD1-071, RR-042.029) regarding the predicted extent of secondary scour representing the greatest area for habitat disturbance, effectively addresses the request to provide further discussion on the reasoning behind using data from Hornsea One Offshore Wind Farm (OWF).	The Applicant welcomes this comment.
3.1.2	The MMO notes that ES Chapter 7 paragraph 186 has estimated potential scour depths up to 18 metres (m), but also that depth will be limited in other places by underlying stiff till. The assessment also estimates the radius of scour based on an assumed conical section of fixed [depth:radius] ratio of 2:1 (APP-062, Table 7.9). The MMO understands this to assume that the radius is controlled by the depth i.e., if depth is limited to 3m, then the radius is calculated from the 2:1 ratio. However, the MMO's understanding of scour would suggest that the potential radius of impact could be modified in depth-limited cases i.e., where scour cannot penetrate to its expected depth, the impact may extend over a greater area, since the energy driving the scour has not been dissipated downward *("Scour asymptotically approaches a limiting extent (volume or depth)"* - USDA, 2007). The same engineering text also suggests that "*ultimate scour in cohesive or cemented soils may be just as great, even though the ultimate scour depth is reached more slowly. Under constant flow conditions, scour reaches maximum depth in sands within hours; in cohesive bed materials in days; in months in glacial till, sandstones, and shale".* The ES does not recognise the possibility that scour effects will alter in profile over time. The Applicant should acknowledge this limitation.	The Applicant would note that the MMO have not raised these concerns around the methodology of primary scour prediction at any other stage of the Examination or pre-application consultation. Within the MMO's Relevant Representation (RR-042) Paragraph 4.2.3, the MMO stated that "*The suggested impact for scour is minor adverse, which we do believe is appropriate*." The Applicant would emphasise that the installation of scour protection will take place where required for engineering purposes (as outlined in Chapter 3 Project Description (APP-058)). The Applicant is not aware of recent literature from the offshore environment which presents results of either field-based or laboratory-based investigation which corresponds to the effects that the MMO describe, as it does not align with the Applicant's understanding of scour processes. The Applicant understand that the USDA 2007 document quoted by the MMO is for fluvial environments (although noting that the MMO have not specified the exact document to which they are referring), which does not necessarily reflect processes taking place in the marine environment. The effects described here by the MMO are not described in a range of literature used as best practice, such as DECC (2008), Harris *et al.* (2011), and Whitehouse *et al.* (2011), nor have they been considered as part of scour assessments for other recent OWF DCO applications (Hornsea Project Four and the Sheringham and Dudgeon Extension Projects). The Applicant therefore consider that a robust assessment of the potential impact of seabed scouring on Marine Physical Processes receptors has been presented within Section 7.12.2.2 Chapter 7 Marine Physical Processes (REP4a-142, Impact 5). Paragraph 184 of Chapter 7 Marine Physical Processes (REP4a-142) states that "*The times required for the equilibrium scour condition to initially develop is also dependant on these parameters and may vary from hours to years*". The Applicant therefore consider that this possibility that scour effects will alter in profile over time has been recognised within the ES, as appropriate. • DECC (2008), Dynamics of scour pits and scour protection – Synthesis report and recommendations (Milestones 2 and 3). Final Report prepared by HR Wallingford Ltd., ABP Marine Environmental Research Ltd and the Centre for Environment, Fisheries and Aquaculture Science (CEFAS) for the Research Advisory Group, Department of Energy and Climate Change (DECC) and Department for Environment, Food and Rural Affairs (Defra). • Harris, J.M., Whitehouse, R.J. and Sutherland, J. (2011). Marine scour and offshore wind: lessons learnt and future challenges. In International conference on offshore mechanics and arctic engineering (Vol. 44373, pp. 849-858). • Whitehouse, R.J., Harris, J.M., Sutherland, J. and Rees, J. (2011). The nature of scour development and scour protection at offshore windfarm foundations. Marine Pollution Bulletin, 62(1), pp.73-88.

Ref No	Submission	Applicant Response
3.1.3	It would be of value to understand in the first instance whether there is any evidence from Hornsea One (or any other comparable windfarm) of depth-limited scour pits increasing in radius relative to unlimited sites and the Applicant should provide this information. If this does occur, it would be necessary to estimate a maximum likely radius to ensure that this does not exceed the seabed preparation footprint, as stated. A maximum radius may be estimated based on a calculated volume (assuming no depth limitation). A depth limit may be obtained from the subsurface depth of the glacial till layer; then, assuming this depth of scour, the potential radius can be calculated based on the calculated volume. In this case, secondary scour may be more substantial, since scour protection extents would be based on the initial radius estimate. This additional evidence may be of consequence in Inner Dowsing, Race Bank and North Ridge SAC, as ES Chapter 7 paragraph 192 assesses the significance of the effect based on scour depth-limiting conditions here.	The Applicant is not able to provide evidence from other windfarm projects which is not in the public domain. The Applicant suggests that a review of evidence of this type may be best carried out by a regulatory body or other research institute. The Applicant would welcome further signposting to recent literature from the marine environment which presents results of either field-based or laboratory-based investigation which corresponds to the effects that the MMO describe, as it does not align with the Applicant's understanding of scour processes. The effects described here by the MMO are not described in a range of literature used as best practice, such as DECC (2008), Harris *et al.* (2011), and Whitehouse *et al.* (2011), nor have they been considered as part of scour assessments for other recent OWF DCO applications (Hornsea Project Four and the Sheringham and Dudgeon Extension Project). The Applicant therefore consider that a robust assessment of the potential impact of seabed scouring on Marine Physical Processes receptors has been presented within Section 7.12.2.2 Chapter 7 Marine Physical Processes (REP4a-142, Impact 5). Scour protection extents will be based on calculations carried out during the pre-construction phase, informed by detailed, site-specific geotechnical information. Potential secondary scour occurring within the Inner Dowsing, Race Bank and North Ridge SAC is anticipated to be restricted in scale due to the project dimensions of the cable protection. This is particularly the case given that scour protection located within the Inner Dowsing, Race Bank and North Ridge SAC will be removable, therefore taking the form of concrete mattresses or rock bags. This cable protection will be of low profile and therefore any scour processes taking place will be considerably less than that assessed for foundations.
3.1.4	Paragraph 13 of the Outline Scour Protection and Cable Protection Management Plan (REP4-079) states *"Ecological based solutions for scour protection will be prioritised, where practicable"*; Paragraph 23 of the same document states *"If cable protection is required in the nearshore (defined as the inner depth of closure out to 7.1m water depth), concrete mattresses will be utilised, a description of concrete mattresses is set out in Section 6.11.5.2 of ES Chapter 3 Project Description (APP-058)"*. The statements are repeated in paragraphs 41 and 42 of the Schedule of Mitigations (REP4-073).	The MMO is correct in their interpretation, ecological-based solutions are not practicable in the nearshore. Scour protection is only being considered for foundations within the array area, and this has been clarified within the Outline Scour Protection and Cable Protection Management Plan (document reference 8.2.1, V5), submitted at Deadline 6.
3.1.5	The two statements combined would constitute a potentially contradictory position in the case that concrete mattresses are not considered ecological-based solutions. In the case that concrete mattresses are not considered an ecological-based solution, paragraphs 13 and 23 together represent a statement that ecological-based solutions are not practicable in the nearshore. This should be clarified within the documents.	
3.1.6	In summary, the Applicant has given a verbal interpretation of the original assessment that partially addresses the MMO's concerns regarding scour but has not provided any additional evidence, leaving a concern that the potential radius of impact could be modified under certain conditions. The MMO has suggested potential evidence and methods that may be appropriate for estimating residual scour impacts. The MMO requests that the Applicant should consider a establishing a maximum radius to ensure that this does not exceed the seabed preparation footprint.	As outlined in Section 7.12.2.2 of Chapter 7 Marine Physical Processes (REP4a-142), scour around foundations will be limited by the installation of scour protection where required for engineering purposes (as outlined in Chapter 3 Project Description (APP-058)). The Applicant consider that a robust assessment of the potential impact of seabed scouring on Marine Physical Processes receptors has been presented within Section 7.12.2.2 Chapter 7 Marine Physical Processes (REP4a-142, Impact 5)

Table 2-9: The Applicant's response to the MMO's response to the Applicant's comments at Deadline 4a – Coastal Processes.

Reference	MMO Deadline 4 Response (REP4-129)	Applicant Deadline 4a Response (REP4a-115)	MMO Response	Applicant Response
REP4-129 1.3.1	No response required. Comment now addressed.			
REP4-129 1.3.2	The MMO welcomes the Applicant's commitment to updating the Outline Scour and Cable Protection Management Plan and the Schedule of Mitigation. The MMO will review the changes once submitted.	This comment is noted by the Applicant.	The MMO notes the addition of the commitment within the Outline Scour and Cable Protection Management Plan (REP4a-105) that '*Any cable protection required on defined areas of supporting habitat for S. spinulosa reef within the IDRBNR SAC, shown on Figure 1, will be removable'*. The MMO welcomes this commitment and defers to Natural England regarding impacts specific to the Inner Dowsing Race Bank North Ridge (IDRBNR) SAC.	The Applicant welcomes this comment.

Table 2-10: The Applicants Response to the MMO's comments on Dredge, Disposal and Chemical Use

Reference	MMO Deadline 4 Response (REP4- 129)	Applicant Deadline 4a Response (REP4a-115)	MMO Response	Applicant Response
REP2-092 1.4.3	The MMO notes that the ES chapters will be updated at Deadline 5.	No response.	No response required.	

Reference	MMO Deadline 4 Response (REP4- 129)	Applicant Deadline 4a Response (REP4a-115)	MMO Response	Applicant Response
REP2-092 1.4.4	The MMO notes that the Outline Scour Protection and Cable Protection Management Plan will be updated at Deadline 4.	The Applicant submitted an updated Scour Protection and Cable Protection Management Plan (REP4- 079) at Deadline 4, which includes a commitment to prioritise ecological based solutions for scour protection, where practicable to do so. The Scour Protection and Cable Protection Management Plan (document reference 8.21) has also been updated at Deadline 4a. The majority of ES chapters will be updated at Deadline 5, except for those requested by the Examining Authority at Deadline 4a (Chapter 12 Offshore and Intertidal Ornithology (document reference 6.1.12) and Chapter 7 Marine Physical Processes (document reference 6.1.7). The Outline Scour Protection and Cable Protection Management Plan (REP4-079) was submitted at Deadline 4 and has been updated at Deadline 4a (document reference 8.21).	The MMO thanks the Applicant for the updated documents so far and the future updates of the ES chapters at Deadline 5. The MMO awaits these further updates and will provide comments at the next deadline, if necessary.	The Applicant provided the updated ES chapters at Deadline 5.

Reference	MMO Deadline 4 Response (REP4- 129)	Applicant Deadline 4a Response (REP4a-115)	MMO Response	Applicant Response
REP2-092 1.4.5	Although the CRA will include consideration of whether chemicals are approved for use, it should be noted that the use of the 'Cefas definitive ranked lists of registered products' is not a list of pre- approved chemicals, and all chemicals with a pathway to the marine environment used on the OWF (not on vessels, or in closed systems unless requiring regular top up) should be notified to the MMO for approval prior to their use together with all their relevant persistence bioaccumulation or toxicity evidence (PBT). As the Applicant has stated that 'all' chemicals and substances will be listed within the CRA and that the MMO has recommended previously inclusions of chemicals not covered in the ES. The MMO has requested an updated chemicals condition in the DML. Please see point 2.1.27 in the main body of this letter.	The Applicant has responded to the MMO's comments on this matter at ref 2.1.27 of the Applicant's Comments on Deadline 4 submissions (document reference 22.3).	The Applicant and the MMO discussed the wording of Condition 11 at a meeting on 20 February 2025. Following further discussions with the Applicant at a meeting on 24 February 2025, the MMO has provided updated proposed drafting to address concerns which the Applicant is considering. The wording of this condition was also provided to the ExA in the MMO's Deadline 4a response (REP4a-133). The MMO has since had additional clarification in relation to *'Pose Little or No Risk to the Environment (PLONOR)'* and requests that the Condition 13(1)(e) is further updated slightly: *(ii) a chemical risk assessment, including information regarding how and when chemicals are to be used, stored and transported in accordance with recognised best practice guidance and standards;* *(X) a site specific chemical risk assessment for all chemicals that have a pathway to the marine environment used for the marine licensed activities, outside the course of normal navigation, to include;* *(i) the function of the chemical,* *(ii) the quantities being used and the frequency of use,* the physical, chemical, and ecotoxicological properties of the chemical. Chemicals present on the OSPAR List of Substances Used and Discharged Offshore which Are Considered to Pose Little or No Risk to the Environment (PLONOR) are exempt from this requirement Submissions for approval must take place no later than ten weeks prior to use. The following interpretations should also be added: "pathway to the marine environment" open systems or closed systems that require top up. "chemicals" comprise both substances and	Whilst the Applicant maintains that the previous iteration of condition 11 was appropriate and in line with precedent for offshore wind DCOs (e.g. East Anglia One North, East Anglia Two) the Applicant updated the wording of condition 11 at Deadline 5 (see draft DCO (3.1)) to reflect the wording proposed by the MMO at Deadline 4 (section 2.1.27, REP4-129) with the aim or reaching agreement on this matter. The Applicant considers there are a number of difficulties with the revised proposed condition wording: • it would be impractical to require an update to the whole PEMP in order to approve each chemical; • the draft wording requires that submissions for approval must take place no later than 10 weeks prior to use. This introduces a potential conflict in the timescales for approval of the PEMP, which in the absence of this wording, would have a 4 month timescale for approval by the MMO; and • The Applicant considers that the definitions of "chemicals" and "substance" significantly extend the scope of the condition beyond the ordinary natural meaning of the words to encompass benign, naturally occurring compounds, such as water.

Reference	MMO Deadline 4 Response (REP4- 129)	Applicant Deadline 4a Response (REP4a-115)	MMO Response	Applicant Response
			preparations. "preparation" means a mixture or solution composed of two or more substances "substance" means a chemical element and its compounds in the natural state or obtained by any manufacturing process, including any additive necessary to preserve its stability and any impurity deriving from the process used, but excluding any solvent which may be separated without affecting the stability of the substance or changing its composition; The MMO apologies for the multiple changes to this condition and understands this does not ensure a smooth discussion, however there are wider discussions not in the MMO's control that are impacting these updates. The MMO also notes this is likely to be an agree to disagree position at the end of Examination.	

Table 2-11: The Applicants Response to the MMO's comments on Benthic Ecology

Ref No	Submission	Applicant Response
Monitoring of sediment macrofauna communities		
3.3.1	The MMO would generally expect the impact of the array on sediment macrofauna communities to be monitored as standard, unless there are strong justifications for exemption. Such justifications might include, for example, the presence of depauperate communities (i.e. those with particularly low diversity, abundance, and biomass) in the proposed array area, making significant adverse ecological effects unlikely. Another valid reason could be extremely high small-scale spatial variability in macrofauna communities, thereby requiring an impractically large number of samples to detect statistically significant changes over time.	In line with guidance from Natural England, as detailed within the Offshore In-Principle Monitoring Plan (V3 submitted at deadline 6, document reference 8.3), the Applicant has committed to monitoring of the following features: ▪ Annex I S. spinulosa reef habitat ▪ Annex I supporting habitat within the IDRBNR SAC; and ▪ Annex I sandbank communities within the IDRBNR SAC.
3.3.2	The MMO would be less expectant of routine monitoring of cable installation impacts on sediment macrofauna communities, given the largely temporary nature of this disturbance. Monitoring would be appropriate if cable installation affects benthic ecological features that are sensitive or	The industry has shifted away from assessing impacts on general sediment macrofauna communities, as existing evidence indicates that the effects of offshore wind development on the benthic

Ref No	Submission	Applicant Response
	of high conservation value. In particular, assessing impacts on sediment macrofauna communities within Annex I sandbanks in designated sites may be warranted. However, the MMO defers to Natural England regarding impact mitigation and monitoring requirements for designated sites.	environment generally fall within the range of natural variability and recover well, when compared to control sites (Foden, *et al*. 2011; Thanet OWF, 2013; EGS, 2015; Dong Energy, 2018). Consistent with the approach taken in recently granted Development Consent Orders (DCOs), the emphasis has been placed on assessing key sensitive features, such as Annex I *Sabellaria spinulosa* reefs. This is evident in projects such as the Norfolk Boreas Offshore Wind Farm, Hornsea 3 Offshore Wind Farm, and Hornsea 4 Offshore Wind Farm, among others. References EGS International. (2015), Lincs Offshore Wind Farm, Post Construction Hydrographic, Geophysical and Benthic Survey. Orsted. (2018), Hornsea Project Three Offshore Wind Farm: Environmental Statement - Volume 5, Annex 2.1 - Benthic Ecology Technical Report. Document Reference: A6.5.2.1, 1-100. Thanet Offshore Wind Limtied. (2013), Thanet Offshore Wind Farm: A Post-construction monitoring survey of benthic resources DONG energy. (2015) Gunfleet Sands 3, Post-Construction Year 1 - Marine Licence Environmental Monitoring Report. Foden J., Rogers S.I. and Jones A.P. (2011), 'Human pressures on UK seabed habitats a cumulative impact assessment'. Marine Ecology Progress Series, 428: 33–47.
3.3.3	Regarding the feasibility of sediment macrofauna communities, this can be achieved by sampling sediments around a representative set of wind turbine foundations, along with control sites located away from the array and other construction activities. A relevant example of this approach can be found in the Pre-Construction Monitoring Plan for the East Anglia ONE North Offshore Wind Farm (GoBe, 2024).	
3.3.4	The MMO supports the inclusion of a commitment to monitor sediment macrofauna communities in the Offshore In-Principle Monitoring Plan (REP4a-073).	This comment is welcomed by the Applicant.
Sabellaria spinulosa Technical Note (REP4a-122)		
3.3.5	The MMO has reviewed the Sabellaria Spinulosa Technical Note (REP4a-122) and has no concerns to raise. However, the MMO defers to the relevant Statutory Nature Conservation Bodies SNCB(s), Natural England, regarding the need to compensate for impacts on designated benthic ecology features and the appropriate compensation measures.	This comment is noted by the Applicant.
Benthic Compensation Evidence Base and Roadmap (APP-248)		
3.3.6	The MMO has reviewed the Benthic Compensation Evidence Base and Roadmap (APP-248) focusing on sections related to the evidence base, existing data, and monitoring plans for each proposed compensation measure. The MMO has no concerns to raise. However, while the MMO understands that Natural England and Joint Nature Conservation Committee (JNCC) would advise Defra on suitable areas for applying the SAC extension option (Section 3.2.1 of REP4-050), it is unclear whether the Applicant intends to collect new survey data to support the identification of such areas or to quantify the distribution and extent of Annex I sandbanks or biogenic reefs that would benefit from the extension. This may already be agreed upon or under discussion among the Applicant, and SNCBs, but the MMO raises it for clarification.	At this stage, it is understood that the identification of these areas will be determined by Defra and its advisory bodies. The Applicant does not anticipate the need to collect new survey data to support the delineation of extension areas, unless explicitly requested by Defra as part of the contribution to the strategic compensation measures.

Table 2-12: The Applicants response to the MMO's response to the Applicant's comments at Deadline 4a – Benthic Ecology

Reference	MMO Deadline 4 Response (REP4- 129)	Applicant Deadline 4a Response (REP4a-115)	MMO Response	Applicant Response
REP2-092 1.5.1	No response required.		Nothing further to note.	

Reference	MMO Deadline 4 Response (REP4- 129)	Applicant Deadline 4a Response (REP4a-115)	MMO Response	Applicant Response
REP2-092 1.5.2	Please see comment 1.5.4 in this table below.		Please see comment below.	
REP2-092 1.5.3	The MMO welcomes the commitment to update the Outline Offshore In- Principle Monitoring Plan (APP-276) at Deadline 4 and will review and provide comments in due course.	This comment is welcomed by the Applicant.	Please see comments below regarding INNS and the Offshore In- principle Monitoring Plan (IPMP).	The Applicant has provided comments below.
REP2-092 1.5.4	The Applicant maintains their conclusion that the impact of the proposed development on the potential spread of INNS will be negligible and has supported this by providing a figure showing the location of the proposed development in relation to other developments in the area that introduce artificial hard habitat (see Appendix A in REP2-053). Whilst the MMO agrees that there are other artificial hard structures in the area, the MMO does not think the location and distribution of the ODOW wind turbine generators (WTGs) in relation to the other hard structures suggests that the Project will not facilitate the spread of INNS in the region. To the contrary, it seems plausible that the ~90 WTGs and foundations could increase connectivity between OWFs that are closer to the shore (e.g. the Triton Knoll and Race Bank) and further offshore (e.g. Hornsea Projects 1-4). Given the uncertainty regarding the potential role of the Project in facilitating the spread of INNS, the MMO considers that the colonisation of WTG foundations must be monitored over time, irrespective of the type of foundation that is used. This could potentially be carried out using imagery collected for other purposes (e.g. inspections or maintenance work using remote operates vehicles), though the feasibility of collecting samples (e.g. by scraping) should also be considered if evidence of INNS becoming established on the foundations is obtained.	The Applicant has updated the Offshore In Principle Monitoring Plan (document reference 8.03) at Deadline 4a to include monitoring of INNS, as requested by the MMO.	As stated previously, given the uncertainty regarding the potential role of the Project in facilitating the spread of INNS, the MMO considers that the colonisation of WTG foundations must be monitored over time, irrespective of the type of foundation that is used. The MMO notes that INNS monitoring, along with sediment macrofauna monitoring in the areas around wind turbine foundations, was secured through the Offshore IPMP for the East Anglia ONE North Offshore Wind Farm (Royal HaskoningDHV, 2021). INNS will be monitored during the operational phase of the East Anglia ONE North OWF, using a remotely operated vehicle (ROV) to capture imagery of wind turbine foundations and scour protection (GoBe, 2024). A relevant example from the Irish Sea is the Morecambe OWF, where video footage collected for engineering inspections will also be analysed for faunal colonisation and potential INNS establishment (Royal HaskoningDHV, 2024). Beyond the precedent set by other OWF developments, the MMO believes this issue is of growing concern as the introduction of artificial hard habitat into soft sediment marine ecosystems continues to increase due to OWF construction. Monitoring may not need to continue throughout the entire operational phase, however, and could instead be guided by observed colonisation rates and species composition at ODOW and other OWFs in the region. The MMO welcomes the commitment in the Offshore In-principle Monitoring Plan (REP4a-	The Applicant updated the Offshore In Principle Monitoring Plan (REP4a-074) on 26th February 2025 to address this issue. The Applicant welcomes the MMOs initial feedback provided at Deadline 5. The Applicant echoes the ExA's comments at Issue Specific Hearing 8 that the submission of any new information at Deadline 6, to which the Applicant should reasonably be given an opportunity to respond, risks not being accepted into the Examination. The Applicant suggests that such evidence should be afforded limited weight.

Reference	MMO Deadline 4 Response (REP4- 129)	Applicant Deadline 4a Response (REP4a-115)	MMO Response	Applicant Response
			073) to determining the location, extent and abundance of any INNS in the post-construction phase, and the addition of Hypothesis 2 within Section 3.3.3. *'Hypothesis 2– Introduction and/or spread of marine Invasive Non-Native Species (INNS) H1 – The development of Project WTG foundation infrastructure results in the introduction and/or spread of marine INNS to artificial hard substrate within the Project array area.* *H0 – The development of Project WTG foundation infrastructure does not result in the introduction and/or spread of marine INNS to artificial hard substrate within the Project array area.'* Additionally, the MMO welcomes that where the introduction and/or spread of INNS is observed, *'the monitoring plan should be reviewed and updated if required (e.g., to increase focus on a specific invaded habitat or detected INNS)*' and that '*responsive actions as outlined in the INNS Biosecurity Management Plan may beimplemented if appropriate.'* The MMO is reviewing this updated commitment to provide monitoring of INNS along with the hypotheses. We will provide further comment direct to the Applicant and at Deadline 6.	
REP2-092 1.5.5	The Applicant's responses regarding the methodology for upcoming surveys and their approach to determining reefiness along transects allay concerns previously raised by the MMO. Based on the information provided, it appears that reefiness did not exceed 'low' in the most recent survey when it was averaged over each contiguous patch of reef, rather than over full transects. No further actions are required relating to this query, but the Applicant should commit to taking the patch-based approach to assessing reefiness using seafloor imagery going forward. The MMO welcomes that the Applicant will supply all images of Sabellaria aggregations observed along contiguous patches of reef for	The Applicant will review all advice in relation to methodologies for assessing S. spinulosa reef habitat, including taking 'the patch-based approach' to analyses. This is secured by Condition 13(1)(c) and 19 of Part 2 of Schedules 10 and 11 of the dMLs, which sets the requirement for a monitoring plan (which accords with the in-principle monitoring plan) to includes details of proposed post-construction surveys, including methodologies and analyses, timings, proposed format and content, to be submitted to the MMO for written approval prior to commencement of licensed activities, in consultation with the	There are several points relating to the interpretation of images of Sabellaria aggregations that require clarification for the MMO. Whilst these are not major concerns at this stage, the MMO feels a consensus should be reached before the interpretation of future surveys intended to inform mitigation measures (e.g., micro- routing). Images have not been provided for certain stations where 'reefiness' was assessed in the Sabellaria spinulosa reanalysis and report (Envision, 2024), specifically stations 37, 48, 49, and 62. Station 62 is of particular interest, as its classification as 'not a reef' was based solely on	The Applicant highlights that Natural England's concerns regarding the presence of existing reef have now been addressed. However, in light of the habitat that could be available to support growth of *S. spinulosa* reef the Applicant has undertaken additional analyses across the area to support the mitigation of this habitat, as detailed within the *S. spinulosa reef* supporting habitat Technical Note (document reference 22.11, V3, updated at Deadline 6), at the request of Natural England. The Applicant would like to reassure all parties that due diligence and caution were carefully applied in the analyses conducted. In

Reference	MMO Deadline 4 Response (REP4- 129)	Applicant Deadline 4a Response (REP4a-115)	MMO Response	Applicant Response
	review at Deadline 4 and the MMO will review these and provide comments in due course.	relevant Statutory Nature Conservation Bodies (SNCB).	insufficient tube elevation—an attribute that is challenging to assess accurately from the available seafloor imagery. The Applicant should provide images from these stations for the MMO to review. In the same reanalysis and report, station 57 was not classified as a reef due to insufficient % cover. However, consecutive images from this station show S. spinulosa aggregations with substantially higher coverage than the 10% threshold required for classification as 'low' reef, and the original analysis determined that this station did indeed have a cover exceeding 10%. The MMO would also expect the estimated cover to increase further when averaged only over contiguous reef patches. The Applicant should clarify this apparent discrepancy. Similarly, in the same reanalysis and report, station 66 was not classified as a reef due to having insufficient area. However, multiple consecutive images from this station show S. spinulosa aggregations covering substantial portions of the visible seabed, and the original analysis of this station determined that the area was sufficient to be classified as reef. The Applicant should clarify this apparent discrepancy and specify how many consecutive images must contain S. spinulosa aggregations to exceed the 25 metre squared (m^2) threshold required for classification as 'low' reef.	accordance with industry best practices, existing data will be thoroughly reviewed to inform the proposed locations for any pre-construction surveys, including any previously acquired data on the Project, such as areas where *S. spinulosa* tubes have been recorded. This approach is outlined and secured within the Offshore In Principle Monitoring Plan (V3 submitted at Deadline 6, document reference 8.3). As such, these habitats will continue to be given careful consideration at this stage of the development, in close consultation with the MMO and their advisors.
REP2-092 1.5.6	Please see comment 1.5.5 in this table above.		Please see comment above regarding Sabellaria aggregations.	The Applicant has responded to the comment above.
REP2-092 1.5.7	Please see comment 1.5.5 in this table above.	This comment is welcomed by the Applicant.	Please see comment above regarding Sabellaria aggregations.	The Applicant has responded to the comment above.
REP2-092 1.5.8	Please see comment 1.5.5 in this table above.		Please see comment above regarding Sabellaria aggregations.	The Applicant has responded to the comment above.
REP2-092 1.5.9	For benthic ecology receptors, the main issues addressed by the Applicant's comments relate to ongoing discussions on the approach to identifying Sabellaria reef using seafloor imagery		Please see comments above regarding INNS and Sabellaria aggregations.	The Applicant has responded to the comment above.

Reference	MMO Deadline 4 Response (REP4- 129)	Applicant Deadline 4a Response (REP4a-115)	MMO Response	Applicant Response
	and the potential role of the Project in facilitating the spread of INNS. The MMO's previous concerns regarding the former issue have been allayed. The MMO still considers that uncertainty remains around the latter issue and that this can be resolved by monitoring WTG foundations for potential INNS colonisation.			

Table 2-13: The Applicant's response to MMO's comments on other submissions received at Deadline 4a

Ref No	Submission	Applicant Response
The Applicant's Comments on Deadline 4 Submissions (REP4a-115)		
4.1.1	The MMO has reviewed all the comments within section 1.2 of this document and notes some comments have been resolved with the Applicant and would highlight on some of the issues further information was provided within our response at Deadline 4a (REP4a-133).	This comment is noted by the Applicant.
4.1.2	The MMO is aiming to have a number of meetings with the Applicant to resolve the remaining issues where possible.	The Applicant has engaged with the MMO throughout examination regularly. To resolve the remaining issues, a meeting was held between the Applicant and the MMO on 27 March 2025 to present a new position on a piling restriction, the MMO agreed to the Applicant's proposed restriction and this issue is now resolved. The Applicant notes significant progress has been made with the MMO between Deadline 5 and Deadline 6 and thanks the MMO for their pro-active engagement to resolve outstanding issues where possible.
4.1.3	In relation to Table 4 1.3.3-1.3.9 - Transfer of the Benefit, the MMO agrees with the Applicant's statement on the current position of the discussions between both parties and this matter will not be agreed by the end of Examination. The MMO has provided additional comments to the Applicant's position below.	This comment is noted by the Applicant.
4.1.4	The MMO disagrees with the purpose of the inclusion of the DML as set out in previous representations. The creation of a new route to transfer the DML is unnecessary as there is already an established route to transfer and vary a marine licence and the Article will not work in practice.	The Applicant refers to its comments on Article 6 in the Applicant's Comments on Deadline 4 Submissions (see 1.3.3 to 1.3.9, REP4a-115). The Applicant considers Article 6 to be an important Article to ensure that Transfer of Benefit works well across DCO and dMLs. The provisions contained within Article 6 of the DCO are long established in offshore wind (and other marine NSIP) DCOs. The appropriateness and legality of these provisions in light of the Marine and Coastal Access Act 2009 have been debated at length during offshore wind DCO examinations. In each case, the Examining Authority and Secretary of State have considered such provisions to be appropriate. Recent examples include Art 5 of the Hornsea Three DCO, Art 5 of the Hornsea Four DCO and Art 5 of the East Anglia One North DCO. This was acknowledged by the MMO at paragraph 3.4.1 of the MMO's Relevant Representation (RR-042) and again at Deadline 5 (REP5-150).

Ref No	Submission	Applicant Response
		In the event of a transfer in whole or in part of a DCO, it is appropriate that the Secretary of State should approve the transfer as it is likely that there would be interactions between the dMLs and the other articles, requirements or schedules in the DCO. This ensures that the project consents operate as a coherent whole. The Applicant disagrees that the inclusion of Article 6 causes confusion from a regulatory perspective.
4.1.5	Even if the Secretary of State (SoS) approves a transfer of benefit for the DML the SoS has no power under the Planning Act 2008 to change the DML once consented. As set out in Schedule 6 Paragraph 2 (13) and Paragraph 5 (6): *"The power may not be exercised in relation to provision included in an order granting development consent by virtue of paragraph 30A or 30B of Schedule 5 (deemed marine licence under Marine and Coastal Access Act 2009).*	The MMO highlights the provisions in Schedule 6, para 2(13) and 5(6) of the Planning Act 2008 in arguing that the Secretary of State has no power to change the DML once consented. The Applicant highlights that the provisions identified by the MMO relate to circumstances in which a change is to be made to the DCO. The mechanism in Article 6 does not require a change to the DCO. Art 6(12) provides the MMO with the power to amend the name of the licence-holder in the absence of the s72 mechanism.
4.1.6	Therefore, the transfer and variation completed by the MMO is the right and proper way to amend the DML.	
4.1.7	As per Section 72 (7) & (8) of the Marine and Coastal Access Act 2009 (MCAA 2009): *Variation, suspension, revocation and transfer* …(7)On an application made by a licensee, the licensing authority which granted the licence— (a)may transfer the licence from the licensee to another person, and (b)if it does so, must vary the licence accordingly. (8)A licence may not be transferred except in accordance with subsection (7).	
4.1.8	The reason MCAA 2009 says if we transfer we must vary is because it recognises that its necessary to vary on transfer to maintain the enforceability of the licence. If DMLs are transferred under Art 6, but cannot be varied by the SoS, the MMO would have to review and then vary under its powers under s72(3)(d) should a variation be required and it may well have to consider suspending the licence whilst that variation takes place, depending on what the nature of the required variation would be.	
4.1.9	There is no good reason to move away from the process already set out in MCAA, save for operator convenience, and our strongest preference remains for the DMLs not to be made subject to the Transfer of Benefit provisions in the main body of the order, in full or in part.	The Applicant considers Article 6 to operate well across DCO and dMLs and the MMO has presented no compelling reason to depart from that precedent in this case.
4.1.10	The MMO is not trying to be unduly difficult over the issue, and has not yet been in a position to use this route as for all other consented offshore wind farms, even those with the more recent proposed wording, the undertakers have provided a request to the MMO for a variation alongside the Transfer of Benefit request to the SoS, therefore the MMO is not entirely sure what consequences will be.	The Applicant notes that the provisions of Article 6(8) to (11) also require the Applicant to notify the MMO of the transfer of the benefit of the Order prior to that transfer taking place to allow the MMO to put in place the relevant administrative procedures to vary the licence to change the name of the licence-holder. The Applicant therefore envisages that any transfer under Article 6 of the Order would operate in a similar manner to the instances that the MMO has identified.
4.1.11	The MMO believes there is more risk included the DML with the inclusion of Article 6 than managing it under the current process.	The Applicant disagrees with the MMO and refers to its comments at 4.1.4 above.
Clarification Note Use of 'best endeavours' in the context of Policy Paper Reducing Marine Noise (REP4a-118)		
4.2.1	The MMO is currently reviewing the clarification note and understands that this has been produced to provide detail on the term 'best endeavours' an its specific meaning in law and the principles which underpin the use of this term.	Following engagement with Natural England and the advice provided against PADSS items NE8 and NE9 in the NE Risk and Issues Log (REP5-171), the Applicant has updated the commitment secured within the Outline MMMP for Piling Activities (document reference 8.6.1, V6 submitted at deadline 6) and the In Principle SIP (document reference 8.7, V4 submitted at deadline 6) to state: "The Applicant <u>will deploy</u> primary and/or secondary noise reduction methods (Noise Abatement Systems) for pile driving, unless otherwise agreed with the MMO"

Ref No	Submission	Applicant Response
		The Applicant considers that the commitment it has made is above and beyond what is required by the Defra (2025) policy, which Defra (2025) policy *Reducing Marine Noise*, which states: *"From January 2025, given the expected increase in noise levels over the coming years, and the above outlined policy commitments, we expect that all offshore wind pile driving activity across all English waters will be required to demonstrate that they have utilised best endeavours to deliver noise reductions through the use of primary and/or secondary noise reduction methods in the first instance."* The Applicant considers that this issue is now resolved. In accordance with Schedule 10 Part 2, 13 (1) (f), in the event that driven or part-driven pile foundations are proposed to be used, a Final MMMP in accordance with the Outline MMMP (piling) (8.6.1), the intention of which is to prevent injury to marine mammals, following current best practice as advised by the relevant statutory nature conservation body, to be submitted to the MMO at least six months prior to commencement of piling activities. The Applicant has agreed revised drafting of condition 13(1)(f), Part 2 Schedule 10 with Natural England and the MMO and this has been incorporated into the DCO (3.1). In relation to the SNS SAC, the Applicant also notes that, in accordance with Schedule 10 Part 2, 22 (1), no piling can begin until a SIP which accords with the principles set out in the In-Principle SNS SAC SIP has been submitted to, and approved in writing, by the MMO in consultation with the relevant statutory nature conservation body. As set out ISH 6 (REP4a-117), the Applicant has engaged with underwater noise abatement/ noise reduction technology suppliers and is confident that the existing commitment allows the Project sufficient time to finance, source and implement a noise abatement/ noise reductions system (or a combination of systems) prior to construction commencing. While the Applicant understands that Natural England's preference is for the Applicant to commit to a specific NAS technology, prior to consent, the Applicant explained in ISH 6 (REP4a-117) it is not possible for the Applicant to commit to a particular technology because of the need to first perform a ground investigation and select installation vessels for piling. The Applicant also wishes to highlight that it has not been identified that NAS is required as no significant impacts have been identified.
4.2.2	It refers to the National Policy Statement for Energy (NPS EN-1) and argues that the purpose of the updated guidance on noise is to *'promote appropriate mitigation to reduce the impact of underwater noise whilst allowing the rapid deployment of offshore wind'*, further arguing that the *'two must therefore be allowed to co-exist and it would be an unreasonable reading of the "best endeavours" obligation to require the selection of a particular noise reduction technology or for a project to incur delays at the expense of the speedy deployment of offshore wind.'* Finally, it states that *'the "best endeavours" obligation does not require developers to commit to achieving the greatest possible noise reduction nor to a particular type of noise reduction technology. That is neither the purpose or intention of the Guidance, nor the way in which the commitment is framed.'*	This comment is noted by the Applicant.
4.2.3	The MMO would advise that the intention of the guidance is to manage noise in- light of the increased levels of noise anticipated over the coming years. It is becoming increasingly more difficult to	The Applicant acknowledges the MMOs advice on this matter. Following engagement with Natural England between Deadline 5 and 6, the Applicant has updated the commitment

Ref No	Submission	Applicant Response
	determine no adverse effects on site integrity for harbour porpoise Special Areas of Conservation. All industries adoption of noise reduction methods during piling will be vital to ensure that activities can go ahead, whilst remaining below the noise disturbance thresholds.	secured within the MMMP (document reference 8.6.1, V6 submitted at deadline 6) and SIP (document reference 8.7, V4 submitted at deadline 6)The Applicant will present an updated alone and in-combination assessment within the Final Piling SNS SAC SIP at the post-consent phase.
4.2.4	The MMO reminds the Applicant that if noise thresholds are likely to be breached, alone or in-combination with other Projects, the Project may not get approval of the SNS SAC SIP without the use of Noise Abatement or Mitigation Systems.	The Applicant considers that the new commitment to NAS (set out in the response to row 4.2.1 above) secured within the In-Principle SIP (document reference 8.7, V4 submitted at deadline 6) is above what is required by the Defra (2025) policy paper. The In Principle SNS SAC SIP has been updated to reflect this commitment (document reference 8.7, V4 submitted at deadline 6). The Applicant will provide an updated alone and in-combination assessment within the Final Piling SNS SAC SIP at the post-consent stage. Through the development of Final Piling SNS SAC SIP and assessments therein, the Applicant will identify the necessary mitigation measures needed to ensure that the noise thresholds are not breached. The Applicant acknowledges the requirement of the MMOs approval of the final SNS SAC SIP. It is the Applicant's expectation that the MMO will only approve the final SNS SAC SIP if the final project parameters, verified mitigation measures and updated underwater noise thresholds demonstrate the noise thresholds will not be breached.
4.2.5	As a Wildlife licence will be required, the Applicant will be required to demonstrate that NAS has been secured, and where this has not been possible, justification must be provided. This is necessary to meet the required legal test to consider satisfactory alternatives, as NAS is now considered to be a primary and expected mitigation. Applications that do not propose to use NAS may only be accepted in exceptional circumstances, where the applicant can prove that the inability to secure NAS is outside of their control. The additional cost of NAS is not a sufficient justification to discount a satisfactory alternative. Note that as technology develops and the supply chain improves, any arguments against utilizing NAS will become less valid. Developers who have secured the greatest possible noise reductions through NAS are less likely to face requests to further explore satisfactory alternatives, and therefore delays in consenting, as they have demonstrated they have utilised best endeavours to secure a "satisfactory alternative".	The Applicant notes the MMO's advice on noise reduction measures and the 'satisfactory alternatives' test required as part of the licencing. The Applicant will apply for the wildlife license, as agreed with the MMO, in the post-consent stage. The Applicant considers that the new commitment to NAS (set out in the response to row 4.2.1 above) secured within the In-Principle SIP (document reference 8.7, V4 submitted at deadline 6) is above what is required by the Defra (2025) policy paper, and this issue is now resolved.
4.2.6	The MMO is reviewing internally along with liaising with NE on this matter, will provide comments to the Applicant as soon as possible and may submit an additional submission on this matter to the ExA.	This comment is noted by the Applicant, and we await feedback from the MMO. Following engagement with Natural England between Deadline 5 and 6, the Applicant has updated the commitment secured within the MMMP (document reference 8.6.1, V6 submitted at deadline 6) and SIP (document reference 8.7, V4 submitted at deadline 6), and considers that this issue is now resolved.
Environment Agency (REP4a-123 and REP4a-127)		
Post-hearing submission		
4.3.1	The MMO notes that the Environment Agency's (EA) objections relating to the flood risks assessments for the Export Cable Corridor (ECC) and the Onshore Substation (OnSS), outlined in paragraphs 13.3.1 and 13.4.1 of its Relevant Representation (RR-018), were still in place at the time of the hearing, however a post-hearing note was added and the EA has now reviewed the ECC flood risk assessment and the holding objection is withdrawn.	This comment is noted by the Applicant.
Noise Bund (Hydraulic Modelling and Impact)		
4.3.2	The MMO notes that the EA has reviewed the noise bund modelling undertaken (submitted in 4 parts: REP4-095 (Part 1 of 4), REP4-096 (Part 2 of 4), REP4- 097 (Part 3 of 4) and REP4-098 (Part 4 of 4)) and has confirmed that it is 'fit for purpose'.	This comment is noted by the Applicant.
HDD Pit Bunding		

Ref No	Submission	Applicant Response
4.3.3	The MMO notes that the request from EA in their Deadline 4 (REP4-127) on the inclusion of the landfall Horizontal Directional Drilling Pit Bunding protection in the Flood Risk Assessment (FRA) has been fulfilled and EA is now satisfied and has reached agreement with the Applicant.	This comment is noted by the Applicant.
4.3.4	The MMO acknowledges that the issues raised by EA regarding the Flood Risk Assessment are now resolved and EA has withdrawn its holding objection, outlined in paragraph 13.3.1 of its Relevant Representation (RR-018).	This comment is noted by the Applicant.
Natural England (REP4a-138)		
Lead-in periods for kittiwake breeding on Artificial Nesting Structures (ANS) (REP4- 105)		
4.4.1	The MMO notes that Natural England (NE) will review and provide comments on the updated version of 19.11 Lead-in periods for kittiwake breeding on Artificial Nesting Structures (ANS) (REP4-105) at the next appropriate deadline. The MMO defers to NE on ornithological issues.	The Applicant notes this comment and has responded to NE's concerns on ornithological issues in tables 27, 28 and 29.
Noise Abatement Systems		
4.4.2	The MMO acknowledges the comment made by NE regarding the Applicants level of commitment to utilising noise reduction technology and notes NE does not consider the Applicants statement to demonstrate commitment to this. The MMO also notes that NE has raised that once the Applicant has committed to using noise reduction technology, the methodology should be discussed with Statutory Nature Conservation Bodies (SNCBs) and regulators as soon as possible, post-consent. The MMO provided its position on NAS commitment in Section 1.4 and 2.10 of the MMO's Deadline 4 response (REP4-129) and strongly believes that the need to reduce noise at source (noise abatement) is especially pressing given the wider context of the current ramp up of offshore wind development at unprecedented scale in the North Sea.	The Applicant considers that the new commitment to NAS is appropriately secured (as set out in the response to row 4.2.1 above) within the In-Principle SIP (document reference 8.7, V4 submitted at deadline 6), and is above and beyond what is required by the Defra (2025) policy paper. The Applicant considers that this issue is now resolved. The Applicant is engaging with the market regarding noise reduction measures available (as confirmed with the ExA in ISH 6), however a commitment to a specific noise reduction measure cannot be made at this stage.
Marine Mammal Mitigation Plan (MMMP) (REP4-085, REP3-038)		
4.4.3	The MMO notes that NE acknowledges the Applicant has included a recommendation in the Marine Mammal Mitigation Plan (MMMP) that a 30- minute visual watch should occur before Acoustic Deterrent Device (ADD) activation. The MMO notes NE is awaiting inclusions within the MMMP that this will occur and that the Applicant will commit to conducting a 30-minute watch before ADD activation and that visual watch times for Marine Mammal Observers will be adjusted to account for this, in addition to the required time of ADD duration.	The Applicant has submitted an updated Outline Marine Mammal Mitigation Protocol for Unexploded Ordnance Clearance at (document reference 8.6.2 submitted at deadline 6) which we hope will allow this Issue to now be agreed.
4.4.4	The MMO notes that NE has raised that the Applicant has not addressed any of the other issues based on the MMMP or SIP (REP4-087) that are outlined in Natural England's Risk and Issues log and that these issues remain not agreed.	The Applicant has submitted an updated Outline Marine Mammal Mitigation Protocol for Unexploded Ordnance Clearance at (document reference 8.6.2 submitted at deadline 6) which it is hoped will address the outstanding issues. The Applicant has submitted updates to the Outline Marine Mammal Mitigation Protocol for Piling Activities (document reference 8.6.1 submitted at deadline 6) and the In Principle Site Integrity Plan (document reference 8.6.2 submitted at deadline 6) which the Applicant considers addresses the remaining issues raised by Natural England. A final MMMP and SIP will be produced at the post-consent stage, these will be produced in accordance with relevant advice and guidance at the time of drafting.
Draft Development Consent Order (REP4-007)		
4.4.5	The MMO notes that NE has identified that Schedule 22, Parts 1-5 paragraph 4 (REP4-007) contains all the compensation requirements. Paragraph 4 has had 2 additional sections included which add a requirement to provide details of ongoing monitoring, reporting, adaptive management and a mechanism to determine if adaptive management is required. NE considers these paragraphs a step forward in the resolution of issues. However, the MMO notes this does not fully address the concerns raised by NE as it does not secure what would happen should the third party fail to undertake the	The Applicant refers to its comments at section 10, page 14 of the Applicant's Comments on Deadline 4a Submissions (REP5-150).

Ref No	Submission	Applicant Response
	compensation, just that the monitoring surveys, timings, methodologies and adaptive management considerations need to be provided in a report.	
4.4.6	The MMO defers to and supports NE in relation to the compensation and although the MMO will be part of the steering group, it is for NE to advise on the suitability of the information within this schedule.	This comment is noted by the Applicant.
Risks and Issues Log		
4.4.7	The MMO notes that NE will provide an updated Risks and Issues Log at Deadline 5 and will review and provide comments in due course.	This is noted by the Applicant and responses to the Risk and Issues Logs are provided in within The Applicants Response to Natural England Risk & Issues Log (document reference 21.8) submitted at deadline 6.
4.4.8	The MMO notes that NE have not been able to review all documents submitted by the Applicant at Deadline 4 and will provide further comments at Deadline 5. The MMO will keep a watching brief and review NE's comments at Deadline 5.	This is noted by the Applicant.
Appendix D1 to the Natural England Deadline 4a Submission Natural England's Advice on Benthic Compensation and Mitigation (REP4a-136)		
4.4.9	<u>Maximum Design Scenario/Parameters</u> The MMO notes that NE has raised that an Adverse Effect on Integrity (AEOI) cannot be excluded alone or in-combination (with other plans or projects) from the placement of cable protection and the Applicant has provided a without prejudice derogations case.	The Applicant has conducted an assessment of the supporting habitat for *S. spinulosa* reef within the Offshore ECC, which intersects with the IDNRRB SAC. The findings are detailed in the *S. spinulosa* Reef Supporting Habitat Technical Note (document reference 22.11, updated at Deadline 6). Natural England approved the Applicant's interpretation of the methodologies and the quantification of the supporting habitat area for *S. spinulosa* reef via email through DAS on 25th March 2025. This advice was supplemented by Natural England's comments at Deadline 4 (Appendix C4 to the Natural England Deadline 4 Submission (REP4-137)), summarised in the following paragraph (emphasis added): "*Natural England advises the Applicant undertakes and submits into examination an assessment of supporting habitats and processes for potential Annex I S. spinulosa reef, to demonstrate that the recovery of this feature will not be hindered by the installation of the export cable and/or the lasting placement of cable protection.* ***This will provide the Secretary of State comfort an adverse effect on integrity to IDRBNR SAC Annex I reef features and habitats/processes in which it relies upon will be avoided***." The Applicant also provided the realistic worst-case figure for the total area of removable cable protection predicted within Annex I supporting habitat to Natural England via DAS on the 27th March 2025. The information is also presented in the table below: **Calculation Step Description** / **Value** / **Unit** Number of Cables: 4 each Length of transit for each cable through Supporting Habitat: 16562.5 m Length of transit for all cables through Supporting Habitat: 66250 m **20%** of total length: 13250 m Number of mattresses required (rounded up): 4417 each Each mattress footprint: 18 m2 Footprint within Supporting Habitat: 79506 m2 20% allowance for installation accuracy and slippage: 15901.2 m2 Total Footprint for Supporting Habitat: **95407.2** **m2** Total volume for Supporting Habitat (0.35m high): **33392.52** **m3** The Applicant has therefore mapped out supporting habitat in accordance with the guidance supplied and has agreed to mitigate impacts using removable cable protection within the areas identified. It should be noted that the conservation objectives of the SAC do not require that

Ref No	Submission	Applicant Response
		habitats with the potential to support designated habitats receive the same level of protection as the designated habitats themselves. Whilst the conservation objective focuses on maintaining and restoring the supporting processes necessary for qualifying habitats, it is not reasonable to interpret this as a requirement to protect all habitats within the SAC that could develop into Annex I reef at some undefined time as if they were reef features themselves, nor has Natural England provided a justification for such an approach. The Applicant considers that the further analysis and further commitment to removable cable protection in defined areas of supporting habitat bolsters the existing conclusions of the assessment that there is no AEoI. The Applicant has updated the RIAA with this detail at Deadline 6 (document reference 7.1).
4.4.10	The MMO notes that NE note that while the finer details of the compensation measure delivery are still yet to be finalised and note the recent guidance for strategic compensation and the Marine Recovery Fund (MRF).	The Applicant notes this note.
4.4.11	The MMO notes that NE have asked for some clarity from the Applicant on cable protection footprints in order to make a comment on the above.	The Applicant has provided this information to Natural England as detailed within the Applicant's Comments on the Natural England's Deadline 4a Submission (REP5-150)
Benthic Compensation Strategy (REP4-046)		
4.4.12	<u>Adverse Effect on Integrity (AEoI)</u> The MMO notes that NE's advice in relation of significance of impacts on IDRBNR SAC Annex I Sandbank and Annex I Reef features from the placement of cable protection continues to differ from the Applicants view. The MMO notes that NE raises that the conservation objectives of the site will be hindered by the project alone and therefore an AEoI cannot be excluded.	The Applicant maintains its position that an AEoI of the Annex I Sandbank and Annex I Reef features of the IDRBNR SAC can be excluded with the mitigation currently proposed, which includes: ▪ The avoidance of *S. spinulosa* reef (as identified in the pre-construction surveys) within the IDRBNR SAC (as detailed within the Outline Biogenic Reef Mitigation Plan (REP2-043) and secured in Condition 13(1)(j), Part 2, Schedule 11 of the DCO); and ▪ Adopting the use of removable cable protection across all Annex I sandbank features and within areas of habitat that could support *S. spinulosa* reef in the future, based on guidance and advice provided by Natural England (this commitment is detailed within the Outline Scour and Cable Protection Management Plan (document reference 8.21, V6 updated at Deadline 6) and in the Outline Cable Specification and Installation Plan (document reference 8.5, V7 updated at Deadline 6), secured under condition 13(1)(d), Part 2, Schedule 11 of the DCO).
4.4.13	<u>Strategic compensation</u> The MMO notes that NE welcomes the Applicant's consideration of the MRF within the Benthic Compensation Strategy and agrees with the Applicant on the next steps and NE aims to agree the level of impact which requires compensation to apply the MRF. However, NE notes that the application is likely to be in the post consent phase for this project.	Following on from above, the Applicant can confidently rule out an AEoI of Annex I features of the IDRBNR SAC and therefore there would be no requirement for compensation. If, however, the SoS disagrees, the Applicant's view of the level of impact is set out in the Without Prejudice Sandbank Compensation Plan (V4 submitted at deadline 6, document reference 7.6.1) and the Without Prejudice Biogenic Reef Compensation Plan (V4 submitted at deadline 6, document reference 7.6.2).
4.4.14	The MMO notes NE's understanding based on the published MRF Guidance is that Defra and DESNZ have included a provision for ODOW within the strategic compensation MPA designation and extension process. The MMO notes that NE does not believe there is merit in further progressing project specific compensation at this time or that there is merit in the Applicant progressing their own outline Implementation and Monitoring plan, as this is something that will be undertaken through DEFRA at a later stage.	It should be noted that until the SoS has made their decision on any necessary compensation and detail on magnitude, cost and timing is available it is necessary for the Applicant to retain the ability to deliver other measures, even in the event there is a lack of agreement with Natural England on those measures the project is proposing to retain. It will be for the SoS to make the final decision on which method will ultimately be delivered (if deemed necessary), noting the Applicants full agreement with Natural England on the appropriateness of Marine Protected Area designations and/or extensions delivered by Defra.
4.4.15	<u>Securing compensation</u>	This comment is noted by the Applicant.

Ref No	Submission	Applicant Response
	The MMO notes that NE requests the Applicant clarify their preferred approach to benthic compensation, which can only be delivered with confidence through the MRF. The MMO will keep a watching brief of the Applicant's comments on this.	
Benthic Compensation plans		
4.4.16	Report to Inform Appropriate Assessment (RIAA) The MMO notes that NE is in support of no updates being provided to the benthic assessments as a result of the Offshore Restricted Build Area (ORBA) and the removal of the Northern Export Cable in the near shore area because the existing worst-case scenario encompasses these changes.	This comment is noted by the Applicant.
4.4.17	Mitigation Hierarchy (Northern Route) The MMO notes that NE raises the use of the mitigation hierarchy noting that within the Sandbank Compensation Plan [REP4-048] the Northern ECC Route through IDRBNR SAC is removed as an option, which would have avoided impacts on the Inner Dowsing Sandbank, an Annex I sandbank feature of the site. The MMO notes NE welcomes the Applicant in considering further mitigation measures to minimise impacts.	The Applicant would like to emphasize that they worked closely with Natural England to thoroughly develop the list of available mitigation options for the IDRBNR SAC, which is presented within Annex A – Natural England Advised Mitigation for the IDRBNR SAC within Chapter 9 Benthic and Intertidal Ecology (document reference 6.1.9, V2 updated at Deadline 5), this included a workshop in Peterborough (ODOW/Natural England Workshop – Benthic and Ornithology Compensation, 9th January, 2024, Peterborough (PINS also in attendance)). Therefore, the Applicant considers that the available options for mitigation have been thoroughly tested in line with Natural England's advice which was based around the impact 'mitigation hierarchy' of avoid, mitigate, and compensate, outlined by CIEEM (2018) with the aim of "development leaving nature in a better state, including through emerging mechanisms for nature improvement and enhancement".
4.4.18	The MMO notes that NE welcomes any commitments that can be made to avoid permanent habitat loss and mentioned removeable cable protection.	The removable cable protection currently proposed includes: ▪ The avoidance of *S. spinulosa* reef (as identified in the pre-construction surveys) within the IDRBNR SAC (as detailed within the Outline Biogenic Reef Mitigation Plan (REP2-043) and secured in Condition 13(1)(j), Part 2, Schedule 11 of the DCO); and ▪ Adopting the use of removable cable protection across all Annex I sandbank features and within areas of habitat that could support *S. spinulosa* reef in the future, based on guidance and advice provided by Natural England (this commitment is detailed within the Outline Scour and Cable Protection Management Plan (document reference 8.21, V6 updated at Deadline 6) and in the Outline Cable Specification and Installation Plan (document reference 8.5, V7 updated at Deadline 6), secured under condition 13(1)(d), Part 2, Schedule 11 of the DCO).
Benthic Compensation Evidence Base and Road Map (REP4-052)		
4.4.19	MPA designation or extension The MMO notes that NE continues to work with JNCC and Defra to progress the MPA designation process and aim to determine appropriate sites for benthic compensation. NE has advised the designation of a new or extended SAC for Anne I Sandbank and Annex I reef features within the North Sea. The MMO will maintain a watching brief of this.	This comment is noted by the Applicant.
4.4.20	Advice on oyster restoration remains the same The MMO notes that NE reiterates the following advice from their Relevant/Written Representation Appendix D (RR-45) that there is a restore conservation objective for Annex I Sabellaria spinulosa reef feature of IDRBNR SAC and there is a preference for management measures to be put in place to support its recovery.	The Applicant maintains its position that an AEoI of the Annex I Sandbank and Annex I Reef features of the IDRBNR SAC can be excluded. The Applicant notes this advice from Natural England. The Applicant would like to highlight that, at Deadline 4 (REP4-137), Natural England commented: *'NE advises the Applicant undertakes and submits into examination an assessment of supporting habitats and processes for potential Annex I S. spinulosa reef, to demonstrate that the recovery of this feature will not be hindered by the installation of the export cable and/or the lasting placement of cable protection. This will provide the Secretary of State comfort an*

Ref No	Submission	Applicant Response
		adverse effect on integrity to IDRBNR SAC Annex I reef features and habitats/processes in which it relies upon will be avoided.' The Applicant's commitment to installing removable cable protection within areas identified as potentially supporting habitat for *S. spinulosa* reef is detailed within the Outline Scour and Cable Protection Management Plan (document reference 8.21, V5 updated at Deadline 6) and in the Outline Cable Specification and Installation Plan (document reference 8.5, V7 updated at Deadline 6), secured under condition 13(1)(d), Part 2, Schedule 11 of the DCO.
4.4.21	The MMO acknowledges NE's point on the creation/restoration of other reef features not being a detriment of existing Annex I habitats within IDRBNR. The MMO notes that NE has also highlighted that both Oyster and Blue Mussel reef may not provide the same ecological function, even if legally it would be considered the same. However, if this was to progress as a compensation measure, NE would be more inclined towards Blue Mussel (*Mytilus edulis*) reef rather than oyster reef since it has not been found historically in the site	The Applicant notes Natural England's advice, however, cannot locate the reference that details a five-year S. spinulosa reef life cycle which is associated with *Lanice conchilega* and Mytilus edulis from the reference given by Natural England (Hendricks V. & Foster-Smith, R. 2006). 'Hendrick , Vicki & Foster-Smith , Robert. (2006). Sabellaria spinulosa reef: A scoring system for evaluating 'reefiness' in the context of the Habitats Directive. Journal of the Marine Biological Association of the United Kingdom. 86. 665 - 677. 10.1017/S0025315406013555' is the only paper that can be found by the Applicant for this reference. The Applicant did request this paper following the workshop they had in Peterborough (ODOW/Natural England Workshop – Benthic and Ornithology Compensation, 9th January, 2024, Peterborough (PINS also in attendance)) where this research was mentioned but has not received the research from Natural England. Oyster reefs offer significant ecosystem benefits, similar to other biogenic reef habitats. Therefore, the Applicant maintains that this approach would provide adequate compensation and ecological functionality, if required. As detailed within the Applicant's Without Prejudice Benthic Compensation Evidence Base and Roadmap (document reference 7.6.3, V4 submitted at deadline 6) the Olsen's Piscatorial Atlas (1883) indicates that native oysters have historically been widely distributed along the Norfolk and Lincolnshire coasts. Records from the Ocean Biodiversity Information System (OBIS) and Natural England's Marine Evidence databases show that in the past native oysters were present in the inner and other Wash, the outer Humber Estuary and offshore within the central North Sea (Johnson et al., 2023). Data from historic research surveys conducted in the late 19th and early 20th centuries show similar results, with records of oyster shells in the outer Wash, off the Norfolk coast and off the Lincolnshire coast between Skegness and Grimsby (Bennema et al., 2020). If this measure is progressed the Applicant will work to establish areas for reef establishment within those 17 defined areas for reef compensation that would not be to the detriment of other Annex I features. Research on the co-occurrence of these species is still ongoing, but some studies have observed the presence of oysters alongside Sabellaria spinulosa in areas with healthy marine ecosystems.
4.4.22	<u>Inclusion of project specific compensation areas in the Development Consent Order (DCO)</u> The MMO notes that NE has requested clarification from the Applicant on the 17 areas within the IDRBNR SAC and if all of these will be taken forward as part of the red line boundary within the DCO.	The Applicant will seek to refine these areas if the need for this compensation option arises. As described previously strategic compensation (being Marine Protected Area Extension) and the Marine Recovery Fund present the Applicant's preferred (without prejudice) compensation measures. Section 4.4.3 and Section 4.3.3 of the Benthic Evidence Base and Road Map (APP-248), details the site selection process for these options. This provides further context and clarity regarding the methodology used for site selection and ensures that the rationale behind the chosen options is fully explained.

Ref No	Submission	Applicant Response
4.4.23	Mitigation Measures The MMO notes that NE has requested further clarification on what the Applicant means by 'ecological solutions' in relation to Paragraph 13 of the Outline Scour Protection and Cable Protection Management Plan (REP4 -079) and Ref 41 within Table 1.1 of the Schedule of Mitigation (REP4-074), as per our comments in Section 3.1 of this letter.	As detailed within Natural England's Advised Mitigation for the IDRBNR SAC (Annex A of Chapter 9 Benthic and Intertidal Ecology (REP5-019)), on of Natural England's mitigation measures included: '*Design rock armouring to mirror the structure and function of geogenic reef – this was advised for the Viking Link interconnector*' and as stated within Annex A. The option for ecologically designed rock protection has been included within the project design envelope; the final design for any rock protection will be discussed with the MMO. Mitigation measures will be implemented by the Applicant, and any justification for not doing so will be discussed with statutory advisors before construction. An agreement will be sought on whether the use of ecological rock protection is appropriate, based on the evidence available at that time.
4.4.24	The MMO notes that NE welcomes the Applicant's commitment in the use of removable concrete mattresses but requires further clarification on the anticipated maximum length of cable protection within the nearshore, location relative to MLWS (Mean Low Water Springs), and water depth to address our concerns in relation to disruption to sediment transport. The MMO also notes that NE asks the Applicant to confirm if the mattresses will remain in situ during storm events and that fishing activities will not dislodge them.	The Applicant notes the Worst-Case Scenario (WCS) volumes in the nearshore area are anticipated to be no greater than 20%, as stated in Chapter 3 Project Description (REP5-009). As a result, the nearshore (defined as the inner depth of closure out to 7.1m water depth) extends to a total cable length of 8,650m. Commitment 39 of the Schedule of Mitigation (document reference 8.13, updated at Deadline 5) states "The landfall HDD exit pits will be located a minimum of 500m from MLWS" so no cable protection will be located between MLWS and the HDD exit pits. 20% of the 8,650m length is 1,730m, therefore this is the WCS of length requiring cable protection. The use of cable protection measures in the nearshore zone has been assessed within Impact 2 as a pathway of effect on coastal receptors (Paragraph 152 – 154, and 156; Section 7.12.1; (REP4a142)). This explicitly includes the potential impact on littoral sediment transport and beach morphology. Given the details above, the Applicant consider that the assessment conclusions presented in Section 7.16 of Chapter 7 Marine and Physical Processes (REP4a-142) remain valid. The likely significant effects to disruptions to wave energy transmission, sediment transport and coastal morphology were fully addressed by the Applicant within Chapter 7: Marine Physical Processes (REP4a-142), and concluded no significant effects were likely to occur. The Applicant notes Natural England's concerns relating to how confident the Applicant is regarding stability of cable protection in this area from storm events and fishing activities. The Applicant would like to emphasize that a typical concrete mattress weighs approximately 9.5–10 tonnes and is constructed with a brick pattern to provide optimal flexibility, enabling it to conform to the seabed and the cable. Additionally, the concrete mattress is specifically designed for installation and lifting using specialized tools, with a primary focus on ensuring stability. It is highly unlikely to become dislodged during storm events. Regarding fishing activities, as outlined in Chapter 14, Commercial Fisheries of the ES (document reference 6.1.14, V2 updated at Deadline 5), the risk of trawling interaction in this area is minimal.

Table 2-14: The Applicant response to MMO's Action Points from Issue Specific Hearing 6

Ref No	Submission	Applicant Response
Action Point 7: Applicant and MMO to provide an update on their respective positions in respect to the spread of Invasive Non-Native Species following their upcoming meeting.		
5.1.1	Please refer to Table 5 for the MMO's position on INNS. In summary, the MMO originally requested that given the uncertainty regarding the potential role of the Project in facilitating the spread of INNS, the MMO considered that the colonisation of WTG foundations must be monitored over time, irrespective of the type of foundation that is used.	The collaborative approach to post-consent monitoring of marine INNS is welcomed by the Applicant.
5.1.2	The MMO welcomes the commitment in the Offshore In-principle Monitoring Plan (REP4a-073) to determining the location, extent and abundance of any INNS in the post-construction phase.	
5.1.3	Additionally, the MMO welcomes that where the introduction and/or spread of INNS is observed, *'the monitoring plan should be reviewed and updated if required (e.g., to increase focus on a specific invaded habitat or detected INNS)'* and that *'responsive actions as outlined in the INNS Biosecurity Management Plan may be implemented if appropriate.'*	
5.1.4	The MMO will continue to work with the Applicant to agree survey programmes and methodologies for the purposes of monitoring post-consent.	
Action Point 9: MMO to examine and provide response on the Applicant's reply to Action Point 8 mentioned above		
5.2.1	The MMO considered that the potential impacts from sediment that would be mobilised due to erosion occurring during scour development to not be fully assessed. The MMO requested that the Applicant provides signposting to the ES where it considers that the assessment has been made. In addition, the Applicant was requested to provide predictions for secondary scour.	This is noted by the Applicant.
5.2.2	The Applicant responded with signposting to Section 7.12.2.2 of Chapter 7 Marine Physical Processes (APP-062), detailing that scour around foundations will be limited by the installation of scour protection where required. As a result, the Applicant considers potential impacts from the remobilisation of sediments due to erosion occurring during scour development are within the envelope assessed for seabed preparation around foundations, as they will occur within the construction phase and over a smaller spatial footprint than seabed preparation activities. The Applicant predicts that elevated Suspended Sediment Concentrations (SSC) will become indistinguishable from background levels within several tidal cycles, and therefore sediment plumes are not considered additive. The MMO is content with this response.	This comment is welcomed by the Applicant.
5.2.3	With regard to secondary scour, the Applicant has used available evidence provided from Hornsea One windfarm site. The Applicant has adequately answered the MMO's query regarding whether secondary scour footprint is factored into project footprint estimates. The Applicant noted that *"the predicted extent of secondary scour would occur within the footprint for seabed preparation works around foundations, which represents the greatest area for habitat disturbance"*.	This is noted by the Applicant.
5.2.4	Please see Section 3.1 of this document which details that the ES does not recognise the possibility that scour effects will alter over time, with only 'constant flow conditions' considered. Therefore, leaving a concern that the potential radius of impact could be modified under certain conditions. Additionally, section	The Applicant has provided a response in Table 6.
5.2.5	3.1 outlines further potential evidence and methods for estimating residual scour impacts and the possible need of establishing a maximum radius to ensure that this does not exceed the seabed preparation footprint.	The Applicant has provided a response in Table 6.
Action Point 13: MMO and NE to provide a response to any and all relevant points covered in the hearings not already covered by action points.		

Ref No	Submission	Applicant Response
5.3.1	The MMO has reviewed the Issue Specific Hearings and does not wish to provide additional comments to those outlined above and in previous Deadline responses, at this stage. The MMO believes all outstanding comments have been provided in REP4-129, Rep4a-133 and this document.	This comment is noted by the Applicant.

2.7 The Applicant's Response to the MoD's Deadline 5 (Rule 17) Submission Response

Table 2-15: The Applicant's Comments on the MoD's Deadline 5 (Rule 17) submissions

Ref No	Submission	Applicant Response
MoD-D5- 1	I write in response to the Rule 17 letter dated 5 March 2025 which was received by this office. Through that letter the Ministry of Defence (MOD) is asked to respond to a revised draft Development Consent Order prepared by the applicant and intended to address MOD concerns.	The Applicant notes this comment.
MoD-D5-2	Through previous responses to consultation on the proposed Outer Dowsing Wind Farm project the MOD has set out objection to the proposed development on the basis that it would have a significant and detrimental impact on the effective operation and capability of air defence radar systems sited/deployed at Remote Radar Head (RRH) Staxton Wold and Remote Radar Head (RRH) Neatishead.	The Applicant notes this comment.
MoD-D5-3	In addition, the MOD has identified that the development, during either or both the implementation and operational phases, has the potential to: introduce physical obstacles into Holbeach Air Weapons Range; introduce physical obstacles to the operation and/or capability of a technical asset known as the East 1 WAM network; and introduce physical obstacles to low flying aircraft. With the intention of addressing the MOD objection due to the impact of the development on the operation and capability of air defence radar systems, the applicant has engaged with MOD regarding mitigation. The applicant has subsequently included Requirement 33 in their most recent draft Development Consent Order. In principle, the MOD accepts that such a requirement could secure mitigation, however, the wording proposed by the applicant does not meet the MOD's needs. As such, the MOD proffers alternative requirement wording as set out at Annex A to this letter. This wording differs by making clear that any mitigation is required to be in place for the life of the development and by providing clarification as to the parties that would be involved in any arrangement required to agree and implement such mitigation.	The Applicant has updated the draft DCO (document 3.1, V10, submitted at Deadline 6) to include the MOD's preferred requirement as Requirement 32 (Ministry of Defence Surveillance Operations).
MoD-D5-4	Through further updates to the draft Development Consent Order the applicant has sought to address the MOD's outstanding concerns. The applicant has amended Requirement 18 to include stipulations that the MOD is to be consulted on: Work no. 12 – up to four underground cable circuits and up to six associated cable ducts to Work No. 13; and	The Applicant welcomes the confirmation from the MOD that the updated wording of Requirement 18 addresses its concerns.

Ref No	Submission	Applicant Response
	Work no. 13 – works consisting of— a. up to six trenchless technique drilling launch pits; b. up to four underground cable circuits and up to six associated cable ducts to Work No. 14; c. up to four underground cable circuits and associated cable ducts from Work No. 14 to Work No. 15; d. a landfall temporary works area; e. storage areas; f. drainage works; g. construction of a haul road; and h. vehicular access tracks, bellmouths and footpaths). These works would be those most likely to impact on the operation and capability of both Holbeach Air Weapons Range and the East 1 WAM network. The MOD is satisfied that the updated wording of Requirement 18, as proposed by the applicant in the draft Development Consent Order, would address MOD concerns relating to the potential for the development, during both implementation and operational phases, to impact on those assets.	
MoD-D5-5	In response to the potential for the development to form an obstruction to low flying aircraft the applicant has included Requirement 27 which requires aviation safety lighting, as well as conditions within the proposed Deemed Marine Licences (Schedules 10, 11, 12, 13, 14, and 15) that require the submission of sufficient data to allow the development to be charted. As set out in the MOD's response to the Examining Authority's second written questions dated 3 February 2025, the inclusion of Requirement 27 and the application of conditions to deemed marine licences within any Development Consent Order that might be granted would be considered to address MOD concerns on this specific issue.	The Applicant welcomes the confirmation from the MOD that Requirement 27 and conditions within the dMLs addresses its concerns.
MoD-D5-6	**Conclusion** In summary, subject to the Requirement wording set out at Annex A of this letter being added to any Development Consent Order that might be made, and the retention of the following Requirements and Conditions already set out in the applicant's draft Development Consent Order: • Requirement 18 in the form set out in the draft Development Consent Order dated February 2025 (Document Ref: 3.1 Revision 8.0). • Condition 10 – Aviation Safety at Schedule 10 Deemed Marine Licence under the 2009 Act – Generation Assets, Part. 2. • Condition 10 – Aviation Safety at Schedule 11 Deemed Marine Licence under the 2009 Act – Offshore Transmission Assets, Part. 2. • Condition 10 – Aviation Safety at Schedule 12 Deemed Marine Licence under the 2009 Act – Northern Artificial Nesting Structure 1, Part. 2. • Condition 10 – Aviation Safety at Schedule 13 Deemed Marine Licence under the 2009 Act – Northern Artificial Nesting Structure 2, Part. 2. • Condition 10 – Aviation Safety at Schedule 14 Deemed Marine Licence under the 2009 Act – Southern Artificial Nesting Structure 1, Part. 2. and • Condition 10 – Aviation Safety at Schedule 15 Deemed Marine Licence under the 2009 Act – Southern Artificial Nesting Structure 2, Part. 2.	As noted above, the Applicant has updated the draft DCO (document 3.1, V10, submitted at Deadline 6) to include the MOD's preferred requirement as Requirement 32 (Ministry of Defence Surveillance Operations). Requirement 18 and condition 10 of the dMLs forming Schedules 10-15 remain as set out in the version of the draft DCO reviewed by the MOD. Therefore, the Applicant considers the MOD objection to now be fully addressed.

Ref No	Submission	Applicant Response
	the MOD is content to withdraw its objection to this development.	

2.8 The Applicant's Response to the NATS En-Route Response to ExA's R17 Request for information 5 March 2025 Rule 17 Letter

Table 2-16: The Applicant's Comments on the NATS En-Route Response to ExA'sRule 17 Letter

Ref No	Submission	Applicant Response
NATS-R17-1	We refer to the application submitted by the Developer dated 19/03/2024 for the construction of up to a 100 turbines. NATS (En-Route) plc ("NERL") has previously submitted Relevant Representations in respect of the proposed development as its assessment is that the development will cause an adverse impact to the Claxby and Cromer radars and the associated air traffic operations of NERL without suitable mitigation.	This comment is noted by the Applicant.
NATS-R17-2	An agreement has been entered into between NERL and GT R4 Limited dated 10/03/25 for the agreement of suitable planning requirements and the implementation of an identified and defined mitigation solution in relation to the development that will be implemented under agreement. In summary, such a mitigation solution will require works to be carried out to NERL's infrastructure at the Claxby and Cromer radar installations. NERL is therefore prepared to withdraw its Relevant Representations to the Development Consent Order application subject to the imposition of the agreed Requirements set out below that has been agreed with the Developer within the Development Consent Order: 1. No part of any wind turbine generator (excluding foundations) is to be erected as part of the authorised development until a Primary Radar Mitigation Scheme agreed in advance with the Operator has been submitted to and approved in writing by the Secretary of State in order to mitigate the impact of the authorised development on the primary radars of the Operator located at Claxby and Cromer, and the associated air traffic management operations. 2. No wind turbine generator blades forming part of the authorised development may be installed until the approved Primary Radar Mitigation Scheme has been implemented and the authorised development must thereafter be operated fully in accordance with the approved scheme. For the purpose of paragraphs 1 and 2 above: **"Operator"** means NATS (En Route) plc, incorporated under the Companies Act (4129273) whose registered office is 4000 Parkway, Whiteley, Fareham, Hampshire PO15 7FL or such other organisation licensed from time to time under sections 5 and 6 of the Transport Act 2000 to provide air traffic services to the relevant managed area (within the meaning of section 40 of that Act). "**Primary Radar Mitigation Scheme**" or "**Scheme**" means a detailed scheme agreed with the Operator which sets out the measures to be taken to mitigate the impact of the development on the primary radars located at Claxby and Cromer and the associated air traffic management operations of the Operator.	This comment is welcomed by the Applicant. The Requirement requested is included as Requirement 31 within the draft DCO (document 3.1, V10, submitted at Deadline 6). Therefore, the Applicant considers the NATS objection to now be fully addressed.

2.9 The Applicant's Response to Natural England's Deadline 5 Submission Response

Table 2-17: The Applicant's Comments on the Natural England's Deadline 5 Cover Letter

Ref	Natural England's Submission	Applicant Response
0	The following constitutes Natural England's formal statutory response for the Outer Dowsing Offshore Windfarm (ODOW) Examination Deadline 5.	
1. Natural England's Deadline 5 Submissions		
1.1	For Deadline 5, Natural England has reviewed the documents relevant to our statutory remit submitted by the Applicant at Deadline 4a on 26 February 2025. An update of Natural England's position regarding these documents is provided in Annex 1, including an indication where responses were deferred from Deadline 4 and where, due to the volume of documentation, we will defer our response to Deadline 6. Natural England is submitting the following Appendices at Deadline 5: • EN010130 501521 ODOW Appendix A - DCO and DML Deadline 5 • EN010130 501521 ODOW Appendix B3 - Natural England's Advice on Marine Processes Deadline 5 • EN010130 501521 ODOW Appendix C6 - Natural England's Advice on Benthic Ecology Deadline 5 • EN010130 501521 ODOW Appendix E3 - Natural England's Advice on Marine Mammals Deadline 5 • EN010130 501521 ODOW Appendix F5 - Natural England's Advice on Offshore and Intertidal Ornithology Deadline 5 • EN010130 501521 ODOW Appendix G3 - Natural England's Updated Advice on Seabird Compensation Calculations • EN010130 501521 ODOW Appendix H7 - Natural England's Advice on Onshore Ecology Deadline 5 • EN010130 501521 ODOW Appendix H8 - Natural England's Final Advice on Soils Deadline 5 • EN010130 501521 ODOW Appendix I3 – Natural England's Advice on Onshore Ornithology Deadline 5 • EN010130 501521 ODOW Appendix J5 - Natural England's NE Risk and Issues Log Deadline 5 • EN010130 503121 ODOW Appendix K3 – Natural England's Comments to the RIES Deadline 5	
2. Natural England's Engagement through Examination		
2.1	Natural England continues to highlight to the ExA and the Applicant 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. Therefore, we have not responded to commentary on our submissions, other Interested Parties' representations/submissions or to comments from the Applicant or other stakeholders on the Risk and Issues Log, unless the ExA questions have directed us to do so.	

Ref	Natural England's Submission	Applicant Response
3. Removal of Benthic Compensation Measures from the DCO		
3.1	Natural England notes the changes to the DCO [REP4a-007] to remove the following compensation options; the removal of marine debris, sandbank protection measures, biogenic reef protection measures and seagrass bed habitat creation/restoration. Natural England supports the removal of these compensation options but highlights that relevant benthic compensation documents should also be updated to reflect this change. Please see our advice in Appendix A.	The Applicant welcomes this support from Natural England. The measures removed from the DCO have also been removed from the following documents, updated at Deadline 5: 7.6.1 Without Prejudice Sandbank Compensation Plan (REP5-105) 7.6.2 Without Prejudice Biogenic Reef Compensation Plan (REP5-107) 7.6.3 Without Prejudice Benthic Compensation Evidence Base and Roadmap (REP5-109)
4. Greater Wash SPA Red-throated diver – use of a 2km buffer		
4.1	Following our advice at Deadline 4a [REP4a-137] Natural England notes and supports the inclusion of a seasonal restriction within the DCO [REP4a-007] for cable laying works or installation of the offshore reactive compensation platforms (ORCP) within the Greater Wash SPA. However, we note the wording of the DCO restriction within the DCO should also include a 2km buffer area to the SPA, which the current drafting does not include.	The DCO drafting was updated at Deadline 5 to incorporate the 2km buffer area to the SPA suggested by Natural England.
5. Natural England's updated advice on Seabird Compensation Calculations		
5.1	Natural England had previously advised that the Hornsea 3 part 2 method for guillemot and razorbill was the most applicable method for calculating seabird compensation requirements, as set out in [REP3-071]. However, since the advice was provided it has become apparent that lower levels of natal dispersal, compounded by older recruitment ages and lower productivity, along with other issues, can produce unrealists and disproportionate requirements for scaling compensatory measures for these species. Therefore, pending further refinements and updates to best practice advice, Natural England advises that it is appropriate for the Applicant to use the Hornsea 4 method for guillemot and razorbill, provided the 95% upper confidence interval (UCI) impact value and an appropriate ratio is used in the calculations. For kittiwake, our advice continues to be that the Hornsea 3 part 2 method is used.	The Applicant welcomes Natural England advising that the Hornsea 4 method for guillemot and razorbill is appropriate and is submitting updated versions of the documents detailed below at Deadline 6 to reflect this methodology update: 7.1 Report to Inform Appropriate Assessment (document reference 3.1, V5, submitted at Deadline 6) 7.1.2 HRA Population Viability Analysis (document reference 3.1, V5, submitted at Deadline 6) 7.7.1 Kittiwake Compensation Plan (document reference 7.1.2, V3, submitted at Deadline 6) 7.7.2 Guillemot Compensation Plan (document reference 7.7.2, V3, submitted at Deadline 6) 7.7.3 Razorbill Compensation Plan (document reference 7.7.3, V3, submitted at Deadline 6) 7.7.4 Offshore Artificial Nesting Structure Evidence Base and Roadmap (document reference 7.7.4, V3, submitted at Deadline 6) 7.7.6 Additional Measures for Compensation of Guillemot and Razorbill (document reference 7.7.6, V4, submitted at Deadline 6)
5.2	Natural England's updated advice on this matter is set out into Appendix G3 of our Deadline 5 submission.	The Applicant has responded to this advice in The Applicant's Comments on Deadline 5 Submissions (document reference 24.2, V1, submitted at Deadline 6) submitted at deadline 6.
6. Additional Compensation Measures for Guillemot and Razorbill		

Ref	Natural England's Submission	Applicant Response
6.1	Natural England welcomes the progress made by the Applicant in progressing the measures relating to recreational disturbance impacts on auk colonies in South West England, including progressing towards agreements with suitable partners.	The Applicant echoes the ExA's comments at Issue Specific Hearing 8 that the submission of any new information at Deadline 6, to which the Applicant should reasonably be given an opportunity to respond, risks not being accepted into the Examination. The Applicant suggests that such evidence should be afforded limited weight.
6.2	We will respond in full to the Applicant's updated compensatory measures documents at Deadline 6.	
7. Kittiwake Artificial Nest Structure Compensation Measure - Lead-in periods for kittiwake breeding on Artificial Nesting Structures (ANS)		
7.1	Natural England will respond to 19.11 Lead-in periods for kittiwake breeding on Artificial Nesting Structures (ANS) [REP4-105] at Deadline 6, including comment on the DCO condition wording, in Schedule 22 Part 1 Para 4 (iii) and 5, [REP4-007, REP4a-007].	The Applicant echoes the ExA's comments at Issue Specific Hearing 8 that the submission of any new information at Deadline 6, to which the Applicant should reasonably be given an opportunity to respond, risks not being accepted into the Examination. The Applicant suggests that such evidence should be afforded limited weight.
8. Noise Abatement Systems and Natural England's position on 'Best Endeavours'		
8.1	Natural England has reviewed the Applicant's submission at Deadline 4a on the 'Use of Best Endeavours in the context of Policy Paper Reducing Marine Noise' [REP4a-118].	The Applicant has responded to these in Row 4.21, Table 3.13 of this document. The Applicant has committed to deploy primary and/or secondary noise reduction methods (Noise Abatement Systems) for pile driving, unless otherwise agreed with the MMO. The Applicant considers that this resolves NE concerns around the use of 'best endeavours'. The Applicant has also submitted updated Report to Inform Appropriate Assessment (document reference 7.1, V5, submitted at Deadline 6), Offshore In Principle Monitoring Plan (document reference 8.3, V3, submitted at Deadline 6), Schedule of Mitigation (document reference 8.13, V7, submitted at Deadline 6), Outline Marine Mammal Mitigation Protocols for both Piling (document reference 8.6.1, V6, submitted at Deadline 6) and Unexploded Ordnance (document reference 8.6.2, V5, submitted at Deadline 6) at Deadline 6 to reflect the updated commitment.
8.2	Please refer to Appendix E3 of Natural England's Deadline 5 submission for further information and advice regarding this matter, in addition to advice relating to the Report to Inform Appropriate Assessment [REP4-031], the Offshore In Principle Monitoring Plan [REP4a-074], Schedule of Mitigation [REP4-074, REP4a-074] and Outline Marine Mammal Mitigation Protocols for both Piling [REP4a-099] and Unexploded Ordnance (UXO) [REP4a-101].	
9. Interim Population Consequences of Disturbance (iPCoD) Modelling Report		
9.1	Natural England is in the processes of reviewing the updated Interim Population Consequences of Disturbance iPCoD modelling report [REP4a-107] and acknowledges the amendments the Applicant has made in response to our feedback at Deadline 4a. Natural England will look to provide a response on [REP4a-107] as soon as possible prior to Deadline 6.	The Applicant has responded to advice received on the IPCoD modelling report (document reference 15.12) from Natural England in Table 24 of The Applicant's Comments on Deadline 5 Submissions (document reference 24.2), submitted at Deadline 6. The Applicant can confirm that, as requested by NE, iPCoD in-combination modelling has been undertaken and submitted at Deadline 6 (document reference 6.3.11.3, V1, submitted at Deadline 6).
10. In Principle Monitoring Plan (IPMP)		
10.1	While advice is provided on the IPMP within several thematic areas, Natural England intends to draw this advice together and provide further comment to the updated IPMP [REP4a-074] at Deadline 6.	The Applicant echoes the ExA's comments at Issue Specific Hearing 8 that the submission of any new information at Deadline 6, to which the Applicant should reasonably be given an opportunity to respond, risks not being accepted into the Examination. The Applicant suggests that such evidence should be afforded limited weight.

Table 2-18: The Applicant's Response to Annex 1: Natural England's Response/Summary Position to the Applicant's Documents Submitted at Deadline 4a and those deferred from Previous Deadlines

Annex 1: Natural England's Response/Summary Position to the Applicant's Documents Submitted at Deadline 4a and those deferred from Previous Deadlines			The Applicant's Response
PD-022	Report on the Implications for European Sites (RIES)	Natural England's response to this document is provided in Appendix K3.	
REP4a-141	1.2 Guide to the Application V9	Natural England has no comments to make on this document.	
REP4a-001	2.0 Schedule of Changes for Plans V7	Natural England has no comments to make on this document.	
REP4a-145	22.1 The Applicant's Deadline 4a Covering Letter	Natural England has no comments to make on this document.	
REP4a-121	22.10 Applicant's Position on Natural l England's Engagement in Examination	Natural England has no comments to make on this document.	
REP4a-120	22.9 The Applicant's Response to Action Points Recorded at ISH5 and ISH6	Natural England has no comments to make on this document.	
REP4a-117	22.5 The Applicant's Written Summaries of Oral Cases Put at Issue Specific Hearing 6 held on 13 February 2025	Natural England has no comments to make on this document.	
REP4a-116	22.4 The Applicant's Written Summaries of Oral Cases Put at Issue Specific Hearing 5 held on 12 February 2025	Natural England has no comments to make on this document.	
REP4a-003	2.2 Offshore Works Plans V4	Natural England has no comments to make on this document.	
REP4-107	21.2 The Applicant's Responses to the Examining Authority's Written Questions 2	Natural England has reviewed with consideration to our response at Deadline 5. We reserve the right to respond should this b required.	
REP4a-110	21.2 The Applicant's Responses to the Examining Authority's Written Questions 2 V2	Natural England has no comments to make on this document.	
REP4-108	21.3 The Applicant's Comments on Deadline 3 Submissions	Natural England has reviewed with consideration to our response at Deadline 5. We reserve the right to respond should this be required.	
REP4a-114	22.2 The Applicant's Comments on Responses to the ExAs Second Written Questions	Natural England has no comments to make on this document. We reserve the right to respond further should this be required.	

Annex 1: Natural England's Response/Summary Position to the Applicant's Documents Submitted at Deadline 4a and those deferred from Previous Deadlines The Applicant's Response			
REP4a-115	22.3 The Applicant's Comments on Deadline 4 Submissions	Natural England has reviewed with consideration to our response at Deadline 5. We reserve the right to respond should this be required.	
REP4a-093	8.2 Outline Offshore Operations and Maintenance Plan V2 (Tracked)	Natural England's response to this document is provided in Appendix C6 and B3.	
REP4a-074	8.3 Offshore In Principle Monitoring Plan V2 (Tracked)	Natural England's response to this document will be at Deadline 6 to take account of further submissions by the Applicant at D5.	
REP4a-095	8.4 Outline Project Environmental Management Plan V2 (Tracked)	Natural England has no comments to make on this document.	
REP4a-087	8.13 Schedule of Mitigation V5 (Tracked)	Natural England's response to this document is provided in Appendix C6, E3, H7 and I3.	
REP4a-103	8.20 Outline Vessel Management Plan V2 (Tracked)	Natural England has no comments to make on this document.	
REP4-113	21.8 The Applicant's Comments on Natural England's Risk and Issues Log	Natural England has reviewed with consideration to our response at Deadline 5. We reserve the right to respond should this be required.	
REP4a-111	21.8 The Applicant's Comments on Natural England's Risk and Issues Log V2	Natural England has reviewed this document, we have no comments to make on this document at this time.	
REP4a-144	Late Submissions Accepted at the Discretion of the ExA - 8.13 Schedule of Mitigation (Tracked)	Natural England's response to this document is provided in Appendix C6, E3, and I3.	
REP4-030	7.1 Report to Inform Appropriate Assessment V3 (Clean) Redacted	Natural England's response to this document is provided i Appendix B3, C6, F5, H7 and I3.	
REP4-032	7.1 Report to Inform Appropriate Assessment V3 (Tracked) CONFIDENTIAL	Natural England has responded to REP4-031.	
REP4-031	7.1 Report to Inform Appropriate Assessment V3 (Tracked) Redacted_Reduced	Natural England's response to this document is provided i Appendix B3, C6, F5, H7 and I3.	
REP4-038	7.2 Habitats Regulations Assessment Screening Report V2 (tracked)	Natural England's response to this document is provided i Appendix F5 and H7.	

Annex 1: Natural England's Response/Summary Position to the Applicant's Documents Submitted at Deadline 4a and those deferred from Previous Deadlines	The Applicant's Response		
REP4-040	7.3 Report to Inform Appropriate Assessment Appendix 1 Screening Matrices (tracked)	Natural England's response to this document is provided i Appendix F5 and H7.	
REP4-042	7.4 Report to Inform Appropriate Assessment Integrity Matrices (tracked)	Natural England's response to this document is provided i Appendix F5 and H7.	
REP4-044	7.5 Habitats Regulations Assessment Derogation Case V2 tracked	Natural England has responded in Appendix D1 [REP4a-136].	
DCO			
REP4-009	3.1 Draft Development Consent Order (Change Request) V7.1 (Tracked)	Natural England's response to this document is provided in Appendix A.	
REP4a-007	3.1 Draft Development Consent Order V8 Tracked	Natural England's response to this document is provided in Appendix A.	
REP4a-008	3.1.1 Schedule of Changes to the Draft DCO	Natural England's response to this document is provided in Appendix A.	
REP4a-010	3.2 Explanatory Memorandum V6 Tracked	Natural England has no comments to make on this document.	
PD-026	The Examining Authority's (ExA) Consultation draft Development Consent Order (dDCO)	Natural England's response to this document is provided in Appendix A	
Onshore Ecology and Soils			
REP4-070	8.1.3 Outline Soil Management Plan V4 (Tracked)	Natural England's response to this document is provided in Appendix H8.	
REP4-117	21.12 BMV Quantitative Cumulative Assessment	Natural England's response to this document is provided in Appendix H8.	
REP4a-002	2.1 Onshore Works Plans V4	Natural England has no comments to make on this document.	
REP4a-005	2.18 Onshore Crossing Plan V6	Natural England has no comments to make on this document.	
REP4a-014	6.1.19 Chapter 19 Onshore Air Quality V3 Tracked	Natural England's response to this document is provided in Appendix H7.	
REP4a-143	6.2.19 Chapter 19 Air Quality Figures V2	Natural England has no comments to make on this document.	
REP4a-016	6.1.23 Chapter 23 Geology and Ground Conditions V2 Tracked	Natural England's response to this document is provided in Appendix H8.	
REP4a-032	6.2.23 Chapter 23 Geology and Ground Conditions Figures V3	Natural England has no comments to make on this document.	

Annex 1: Natural England's Response/Summary Position to the Applicant's Documents Submitted at Deadline 4a and those deferred from Previous Deadlines The Applicant's Response			
REP4a-018	6.1.24 Chapter 24 Hydrology Hydrogeology and Flood Risk V2 Tracked	Natural England has no comments to make on this document.	
REP4a-033	6.2.24 Chapter 24 Hydrology, Hydrogeology and Flood Risk Figures V2	Natural England has no comments to make on this document.	
REP4a-020	6.1.25 Land Use Chapter V3 Tracked	Natural England has no comments to make on this document.	
REP4a-034	6.2.25 Chapter 25 Land Use Figures V3	Natural England's response to this document is provided i Appendix H8.	
REP4a-060	6.1.25.1 Chapter 25 Appendix 1 BMV Regional and National Context	Natural England's response to this document is provided i Appendix H8.	
REP4a-022	6.1.26 Chapter 26 Onshore Noise and Vibration V2 Tracked	Natural England's response to this document is provided i Appendix H7.	
REP4a-035	6.2.26 Chapter 26 Noise and Vibration Figures V2	Natural England has no comments to make on this document.	
REP4a-068	6.3.3.2 Chapter 3 Appendix 2 Onshore Crossing Schedule V7 Tracked	Natural England has no comments to make on this document.	
REP4a-057	6.3.23.1 Preliminary Land Quality Risk Assessment V3 Tracked	Natural England has no comments to make on this document.	
REP4a-059	6.3.24.1 Chapter 24 Appendix 1 Groundwater Risk Assessment. V2 Tracked	Natural England has no comments to make on this document.	
REP4a-062	6.3.26.4 Chapter 26 Appendix 4 Noise Model Outputs. V2 Tracked	Natural England has no comments to make on this document.	
REP4-068	8.1 Outline Code of Construction Practice V5 (Tracked)	Natural England's response to this document is provided i Appendix H8.	
REP4a-076	8.1 Outline Code of Construction Practice V6 (Tracked)	Natural England has no comments to make on this document.	
REP4a-078	8.1.2 Outline Air Quality Management Plan V2 (Tracked)	Natural England's response to this document is provided i Appendix H7.	
REP4a-080	8.1.3 Outline Soil Management Plan V5 (Tracked)	Natural England has no comments to make on this document.	
REP4a-082	8.1.7 Outline Organic Land Protocol V2 (Tracked)	Natural England has no comments to make on this document.	
REP4a-086	8.10 Outline Landscape & Ecological Management Strategy V6 (Confi Tracked)	Natural England's response to this document is provided i Appendix H7.	

Annex 1: Natural England's Response/Summary Position to the Applicant's Documents Submitted at Deadline 4a and those deferred from Previous Deadlines	The Applicant's Response		
REP4a-084	8.10 Outline Landscape & Ecological Management Strategy V6 (Tracked)	Natural England's response to this document is provided i Appendix H7 and Appendix I3.	
Offshore and Intertidal Ornithology			
REP4-019	6.3.12.6 MRSea Modelling for Offshore Ornithology V2 Tracked	Natural England has provided an update to this document in Appendix J5 – Natural England's Risks and Issues Log submitted at Deadline 5	
REP4-105	19.11 Lead-in Periods for Kittiwake Breeding on ANS V2 Tracked	Natural England will provide a response to this document at Deadline 6.	The Applicant echoes the ExA's comments at Issue Specific Hearing 8 that the submission of any new information at Deadline 6, to which the Applicant should reasonably be given an opportunity to respond, risks not being accepted into the Examination. The Applicant suggests that such evidence should be afforded limited weight.
REP4-034	7.1.1 Offshore and Intertidal Ornithology Apportioning V3 (Tracked)	Natural England's response to this document is provided i Appendix F5	
REP4-036	7.1.2 Ornithology Population Viability Analysis Habitats Regulations Assessment V2 (Tracked)	Natural England's response to this document is provided in Appendix F5	
REP4-054	7.7 Ornithology Compensation Strategy V2 Tracked	Natural England has no comments to make on this document.	
REP4-056	7.7.1 Kittiwake Compensation Plan Tracked	Natural England will provide a response to this document at Deadline 6	The Applicant echoes the ExA's comments at Issue Specific Hearing 8 that the submission of any new information at Deadline 6, to which the Applicant should reasonably be given an opportunity to respond, risks not being accepted into the Examination. The Applicant suggests that such evidence should be afforded limited weight.
REP4-058	7.7.2 Guillemot Compensation Plan Tracked	Natural England will provide a response to this document at Deadline 6	
REP4-059	7.7.3 Razorbill Compensation Plan V2 Tracked	Natural England will provide a response to this document at Deadline 6	
REP4-062	7.7.4 Offshore Artificial Nesting Structure Evidence Base and Roadmap V2 Tracked	Natural England will provide a response to this document a Deadline 6	
REP4-064	7.7.5 Without Prejudice Predator Control Evidence Base and Road Map V3 (Tracked)	Natural England will provide a response to this document a Deadline 6	
REP4-066	7.7.6 Additional Measures for Compensation of Guillemot and Razorbill Tracked	Natural England will provide a response to this document a Deadline 6	
REP4-081	8.23 Outline ORCP Lighting Management Plan	Natural England has no comments to make on this document.	

Annex 1: Natural England's Response/Summary Position to the Applicant's Documents Submitted at Deadline 4a and those deferred from Previous Deadlines			The Applicant's Response
REP4-076	8.18 Design Approach Document V2 (Tracked)	Natural England has no comments to make on this document.	
REP4-078	8.19 Design Principles Statement V2 (Tracked)	Natural England has no comments to make on this document.	
REP4-121	21.16 ORCP Design Principles Statement	Natural England has no comments to make on this document.	
REP4a-012	6.1.12 Chapter 12 Offshore and Intertidal Ornithology V2 Tracked	Natural England's response to this document is provided i Appendix F5	
No Ref Number	6.2.12 Chapter 12 Offshore and Intertidal Ornithology Figures V2	Natural England has no comments to make on this document.	
REP4a-030	6.3.12.1 Chapter 12 Appendix 1 Intertidal and Offshore Ornithology Technical Baseline V2	Natural England has no comments to make on this document.	
REP4a-147	6.3.12.2 Chapter 12 Appendix 2 Collision Risk Modelling V2	Natural England's response to this document is provided i Appendix F5.	
REP4a-148	6.3.12.3 Chapter 12 Appendix 3 Displacement Assessment V2	Natural England's response to this document is provided i Appendix F5.	
REP4a-149	6.3.12.4 Chapter 12 Appendix 4 Population Viability Analysis V2	Natural England's response to this document is provided i Appendix F5.	
REP4a-150	6.3.12.5 Chapter 12 Appendix 5 Migratory Collision Risk Modelling V2	Natural England's response to this document is provided i Appendix F5.	
REP4a-049	6.3.12.7 Chapter 12 Appendix 7 Levels of precaution in the assessment and confidence calculations V2 Tracked	Natural England has no comments to make on this document a this Deadline. We reserve the right to comment at a later date i required.	
REP4a-051	6.3.12.8 Chapter 12 Appendix 8 Consideration of bioseasons in the assessment of guillemot V2 Tracked	Natural England has no comments to make on this document a this Deadline. We reserve the right to comment at a later date i required.	
REP4a-053	6.3.12.9 Chapter 12 Appendix 9 Rates of displacement in guillemot and razorbill V2 Tracked	Natural England has no comments to make on this document a this Deadline. We reserve the right to comment at a later date i required.	
REP4a-072	7.7.6 Additional Measures for Compensation of Guillemot and Razorbill V2 (Tracked)	Natural England will provide a response to this document a Deadline 6.	The Applicant echoes the ExA's comments at Issue Specific Hearing 8 that the submission of any new information at Deadline 6, to which the Applicant should reasonably be given an opportunity to respond, risks not being accepted into the Examination. The Applicant suggests that such evidence should be afforded limited weight.
REP4a-109	20.17 Guillemot and Razorbill Compensation Quanta V2 (Tracked)	Natural England will provide a response to this document a Deadline 6.	

Annex 1: Natural England's Response/Summary Position to the Applicant's Documents Submitted at Deadline 4a and those deferred from Previous Deadlines	The Applicant's Response		
REP4a-113	21.16 ORCP Design Principles Statement V2 (Tracked)	Natural England has no comments to make on this document.	
Benthic			
REP4a-069	6.3.9.2 Chapter 9 Appendix 2 Benthic Ecology Technical Report (ECC) V4	Natural England's response to this document is provided in Appendix C6.	
REP4a-070	6.3.9.6 Chapter 9 Appendix 6 Envision *Sabellaria spinulosa* reanalysis and report (V3)	Natural England's response to this document is provided in Appendix C6.	
REP4a-097	8.5 Cable Specification and Installation Plan V5 (Tracked)	Natural England's response to this document is provided in Appendix C6 and B3.	
REP4a-105	8.21 Outline Cable Protection and Scour Protection Management Plan V3 (Tracked)	Natural England's response to this document is provided in Appendix C6.	
REP4a-122	22.11 Sabellaria spinulosa reef supporting habitat Technical Note	Natural England's response to this document is provided in Appendix C6 and B3.	
Marine Mammals			
REP4-100	15.12 Interim Population Consequences of Disturbance Modelling Report V2 Tracked	Natural England has no comments to make on this document as superseded by REP4a-107. Please refer to row below for Natural England's comment on REP4a-107.	
REP4a-107	15.12 Interim Population Consequences of Disturbance Modelling Report V3 (Tracked)	Natural England will provide a response to this document at Deadline 6. Please refer to Section 9 of this cover letter.	The Applicant echoes the ExA's comments at Issue Specific Hearing 8 that the submission of any new information at Deadline 6, to which the Applicant should reasonably be given an opportunity to respond, risks not being accepted into the Examination. The Applicant suggests that such evidence should be afforded limited weight.
REP4a-099	8.6.1 Outline Marine Mammal Mitigation Protocol Piling V5 (Tracked)	Natural England's response to this document is provided in Appendix E3	
REP4a-101	8.6.2 Outline Marine Mammal Mitigation Protocol UXO V4 (Tracked)	Natural England's response to this document is provided in Appendix E3	
REP4a-118	22.7 Use of Best Endeavours in the context of Policy Paper Reducing Marine Noise	Natural England's response to this document is provided in Appendix E3. Please also refer to Section 8 of this cover letter	

Annex 1: Natural England's Response/Summary Position to the Applicant's Documents Submitted at Deadline 4a and those deferred from Previous Deadlines The Applicant's Response			
Marine Physical Processes			
REP4a-142	Late Submissions Accepted at the Discretion of the ExA - 6.1.7 Chapter 7 Marine Physical Processes	Natural England's response to this document is provided in Appendix B3.	
REP4a-151	Late Submissions Accepted at the Discretion of the ExA - 6.1.7 Chapter 7 Marine Physical Processes V2 (Tracked	Natural England's response to this document is provided in Appendix B3.	
REP4a-029	6.1.7 Chapter 7 Marine Physical Processes	Natural England's response to this document is provided in Appendix B3.	
REP4a-041	6.2.7 Chapter 7 Marine Physical Processes Figures V2 (Part 1 of 2)	Natural England's response to this document is provided in Appendix B3.	
REP4a-042	6.2.7 Chapter 7 Marine Physical Processes Figures V2 (Part 2 of	Natural England's response to this document is provided in Appendix B3.	

Table 2-19: The Applicant's Comments on the Natural England's Deadline 5 Appendix A DCO & DMLs

Ref	Natural England's D5 Submission	The Applicant's Response
General Information		
0.1	In formulating these comments, the following documents have been considered: • [REP4a-007] 3.1 Draft Development Consent Order V8 (Tracked) • [REP4a-008] 3.1.1 Schedule of Changes of the draft DCO • [REP4-007] 3.1 Draft Development Consent Order V7 (Tracked) • [REP4-009] 3.1 Draft Development Consent Order (Change Request) V7.1 (Tracked)	
1.Introduction		
1.1	Natural England welcomes the change to require consultation from the Statutory Nature Conservation Body on the soil management plan, as highlighted in Schedule 1, Part 3, Requirement 31 [REP4a-008]. Furthermore, Natural England has reviewed the Examining Authority's (ExA) Consultation draft Development Consent Order (dDCO) [PD-026], but have no comments currently. Please find below our advice on outstanding and new issues from documents submitted at Deadline 4 and 4a.	This comment is welcomed by the Applicant.
2. Development Consent Order – Change Request		
2.1	Within the Draft Development Consent Order [REP4-007, REP4a-007], Schedule 22 Part 1 Para 4 (iii) and 5, Natural England notes that the timing requirement for Kittiwake compensation to be in place has been reduced from 3 full breeding seasons to 2. We reiterate our concerns raised in our Relevant and Written reps [RR-045] issues A2 and A16 where we requested compensation be in place **four full breeding seasons prior to operation**. We would note ongoing compensation for other projects have	The Applicant refers to the evidence submitted in Lead-in periods for kittiwake on artificial nesting structures at Deadline 4 (REP4-104), which provides the evidence base for the justification for the proposed two breeding season timing requirement and takes account of comments made by Natural England during consultation. The Applicant maintains that the requirement that the ANS is implemented two full breeding seasons prior to operation is appropriate and justified.

Ref	Natural England's D5 Submission	The Applicant's Response
	encountered significant issues and adaptive management measures have been needed delaying the compensation providing any recruits into the kittiwake population. We would further note that while this change is shown in tracked changes it is not covered in the schedule of changes.	With regard to delayed recruitment (the applicant assumes that the significant issues noted by NE relate to this), The Applicant's ANS are situated close to well established offshore breeding populations where breeding opportunities are limited to suitable platforms, as opposed to existing ANSs which are situated near to urban colonies where suitable habitat is abundant within and around the existing colony. As such the Applicant considers that issues regarding colonisation are much less likely to arise with the Project's offshore ANSs.
2.2	Natural England is actively considering the proposed change regarding the reduction in leadin time [REP4-009]. Our advice on this matter will be provided at Deadline 6 in relation to 19.11 Lead-in Periods for Kittiwake Breeding on ANS [REP4-105].	The Applicant echoes the ExA's comments at Issue Specific Hearing 8 that the submission of any new information at Deadline 6, to which the Applicant should reasonably be given an opportunity to respond, risks not being accepted into the Examination. The Applicant suggests that such evidence should be afforded limited weight.
3. Red Throated Diver Mitigation		
3.1	Natural England notes and supports the inclusion of a seasonal restriction for cable laying works or installation of compensation platforms within the Greater Wash Special Area of Protection (SPA), within Schedule 11, Part 2, Condition 25 [REP4a-008]. However, we note the restriction should also include a 2km buffer area to the SPA, which the current drafting does not include. This new issue has been incorporated into Natural England's risk and issues log Appendix J5 Ref 27.	The Applicant updated condition 25, Part 2, Schedule 11 of the draft DCO (3.1) at Deadline 5 to include the requested 2km buffer.
4. Benthic Compensation		
4.1	Natural England notes the inclusion of new wording within Schedule 22, Part 1, in paragraph 4 [REP4a-008], where multiple sections now include further requirements to clarify the requirement for various types of third-party compensation agreements. These changes partly, but not fully, address our concerns raised in our relevant representations NE Ref A1 and A15 (RR-045]. In addition, Natural England notes the changes to remove the following compensation options; the removal of marine debris, sandbank protection measures, biogenic reef protection measures and seagrass bed habitat creation/restoration. Natural England supports the removal of these project level compensation options, but we note that compensation documents require updating to reflect this change.	The Applicant refers to its comments at page 14, section 10 of the Applicant's Comments on Deadline 4a Submissions (REP5-150) and believes that Natural England's comments on Schedule 22 of the DCO are now fully addressed. The following documents were updated at Deadline 5 to reflect the narrowing of benthic compensation options: • Without Prejudice Sandbank Compensation Plan (REP5-105); • Without Prejudice Biogenic Reef Compensation Plan (document reference 7.6.2, V4, submitted at Deadline 6); and • Without Prejudice Benthic Compensation Evidence Base and Roadmap (document reference 7.6.3, V4, submitted at Deadline 6).
5. Cable Protection		
5.1	Within both Schedule 10 and 11 [REP4a-008] Natural England advises that a condition should be applied to all DMLs with wording similar to that outlined below, which will require return of information in relation to the as-built scenario, including the location, volume, area and coordinates of the cable protection laid. This new issue has been incorporated into Natural England's risk and issues log Appendix J5 Ref 28. • (1) Not more than 4 months following completion of the construction phase of the authorised scheme, the undertaker must provide the MMO and the relevant statutory nature • conservation bodies with a report setting out details of the cable protection used for the authorised scheme. • (2) The report must include the following information— • (a) location of the cable protection.	The Applicant has updated condition 23, Part 2, Schedules 10 and 11 at Deadline 6 to incorporate the substance of the requested condition.

Ref	Natural England's D5 Submission	The Applicant's Response
	• (b) volume and area of cable protection; and • (c) any other information relating to the cable protection as agreed between the MMO and the undertaker. • (3) For any subsequent deployments of cable protection following the completion of construction, the undertaker will provide an updated report as defined in (1) and (2) not more than 4 months following deployment of the cable protection	

Table 2-20: The Applicant's Comments on the Natural England's Deadline 5 Appendix B3 Marine Physical Processes

Ref	Natural England's D5 Submission	The Applicant's Response
General Information		
0.1	In formulating these comments, the following documents have been considered: • [REP4a-151] Late Submissions Accepted at the Discretion of the ExA 6.1.7 Chapter 7 Marine Physical Processes V2 (Tracked) • [REP4a-142] Late Submissions Accepted at the Discretion of the ExA 6.1.7 Chapter 7 Marine Physical Processes • [REP4a-041] 6.2.7 Chapter 7 Marine Physical Processes Part 1 of 2 • [REP4a-042] 6.2.7 Chapter 7 Marine Physical Processes Part 2 of 2 • [REP4a-029] 6.1.7 Chapter 7 Marine Physical Processes • [REP4a-074] 8.3 Offshore In-Principle Monitoring Plan V2 (Tracked) • [REP4a-093] 8.2 Outline Offshore Operations and Maintenance Plan V2 (Tracked) • [REP4a-097] 8.5 Cable Specification and Installation Plan V5 (Tracked) • [REP4a-105] 8.21 Outline Scour Protection and Cable Protection Management Plan (Tracked) • [REP4a-111] 21.8 The Applicant's Comments on Natural England's Risk and Issues Log V2	
1. Introduction		
1.1	Natural England notes that there are three Deadline 4a Chapter 7 Marine Physical Processes documents. Therefore, we have based our advice on the most recent and tracked changes version of this document – REP4a-151.	
2. Detailed Comments		
2.1	Natural England provides detailed comments and advice to the above documents submitted by the Applicant in Tables 1 and 2 below.	

Table 2-21: The Applicant's Response to Table 1: Natural England's Detailed Advice on 6.1.7 chapter 7 Marine Physical Processes (Version 2) (Tracked) [REP4a-151]

Ref	Section	Key Concern and/or Update	Natural England's Advice to Resolve Issues	The Applicant's Response
1	Para 40	The Applicant states that data from NCERM2 indicates that the main risk on this part of the coast is from flooding, and no erosion risk information is provided (Environment Agency, 2024).	Natural England advises that this needs to be clarified, as 'no information provided' does not necessarily mean no erosion, just that the data has not been provided.	Information from the NCERM2 dataset (as presented in https://environment.data.gov.uk/shoreline-planning/coastal-erosion) at the landfall location (Anderby Creek) shows a Flood Frontage, with the associated information provided: "The main risk on this part of the coast is from flooding,

Ref	Section	Key Concern and/or Update	Natural England's Advice to Resolve Issues	The Applicant's Response
				and no erosion risk information is provided. However, coastal processes may still include some erosion or land instability which may pose a risk to property." As outlined in Row 24 and Row 25, Table 1.18 of PD1-071, the Applicant was advised to consult the NCERM2 database as part of the pre-Application consultation with both Natural England and the Environment Agency (Table 7.2, REP4a-029). Outside of the NCERM2 dataset, Light Detection and Ranging (LiDAR) data from the National Network of Regional Coastal Monitoring Programmes (NNRCMP) has been used to assess change in the beach topography between 2016 and 2020. In addition, studies from the Environment Agency have been used to characterise the receiving environment, with sources ranging from 2011 to 2019 (Environment Agency, 2011; 2013a; 2019b; provided in Appendix 6.3.7.1 Physical Processes Technical Baseline (APP-150)). The Applicant consider these sources to represent the prevailing conditions at the landfall location, which are represented by continuing beach nourishment resulting in a long-term maintenance of the coastal position. The Applicant notes that as stated in REP5-156 (Environment Agency's Comments on any other submissions received at Deadline 4a) the Environment Agency have reviewed the updated Chapter 7 (REP4a-029, as submitted at Deadline 4a) and believe that this provides a satisfactory assessment of issues within the Environment Agency's remit. The Environment Agency have also stated (Statement of Common Ground with the Environment Agency (REP5-133)) that they are satisfied that all issues in respect of marine physical processes have been addressed in the ES and supporting documents, noting the inclusion of NCERM2 within the assessment.
2	Table 7.3	In Impact 4 (Modifications to the wave and tidal regime and associated potential impacts to morphological features), the MDS for cable protection now includes "*If cable protection is required in the nearshore (defined as the inner depth of closure out to 7.1m (LAT) water depth), concrete mattresses will be utilised*;" We note that this commitment has been secured in [REP4-083] and [REP4-079], which is welcomed. However, this does not explicitly state the MDS parameters for the nearshore cable protection. For example, with regards to the nearshore cable protection height, in [REP4-113] the Applicant has reiterated that the proposed concrete mattress is unlikely to exceed 0.35m, but also that the general dimensions of the concrete mattresses will be 6m x 3m x 0.3m height.	Natural England would welcome confirmation that the MDS nearshore cable protection height is 0.35m (based on the Applicant's rationale), and also the MDS nearshore cable protection length. Equally as previously highlighted in our Deadline 4a responses and REIS that mattresses will remain in situ in this dynamic environment and not be at risk from fishing activities.	The Applicant has committed to the use of concrete mattresses in the nearshore in addition to the commitment of the nearshore cable protection height to not exceed 0.35 m. This is secured in the (further) updated Outline Scour Protection and Cable Protection Management Plan (document reference 8.21, V5, submitted at Deadline 6). The Applicant provided the following clarifications on the nearshore cable protection directly to Natural England on 25th March 2025: • Length = 2,076 m • Area = 12,456 m^2 • Volume = 4,359 m^3 These clarifications present a basic calculation of the length, area and volume based on the parameters already included within ES Chapter 3 Project Description (REP5-009) and commitment to only use concrete mattresses in the nearshore area set out in section 3.2 of the Outline Cable Protection and

Ref	Section	Key Concern and/or Update	Natural England's Advice to Resolve Issues	The Applicant's Response
		Can the Applicant confirm, therefore, that the anticipated maximum height of nearshore cable protection will not exceed 0.35m? We agree that *"remedial protection is a final technical mitigation measure"* and appreciate that final engineering design will occur at a later stage but would wish the Applicant to provide a MDS cable protection length for the nearshore.		Scour Protection Management Plan (document reference 8.21, V5, submitted at Deadline 6). The Applicant notes Natural England's concerns regarding the movement of concrete mattresses due to storm events and/ or fishing activities. A typical concrete mattress weighs, approximately, 9.5 to 10 tonnes and mattresses will be designed to withstand adverse seabed and wave conditions (such mattress designs are readily available on the market). With regards to fishing, the Applicant has liaised with our specialist consultant who directly liaised with fishermen from the area (05/03/25). It has been indicated that there is an absence of trawlers in the nearshore area. Concrete mattresses are more likely to embed into the seabed thus increasing their stability further. Additionally, ODOW are aware of design optimisations of tapered concrete mattresses increasing stability even further where deemed required. This will be defined in detail design stage post consent. To conclude, the Applicant is very confident that neither storm events nor fishing would impact on the stability or position of concrete mattresses.
3	Table 7.3/Pages 95-96	We note that Table 7.3 has been updated to include Impact 6: Potential impacts during operational and maintenance activities (i.e. inter-array, interlink and export cable remedial activities), including increases in SSC and potential changes in seabed levels and seabed morphology. This is welcome. However, this information has not be included within the Operation and Maintenance plan.	This issue is now resolved. However, we advise that the Applicant needs to ensure that these MDS parameters have also been taken into account in the relevant assessments (and thus plans/documents) for those ecological receptors that may be affected by these O&M activities.	The Applicant welcomes this issue being resolved. These MDS parameters have been taken into account in Chapter 9: Benthic, Subtidal and Intertidal Ecology (REP5-019; Impact 5) and Chapter 10: Fish and Shellfish Ecology (REP5-021; Impact 9). These chapters, along with Chapter 7: Marine Physical Processes (REP4a-029), have been cross-referenced within Table 1.1 of the Outline Offshore Operations and Maintenance Plan (REP4a-093), as appropriate.
4	Paras 173- 176	The assessment of changes to the wave and tidal regime (Impact 4) have not been fully considered or assessed for impacts to offshore sandbanks within and adjacent to the array, particularly those to the west and southwest where there are predicted distinct wave shadows.	Natural England advises that given wave climate is an important contributory factor in shaping these shallow water offshore sandbanks and in the sediment transport processes operating on and around them, this needs to be considered and better understood in the impact assessment.	The effects of the Project on changes to the wave regime on offshore sandbanks within and adjacent to the array area have been fully assessed in Paragraph 173 (magnitude of impact), Paragraph 179 (sensitivity of the receptor) and Paragraph 181 (significance of effect) of the updated Chapter 7 Marine Physical Processes (REP4a-029), submitted at Deadline 4a. As shown in Volume 2, Figure 7.25 (REP4a-042) 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. As outlined in Appendix 6.3.7.1 Physical Processes Technical Baseline (APP150), 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). Offshore sandbanks within and around the array area may be generally classified as open shelf linear sandbanks (Kenyon and Cooper, 2005). Wave processes are understood to be important in enhancing sediment

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				transport across the crest and limiting the limiting the vertical growth of banks of this type (Dyer and Huntley, 1999). However, 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.
5	Para 177	We note and welcome the removal of the GBS option for the ORCP foundations from the project design, which reduces tidal current blockage effects. We note that the impact assessment has also been updated in the updated ES Chapter 7 [REP4a-151]. However, currently there is insufficient detailed bathymetric data and high-resolution wave and tidal current modelling data results for the ORCP/SAC area to adequately demonstrate the scale and extent of potential changes to tidal currents in this area adjacent to the SAC.	Natural England advises that more detailed bathymetric and higher resolution wave and tidal current modelling result data for the ORCP/SAC area are needed to inform the impact assessment of potential seabed morphological change over the lifetime of the Project.	The Applicant maintains its position. Updated numerical model results have been presented within the updated Chapter 7 Marine Physical Processes (REP4a-029), submitted at Deadline 4a. This modelling is informed by pre-construction bathymetric data covering the Offshore ECC (GEOxyz, 2022R), as shown in Figure 4 of the Sandwave Levelling Study (REP3-047). The numerical modelling was carried out using best-practice methods as agreed with Natural England and other stakeholders prior to submission (as outlined in Table 7.2 of Chapter 7 (REP4a-029)). Details of the numerical modelling assumptions including the parameters, data sources and calibration/validation details are provided in Appendix 7.2: Physical Processes Numerical Modelling Report (APP-151). As shown in Figures 7.24 to 7.26 within the Chapter 7 Marine Physical Processes Figures Part 2 of 2 (REP4a-042): • Tidal flows are aligned north to south and as such there is limited pathway of effect from the ORCP to the SAC; • Predominant wave directions from the north and northeast towards the coast are such that any modifications to the wave regime occur away from the SAC and in the wave's direction of travel. As such there is limited pathway of effect from the ORCP to the SAC. This is supported by the sediment mobility results presented in REP4a-029 Annex A, with the locations of extraction points shown on Figure 7.8 (Chapter 7 Marine Physical Processes Figures Part 1 of 2 (REP4a-041)). 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. This is outlined in Paragraph 177 of REP4a-029. The effects arising from modification to the wave and tidal regime and associated potential impacts to seabed morphology resulting from the presence of the ORCPs have been identified as of minor adverse significance (at worst), which is not significant in EIA terms (Section 7.12.2.1 (Impact 4) of Chapter 7 (REP4a-029)). This assessment of minor adverse significance has

Ref	Section	Key Concern and/or Update	Natural England's Advice to Resolve Issues	The Applicant's Response
				therefore been made with due consideration of the proximity of the proposed ORCP area to the Inner Dowsing sandbank. The Applicant further notes that the removal of the GBS option for the ORCP further reduces the wave and hydrodynamic blockage impacts beyond that presented in the updated Chapter 7 Marine Physical Processes (REP4a-029). The siting of the ORCP to the west of the SAC has been undertaken with due regard to H&S, environmental and engineering parameters. As such, the Applicant does not believe that there is a requirement for the collection of more detailed bathymetric surveys or higher resolution wave and tidal modelling data. Therefore, the Applicant believes that all the necessary information required to achieve a robust EIA assessment has been included in the documentation submitted with the DCO application and during Examination.
6	7.12.2.3/Para 200	It is stated in Section 7.12.2.3 *that "...the Project area is characterised by a dynamic sediment environment that is conducive to the development and maintenance of mobile bedforms. Whilst cable repair works…may result in some interruption to the recovery of features, this will be over a localised area and infrequent, with feature recovery expected to commence following the completion of the works".* This does not take into account the conservation objectives for the IDRBNR SAC. Furthermore, given the uncertainty at present regarding the mobile bed layer thickness and seabed mobility, we do agree with this assumption.	We note that the IPMP [REP4a-074] has been updated to include monitoring of seabed and bedform recovery. Therefore, we advise that where sensitive areas of seabed are affected by remedial work impacts, the ES assumptions regarding bedform recovery should be validated. We would also wish to see the IPMP consider the need for adaptive monitoring if unforeseen impacts are detected. Similarly, triggers for the development of countermeasures should be clearly stated.	The Applicant considers that the evidence presented in Chapter 7 Marine and Physical Processes (REP4a-029) and the Sandwave Levelling Study (REP3-047) is sufficient to allow the ExA and the Secretary of State to reach a conclusion on the likely significance of the effects of the Project on bedforms. The Applicant has provided a response with regard to the mobile bed layer thickness in Row B14, Table 1.45.3.2 of the Applicant's Response to Relevant Representations (PD1-071) and Row 8, Table 1.2.1 of the Risks and Issues Log (REP4a-111). Paragraph 70 of Chapter 7 Marine Physical Processes (REP4a-029) confirms that the availability of robust data relevant for the characterisation and assessment of Marine Physical Processes is such that, despite some data limitations, the available evidence base is sufficiently robust to underpin the assessment presented and a high confidence level is placed on its results. The Applicant consider that the assessment provided in Chapter 7 Marine Physical Processes (REP4a-029) has provided a robust assessment of the potential environmental effects on bedforms. The assessment has concluded no significant effects and therefore a commitment to countermeasures is not considered to be necessary. The Applicant notes that as stated in Section 3.1.2 IPMP (document reference 8.3, V3, submitted at Deadline 6) '*Final hypotheses and the precise wording will be proposed within the final monitoring plans submitted for approval to the MMO and Natural England prior to construction*'.

Ref	Section	Key Concern and/or Update	Natural England's Advice to Resolve Issues	The Applicant's Response
				Therefore, the Applicant considers that the In-Principle Monitoring Plan is sufficient at this stage, and will be developed post-consent and agreed with the MMO following consultation with Natural England.

Table 2-22: The Applicant's Response to Table 2: Natural England's Detailed Advice on 8.3 Offshore In-Principle Monitoring Plan (Version 2) (Tracked) [REP4a-074]

Ref	Section	Key Concern and/or Update	Natural England's Advice to Resolve Issues	The Applicant's Response
1	Table 3.1	Natural England welcomes the updated IPMP and Applicant's commitments to monitor seabed and bedform recovery. However, the IPMP should include consideration of the need for adaptive monitoring if unforeseen impacts are detected, and triggers for the development of countermeasures, where needed.	We advise that the IPMP consider the need for adaptive monitoring if unforeseen impacts are detected. Similarly, triggers for the development of countermeasures should be clearly stated.	The Applicant consider that the assessment provided in Chapter 7 Marine Physical Processes (REP4a-029) has provided a robust assessment of the potential environmental effects on bedforms. The assessment has concluded no significant effects and therefore a commitment to countermeasures is not considered to be necessary. The Applicant notes that as stated in Section 3.1.2 of the updated IPMP (document reference 8.3, V3 submitted at deadline 6) '*Final hypotheses and the precise wording will be proposed within the final monitoring plans submitted for approval to the MMO and Natural England prior to construction*'. Therefore, the Applicant considers that the outline monitoring plan is sufficient at this stage given that it includes provisions for adaptive monitoring and will be developed post-consent and agreed with the MMO following consultation with Natural England.
2	Table 3.1	Natural England welcomes the Applicant's commitment to monitor scour in the updated IPMP and testing of a hypothesis regarding seabed level changes due to scour. However, we advise that this needs to go further to consider options, should scour observations prove greater than predicted.	We advise that the Applicant should manage the risk of potential impacts as far as possible and that if the proposed scour monitoring detect changes greater than expected, triggers should be established, and any necessary counter measures is secured. This should be adequately captured in the OOOMP so that the proposed post-construction geophysical surveys are used to validate ES predictions.	The Applicant notes that as stated in Section 3.1.2 of the updated IPMP (document reference 8.3, V3 submitted at deadline 6) '*Final hypotheses and the precise wording will be proposed within the final monitoring plans submitted for approval to the MMO and Natural England prior to construction*'. Therefore, the Applicant considers that the In-Principle Monitoring Plan is sufficient at this stage, and will be developed post-consent and agreed with the MMO following consultation with Natural England.

Table 2-23: The Applicant's Comments on the Natural England's Deadline 5 Appendix C6 Benthic Ecology

Ref	Natural England's D5 Submission	The Applicant's Response
General Information		
0.1	In formulating these comments, the following documents have been considered: • [REP4-031] 7.1 Report to Inform Appropriate Assessment V3 (Tracked) • [REP4a-069] 6.3.9.2 Chapter 9 Appendix 2 Benthic Ecology Technical Report (ECC) V4 • [REP4a-070] 6.3.9.6 Chapter 9 Appendix 6 Envision Sabellaria spinulosa reanalysis and report (V3) • [REP4a-093] 8.2 Outline Offshore Operations and Maintenance Plan V2 (Tracked) • [REP4a-095] 8.4 Outline Project Environmental Management Plan V2 (Tracked) • [REP4a-097] 8.5 Cable Specification and Installation Plan V5 (Tracked) • [REP4a-087] 8.13 Schedule of Mitigation V5 • [REP4a-144] 8.13 Schedule of Mitigation V5 (Tracked) • [REP4a-105] 8.21 Outline Cable Protection and Scour Protection Management Plan V3 (Tracked) • [REP4a-122] 22.11 Sabellaria spinulosa reef supporting habitat Technical Note	
1.Introduction		
1.1	This Appendix draws together Natural England latest advice on benthic ecology technical assessments, together with our advice to the updated RIAA and associated mitigation and monitoring incorporated within other plans and documents submitted at Deadline 4a.	
2. 6.3.9.2 Chapter 9 Appendix 2 Benthic Ecology Technical Report (ECC) V4 [REP4a-069] and 6.3.9.6 Chapter 9 Appendix 6 Envision Sabellaria spinulosa reanalysis and report (V3) [REP4a-070]		
2.1	Natural England welcomes the addition of the forward note at the beginning of documents REP4a-070 and REP4a-95, as recommended at Deadline 4 [REP4-137], to signpost the user to the appendices, R and A respectively, to ensure these are read in conjunction with the method, analysis and results of the documents. The reports now include adequate additional information and clarification sufficient to address our previous concerns and therefore we consider this matter resolved. Please see updated in Tab C Points 6 and 7 of the Appendix J R&I Log	The Applicant welcomes that this issue is now resolved.
3. *Sabellaria spinulosa* reef supporting habitat Technical Note [REP4a-122]		
3.1	As advised in our D4a cover letter [REP4a-136], Natural England reviewed the Applicant's approach to delineating supporting habitat for Annex 1 *Sabellaria spinulosa* reef [REP4a-122] and provided advice directly to the Applicant on 24 February 2025 through our discretionary advice service (DAS). This advice is included in Annex 1 for transparency.	The Applicant has conducted an assessment of the supporting habitat for *S. spinulosa* reef within the Offshore ECC, which intersects with the IDNRRB SAC. The findings are detailed in the *S. spinulosa* Reef Supporting Habitat Technical Note (document reference 22.11, V3, submitted at Deadline 6). Natural England approved the Applicant's interpretation of the methodologies and the quantification of the supporting habitat area for *S. spinulosa* reef via email through DAS on 25th March 2025. The Applicant also provided the realistic worst-case figure for the total area of cable protection predicted within Annex I supporting habitat to Natural England via DAS on the 27th March 2025. The information is also presented in the table below.
3.2	Natural England understands the Applicant intends to submit an update to their Annex 1 *Sabellaria spinulosa* reef supporting habitat approach at Deadline 5. Natural England will review this update and seek to engage with the Applicant in order to provide further advice to the ExA at Deadline 6 regarding the level of impact that requires compensation as part of the consenting phase, as set out in [REP4a-136].	

Ref	Natural England's D5 Submission	The Applicant's Response
		<table><tr><th>Calculation Step Description</th><th>Value</th><th>Unit</th></tr><tr><td>Number of Cables</td><td>4</td><td>each</td></tr><tr><td>Length of transit for each cable through Supporting Habitat</td><td>16562.5</td><td>m</td></tr><tr><td>Length of transit for all cables through Supporting Habitat</td><td>66250</td><td>m</td></tr><tr><td>20% of total length</td><td>13250</td><td>m</td></tr><tr><td>Number of mattresses required (rounded up)</td><td>4417</td><td>each</td></tr><tr><td>Each mattress footprint</td><td>18</td><td>m2</td></tr><tr><td>Footprint within Supporting Habitat</td><td>79506</td><td>m2</td></tr><tr><td>20% allowance for installation accuracy and slippage</td><td>15901.2</td><td>m2</td></tr><tr><td>Total Footprint for Supporting Habitat</td><td>95407.2</td><td>m2</td></tr><tr><td>Total volume for Supporting Habitat (0.35m high)</td><td>33392.52</td><td>m3</td></tr></table> The Applicant awaits Natural England's final position at Deadline 6. However, the Applicant has updated the without prejudice compensation case to include the quantification of impact to Annex I supporting habitat. The following documents have therefore been updated and submitted at Deadline 6. Without Prejudice Benthic Compensation Evidence Base and Roadmap (document reference 7.6.3, V4, submitted at Deadline 6). Without Prejudice Biogenic Reef Compensation Plan (document reference 7.6.2, V4, submitted at Deadline 6).
3.3	Where the map of habitat suitability for Annex I *S. spinulosa* supporting reef habitat within IDRBNR SAC has been included within other documents such as the Cable Specification and Installation Plan V5 (Tracked) [REP4a-097] and the Outline Cable Protection and Scour Protection Management Plan [REP4a-105], Natural England advises this will require updating following the Applicants updated assessment in any subsequent submission.	Natural England approved the Applicants interpretation of the methodologies and the quantification of the supporting habitat area for S. spinulosa reef via email through DAS on 25th March 2025. Where the map of habitat suitability for Annex I *S. spinulosa* supporting reef habitat within IDRBNR SAC has been included within documents and plans, these have been updated and re-submitted at Deadline 6: • *Sabellaria spinulosa* reef supporting habitat Technical Note (document reference 22.11, V3, submitted at Deadline 6) • Cable Specification and Installation Plan (document reference 8.5, V7, submitted at Deadline 6) and the • Outline Cable Protection and Scour Protection Management Plan (document reference 8.21, V5, submitted at Deadline 6)
4. Mitigation – Removable Cable Protection within IDRBNR SAC		
4.1	As set out in [REP4a-097, REP4a-105 and REP4a-144], to minimise the overall impacts to Inner Dowsing Race Bank and North Ridge (IDRBNR) Special Area of Conservation (SAC), ODOW have committed to installing removable cable protection within areas identified as supporting habitat for Annex I *S. spinulosa* reef. Whilst this is welcomed and demonstrates adoption of the mitigation hierarchy in minimising impacts; Natural England advises it does not secure the removal of cable protection and nor does it avoid hindering the conservation objectives for the site to restore '*the*	The Applicant has conducted an assessment of the supporting habitat for *S. spinulosa* reef within the Offshore ECC, which intersects with the IDNRRB SAC. The findings are detailed in the *S. spinulosa* Reef Supporting Habitat Technical Note (document reference 22.11, V3, submitted at Deadline 6). Natural England approved the Applicants interpretation of the methodologies and the quantification of the

Ref	Natural England's D5 Submission	The Applicant's Response
	supporting processes on which qualifying natural habitats and the habitats of qualifying species rely'. Therefore, we advise that as per Natural England's previous advice [RR-045, REP1-059, REP3- 066 and REP4-137 and REP4a-136], any habitat loss associated with cable protection, including removable cable protection on supporting habitat for Annex I *S. spinulosa* reef will require compensation. However, as set out in our responses to the RIES questions we will advise at Deadline 6 on scale and significance of the impacts to supporting habitats/processes.	supporting habitat area for S. *spinulosa* reef via email through DAS on 25th March 2025. The Applicant notes that the requirement to identify supporting habitat for S. spinulosa reef and to mitigate any impacts was not raised during the extensive pre-application process undertaken by the Applicant. The request to include this assessment was provided by Natural England at Deadline 3 submissions Appendix C2 (REP3-067) and Appendix C3 (REP3-068). This advice was supplemented by Natural England's comments at Deadline 4 (Appendix C4 to the Natural England Deadline 4 Submission (REP4-134)), summarised in the following paragraph (our emphasis added): "*Natural England advises the Applicant undertakes and submits into examination an assessment of supporting habitats and processes for potential Annex I S. spinulosa reef, to demonstrate that the recovery of this feature will not be hindered by the installation of the export cable and/or the lasting placement of cable protection.* ***This will provide the Secretary of State comfort an adverse effect on integrity to IDRBNR SAC Annex I reef features and habitats/processes in which it relies upon will be avoided."*** The Applicant has endeavoured to map out supporting habitat in accordance with the guidance supplied and has agreed to mitigate impacts using removable cable protection within the areas identified. It should be noted that the conservation objectives of the SAC do not require that habitats with the potential to support designated habitats receive the same level of protection as the designated habitats themselves. Whilst the conservation objective focuses on maintaining and restoring the supporting processes necessary for qualifying habitats, it is not reasonable to interpret this as a requirement to protect all habitats within the SAC that could develop into Annex I reef at some undefined time as if they were reef features themselves, nor has Natural England provided a justification for such an approach. The Applicant considers that the further analysis and further commitment to removable cable protection in defined areas of supporting habitat bolsters the existing conclusions of the assessment that there is no AEoI. The Applicant has updated the RIAA with this detail at Deadline 6 (document reference 7.1, V5, submitted at Deadline 6).The commitment is secured within the Outline Scour and Cable Protection Management Plan (document reference 8.21, V5, submitted at Deadline 6) and in the Outline Cable Specification and Installation Plan (document reference 8.5, V7, submitted at Deadline 6) secured under condition 13(1)(d), Part 2, Schedule 11 of the DCO). However, it should be noted that the conservation objectives of the SAC do not require that habitats with the potential to support designated habitats receive the

Ref	Natural England's D5 Submission	The Applicant's Response
		same level of protection as the designated habitats themselves. While the conservation objective focuses on maintaining and restoring the supporting processes necessary for qualifying habitats, it is not justified to interpret this as a requirement to protect all habitats within the SAC that *could* develop into Annex I reef at some undefined time as if they were reef features themselves. The Applicant considers that the further commitment to removable cable protection in defined areas of supporting habitat bolsters the existing conclusions of the assessment that there is no AEoI. The Applicant has updated the RIAA with this detail at Deadline 6 (document reference 7.1, V5, submitted at Deadline 6). The Applicant echoes the ExA's comments at Issue Specific Hearing 8 that the submission of any new information at Deadline 6, to which the Applicant should reasonably be given an opportunity to respond, risks not being accepted into the Examination. The Applicant suggests that such evidence should be afforded limited weight.
5. Mitigation - Sediment Disposal		
5.1	Natural England welcomes the commitment in Section 5.2 Para 22 of the Cable Specification and Installation Plan v5 [REP4a-097] and the Schedule of Mitigation [REP4a-144] that *"In the event that disposal of dredged sediment (associated with seabed preparation works or cable installation) is required, material will be deposited, upstream, within an area of similar sediment characteristics, in close proximity to the dredge location, in order to retain sediment within the sediment transport system."*. Natural England considers this matter resolved, please refer to Appendix J5 Risks and & Issue Log Tab C Point 4.	The Applicant welcomes that this issue is now resolved.
6. 8.2 Outline Offshore Operations and Maintenance Plan V2 [REP4a-093]		
6.1	Within 8.2 Outline Offshore Operations and Maintenance Plan V2 (Tracked) [REP4a093], Natural England acknowledges the amendment to ensure any cable protection that is installed following completion of construction in locations where cable protection was not installed during construction, must be deployed within 10 years of completion of construction unless otherwise agreed by the Marine Management Organisation (MMO) in writing, and is secured in condition 21 of Schedule 10 and 11 of the draft Development Consent Order (DCO). This is also secured within the Schedule of Mitigation [REP4a-087 and REP4a-144]. However, we refer the ExA to Point A9 of Tab A of our risks and issues log and our Deadline 4 submission Appendix C5 [REP4-144] in which we advise that within MPAs cable protection should not be deployed after a defined construction phase and any further deployment would be subject to a new /separate marine licence.	The Applicant is confident that it has provided a robust, detailed assessment of the full lifetime effects of the deployment of cable protection up to the footprints set out within Chapter 3 Project Description (REP5-009), and secured within the DCO (document reference 3.1, V10, submitted at Deadline 6), and within the RIAA (document reference 7.1, V5 submitted at Deadline 6)). The Applicant is confident that the conclusion of no potential for an AEoI is robust. The Applicant considers that this assessment fully covers the eventualities of all consented cable protection being deployed during the construction phase, or where not all was required during construction, further deployment if required during the O&M phase up to the totals assessed. The impacts assessed within the RIAA (document reference 7.1, V5, submitted at Deadline 6) would not be different or any greater (and likely would be lessened for habitat disturbance) than as set out within the RIAA. As such, the Rochdale Envelope for the Project includes for the deployment of cable protection during the O&M phase, as well as within the construction phase. The Applicant has proposed condition 21 of Schedules 10 and 11, limiting the duration of the consent

Ref	Natural England's D5 Submission	The Applicant's Response
		for deployment of cable protection after construction to 10 years to align with the preference of the MMO and Natural England for 10-year licences.
7. 7.1 Report to Inform Appropriate Assessment V3 (Tracked) [REP4-031]		
7.1	Natural England welcomes the consideration in Para 123 of deposition and smothering impacts on benthic receptors within Inner Dowsing Race bank and North Ridge (IDRBNR) Special Area of Conservation (SAC) and North Norfolk Sandbanks and Saturn Reef (NNSR) SAC. However, the evidence to support recoverability of Sabellaria spinulosa reef is limited. We also advise that impacts on supporting habitat for Annex I *S. spinulosa* reef have not been assessed.	The Applicant considers that the further analysis and further commitment to removable cable protection in defined areas of supporting habitat bolsters the existing conclusions of the assessment that there is no AEoI. The Applicant has updated the RIAA with this detail at Deadline 6 (document reference 7.1, V5, submitted at Deadline 6). The Applicant has also provided relevant supporting study references within the RIAA (document reference 7.1, V5 submitted at Deadline 6), specifically in paragraphs 126–128, where this information is cited. This research states evidence that *S. spinulosa* community structure can recover within the range from two to seven years, depending on the level of disturbance and is reliant on larval recruitment from surrounding areas.
7.2	Natural England advises that the evidence to support recoverability of Annex I *Sabellaria spinulosa* reef from the identified impacts is insufficient to conclude that there will be no Adverse Effect on Integrity (AEoI) as a result of this pathway of effect.	The Applicant acknowledges that while the evidence supporting the recoverability of Annex I *S. spinulosa* reef from the identified impacts is currently somewhat limited, however research conducted by the aggregates industry, in addition to studies such as those by Pearce et al., provides a solid foundation for evidence in recovery. These studies suggest that the recovery of impacted populations is facilitated by a range of dynamic processes, which, although influenced by stochastic events, operate across multiple scales. Positive factors such as favourable local habitat conditions, resilience to further impacts, and vital ecological processes such as larval supply and recruitment between populations all contribute to the potential for successful recovery. As such, while recovery can be complex, there is evidence to suggest that *S. spinulosa* populations have a strong capacity to regenerate over time, provided conditions remain conducive to their resilience.
7.3	We also advise that impacts on Sabellaria spinulosa supporting habitats also require assessment. Furthermore, the in-principle monitoring should be extended to include considerations of changes in the quality, extent and recovery of supporting habitat for Annex I *S. spinulosa* reef as well as that of Annex I Sandbank communities as well as that of Annex I S. spinulosa reef. We will provide more information on this at Deadline 6.	The Applicant has updated the RIAA with an assessment to *S. spinulosa* supporting habitats at Deadline 6 (document reference 7.1, V5, submitted at Deadline 6). The Applicant has updated the Offshore In-Principle Monitoring Plan (document reference 8.03, V3, submitted at Deadline 6) to include a monitoring campaign for supporting habitat for Annex I *S. spinulosa* reef as well as that of Annex I Sandbank communities. The current proposed monitoring campaign covers quality and extent of Annex I *S. spinulosa* reef within the Order Limits, as detailed within Section 3.3 of the Offshore In-Principle Monitoring Plan (document reference 8.03, V3, submitted at Deadline 6).

Ref	Natural England's D5 Submission	The Applicant's Response
		The Applicant echoes the ExA's comments at Issue Specific Hearing 8 that the submission of any new information at Deadline 6, to which the Applicant should reasonably be given an opportunity to respond, risks not being accepted into the Examination. The Applicant suggests that such evidence should be afforded limited weight.
7.4	Overall, Natural England notes no changes have been made in respect of the conclusions of AEoI following Natural England's previous advice [RR-045, REP1-059, REP3-066, REP4-137 and REP4a-136]. We continue to disagree with the conclusions of no AEoI to the IDRBNR SAC for the Annex I *Sabellaria spinulosa* Reef and Sandbank features both alone and in-combination.	The Applicant maintains its position that an AEoI of the Annex I Sandbank and Annex I Reef features of the IDRBNR SAC can be excluded with the mitigation currently proposed, which includes: • *The avoidance of S. spinulosa reef (as identified in the pre-construction surveys) within the IDRBNR SAC (as detailed within the Outline Biogenic Reef Mitigation Plan (REP2-043) and secured in Condition 13(1)(j), Part 2, Schedule 11 of the DCO); and* • *Adopting the use of removable cable protection across all Annex I sandbank features and within areas of habitat that could support S. spinulosa reef in the future, based on guidance and advice provided by Natural England (this commitment is detailed within the Outline Scour* and Cable Protection Management Plan (document reference 8.21, V5 updated at Deadline 6) and in the Outline Cable Specification and Installation Plan (document reference 8.5, V7, submitted at Deadline 6), secured under condition 13(1)(d), Part 2, Schedule 11 of the DCO).

Table 2-24: The Applicant's Comments on the Natural England's Deadline 5 Appendix E3 Marine Mammals

Ref	Natural England's D5 Submission	The Applicant's Response
General Information		
	In formulating these comments, the following documents have been considered: • [REP4-031] 7.1 Report to Inform Appropriate Assessment V3 (Tracked) • [REP4a-074] 8.3 Offshore In Principle Monitoring Plan V2 (Tracked) • [REP4a-099] 8.6.1 Outline Marine Mammal Mitigation Protocol Piling V5 (Tracked) • [REP4a-101] 8.6.2 Outline Marine Mammal Mitigation Protocol UXO V4 (Tracked) • [REP4-074] 8.13 Schedule of Mitigation V4 (tracked) • [REP4a-087] 8.13 Schedule of Mitigation V5 (Tracked) • [REP4a-118] 22.7 Use of Best Endeavours in the context of Policy Paper Reducing Marine Noise	
1.Introduction		
	This appendix sets out Natural England's advice on documentation submitted by the Applicant at Deadlines 4 and 4a in relation to marine mammals. Please note, Natural England will respond to	

Ref	Natural England's D5 Submission	The Applicant's Response
	the Interim Population Consequences of Disturbance Modelling Report V3 (Tracked) [REP4a-107] as soon as possible.	
2. Best Endeavours		
2.1	Natural England has reviewed the Applicant's submission at Deadline 4a on the '*Use of Best Endeavours in the context of Policy Paper Reducing Marine* Noise' [REP4a-118]. In this regard we provide the following overarching advice regarding 'Best Endeavours' to deliver noise reductions. In January 2025, Defra published their Marine Noise Package including their '*Reducing Marine Noise'* policy paper Reducing marine noise - GOV.UK This paper includes the expectation that '*all offshore wind pile driving activity across all English waters will be required to demonstrate that they have utilised best endeavours to deliver noise reductions through the use of primary and/or secondary noise reduction methods in the first instance.'* Natural England's advice to date has consistently been that projects should commit to the use of Noise Abatement Systems (NAS) where driven or part-driven piles are to be used, as early as possible and in the cases of projects currently going through the consenting process, this should be done prior to consent being granted. 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 and we consider the use of NAS to be the best currently available option to achieve these reductions. We also consider that making this commitment prior to consent allows the projects sufficient time to finance, source and implement NAS into their projects prior to the start of construction.	Following engagement with Natural England and the advice provided against PADSS items NE8 and NE9 in the NE Risk and Issues Log (REP5-171), the Applicant has updated the commitment secured within the Outline MMMP for Piling Activities (document reference 8.6.1, V6 submitted at deadline 6) and the In Principle SIP (document reference 8.7, V4 submitted at deadline 6) to state: "The Applicant will deploy primary and/or secondary noise reduction methods (Noise Abatement Systems) for pile driving, unless otherwise agreed with the MMO" The Applicant considers that the commitment it has made is above and beyond what is required by the Defra (2025) policy *Reducing Marine Noise*, which states: *"From January 2025, given the expected increase in noise levels over the coming years, and the above outlined policy commitments, we expect that all offshore wind pile driving activity across all English waters will be required to demonstrate that they have utilised best endeavours to deliver noise reductions through the use of primary and/or secondary noise reduction methods in the first instance."* The Applicant has discussed the NAS commitment wording with NE directly and considers that this issue is now resolved. As set out ISH 6 (REP4a-117), the Applicant has engaged with underwater noise abatement/ noise reduction technology suppliers and is confident that the existing commitment allows the Project sufficient time to finance, source and implement a noise abatement/ noise reductions system (or a combination of systems) prior to construction commencing. The Applicant also wishes to highlight that NAS is not required as a result of the conclusions of Chapter 11 Marine Mammals (document reference 6.1.11, V3 submitted at deadline 6), as no significant effects have been identified for underwater noise related impacts from piling. The Applicant's commitment to deploying primary and/or secondary noise reduction methods (Noise Abatement Systems) for pile driving, unless otherwise agreed with the MMO, has been implemented as a result of the Defra (2025) policy and advice from SNCBs throughout the examination. The commitment will further reduce any predicted effect in Chapter 11 Marine Mammals (document reference 6.1.11, V3 submitted at deadline 6), that are based off worst-case unmitigated noise modelling.
2.2	The overall level of noise in the Southern North Sea Special Area of Conservation (SAC) is increasing due to increasing levels of offshore wind construction and other noisy marine activities taking place. Therefore, it will be increasingly difficult to determine no Adverse Effect on Site Integrity (AEoI) from cumulative noise disturbance going forward. Projects that do not use noise abatement systems risk contributing to cumulative noise disturbance that could exceed the daily and seasonal thresholds for significant disturbance leading to AEoI and therefore may not be able to construct as planned.	The Applicant considers that the new commitment to NAS (set out in the response to row 2.2 above, and as requested by NE) secured within the In-Principle SIP (document reference 8.7, V4 submitted at deadline 6) is above what is required by the Defra (2025) policy paper, and that this issue is now resolved. The Applicant notes that, in accordance with Schedule 10 Part 2, 22 (1), no piling can begin until a SIP which accords with the principles set out in the In Principle SNS SAC SIP has been submitted to, and approved in writing, by the MMO in consultation with the relevant statutory nature conservation body. The Applicant is confident that the SIP process and the measures listed within the In-Principle SIP (document reference 8.7, V4 submitted at deadline 6) are sufficient to conclude no AEoI on the SNS SAC. Included in the In-Principle SIP (document reference 8.7, V4 submitted at deadline 6) as a potential measure is the use of noise abatement systems, which will be implemented if required to avoid AEoI to the SNS SAC. The Applicant

Ref	Natural England's D5 Submission	The Applicant's Response
		has also detailed in the In-Principle SIP (document reference 8.7, V4 submitted at deadline 6) how they will engage with other developers through the Southern North Sea Offshore Wind Forum.
2.4	Large-scale piling campaigns for offshore wind projects risk causing injury and disturbance offences to marine mammals of European Protected Species (EPS), therefore developers typically apply for a wildlife licence to exempt them from an offence under the regulations. A licence can only be granted where the regulator is satisfied that the required legislative tests are met, such as that there is no other satisfactory alternative. We expect it to be increasingly difficult for projects to demonstrate that noise abatement is not a satisfactory alternative. Projects that do not use noise abatement therefore risk not meeting the legislative test needed in order to be granted a wildlife licence.	The Applicant considers that the new commitment to NAS (set out in the response to row 2.2 above, and as requested by NE) secured within the In-Principle SIP (document reference 8.7, V4 submitted at deadline 6) is above what is required by the Defra (2025) policy paper, and that this issue is now resolved. The Applicant will apply for relevant EPS licences at the post-consent stage; this was confirmed by the MMO and acknowledged by the Applicant in (REP4-108). The Applicant acknowledges the advice from Natural England regarding EPS licencing and noise reduction measures. The Applicant notes that this information is detailed in the Defra (2025) policy paper, which the Applicant is already aware of and has considered in its responses.
	Natural England does not consider that a commitment to employ best endeavours constitutes a commitment to use NAS and that it does not go far enough to provide confidence and certainty that a project will implement either primary or secondary NAS for their projects and therefore noise reduction at source may not be achieved. Consequently, Natural England strongly advises that all Applicants should commit to the use of NAS as mitigation to ensure the satisfactory alternatives test for EPS licensing can be passed and significant noise reductions can be achieved to help avoid adverse effects on integrity of designated sites, particularly from cumulative and in-combination impacts with other plans and projects	The Applicant considers that the new commitment to NAS (set out in the response to row 2.2 above, and as requested by NE) secured within the In-Principle SIP (document reference 8.7, V4 submitted at deadline 6) is above and beyond what is required by the Defra (2025) policy paper, and that this issue is now resolved.
	If a commitment to the use of NAS can be made pre-consent, Natural England would welcome the use of Best Endeavours by Applicants to secure the most appropriate noise abatement system or noise mitigation technology they can between consent and construction. Natural England would welcome the opportunity to engage with the Applicant in this regard post-consent.	The Applicant considers that the new commitment to NAS (set out in the response to row 2.2 above, and as requested by NE) secured within the In-Principle SIP (document reference 8.7, V4 submitted at deadline 6) is above what is required by the Defra (2025) policy paper, and that this issue is now resolved.
3. Detailed Comments		
	Natural England provides detailed comments and advice to the Report to Inform Appropriate Assessment V3 (Tracked) [REP4-031] in Table 1, the offshore In Principle Monitoring Plan (IPMP) [REP4a-074] and Schedule of Mitigation [REP4-074 and REP4a-087] in Table 2 and the Marine Mammal Mitigation Protocols (MMMPs) [REP4a-099 and REP4a-101] in Table 3 below	The Applicant has responded to comments below.

Table 2-25: The Applicant's Response to Table 1: Natural England's Detailed Advice on 7.1 Report to Inform Appropriate Assessment V3 (Tracked) [REP4-031]

Ref	Section	Key Concern and/or Update	Natural England's Advice to Resolve Issues	The Applicant's Response
1	Table 10-3	The in-combination impacts from a single event in a single day in summer season demonstrates an exceedance of the thresholds for the project in combination with Teir 2 and 3 in some scenarios in some years, and for the project in combination with Teir 2, 3 and 4 in all scenarios and across all years. The exceedance is significantly beyond the thresholds.	The Applicant should commit to the use of NAS to reduce their contribution to the threshold exceedance.	The Applicant considers that the new commitment to NAS (set out in the response to row 2.2 above, and as requested by NE) secured within the In-Principle SIP (document reference 8.7, V4 submitted at deadline 6) is above and beyond what is required by

Ref	Section	Key Concern and/or Update	Natural England's Advice to Resolve Issues	The Applicant's Response
2	Section 10.2.1, para 1626	Natural England acknowledges that the in-combination assessment is demonstrating unmitigated scenarios; however, mitigation currently outlined in the Marine Mammal Mitigation Plan (MMMP) (i.e without commitment to using Nosie Abatement Systems (NAS)) does not mitigate for disturbance impacts. To mitigate for disturbance, and therefore to reduce the exceedance of the Southern North Sea (SNS) Special Area of Conservation (SAC) thresholds for disturbance, the sound at source needs to be reduced by using methods such as NAS.	To mitigate for disturbance, and therefore to reduce the exceedance of the SNS SAC thresholds for disturbance, the sound at source needs to be reduced by using methods such as NAS.	the Defra (2025) policy paper, and that these issues are now resolved. The in-combination assessment is highly unrealistic and over precautionary as there is a negligible likelihood of all potential activities occurring at the same time and the assumption is based on unabated piling for all projects, which is not in line with Defra (2025) policy. Table 10.3 represents a worst-case scenario that is unmitigated and precautionary. It assumes no overlap between individual activities from separate projects, even though such overlap would only occur in the unlikely event that all such activities occurred on the same day. Once such double counting is taken into account, the remaining potential for overlap (based on each project piling at the worst possible location for each project and assuming an unrealistic build out) is reduced. Additionally, the timeframe of projects means that such a risk on a day-by-day basis would not actually materialise, with the maximum values even less likely to occur (as this requires simultaneous works at all projects at the worst-case location). In the context of the SNS SAC, mitigation of disturbance (i.e. to remain under the thresholds for significant disturbance) can be achieved through co-ordination of activities, as well as through reducing an activity's noise levels. Both of these approaches and measures are detailed in the In-Principle SIP (document reference 8.7, V4 submitted at deadline 6).
3	Section 10.2.1, para, 1628	Natural England has provided comments on the latest version of the Site Integrity Plan (SIP) [REP4-087] within Natural England's cover letter submitted at deadline 4a [REP4a-138]. Until these comments are taken into account, Natural England cannot agree that the measures outlined in the SIP are sufficient to manage the adherence to the thresholds.	Address the issues in the SIP raised at Deadline 4a [REP4a-138]	
4	Section 10.2.1, para 1630, 1635, 1636	Natural England acknowledges that the Project alone is not breaching the thresholds; however, there are several projects contributing to the exceedance, including this Project. To ensure that disturbance in the SNS SAC can be suitably reduced, there is an expectation that each contributing project will take responsibility for their project's noise reduction, for example committing to NAS.	The Applicant should commit to the use of NAS to ensure the Projects contribution to disturbance in the SNS SAC is reduced as far as possible.	The Applicant considers that the new commitment to NAS (set out in the response to row 2.2 above, and as requested by NE) secured within the In-Principle SIP (document reference 8.7, V4 submitted at deadline 6) is above and beyond what is required by the Defra (2025) policy paper, and that this issue is now resolved. The Applicant expects that all other projects piling in English waters will also commit to the requirements of the Defra (2025) policy and the advice being given by SNCBs. Given the high bar set by this commitment,

Ref	Section	Key Concern and/or Update	Natural England's Advice to Resolve Issues	The Applicant's Response
				it is expected that the realised disturbance to the SNS SAC will be much lower than that presented in the in-combination assessment against the SNS SAC thresholds. The In-Principle SIP (document reference 8.7, V4 submitted at deadline 6) includes both primary and secondary mitigation options that will be considered in the post-consent stage to reduce the Project's contribution to the thresholds, and to ensure that there is no AEoI to the SNS SAC.
5	Section 10.2.1, Table 10-5	There is inconsistency within the table and assigned 'Threshold Risk'. The project is contributing an average 1.80% overlap per summer season and the threshold risk is defined as a 'small contribution'. Norfolk Boreas is contributing an average 1.36% overlap per summer season and the Threshold Risk is defined as 'considerable proportion' despite having a smaller contribution than the Project.	The Applicant should correct inconsistencies within the table.	This inconsistency has been addressed in the updated version of the Report to Inform Appropriate Assessment (V4 document reference 7.1) submitted at Deadline 6. This amendment does not change the assessment or conclusions.
6	Section 10.2.1, para 1638, 1647	Natural England has provided comments on the latest versions of the SIP at Deadline 4a [REP4a-138] and MMMP in table 3 below. Until these comments are taken into account, Natural England cannot agree to the conclusion of no Adverse Effect on Integrity (AEoI). The Applicant should commit to noise reduction to reduce their contribution to the threshold exceedance.	The Applicant should commit to noise reduction to reduce their contribution to the threshold exceedance.	The Applicant considers that the new commitment to NAS (set out in the response to row 2.2 above, and as requested by NE) secured within the In-Principle SIP (document reference 8.7, V4 submitted at deadline 6) is above and beyond nod what is required by the Defra (2025) policy paper, and that this issue is now resolved.
7	Section 10.2.1, para 1649	Natural England cannot agree to the conclusion of no AEoI on grey and harbour seals because of the high proportion of animals expected to be disturbed by the project in combination with other projects. The project in combination with other projects is predicted to cause disturbance to 6.5% of harbour seals within the Management Unit (MU). Since the Wash and North Norfolk Coast (WNNC) SAC is the only SAC for harbour seals in the MU, it is reasonable to assume that those seals are from the WNNC SAC. For grey seals, the project, in combination with other projects, is predicted to cause disturbance to 6%-14% of the MU. Although not all seals disturbed will be from the Humber Estuary SAC, it is reasonable to assume a significant proportion are from the SAC.	To reduce the disturbance to harbour and grey seals, the Applicant should commit to noise reducing technology.	The Applicant considers that the new commitment to NAS (set out in the response to row 2.2 above, and as requested by NE) secured within the In-Principle SIP (document reference 8.7, V4 submitted at deadline 6) is above and beyond what is required by the Defra (2025) policy paper, and that this issue is now resolved. The Applicant highlights that the values referenced for harbour and grey seal disturbance considers all projects in Table 10-7 of the RIAA (REP5-101). For this impact to materialise, 15 projects would need to be constructing at the same time, which is highly unrealistic due to the limited availability of piling vessels. The Applicant has caveated the assumptions made within the cumulative and in-combination assessments within the RIAA (REP5-101).

Ref	Section	Key Concern and/or Update	Natural England's Advice to Resolve Issues	The Applicant's Response
				Following engagement with Natural England, the Applicant has updated the commitment to noise reduction methods secured within the Outline MMMP (document reference 8.6.1, V6 submitted at deadline 6) and In Principle SIP (document reference 8.7, V4 submitted at deadline 6) to state: "Applicant will deploy primary and/or secondary noise reduction methods (Noise Abatement Systems) for pile driving, unless otherwise agreed with the MMO". The Applicant considers that the commitment it has made is above and beyond what is required by the Defra (2025) policy and that this issue is now resolved. The Applicant engaged with Natural England to try and seek resolution on this matter in relation to the Applicant's commitment to use primary and/or secondary noise reduction methods (Noise Abatement Systems (NAS)). Natural England confirmed to the Applicant via email on 2nd April 2025 that a committed to NAS would resolve this issue however, due to the time constraints, Natural England were not able to reply in an official capacity. The email exchange from Natural England has been added at in Annex 1: Email Exchange With Natural England of The Applicants Response to the Natural England R&I Log (document reference 21.8)(Pers comm, 2025). As such, the applicant considers that this issue is now resolved.

Table 2-26: The Applicant's Response to Table 2: Natural England's Detailed Advice on 8.3 Offshore In Principle Monitoring Plan V2 (Tracked) [REP4a-074], 8.13 Schedule of Mitigation V4 [REP4-074] and V5 [REP4a-087]

Ref	Section	Key Concern and/or Update	Natural England's Advice to Resolve Issues	The Applicant's Response
8.3 Offshore In Principle Monitoring Plan V2 (Tracked) [REP4a-074]				
1	Section 3.5.2, Para 38	Natural England acknowledges the Applicant has stated that '*the purpose of this monitoring will be to validate the predictions made within the ES, but also to validate the impacts ranges used to inform the*	Natural England accepts the Applicant's suggestion, however, continues to request further detail on how this will be monitored/implemented. Natural England would welcome	The Applicant considers that is more appropriate for decisions regarding monitoring to be made in the post-consent phase, when final design parameters are known and a decision around noise reduction measures has been made. Th Applicant will continue to engage with Natural England

Ref	Section	Key Concern and/or Update	Natural England's Advice to Resolve Issues	The Applicant's Response
		MMMP and the specific mitigation measures set out therein'	the opportunity to engage with the Applicant on this matter post-consent	post-consent on this matter before submitting the final monitoring plans to the MMO under DML conditions 13(1)(c), Part 2, Schedules 10 and 11 of the DCO.
8.13 Schedule of Mitigation V4 [REP4-074] and V5 [REP4a-087]				
2	Ref 40	Natural England requires the Applicant to make a commitment to deliver noise reductions for pile driving activity. Natural England does not consider the use of "Best Endeavours" demonstrates a commitment to utilising noise reducing technology.	The Applicant should make a commitment to noise reduction during pile driving. Please see advice under section 2 of this appendix.	The Applicant considers that the new commitment to NAS (set out in the response to row 2.2 above, and as requested by NE) secured within the In-Principle SIP (document reference 8.7, V4 submitted at deadline 6) is above and beyond what is required by the Defra (2025) policy paper, and that this issue is now resolved.
ReferRep-84)	Ref 47	Natural England welcomes the commitment that low order clearance techniques, such as deflagration, will be used as the default method for unexploded ordnance (UXO) clearance.	To note.	The Applicant welcomes this support from Natural England.
4	Ref 48	Natural England accepts that high order clearance will be used as a contingency measure if low order is not successful, however, we advise the Applicant should outline the measures that will be adhered to before high order is used as a last resort. In addition, if high order is utilised a commitment should be made that NAS will be used in conjunction.	The Applicant should include an outline of the procedure that will take place before high order detonation is considered in the MMMP (refer to point 4 in table 3 below), and a commitment should be made that if high order is utilised then NAS must be used alongside this.	The Applicant has provided an outline of the procedure that will take place before high order detonations are considered within the Outline Marine Mammal Mitigation Protocol for Unexploded Ordnance Clearance (V5 document reference 8.6.2) at Deadline 6.

Table 2-27: The Applicant's Response to Table 3: Natural England's Detailed Advice on 8.6.1 Outline Marine Mammal Mitigation Protocol Piling V5 (Tracked) [REP4a-099] and 8.6.2 Outline Marine Mammal Mitigation Protocol UXO V4 (Tracked) [REP4a-101]

Ref	Section	Key Concern and/or Update	Natural England's Advice to Resolve Issues	The Applicant's Response
8.6.1 Outline Marine Mammal Mitigation Protocol Piling V5 (Tracked) [REP4a-099]				
1	Section 1.3, para 7	Natural England welcomes the engagement with other relevant offshore wind farm projects in the southern North Sea and industry groups. However, Natural England advises a commitment to NAS is still required as it is likely that the SNS SAC threshold will be exceeded without the use of NAS, despite the communication between other developers due to the number of projects planning to undertake noise generating activities during a similar time frame.	The Applicant should make a commitment to using NAS.	The Applicant considers that the new commitment to NAS (set out in the response to row 2.2 above, and as requested by NE) secured within the In-Principle SIP (document reference 8.7, V4 submitted at deadline 6) is above and beyond what is required by the Defra (2025) policy paper, and that this issue is now resolved. The Applicant is confident that SIP process and the measures listed within the In-Principle SIP (document reference 8.7, V4 submitted at deadline 6) are sufficient to conclude no AEoI on the SNS SAC.
2	Section 4, para 17	The Applicant should make a commitment to deliver noise reductions for pile driving activity.	The Applicant should make a commitment to using NAS.	

Ref	Section	Key Concern and/or Update	Natural England's Advice to Resolve Issues	The Applicant's Response
		Natural England does not consider the use of "Best Endeavours" demonstrates a commitment to utilising noise reducing technology.		
3	Section 4.4, para 39	Natural England does not need the Applicant to commit to a specific noise reducing technology at this stage, just a commitment to use NAS	The Applicant needs to make a commitment to using NAS.	
8.6.2 Outline Marine Mammal Mitigation Protocol UXO V4 (Tracked) [REP4a-101]				
4	Section 2, para 8 & Section 4.4, para 31	Natural England welcomes the use of avoidance, followed by low order detonation, with high order only occurring in cases where low order is not possible.	The Applicant should include an outline of the procedure that will take place before high order detonation is considered as a last resort, within the MMMP. For example, high order should only be used as a contingency if the following procedures have been conducted: • the most appropriate low noise method has failed after a minimum of three attempts, • all best practice has been demonstrably applied, • there is prior agreement with the appropriate licensing authority (see Joint UXO Position Statement for further details). In addition, a commitment should be made by the Applicant that if high order is utilised then NAS must be used as mitigation alongside this.	The Applicant has provided an update to the Outline Marine Mammal Mitigation Protocol for Unexploded Ordnance Clearance (V5 document reference 8.6.2) resubmitted at Deadline 6 further detailing the procedure that will take place before high order detonation is considered.
5	Section 4, para 11	In line with JNCC guidelines, all UXO clearance operations should take place during day light hours only and in favourable weather conditions with good visibility (i.e. sea state of 3 or less). However, the Applicant has included a caveat of 'When possible', within this statement, which goes against the JNCC guidelines.	The Applicant should remove 'when possible' to ensure UXO clearance only occurs during the conditions stipulated in the JNCC 2025 guidelines.	The Applicant has incorporated the suggestion from NE in the Outline Marine Mammal Mitigation Protocol for Unexploded Ordnance Clearance (V5 document reference 8.6.2) updated at Deadline 6.
6	Section 4.3	There remain discrepancies between the mitigation stipulated within the 2025 JNCC guidelines and that included in the MMMP.	Natural England advises that the Applicant reviews the content of these documents and ensure their assessment and mitigation measures are aligned.	The Applicant has provided an update to the Outline Marine Mammal Mitigation Protocol for Unexploded Ordnance Clearance (V5 document reference 8.6.2) resubmitted at Deadline 6 and has included suggestions from Natural England that NAS will be used in-conjunction with any required high order clearances. The Applicant can confirm they are in a position to commit to bubble curtains as a NAS for high order UXO clearance (in line with JNCC, (2025)) as no other accepted form of NAS exists for UXO clearance.
7	Section 4.4	Natural England welcomes the recognition from the Applicant that if high order is utilised as a last resort mitigation in the form of NAS is required.	The Applicant should make a commitment to using NAS in conjunction with high order detonation.	

Table 2-28: The Applicant's Comments on the Natural England's Deadline 5 Appendix F5 Offshore and Intertidal Ornithology

Ref	Natural England's D5 Submission	The Applicant's Response
General Information		
0.1	In formulating these comments, the following documents have been considered: • [REP4-030] 7.1 Report to Inform Appropriate Assessment V3 (Clean) Redacted • [REP4-034] 7.1.1 Offshore and Intertidal Ornithology Apportioning V3 (Tracked) • [REP4-036] 7.1.2 Ornithology Population Viability Analysis Habitats Regulations Assessment V2 (Tracked)[REP4-038] 7.2 Habitat Regulation Assessment Screening Report (Tracked) • [REP4a-012] 6.1.12 Chapter 12 Offshore and Intertidal Ornithology V2 Tracked • [REP4a-147] 6.3.12.2 Chapter 12 Appendix 2 Collision Risk Modelling V2 (Tracked) • [REP4a-148] 6.3.12.3 Chapter 12 Appendix 3 Displacement Assessment V2 (Tracked) • [REP4a-149] 6.3.12.4 Chapter 12 Appendix 4 Population Viability Analysis V2 (Tracked) • [REP4a-150] 6.3.12.5 Chapter 12 Appendix 5 Migratory Collision Risk Modelling V2 (Tracked) Please note that further comments on these documents may be provided as part of our Deadline 6 response, due to the volume of documentation received and constrained capacity for specialist review.	
Summary		
0.2	Natural England welcomes the submission of updated Environmental Statements (for Environmental Impact Assessment (EIA)) and the Report to Inform the Appropriate Assessment (RIAA) into the Examination. Natural England has reviewed the updated RIAA and is satisfied with the project alone assessment, notwithstanding some minor errors (see detailed comments in Table 1 below), and we will be using it to inform our final position statement for impacts to the Project alone, which we will submit at Deadline 6. In the meantime, we refer the ExA to the initial integrity judgements we submitted at Deadline 3 ([REP3-070]), which remain unchanged.	The Applicant notes the integrity judgements submitted at Deadline 3 in document REP3-070 which provide Natural England's position following the acceptance of the ORBA. Natural England concluded no Adverse Effect on Integrity from the Project alone (with no conclusion given for razorbill pending updated assessment based on Natural England's advised apportioning approach; the Applicant notes that an updated assessment for razorbill was provided at Deadline 4 (REP4-030) which should enable agreement for this species). The Applicant has concluded no AEoI for razorbill. Natural England also concluded that they are unable to rule out AEoI in-combination from kittiwake, guillemot and razorbill and the breeding seabird assemblage features of FFC SPA. The Applicant echoes the ExA's comments at Issue Specific Hearing 8 that the submission of any new information at Deadline 6, to which the Applicant should reasonably be given an opportunity to respond, risks not being accepted into the Examination. The Applicant suggests that such evidence should be afforded limited weight.
0.3	The in-combination assessment however contains some errors in terms of how impacts from other projects have been carried through for guillemot, razorbill and gannet at Flamborough & Filey Coast (FFC) Special Protection Area (SPA) (see detailed comments below). Natural England has recalculated in-combination totals for these species and will be using these to inform our final position statement at Deadline 6; nonetheless we recommend that the in-combination assessment is updated by the Applicant and submitted at the final Deadline, to ensure that there is clarity going forward.	An updated RIAA will be provided at Deadline 6. Within this, updated in-combination assessments will address the errors highlighted by Natural England. The Applicant notes that the errors do not materially affect the conclusions of the assessments.

Ref	Natural England's D5 Submission	The Applicant's Response
0.4	In addition Natural England has provided updates to the following aspects of our previous advice [REP3-070], using a similar format: • Table 1 of REP3-070 for species/Special Protection Areas (SPAs) where there remained outstanding disagreement and/or uncertainty at Deadline 3 around the updated project alone mortality that should be taken though to an updated in-combination assessment, please see Annex 1 for updates. • Annex 1 of REP3-070, a summary of the disagreements between Natural England and the Applicant on assessment methodologies, please see Annex 2 for updates.	The Applicant has provided comments on Table 1 and Annex 1 of REP3-070 in Table 1.3.5 and Table 1.3.5.2 respectively (REP4-108) The Applicant echoes the ExA's comments at Issue Specific Hearing 8 that the submission of any new information at Deadline 6, to which the Applicant should reasonably be given an opportunity to respond, risks not being accepted into the Examination. The Applicant suggests that such evidence should be afforded limited weight.
1.Clarification regarding apportioning rate for guillemot and razorbill at Flamborough and Filey Coast (FFC) SPA		
1.1	In the Applicant's Comments on Deadline 4 Submissions [REP4a-115], the Applicant has requested clarification on how the 90% adult proportion for both razorbill and guillemot has been factored into Natural England's advised apportioning rate for each species at Flamborough and Filey Coast (FFC) SPA of 68.5% and 70.6% respectively. This confusion has arisen due to an error in the figure stated in Appendix F3 to Natural England's Deadline 4 submission [REP4-139] where we state that the advised apportioning rate for guillemot at FFC SPA takes into account that 31.5% will be chicks. The correct value is 23.95%.	The Applicant welcomes this clarification from Natural England. The Applicant has utilised Natural England's advised apportioning rate for both razorbill and guillemot in relation to FFC SPA when presenting Natural England's preferred approach within the RIAA (document reference 7.1, V5, submitted at Deadline 6).
1.2	As outlined in Appendix 2 of our Relevant Representations [RR-045], the advised apportioning rate of 68.5% has been calculated as follows: • A productivity rate of 0.63 (i.e. 0.63 chicks produced by every two breeding adults) has been used to calculate that for every breeding adult, there would be 0.315 chicks (0.63 divided by 2) • This is equivalent to 23.95% chicks (using a ratio of 0.315 chicks:1 adult so therefore calculated as 0.315 (chicks) divided by 1.315 (adults plus chicks) multiplied by 100) and therefore 76.1% breeding adults • Of the 76.1% breeding adults, 90% are assumed to be from FFC SPA (and 10% from other colonies) therefore, the percentage of breeding adults from FFC SPA is 68.5% (71.6 multiplied by 0.9) • This results in an apportioning rate for breeding adults from FFC SPA of 68.5%	
1.3	We apologise for the confusion caused by the error in [REP4-139] but can confirm that the previously advised apportioning rate of 68.5% for impacts to guillemot at FFC SPA during the chick-rearing and moult season (August and September), as set out in [RR-045], remains our advice and accounts for 10% of guillemot present within the Project area during those months being breeding adults from other colonies. Similarly, the advised apportioning rate of 70.6% for razorbill to FFC SPA during the post-breeding season (August to October), as set out in [RR-045], also accounts for 10% of razorbill present within the Project area during those months being breeding adults from other colonies.	
1.4	We acknowledge the Applicant's point regarding the approach assuming no immature birds are present, but reiterate that as for the breeding season, Natural England's position is that where it is not possible to age distinguish between immatures and adults, a precautionary approach is to assume all 'adult type' birds are adults.	Where DAS data cannot provide suitable proportions, the Applicant has assumed 100% adult based when presenting Natural England's preferred approach within the RIAA (document reference 7.1, V5 submitted at Deadline 6).
2. Interpretation of Population Viability Analysis (PVA) results: Consideration of realistic assessments of current and future population trends		

Ref	Natural England's D5 Submission	The Applicant's Response
2.1	As outlined in our Best Practice Advice (Parker et al. 2022), when interpreting the outputs of Population Viability Analysis (PVAs) in order to make integrity judgements, *"population metrics need to be considered with reference to the site trend, population status and SPA conservation objective for HRA, or to the relevant reference population trend and conservation status of the species for EIA. As it is not known what the growth rate of a specific feature of a colony will be over the next 30 years, this uncertainty should be considered when judging the significance of predicted impacts against the conservation objectives for the features*." This includes consideration of the PVA metrics against a realistic assessment of the current and potential future population trends (growth rates and population sizes). Natural England note, for example, that there are not an infinite number of suitable breeding ledges for guillemot at FFC SPA and it is therefore inappropriate to assume that past population growth rates will continue over the next 35 years. The Applicant has stated within the Environmental Statement Offshore and Intertidal Ornithology Chapter [AS1-041] under Section 12.4.4 Future Baseline *that "the impact assessment will be carried out in a context of declining baseline population for a number of species*". Natural England maintain that this has not been carried through to the assessment of the significance of the results of the PVAs in either the ES or RIAA.	The Applicant accepts that site population status and trends, and conservation objectives should be considered when interpreting outputs of PVA and that there is uncertainty regarding future colony growth rates over the lifetime of a project. At FFC SPA, the Applicant notes increasing populations of guillemot and razorbill, and a stable population of kittiwake, with low impacts to all three species predicted using the Applicant's well evidenced and suitably precautionary approach. The Applicant considers that there is no evidence that a realistic assessment of potential future population trends should consider any meaningful reduction in colony growth as a result of the low predicted impacts from the Project (i.e., the Applicant does not consider that the Project's low impacts are substantial enough to change colony growth in any meaningful way, and therefore future population trends should not be affected by these impacts). As such, the Applicant considers that a realistic assessment of the current and potential future trends has been presented. Likewise, the Applicant notes that Natural England's statement that it would be inappropriate to assume that growth rates will continue over the next 35 years is based on the fact that 'there are not an infinite number of suitable breeding ledges for guillemot at the FFC SPA'. In other words, this position is unevidenced, The Applicant echoes the ExA's comments at Issue Specific Hearing 8 that the submission of any new information at Deadline 6, to which the Applicant should reasonably be given an opportunity to respond, risks not being accepted into the Examination. The Applicant suggests that such evidence should be afforded limited weight.
2.2	Acknowledging the late stage of the Examination, Natural England will interpret PVA outputs by considering reductions in population growth rates against both current and potential future population trends, as per the approach taken by Sheringham and Dudgeon Extensions Project [APP-049], when making our integrity judgements and providing our final position at the end of the examination.	
3. Presentation of in-combination totals for displacement-affected species and incombination totals for guillemot, razorbill and gannet at FFC SPA		
3.1	The Applicant has presented in-combination totals for displacement-affected species as total and apportioned abundance estimates, which they have then applied displacement and mortality rates to. Natural England note that this approach makes it more difficult to check the appropriate impact figures against those presented by other projects, and that it prevents the Applicant from considering the advice Natural England has given to previous projects on how these impacts should be calculated. Specifically, the in-combination assessments for guillemot and razorbill at FFC SPA do not take into account the advice provided at Sheringham Shoal and Dudgeon Extension Projects (SEP&DEP) [REP8-102], that for the in-combination assessment, while we consider it is reasonable to consider the mortality level arising using a displacement rate of 70% and mortality rate of 2% for most projects, we advised that the impacts of Hornsea 4 on FFC SPA populations should be considered at a displacement rate of 70% and a mortality rate of 5%. Similarly, the in-combination assessment for gannet at FFC SPA does not take into account the advice provided at SEP&DEP [REP8-102] that whilst we consider it reasonable to consider displacement rates of 60-80% for all projects, and a mortality rate of 1% for most, the impacts from Hornsea 4 should be assessed at 60-80% displacement, 1-10% mortality.	The Applicant has provided updated in-combination assessments at Deadline 6, in line with requests by Natural England, for guillemot, razorbill and gannet. The Applicant's position remains that their assessment of displacement for auks is suitably precautionary at 50% displacement and 1% mortality (as evidenced in REP4a-052 Rates of displacement in guillemot and razorbill), and that the use of a 70% displacement rate, and mortality rates of 2%, and especially 5%, should be considered extremely precautionary. The Applicant also considers an assessment of the impacts of displacement on gannets using a mortality rate of 10% to be extremely precautionary, given that displacement impacts on gannet were assessed using 1% mortality by Hornsea Four and given that gannets are highly mobile and easily able to exploit alternative resources. The Applicant notes that the request to provide impacts based on a range of additional scenarios has come very late in the examination. To date, the Applicant's assessments have been carried out in line with all of Natural England's previous advice and updated to reflect the additional advice provided by Natural England throughout the Examination. Given that the examination process is now at Deadline 6, it is unreasonable to expect further updates on the assessment methodology at this stage.
3.2	We request that the Applicant presents in-combination impacts considering these various scenarios (i.e. for auks where 2% mortality is applied to all consented projects, and where 2% mortality is used for all consented projects plus Hornsea 4 at 5% mortality; for gannet where 1% mortality is applied to all consented projects, and where 1% mortality is used for all consented projects plus Hornsea 4 at a range	

Ref	Natural England's D5 Submission	The Applicant's Response
	of 1-10% mortality). This will allow Natural England to make a judgement on the full range of potential impacts.	Even if presented, any judgement Natural England will be making on the new information presented could only occur after the close of Examination and ODOW, as well as other interested parties, would therefore have no opportunity to comment on this. Natural England have suggested that this issue is not a matter that is material to their advice or decision making (REP5-171) and therefore should not be given much more focus during this examination.
3.3	In addition, the total abundance for guillemot and razorbill apportioned to FFC for Dogger Bank South as per Tables 10-28 and 10-33 of the RIAA [REP4-030] appear to be too low (see detailed comments 3 and 4 in Table 1 below).	The Applicant has provided an updated RIAA at Deadline 6 (document reference 7.1, V5, submitted at Deadline 6) which includes the most recently agreed in-combination totals for guillemot and razorbill in line with those provided within Dogger Bank South RIAA (RWE, 2024) and those provided by Sheringham and Dudgeon Extension (Natural England, 2025).
3.4	Natural England advise the Applicant refers to the project alone values presented for Dogger Bank South within the Dogger Bank South RIAA [AS-085] (6.1 Report to Inform Appropriate Assessment Habitats Regulations Assessment - Part 4 of 4 - Marine Ornithology Features (Revision 3)) and also the most recently agreed in-combination totals provided at SEP&DEP [REP8-102], and update their in-combination totals for guillemot and razorbill at FFC SPA accordingly.	

Table 2-29: The Applicant's Response to Annex 2: Update to Annex 1 provided at Deadline 3 [REP3-070]) - Update of Summary of Disagreements for Offshore Ornithology Assessment Methodology (initially provided in response to ExA Q1 OR 1.2 [REP2-074]

Ref	Section	Key Concern and/or Update	Natural England's Advice to Resolve Issues	The Applicant's Response
1	Para 688 Razorbill FFC Operations & Maintenance (O&M) alone	The Applicant has presented an assessment according to Natural England's advised approach to apportioning breeding adults to Flamborough and Filey Coast (FFC) Special Protection Area (SPA). In doing so, the Applicant describes the approach as *"a highly precautionary adult proportion of 100% throughout the annual cycle, apart from a bespoke apportioning rate of 70.6% that is applied to the post-breeding bio-season".* As stated within our Deadline 4a submission [REP4a-137] (ref 5), this is an incorrect interpretation of our advice and suggests a misunderstanding of how the proportions of adults contributing to biologically defined minimum population scales within Furness (2015) have been calculated.	To Note.	This is noted by the Applicant. The correct adult proportions for non-breeding seasons (i.e. those that are presented in Furness 2015) have been used throughout the assessment.
2	Table 9-58 Gannet displacement FFC O&M alone	The values presented in the '% increase in baseline mortality (recent count), 60-80% displacement, 1% mortality' contain some errors. The lower value in the range representing 60% displacement and 1% are half what they should be. The mean	Natural England has recalculated the range of % increase to baseline mortality (recent count) for gannet at FFC SPA and based our conclusions	The Applicant notes the error highlighted by Natural England. An updated RIAA (document reference 7.1, V5, submitted at

Ref	Section	Key Concern and/or Update	Natural England's Advice to Resolve Issues	The Applicant's Response
		annual total at 60-80% displacement, 1% mortality should therefore be 0.128-0.171 (not 0.064-0.171) % increase in baseline mortality (recent count).	regarding the project alone impacts on these corrected values.	Deadline 6) will be provided at Deadline 6, within which the errors to Table 9-58 will be addressed.
3	Table 10-28 Guillemot displacement at FFC O&M in-combination	This table shows the annual total (i.e. number of guillemots at risk of displacement apportioned to FFC SPA) for Dogger Bank South (DBS) (at 100% apportioning to FFC in the breeding season) as 15,814. However, the most recent version of the DBS RIAA [AS-085] has this as 32,563.	Natural England advises the Applicant to refer to Table 9-28 of the DBS RIAA Rev 3 [AS-085] for the estimated project alone impact for DBS and recommends that they submit a corrected incombination assessment for guillemot at FFC SPA at the final Deadline.	The Applicant has provided an updated RIAA (document reference 7.1, V5, submitted at Deadline 6) at Deadline 6 which includes the most recently agreed in-combination totals for guillemot in line with those provided within Dogger Bank South RIAA (RWE, 2024) and those provided by Sheringham and Dudgeon Extension (Natural England, 2025).
4	Table 10-33 Razorbill displacement at FFC O&M in-combination	This table shows the annual total (i.e. number of razorbill at risk of displacement apportioned to FFC SPA) for DBS (at 100% apportioning to FFC in the breeding season) as 3,315. However, the most recent version of the DBS RIAA has this as 10,031.	Natural England advises the Applicant to refer to Table 9-36 of the DBS RIAA Rev 3 [AS-085] for the estimated project alone impact for DBS and recommends that they submit a corrected in-combination assessment for razorbill at FFC SPA at the final deadline.	The Applicant has provided an updated RIAA (document reference 7.1, V5, submitted at Deadline 6) at Deadline 6 which includes the most recently agreed in-combination totals for razorbill in line with those provided within Dogger Bank South RIAA (RWE, 2024) and those provided by Sheringham and Dudgeon Extension (Natural England, 2025).
5	Tables 10- 43 and 10-51 Gannet displacement at FFC O&M in-combination	The Applicant has provided two values each for impacts to FFC SPA gannet from Dogger Bank South – one based on 60% apportioning to FFC (which it has called the 'realistic-case' and one based on 100% apportioning to FFC SPA (which it has called 'worst-case'). It is unclear why the Applicant, having used 100% apportioning for gannet to FFC SPA for their own approach, for the reasons set out in Appendix 7.1.1 section 5.1 [REP4-033], considers the 60% apportioning rate to be the 'realistic case'.	Natural England has based their integrity judgement on the higher total using a 100% apportioning rate for gannet to FFC SPA for DBS.	The Applicant has provided both approaches and has used the 100% apportioning as this is considered the most precautionary position. In representing the upper and lower estimates for in-combination impacts across a range of projects, the Applicant has presented Dogger Bank South's 'realistic case' (60%) and worst case (100%) - but the Applicant's position for the Project is that 100% should be used.
6	Para 1846 Gannet displacement at FFC O&M in-combination	The Applicant has stated that the addition of 155 mortalities (combined mortalities for displacement and collision for gannet at FFC SPA in-combination) represents a 0.063% increase in baseline mortality. This is an error; the value should be 6.3%.	The Population Viability Analysis (PVA) undertaken has used the correct reduction in survival as the input, therefore the outputs of the PVA remain valid. No further action is required.	This comment is noted by the Applicant.

Table 2-30: The Applicant's Comments on the Natural England's Deadline 5 Appendix G3 Seabird Compensation Calculations

Ref	Natural England's D5 Submission	The Applicant's Response
1	Natural England's headline advice on calculations for seabird compensation requirements is set out in [REP3-071]. However, following testing of the application of the Hornsea 3 part 2 ('H3pt2') method for guillemot and razorbill, it has become apparent that lower levels of natal dispersal, compounded by older recruitment ages and lower productivity can produce unrealistic and clearly disproportionate requirements for scaling compensatory measures for these species. Furthermore, it is not clear that some of the demographic information is well evidenced, which can introduce significant uncertainty into any calculations reliant on those data.	The Applicant welcomes the advice from Natural England regarding the use of the Hornsea Four method in order to calculate compensation requirements. The Applicant understands that Natural England's advice is that the scale of measures, the 'design requirement' should be informed using the UCL and an appropriate ratio, with the 'success requirement' (i.e. the level of compensation that the measure(s) are expected to deliver each year) be informed by the mean impact value at a 1:1 ratio. The Applicant has calculated the design requirement and the success requirement for impacts on guillemot and razorbill using the Applicant's and Natural's approach; impacts, 'design requirements' and 'success requirements' are presented in Table , in Appendix A below. In all cases, the compensation capability across all three measures is substantial and can easily meet Natural England's 'success requirement'; Natural England's design requirement is met in all cases with the exception of the most precautionary scenario, i.e. the inclusion of the most precautionary approach for all elements of the impact assessment, the use of an Upper Confidence Interval (UCI) for predicted impacts and a 3:1 ratio for the compensation measures. The Applicant has consistently argued that such a scenario generates outputs which are unrealistic compared to the environmental risk in question and goes well beyond the requirements in the Habitats Regulations to '*secure that any necessary compensatory measures are taken to ensure that the overall coherence of the National Site Network is protected*'. The Applicant considers that if the SoS prefers the Natural England approach (i.e. the use of the UCI) the application of a compensation ratio is not necessary given the inherent precaution within the assessment. However, if the SoS does deem a ratio necessary in addition to the above, the Applicant can provide compensation at a broadly 2:1 ratio for kittiwake, guillemot and razorbill. The Applicant maintains its position that the use of the UCI in calculating design requirements for measures, in order to address any uncertainties regarding the measures ability to deliver, is not necessary given the high levels of precaution within the assessment (especially under Natural England's preferred approach) and even more so when a compensation ratio is also applied. The Applicant is clear that the use of UCI and a ratio when considering compensation quanta effectively address the same uncertainties regarding the effectiveness of the measures, and therefore the application of both to address these uncertainties is not appropriate. The Applicant maintains that the use of the mean impact value and a 1:1 ratio is appropriate for defining compensation quanta, given the precaution inherent in the assessments. However, the Applicant has developed substantial compensation measures such that, if required absolutely necessary by the SoS, compensation based upon the UCI at a 2:1 ratio for all species (1.99:1 for razorbill) could be provided. The Applicant refers again to the submissions specifically made in relation to precaution at previous deadlines. The precaution relevant to auks is summarised below, and discussion of papers relevant to the application of the precautionary principle is presented in REP5-053:
2	In such cases and pending further refinement and updates to best practice advice, Natural England consider that, given the current absence of a robust alternative option for guillemot and razorbill, it is appropriate for the Hornsea 4 ('H4') method to be used. This should be carried out in conjunction with the use of the 95% upper confidence limit (UCL) predicted impact value and the application of a suitable ratio to address the uncertainty of success, set on a case-by-case basis. The mean or central impact value should be used to inform and define success criteria, if appropriate.	

Ref	Natural England's D5 Submission	The Applicant's Response
		• Adult proportioning - Natural England's advised rate is 100% adults, see REP4-033; the Applicant advocates the use of the Furness 2015 stable age populations, i.e. 57% adults, as the best available evidence, with no data supporting an assumption of 100%. • Displacement rates - Natural England's advised rate is 70%, i.e. the highest rate from studies of displacement from constructed windfarms; the Applicant advocates a rate of 50% based on a meta-analysis presented in REP2-059, noting that this is precautionary in that it considers the weight of evidence and range of studies (which as set out by the RSPB ranges from 0 – 70% and as such a value of 50% errs on the side of caution). • Sabbatical rates – Natural England's advice is to not incorporate sabbatical rates (these rates account for fully mature adults which are not breeding within a specific breeding season); the use of published sabbatical rates would reduce impacts by approximately 5 – 10% (depending on the species). As such, not applying any sabbatical rate is precautionary and artificial (see REP4-033). The Applicant has not applied a sabbatical rate but would advocate that published rates should be treated as best available evidence and used in assessment. • Apportioning to FFC SPA in the breeding season – Natural England advises that 100% of birds are apportioned to the FFC SPA; the Applicant advocates 50% apportioning as a reasonable approach (see REP4-033) based on the distance of the Project from the colony (at the extreme foraging range of both guillemot and razorbill from the FFC SPA). • Use of bioseasons - Natural England's advice for guillemot is to consider a discrete post-breeding bioseason (the Applicant notes that this advice was provided into the Examination as a relevant representation (RR-045) and is not currently published guidance; the Applicant does not consider the addition of a discrete post breeding bioseason with 100% of birds apportioned to FFC SPA during these months is appropriate. Additional highly precautionary inputs advocated by Natural England include: • Use of mean peaks for setting of bioseason populations upon which impact assessments are being run. • Assumption that the project is within the core range of birds foraging from FFC SPA based upon Mean Max Foraging Ranges (MMFR) + 1 Standard Deviation (SD). When considering impacts on guillemot and razorbill and the level of precaution to be applied, the likely connectivity between the Project and the FFC SPA must also be considered as it provides a more ecologically pragmatic understanding of the likely scale of any impacts: • The Applicant notes that the closest distance between the FFC SPA colony and the array is 95km. The mean-max foraging range for guillemot is 73.2 km which suggests no connectivity between the colony and the array; as a precaution, Natural England advise the use of a mean-max foraging range plus 1SD (standard deviation) which is 153.7km, i.e. connectivity is possible but likely to

Ref	Natural England's D5 Submission	The Applicant's Response
		involve a small number of individuals. Once the anomalous Fair Isle data are removed from the MMFR calculation (foraging ranges in the study referred to may have been unusually high owing to reduced prey availability (Woodward, 2019)), the mean-max foraging range plus 1SD is 95.2 km. Without the inclusion of the Fair Isle data, the distance between the project and the FFC SPA is approximately four times the mean foraging range for guillemot. • Similarly for razorbill, the mean-max foraging range plus 1SD (with the removal of the Fair Isle data) is 94.7km therefore there is likely to be no connectivity between the FFC SPA and the array for the vast majority of birds. As such, assuming that all birds within the array are connected to the FFC SPA is highly precautionary, and Natural England's apportioning of 100% to the FFC SPA is unlikely to represent the ecological reality, even on a conservative basis. The Applicant also considers that there will be no material consequence to birds from the FFC SPA being displaced as they will be displaced into water closer to the colony. Both auk species are ubiquitous across the southern North Sea and can forage in a wide range of depths and environmental conditions. When considering the likely success of the compensation measures proposed, the Applicant is clear that any uncertainties will be reduced through the implementation of three separate measures for both guillemot and razorbill (predator control at Plemont, measures at the south-west sites and the use of ANS (note that the ANS design calculations are conservative in terms of the number of spaces predicted to be available as it is likely that many more birds will colonise the ANS when compared to the base case calculations); there is also the potential for additional compensation measures (should they be required) through predator eradication at the Isles of Scilly (which are likely to be substantial) (see Annex 7 of REP5-111 for further details of this measure). Following the updated advice provided by Natural England at D5, Tables 2-5 provide a range of compensation requirement scenarios based on the Applicant and Natural England's approach to impact calculation and the preferred predicted impact (i.e. the mean or UCL impact) have been provided: • Table : Guillemot at the Flamborough and Filey Coast SPA (Appendix A) • Table : Guillemot at the Flamborough and Filey Coast and Farne Islands SPAs (Appendix A) • Table : Razorbill at the Flamborough and Filey Coast SPA) (Appendix A) **<u>Success criteria</u>** Success criteria are calculated with the mean impact value, using the Hornsea Four method and at a 1:1 ratio. For guillemot at the Flamborough and Filey Coast SPA, the potential compensation achievable across the three proposed measures developed by the Applicant (including collaborative measures in the South West of England) is substantially larger than the success requirement calculated, with the Applicant's potential compensation at a ratio of 41.3:1 using the Applicant's approach to impact assessment and 3.0:1 using Natural England's approach to impact assessment. The Applicant notes that this is

Ref	Natural England's D5 Submission	The Applicant's Response
		conservative given quantification of available compensation through predator eradication on the Isles of Scilly is not yet included, but the Task and Finish Group (comprising Defra, DESNZ, Natural England, The Wildlife Trusts, OWIC, The Crown Estate, and RSPB) state that: *'All parties agree that predator eradication on the Isles of Scilly has great potential to provide compensation for the impacts of offshore wind projects and would support its inclusion in project specific compensation plans. Offshore wind projects currently seeking consent might wish to submit this statement to the examining authority to demonstrate progress with this scheme, if they seek to use it as strategic compensation for unavoidable impacts to protected species likely to be impacted by their projects.* The Applicant understands that the Task and Finish Group is currently quantifying the potential compensation for guillemot and razorbill and that this information will be shared with the relevant developers as soon as it is available. In the meantime, the Applicant has provided RWE Dogger Bank South with its updated compensation quanta based on Natural England's preferred approach identified in REP5-167. Following discussion with RWE Dogger Bank South regarding Natural England's revised compensation quanta, the Applicant has received the following statement from RWE Dogger Bank South: 'Based on the amount of available habitat suitable for the guillemot and razorbill to 'nest' at the Isles of Scilly as documented by the DBS Projects' colony count and habitat surveys undertaken in July 2024 (RWE, 2025), it is predicted that an eradication at the Isles of Scilly could provide enough rat free nesting spaces for both ODOW's and the DBS Project's guillemot and razorbill compensation needs, based on the compensation numbers for each species as derived from the HOW4 method using the 95% UCL at a 3:1 ratio'. For guillemot at the Flamborough and Filey Coast SPA and Farne Islands SPA, the potential compensation achievable across the three measures developed by the Applicant (including collaborative measures in the South West of England) is substantially larger than the success requirement calculated, with the Applicant's potential compensation at a ratio of 37.7:1 using the Applicant's approach to impact assessment and 3.0:1 using Natural England's approach to impact assessment. For razorbill at the Flamborough and Filey Coast SPA, the potential compensation achievable across the three measures developed by the Applicant (including collaborative measures in the South West of England) is larger than the success requirement calculated, with the Applicant's potential compensation at a ratio of 21.0:1 using the Applicant's approach to impact assessment and 3.2:1 using Natural England's approach to impact assessment. **<u>Design criteria</u>** The design criteria are calculated with the UCI impact, using the Hornsea Four method, with an appropriate ratio applied. Assuming that a ratio of 2:1 is applied for kittiwake (thus freeing space for auks on the ANS), the following scenarios arise:

Ref	Natural England's D5 Submission	The Applicant's Response
		• For guillemot at the FFC SPA, the Applicant's suite of measures meets Natural England's design criteria at a ratio of 2:1 • For guillemot at the FFC SPA and the Farne Islands SPA, the Applicant's suite of measures meets Natural England's design criteria at a ratio of 2:1 • For razorbill at the FFC SPA, the Applicant's suite of measures meets Natural England's design criteria at a ratio of 2:1 (1.99:1) The Applicant's approach, i.e. the use of the mean impact prediction with the Hornsea Four method and a 1:1 ratio, should be suitable to meet the compensation design requirements as well as the success requirements. However, should the UCI be applied then the Applicants position is that the additional built-in precaution (e.g. an additional layer of precaution to that already present in the Hornsea 4 method) that results negates the need for the Application of any ratio. That is that using the UCI without a ratio is more than adequately precautionary. However, should there be disagreement with this position, then the Applicant notes that, even with the inclusion of the additional impacts at the Farne Islands SPA, a design requirement that utilises a ratio very close to 2:1 for both razorbill and guillemot could be delivered across all measures proposed by Applicant. In summary, the Applicant maintains that compensation is not necessary for either the guillemot or razorbill feature of the FFC SPA. Should compensation be necessary then the Applicants firm position is that the use of the mean impact value and a 1:1 ratio is appropriate for defining compensation quanta, given the precaution inherent in the assessments and relevant precedent. However, the Applicant has developed compensation measures which when considered collectively the required compensation could be delivered under any of the following scenarios for guillemot and razorbill dependent on which method of quantification is deemed appropriate by the SoS: • Applicants preferred approach at ratios beyond 1:1 • Natural England's Preferred Approach using the UCI, no ratio applied • Natural England's preferred approach using the UCI up to a ratio of close to 2:1 (1.99:1) The Applicant notes that, even with the inclusion of the additional impacts at the Farne Islands SPA, a design requirement that broadly utilises a 2:1 ratio for both razorbill and guillemot should be achievable. In addition to the compensation described, the Applicant will also be able to access guillemot and razorbill compensation through the predator eradication measure on the Isles of Scilly. As such, delivery of the Project's compensation across the suite is not necessarily reliant on the ANS as described here, giving further confidence regarding overall delivery of appropriate compensation if required.

Ref	Natural England's D5 Submission	The Applicant's Response
3	Our advice on kittiwake remains that the Hornsea 3 part 2 is the most complete method of scaling compensation requirements. Nevertheless, Natural England highlight that the application of any method to calculate the scale of compensatory measures with respect to the number of breeding pairs required to compensate a specified annual mortality impact remains somewhat contentious. The pressing need for independent expert advice on the topic led to the British Trust for Ornithology (BTO) being contracted by Natural England (on behalf of the Collaboration on Offshore Wind Strategic Compensation) to critically review the available methods and determine the most appropriate, or to identify an alternative method. The contract's principal focus is on kittiwake but also considering whether the method is appropriate for other species. However, it is unlikely that the outputs of this project will be finalised in time for proper consideration within this examination.	The Applicant reiterates the position that the use of the Hornsea Three part-2 method is not appropriate for compensation calculation for any species, and that the Hornsea Four method is appropriate for the calculation of compensation for kittiwake. The Applicant has highlighted specific concerns with the Hornsea Three part-2 methodology within previous submissions, specifically REP2-057 Levels of precaution in the assessment and REP5-134 Guillemot and Razorbill Compensation Quanta. Many of the concerns laid out within this document also apply to the calculation of compensation of kittiwake. In summary, the Applicant's position is that the Hornsea Three part-2 method relies on a range of ecological assumptions and flawed principles for which there is no evidence. **The Hornsea Three part-2 method assumes that all birds required to address natural wastage from the measure would come from the impacted colony** The assumption that all losses from the measure (through natural wastage, i.e. adult mortality and dispersal) will be replaced by birds from the impacted colony (in this case, the FFC SPA) is flawed in several ways. Birds will emigrate from a colony where performance is low and recruit to a colony where performance is higher. For this to occur, the birds must have information on the performance at the potential new colony. This can only be gleaned during the latter period of the breeding season; birds from colonies where there is no breeding season connectivity with the measure will not have access to this information and therefore cannot directly recruit from the impacted colony to the measure. During the latter period of the breeding season, birds are at their most constrained (i.e. have reduced foraging ranges as a result of needing to provision chicks) and therefore connectivity with FFC SPA is less likely than connectivity with closer breeding birds (for example, on an ANS). It is more likely that adults from the offshore breeding population, rather than birds from the FFC SPA, will acquire the information they need pre-recruitment to a potential new colony (i.e. an ANS). In summary, the Applicant considers that natural wastage from the measure is highly likely to be addressed through recruitment of birds from offshore breeding colonies, the annual cohort of birds maturing to adulthood and any 'floating' adults (i.e. those not affiliated with any colony) in the population. **The Hornsea Three part-2 method assumes that birds recruiting to the measure from the impacted colony is detrimental to the colony and that the resultant gaps in the impacted colony would not be addressed** The method assumes that it is detrimental to the impacted colony, i.e. the FFC SPA, for birds to leave that colony and recruit elsewhere, i.e. to the measure. Given the extremely high rates of juvenile dispersal in kittiwake (89% recruit to different colonies), this is not a given. In the case of kittiwake at FFC SPA, preliminary modelling undertaken by the Applicant has shown that, due to high dispersal rates of juveniles, if breeding birds relocate from the FFC SPA to a measure, only 13% of their offspring need to

Ref	Natural England's D5 Submission	The Applicant's Response
		relocate back to the FFC SPA for them to contribute more to the FFC SPA from the measure than if they had remained at the SPA. The figure of 13% is entirely plausible given the juvenile dispersal rate, and the location of the ANS in relation to the FFC SPA. **The Hornsea Three part-2 method is fundamentally flawed as it results in a 'feedback loop'** Use of the Hornsea Three part-2 method increases the compensation requirement and therefore the output required from a measure. By increasing the output required, the size of the measure also increases, thereby increasing the number of birds that would be lost as a result of mortality and dispersal, and additional output from the measure is then needed to address these losses. This additional output then increases the numbers lost through mortality and dispersal, and so on. It is counterintuitive to increase the size of a measure to address impacts at a colony when doing so will create additional losses at the same impacted colony. Put simply, the Hornsea Three Stage 2 method consists of a 'feedback loop' whereby increasing the requirement increases the impact on the impacted colony, which in turn increases the requirement. As set out herein, the Applicant considers that many of these assumptions which cause the feedback loop itself are fundamentally flawed and do not represent realistic ecological behaviour of seabirds. **Dispersal from colonies is natural and the Applicant should not be expected to include this in any compensation calculations** Birds disperse from colonies, including the FFC SPA, regardless of whether a compensation measure is in place. Effectively, the Hornsea Three-part 2 method artificially penalises the Applicant such that natural aspects of the birds' behaviour, i.e. movement between colonies, are included as part of compensation calculations. The Applicant agrees with Natural England that 'the intervention site will only be compensating for the predicted impacts when its fledglings become successful breeding adults'. The Applicant considers that this is accounted for in its use of the Hornsea Four calculation as age-group specific survival rates are used to calculate the number of fledglings required to generate the necessary number of adults. As such, the Applicant's use of the Hornsea Four method is appropriate. The Applicant considers that it would not be scientifically possible to determine which fledglings would not have been hatched without the intervention (i.e. those from pairs which would have bred at FFC SPA in this case) due to the large uncertainties as to which birds would have naturally left that colony without the intervention. Additionally, the Applicant maintains that the purpose of the compensation should be considered to provide adult breeding birds back into the wider biogeographical population which consequently sustains the National Site Network population (and consequently that of the FFC SPA). As such, the Applicant maintains that it is appropriate to consider all birds fledged form the measure as part of the compensation contribution. The Applicant agrees with Natural England that 'there is a clear benefit to having a consistently applied, scientifically robust method of calculating the number of breeding pairs required to generate the

Ref	Natural England's D5 Submission	The Applicant's Response
		replacements into the national site network' and considers that the Hornsea Four method provides this, having been used by the SoS for multiple species on Hornsea Four and representing the most recent precedent.
4	At Deadline 6 we will provide our end-of-Examination position regarding the Applicant's proposed compensatory measures and our current position on the appropriate compensation quanta. It should be recognised though that this is a matter that will continue to be explored beyond the close of the ODOW Examination.	The Applicant echoes the ExA's comments at Issue Specific Hearing 8 that the submission of any new information at Deadline 6, to which the Applicant should reasonably be given an opportunity to respond, risks not being accepted into the Examination. The Applicant suggests that such evidence should be afforded limited weight. However, the Applicant notes it has been provided some comments in relation to considerations that would give Natural England further confidence in the proposed compensation measures. The points raised are addressed by the Applicant in Table . The Applicant notes that these are largely considerations that can be addressed in the post consent phase but the following documents have been updated in order to incorporate Natural England's comments at Deadline 6: • 7.7.4 Offshore Artificial Nesting Structure Evidence Base and Roadmap (document reference 7.7.4, V3, submitted at Deadline 6) • 7.7.5 Without Prejudice Predator Control Evidence Base and Roadmap (document reference 7.7.5, V4, submitted at Deadline 6) • 7.7.6 Additional Measures for the Compensation of Guillemot and Razorbill (document reference 7.7.6, V1, submitted at Deadline 6) • 24.2 The Applicant's Comments on Deadline 5 Submissions (document reference 3.1, V5, submitted at Deadline 6)

Table 2-31: The Applicant's Comments on the Natural England's Deadline 5 Appendix H7 Comments on Onshore Ecology

Natural England's Submission	Applicant Response
1. Introduction	
This appendix draws together Natural England's advice in relation to: • Biodiversity Awareness Training within the Outline Landscape and Ecological Management Strategy • Air quality mitigation • Sea Banks Clay Pits Site of Special Scientific Interest (SSSI) as an ecological receptor in Environmental Statement (ES) Chapter 26 Onshore Noise and Vibration. • Construction noise disturbance to the designated features of The Wash SPA / Ramsar, including on functionally linked land associated with the designated birds.	This comment has been noted by the Applicant.
2. Report to Inform Appropriate Assessment [REP4-032] 7.2 Habitats Regulations	

Natural England's Submission	Applicant Response
Assessment Screening Report V2 (Tracked) [REP4-038]	
Natural England welcomes the inclusion of the Viking Carbon Capture and Storage Pipeline within the in-combination assessment. However, we note it is absent from Table 7.9: 'Projects identified at Screening to be considered within the onshore ecology and ornithology in-combination impact assessment'. Natural England advises for completeness the Viking Carbon Capture and Storage Pipeline should be included in the Table 7.9, to ensure it is not missed from any analyses.	The Applicant can confirm that this project has been added to Table 7.9 in the version of the RIAA submitted at Deadline 6 (document reference 7.1, V5, submitted at Deadline 6).
3. Biodiversity Awareness Training [OLEMS REP4a-084 and Schedule of Mitigation REP4a-087]	
Natural England welcomes the inclusion of designated sites, their features and functionally linked land within the Biodiversity Awareness Training in the Outline Landscape and Ecological Management Strategy (OLEMS) [REP4a-084] and Schedule of Mitigation [REP4a-087].	This comment is welcomed by the Applicant.
4. Air Quality [Chapter 19 Onshore Air Quality V3 Tracked REP4a-014 and Outline Air Quality Management Plan V2 REP4-078]	
The mitigation provided by the Applicant within 6.1.19 Chapter 19 Onshore Air Quality [REP4a-014] and 8.1.2 Outline Air Quality Management Plan [REP4a-078], is acceptable to sufficiently protect designated features within ecological designated sites from construction dust. However, Natural England advises ongoing monitoring at ecological designated sites >50m from dust generating activity should be included and outlined within the Air Quality Management Plan, along with being secured via a requirement of the Development Consent Order (DCO) to ensure any potential damaging activity to designated features generated by construction dust is captured and adjusted accordingly.	The Applicant has revised the Outline Air Quality Management Plan (AQMP) (document reference 8.1.2, V3, submitted at Deadline 6) to include a commitment to monitor dust deposition at relevant sensitive ecological designations. The locations will be agreed in consultation with Natural England as part of the Final AQMPs. DCO Requirement 18 requires an air quality management plan that accords with the oAQMP to be submitted for approval by LCC as part of the code of construction practice therefore this commitment is secured by a DCO requirement.
5. Onshore Noise Disturbance - The Wash SPA / Ramsar, and Sea Banks Clay Pits Site of Special Scientific Interest (SSSI)	
As advised in our Appendix J4 Risks and Issue Log at Deadline 4 [REP4-144] in the interest of issue resolution, Natural England has sought further advice from our ornithology specialist on the noise disturbance assessment and impacts to the designated features of The Wash SPA / Ramsar, and Sea Banks Clay Pits Site of Special Scientific Interest (SSSI) including on functionally linked land (FLL) associated with the designated birds. It remains Natural England's view that the Applicant's noise assessment was not undertaken as per Natural England's guidance [RR-045], however on further review, we are able to advise the assessment for the purposes of this project can be considered acceptable.	The Applicant welcomes confirmation that these issues are now resolved.
Risk and Issues Log	
Natural England therefore provides the following update to the ExA regarding our issues and concerns raised within our Relevant Representations [RR-045]. These are also summarised within Appendix J5 Risk and Issues Log.	The Applicant welcomes confirmation that these issues are now resolved.
1. Sea Banks Clay Pits Site of Special Scientific Interest (SSSI) Sea Banks Clay Pits Site of Special Scientific Interest (SSSI) has been included as an ecological receptor in the noise assessment of the Environmental Statement (ES) Chapter 26 Onshore Noise and Vibration [REP4a-022] as requested by Natural England in our Relevant Representations [RR-045]. The analysis concludes temporary minor adverse effect from inter-related construction activities. This is below the threshold for impacts and so is acceptable and no further action is required. This issue is now resolved see Risks and Issues Log Appendix J5, Tab H, Point 7.	

Natural England's Submission	Applicant Response
2. Impact Risk Zone The Applicant has used their own survey data to assess FLL in ES Chapter 22, and included mitigation where fields are used by brent geese or lapwing. As such Natural England is satisfied this approach is acceptable for the assessment of ornithological features and their use of functionally linked land. As such the Impact Risk Zones (IRZs)are superseded by the surveys and not required to inform the avoidance / mitigation / compensation in this instance. Therefore, this issue is resolved, see Appendix J5 Risk and Issues Log Tab H Point 8.	
3. Assessment of designated bird features of The Wash SSI / SPA and Ramsar Natural England's preferred approach is to assess the specified features of designated sites spatially, and ideally this would be done by noise contour mapping and include any functionally linked land. However, the use of the 55dB LAeq,1hr threshold to derive a set back distance is acceptable for the bird features of the identified designated sites. Therefore, this issue is resolved, see Appendix J5 Risk and Issues Log Tab H Point 9.	
4. Thresholds Construction and Operational Noise Impact Magnitudes Natural England does not advocate the use of thresholds for significant effects as they will vary by species and by site. Therefore, we advise that noise contour maps for both LAeq and LAmax noise are produced from 55dB upwards. This models the area of land that would be affected by different noise levels. Instead, the Applicant has used the 55 dB LAeq,1hr threshold to define a distance within which significant impacts could occur. Whilst this is not our preferred approach, we advise this is acceptable and appropriately justified within ES Chapter 26 v2 [APP-081] Section 26.7.6.6. Whilst the Applicant has not modelled the noise levels in line with Natural England guidance, they have looked at the designated sites and use of FLL by different species, and included mitigation in the form of timing of works within ES Chapter 22. As such, Natural England are satisfied with the Applicant's conclusions in this instance. Therefore, these issues are resolved see Appendix J5 Risk and Issue Log Tab H Points 10, 11, 12 and 17.	
5. Functionally Linked Land as Ecological Noise Sensitive Receptors (NSRs) ES Chapter 26 v2 [APP-081] does not include functionally linked land as an ecological receptor, and the assessment of FLL impacts in the ornithology ES Chapter 22 does not refer to the set back distances used in Chapter 26. Despite that lack of read-across, Natural England is satisfied that FLL is considered in the ornithology chapter, including mitigation measures. Therefore, this issue is resolved, see Appendix J5 Risk and Issue Log Tab H Points 13 and 16.	
6. Noise and Vibration Management Plan (NVMP) [REP2-032] Thresholds, although potentially a useful rule of thumb, are discussed in studies such as Cutts et al (2009) where the authors recognise that this is a relatively simplistic approach as it does not take into account the type of disturbance nor the sensitivity and prior experience of the birds. Furthermore, as the derivation of this threshold seems to be largely related to studies of noise disturbance associated with construction works on the Humber Estuary, it is most relevant to locations which already experience relatively high levels of background noise. Within this Application, Natural England has accepted analysis of impacts outside our usual guidance in relation to survey and modelling of noise pollution impacts to ecological noise sensitive receptors, due to	It is unclear why NE are requesting monitoring as previous points relating to noise monitoring at the designated sites and FLL have been resolved. For example, within Point 16 within the Risks and Issues Log (REP5-171), NE have stated they are satisfied that noise impacts on the FLL is considered in ES Chapter 22 Onshore Ornithology, including mitigation measures. Table 22.21 in ES Chapter 22 sets out that there will be seasonal restriction to avoid works within 400m of core areas used by Brent Geese at the Haven. Based on this, and the additional measures within the OLEMS (document reference 8.10, V8, submitted at Deadline 6) and the outline NVMP (REP2-031), Natural England is satisfied that noise disturbance to birds using the Haven area will be avoided.

Natural England's Submission	Applicant Response
the Applicant's reasoning and justification. It would be pertinent to ensure that impacts from noise pollution during construction and decommissioning to noise sensitive designated features of designated ecological sites are monitored and activities adjusted where an impact is identified. Natural England guidance states, increases of 3 dB or more against existing levels could be significant. We advise monitoring of ecological noise sensitive receptors against the baseline, including designated features of designated sites and any functionally linked land they use, should be outlined in the Noise and Vibration Management Plan (NVMP) and the full NVMP secured as a requirement within the DCO. This should align with, and reference avoidance and mitigation as outlined in Chapters 26 and 22 of the ES. See Appendix J5 Risk and Issue Log Tab H Points 14 and 15.	With regards to the assessment of FLL, NE have stated that this has been appropriately assessed within ES Chapter 22 (REP5-042) which was undertaken with reference to, amongst other things, an IECS study which also recommends absolute noise limits. As the assessments within ES Chapter 26 (REP4a-021) and ES Chapter 22 (REP5-042) are based on absolute noise limits from the AQTAG09 guidance and the IECS study respectively; baseline levels were not measured or collected as they were not required in order to reach a conclusion on the likely significant effects of noise upon ecological receptors. With regards to the NE statement that in conjunction with 'Natural England Guidance, *"increases of 3 dB or more against existing levels could be significant"* it is unclear where this figure has been derived from and the Applicant has not been able to identify the guidance that they are referring to. When the Applicant requested a copy of this guidance (email to NE dated 26/03/25), it was initially informed "We don't have any published standard guidance on noise available, however we generally refer people to Nature Scot published guidance" (Email from NE 27/03/25). Upon review of the guidance linked in the above email, that particular guidance does not provide and further detail upon the origin of the 3dB limit. Only after further correspondence with NE to highlight the lack of a 3dB limit in the suggested guidance was the Applicant provided an 'excerpt' from 'internal guidance'. Without full access to the guidance being quoted by NE, and the opportunity to understand its origins and scientific credibility, it is not possible for the Applicant to establish if it is suitable for use on this project. In addition, and with reference to the general principles of acoustics, a 3dB increase or change in noise levels is the minimum perceptible change to a human ear under normal conditions and includes an 'A-weighting' to the reflect how a sound is perceived by the human ear. Therefore, we are unclear how this would relate to ecological receptors. It should also be noted that due to the low baseline sound level measured at the human receptors, which would be comparable to a number of the ecological receptors, only a minimal amount of construction activity or normal local activity (i.e. private car movements, use of garden or farm machinery) would have the potential to increase the baseline level by 3dB or more, especially within the FLL, which is another reason why the use of absolute limits is considered more appropriate. Further to the above worked examples are provided below. With reference to Table 26.18 within ES Chapter 26 (REP4a-021) the measured average daytime ambient noise level at Location ECC003 which is located to the west of Seathorpe was 44dB $L_{Aeq,T}$. Therefore, in conjunction with the general principles of acoustics, a source equal to 44dB would cause a 3dB change in the ambient noise levels when logarithmically added to the measured ambient level.

Natural England's Submission	Applicant Response
	Based on the guidance contained in BS5228:2009+A1:2014 the operational sound pressure level (SPL) for a tractor pulling a trailer (i.e. typical farming activity) is 79dB(A) at a distance of 10m (Item 75 in Table C4 of BS5228+A1:2014), which equates to a sound power level (SWL) of 107dB(A). With reference to the noise level above, based on flat, soft ground and excluding any barriers or buildings, utilising noise prediction methodology contained in BS5228+A1:2014 the predicted noise level from the tractor would be 44dB at a distance of approximately 300m away from the source. Therefore, any ecological sensitive receptors or areas of FFL located within 300m of a farmer using a tractor would be subject to a change in ambient noise levels of 3dB or more and any receptor within 20m of the tractor, which could be the case for the FFL, would be subject to a noise level of approximately 38dB above the baseline ambient level. Similarly, based on a noise level of 96dB(A) for a lawn mower (Mountfield NTL 434 TR-R) the predicted noise level from the mower would be 44dB at a distance of approximately 110m, away from source. Therefore, any ecological sensitive receptors or areas of FFL located within 110m of someone mowing their grass would be subject to a change in ambient noise levels of 3dB or more and any receptor within 20m of the lawn mower, which could be the case for the FFL, would be subject to a noise level of approximately 28dB above the baseline ambient level. In the referenced excerpt from guidance provided in the email sent to the Applicant on the 02nd of April 2025 NE also referenced sporadic, peak, impulsive and maximum noise levels. With regards to 'sporadic/peak/impulsive/maximum' noise levels, these are more difficult to assess as there is limited published data regarding maximum noise levels from construction plant and/or domestic machinery such as lawn mowers and it is almost impossible to predict when or where the 'maximum' noise level from plant may occur as this could depend on factors such as a tractor driving over a rock or a lawn mower hitting a stone. In addition and with reference to the maximum (L_{Amax}) noise level measured as part of the baseline survey the exact source of the maximum noise levels could not be identified, i.e. the maximum noise level of 62dB L_{Amax} measured at ECC003 may have been caused any one of the audible sources which contributed to the overall soundscape such as car pass-byes, distant gunshots or even ducks quacking (See Table 26.19 in APP-081). Therefore, it is difficult to make a 'like of like' comparison. However, even when based on the sound power level of the tractor, which is likely to be lower than the maximum noise level (L_{Amax}), the predicted noise level from the tractor would be 65dB (i.e. 3dB higher than the measured baseline maximum) at a distance of approximately 40m, away from source. Therefore, any ecological sensitive receptors or areas of FFL located within 40m of the tractor described above would be subject to maximum noise levels of 3dB or more above baseline maximum levels, and

Natural England's Submission	Applicant Response
	any receptor within 20m of the tractor, which could be the case for the FFL, would be subject to a noise level of approximately 11dB above the baseline maximum noise level. With reference to the above it is considered that the use of a 3dB change in noise levels is not practicable or suitable as the basis to assess impacts on Ecological receptors as this degree of change could be experienced at significant distances away from 'everyday' farming operations or normal local activity, which for all intents and purposes is likely to be already occurring. It is also unclear why NE consider that a change of 3dB 'could be significant', as previously stated a 3dB increase or change in noise levels is a minimum perceptible to a human ear under normal conditions, but it is not considered significant. With reference to Table 7-12 within the Guidelines for Environmental Noise Impact Assessment produced by the Institute of Environmental Management and Assessment (IEMA) a 'Substantial effect' is defined as a Greater than 5 dB L_{Aeq} change in sound level at a noise-sensitive receptor, or a 5 to 9.9 dB L_{Aeq} change in sound level at a receptor of great sensitivity to noise. The above is again based on the human response to noise, but NE have stated in the email referenced above that the 3dB change is based on human perception to changes in noise and so gives a precautionary, assumed impact to birds, so logically the effects defined in the IEMA guidance would also apply to birds in this case? Section 5.8.2.1 of the latest version of the outline NVMP (REP2-031) does however state that noise monitoring would be undertaken within the Anderby Marsh Lincolnshire Wildlife Trust (LWT) Reserve at its closest approach to the landfall construction area whilst construction operations are being undertaken. This ecological receptor has been targeted due its close proximity to the landfall area and specific noise attenuation mitigation which has been incorporated. Sections 5.3.1 and 5.8.2.1 of the latest version of the outline NVMP (REP2-031) commits to mitigation measures in the form of a 4m high bund to be constructed on the boundary of the landfall area closest to the Anderby Marsh Lincolnshire Wildlife Trust (LWT) Reserve; however this monitoring is being undertaken to determine whether the noise levels generated by landfall operations are below the absolute limits utilised within ES Chapter 26 (REP4a-021) and not to assess a change in noise levels. With reference to all of the above, the Applicant does not agree with NEs recommendation that monitoring should be undertaken within all ecological noise sensitive receptors (including the FLL) during construction operations and compared against baseline levels and potentially assessed in conjunction with a 3dB change in noise levels. As acknowledged by Natural England's email dated April 2, 2025, "noise and disturbance to birds is an under-studied area." In response, the Applicant has committed within the OLEMS (document reference 8.10 v8) to further consultation with Natural England to discuss the potential for targeted baseline noise monitoring. The Applicant will undertake this monitoring at selected ecological receptors to assist Natural

Natural England's Submission	Applicant Response
	England in its data gathering activities. This initiative aims to enhance the scientific knowledge base on this topic and support Natural England in providing robust advice in the future.

Table 2-32: The Applicant's Comments on the Natural England's Deadline 5 Appendix H8 Final Advice on Soils

Ref No	Submission	Applicant Response
Summary		
0.1	Natural England continues to advise that an Agricultural Land Classification (ALC) survey is conducted across the site Following the provision of our advice below, Natural England will not be engaging further on soil related matters as our advice provided in our Relevant Representations [RR-045] and throughout examination remains unchanged, regarding the need for a ALC survey. This is to ensure that any further recommendations or guidance provided by Natural England is based on comprehensive and accurate data. The ALC surveys provide essential insights into the site's agricultural land quality and soil properties, which inform the Environmental Impact Assessment (EIA); site micrositing, soil handling and restoration, and suitability for various uses, allowing for informed and effective decision-making. Natural England had hoped that the results of ALC surveys would be made available during examination in order to provide the necessary soils advice. Additional document specific advice is presented below	This comment has been noted by the Applicant and the points are addressed in detail in the below responses.
8.1 Outline Code of Construction Practice V5 (Tracked) [REP4a-076]		
1.1	Para 103: Natural England supports the provision of a Peat Management Plan. However, to reiterate our previous advice, noting, in line with IEMA guidelines a 'Soil Resources Plan, Soil/Peat Management Plan and Quantified Proposed beneficial uses of temporarily and permanently displaced soils', should be carried out pre-consent to inform EIA. The Applicant should refer to Annex J Process for the Sustainable use of Soil Resources and other Excavated Materials of the IEMA guidelines for further information, 2022-iema_land_and_soils_guidance.pdf	The text referred to by Natural England from the flow chart in Annex J Stage I of the IEMA guidance on soils should be considered in the context of a nationally significant infrastructure project (NSIP) using the Rochdale Envelope as this approach involves a flexible design framework. This flexibility means that specific details about the project's final design, including precise locations and extents of soil disturbance, are not confirmed until detailed design stages. Annex J Stage I sets out a flow chart showing the process of integrating management plans for the sustainable management of soils. The Applicant has set out commitments within the Outline management plans which do follow this process, however the level of detail the Applicant will use to inform the final management plans cannot be accurately provided at this stage without detailed design. Therefore, applying the full process set out in Annex J Stage I at this stage would be premature and potentially misleading, as it relies on specific data that the Rochdale Envelope approach does not yet provide. A soil balance exercise cannot be effectively developed prior to the detailed design phase because the necessary construction information required to inform the soil volume balance is not yet available. Detailed design provides critical data on excavation depths, cut-and-fill volumes, and the specific locations of construction activities, all of which are essential for accurately assessing soil resources. Without this information, any soil volume balance calculations would be indicative and potentially

Ref No	Submission	Applicant Response
		inaccurate, leading to less effective soil management strategies. Therefore, it is crucial to wait until the detailed design phase to ensure the soil management plan and location specific method statements is based on precise and comprehensive construction data. The final Soil Management Plan will be submitted as secured under Requirement 18 and will include details on the restoration of land impacted. Natural England will be consulted as the relevant SNCB. The Applicant has submitted an outline soil management plan (document reference 8.1.3, V7, submitted at Deadline 6) which will be further refined into a final soil management plan which will include detailed soil information and mitigation measures based on the ALC surveys. Should deep peat be identified during pre-construction surveys (in the areas identified on the Lowland Peat in England and Wales mapping (Cranfield University), the Applicant will undertake a low-resolution peat probing survey at a density of 100x100m. This will inform a Peat Management Plan (PMP) that will be prepared, should one be required. The commitment within the oCoCP paragraph 104 confirms that the PMP would include good practice guidance on excavation, reuse, storage, handling, reinstatement and monitoring and inspection.
8.1.3 Outline Soil Management Plan V4 (Tracked) [REP4a-080]		
2.1	Para 19 Natural England requires clarification on the method utilised to determine specific percentages of stoniness and if this will take place at each sampling point. Para 104 Natural England requires clarification on what circumstance would lead to an increase in stone content during construction. We accept that stone content should be determined by the ALC survey, however we advise it should be handled and stored in line with the Defra Construction Code of Practice for the Sustainable Use of Soils on Construction Sites such that no further remedial action would be necessary. Notwithstanding the above, Natural England advises all stones and other materials in excess of 100 mm in any dimension which are likely to obstruct cultivation in the agricultural after use should be picked and removed from the site. Natural England welcomes the update within the DCO [REP4-007] for the relevant planning authority to consult the Relevant SNCB on the SMP. To resolve this issue Natural England requires the SMP to also stipulate the relevant SNCB will be consulted.	During the ALC surveys stone content will be defined using methodology derived from the MAFF ALC Guidance. At each survey point the percentage (volume) of hard stones in the top 25cm of soil stones larger than 2 cm, and stones larger than 6 cm will be identified visually. The oSMP (document 8.1.3, V7, submitted at Deadline 6) includes a further commitment that the Soil Clerk of Works will attend site and verify that the soil survey results are reflective of overall field parcel. Where discrepancies are noted, it may be necessary to undertake additional bulk sampling to verify and confirm stone percentages within a field parcel. An increase in stone content in the soil could result from the incomplete removal of haul road materials after construction activities. If the materials used for the haul road, such as gravel or crushed stone, are not fully cleared, they could become mixed with the surrounding soil. This residual stone content poses a small risk of remaining in the soil, potentially altering its composition and affecting the ability of existing agricultural machinery. Proper removal and management of haul road materials will minimise this risk and maintain soil quality. The oCoCP (document reference 8.1, V8, submitted at Deadline 6) and oSMP (document reference 8.1.3, V7, submitted at Deadline 6) include reference to handling in line with the Defra Construction Code of Practice for the Sustainable Use of Soils on Construction Sites. Furthermore, Section 1.16 of the oSMP includes specific reference to the materials that may be used to construct the temporary haul road and separately that soils will be returned to their original stone content state. In regard to stone removal to ensure there is no obstruction to agricultural use post construction, paragraph 103 within the oSMP states “Soil surveys carried out following the methodology detailed in Section 1.8, will include an assessment of stoniness, to ensure that soils have been returned to their stone free or equivalent state. Where stone content is found to be above the percentage identified in the pre-construction ALC Survey, appropriate remedial action through mechanical means or by hand will be discussed with the landowner.”

Ref No	Submission	Applicant Response
		Following confirmation received from Lincolnshire County Council [REP4a-135] and East Lindsey District Council, Boston Borough Council and South Holland District Council [REP4a139] at Deadline 4a that LCC should be the discharging authority in respect of both the Code of Construction Practice (CoCP) and the Soil Management Plan (SMP), the requirement to provide a soil management plan has been reinstated in Requirement 18 (Code of construction practice) and the soil management plan requirement (formerly Requirement 31) has been removed. Natural England is a consultee to the discharge of this document under Requirement 18. The oSMP has been updated at DL6 to stipulate that the SNCB will be consulted on the final soil management plan(s).
6.1.25.1 Chapter 25 Appendix 1 BMV Regional and National Context and 21.12 BMV Quantitative Cumulative Assessment		
3.1	Natural England supports the provision of a cumulative assessment and has no further comments. Therefore, this issue is resolved, refer to Appendix J5 risks and Issues Log Tab H Point 41 and 44.	This comment is welcomed by the Applicant.
6.2.25 Chapter 25 Land Use Figures V3 [REP4a-034]		
4.1	Natural England continues to advise the Figures in this document should be clearly titled as provisional mapping dataset. Whilst this provisional mapping provides an indication of the ALC grade, and thus the potential impact on BMV agricultural land, it does not provide the soil details required to inform soil management which would feed into the Soil Management Plan. There is a risk of soil damage, ALC degradation and long term or permanent loss of BMV from cable installation. Soil will need to be handled according to best practice and reinstated to a high standard to reduce the impacts. The results from a detailed ALC survey would provide soils data to inform a Soil Management Plan for the whole site regardless of whether the use is permanent or temporary in nature. Natural England requires that land quality and soil resources information is gathered for any land that is disturbed by the development, so the cabling route should be surveyed. Ideally a full detailed ALC survey should have been carried out across the whole site.	The Applicant has submitted at Deadline 6 an updated version of the 6.2.25 Chapter 25 Land Use (document reference 6.2.25, V4, submitted at Deadline 6) Figures which clearly states that the data used is the provisional ALC mapping dataset. The oSMP is based upon guidance contained in the Department for Environment, Food and Rural Affairs' (Defra's) Construction Code of Practice for the Sustainable Use of Soils on Construction Sites (2009); the Institute of Quarrying, Good Practice Guide for Handling Soils (2021); and professional experience. Measures related to the following listed topics are secured within oSMP to ensure the soils will be handled according to best practice and reinstated to their predevelopment quality: General Handling Principles; Management of 'Running Sand'; Adverse Weather; Determining Soil Moisture; Site Preparation; Drainage; Soil Stripping; Soil Storage; Stockpile Maintenance; Reinstatement; Aftercare and Monitoring. The Applicant agrees that the results of a detailed ALC survey will provide soil data to inform the final SMP. The Applicant has committed to undertake preconstruction ALC surveys across the ECC route and ONSS site to inform the final soil management plan and location specific method construction method statements as set out within the oSMP (document reference 8.1.3, V7, submitted at Deadline 6). The oSMP will be updated prior to construction and the Local Planning Authority, Landowner Interest Group and relevant statutory nature conservation body will be provided an opportunity to comment and consult on the final SMP. With regard to reinstatement of land, paragraph 91 of the oSMP states: *"The main objectives for the reinstatement of the land will be to restore it to its predevelopment quality as far as is reasonably practicable, as determined by the information obtained during the pre-construction soils survey and agreed with the landowner. This will primarily be achieved by ensuring that the full soil profile is reinstated in the correct sequence of horizons, and in a state where good soil profile drainage and plant root development are achieved; and by ensuring that the reinstatement works cause minimum damage to soil structure. The consequence of this, for the purpose of satisfying the tests in NPS EN-5 paragraph 2.9.25 as it relates to mitigating effects on ALC grade land, is that the land will be returned to its baseline agricultural land classification."*

Ref No	Submission	Applicant Response
		Regarding the timing of Agricultural Land Classification surveys please see response to point 5 below.
6.1.23 Chapter 23 Geology and Ground Conditions V2 Tracked		
5.1	Natural England's position regarding the requirement for pre-consent surveys for Agricultural Land Classification (ALC Grade) Grade and the requirement for further assessment on Deep Peat Presence, remains unchanged, as per Appendix H to our Relevant Representations [RR-045] and Appendix H2 of our Deadline 1 submission [REP-063]. Para 352: We reiterate the advice provided in our Relevant Representations [RR-045]: "Natural England advises that the ES should present the detailed and semi-detailed ALC survey information. This should include a breakdown of the ALC grades (area, %) in relation to the application site boundary and include ALC and soil data for the cable route and areas of permanent infrastructure and habitat enhancement. A breakdown of the proposed site into disturbed and undisturbed land categories should also be included, split by ALC grade, to help illustrate the potential for impact on agricultural land grade This information would also help inform the scale of mitigation measures required."	The Applicant's position is that it has provided sufficient information to justify the approach taken in regard to ALC surveys and peat management. Undertaking ALC surveys prior to consent will not change the likelihood of significant effects, as a worst-case scenario has been assumed for the baseline environment (i.e that all land is BMV). Measures are secured within the oCOCP and oSMP to ensure the sustainable handling of soils and deep peat to mitigate the risk of soil damage and degradation. As has been established in numerous other DCO applications, it is common practice to finalise mitigation based on the options identified following consent, once more information about the project is available. Within the Applicants Responses to EXQ1 [REP2-051] it provided examples of some of the numerous other Nationally Significant Infrastructure Projects where approval has been given by the Secretary of State (SoS) in the absence of ALC surveys (Triton Knoll, Viking CCS Pipeline, Sheringham Shoal and Dudgeon and Hornsea Project 4), in which only the provisional mapping was used in the assessment. Furthermore, the Applicant's position is that there are significant advantages to the proposed scheduling of ALC surveys. Through the examination process, the Applicant has incorporated measures within the oSMP that exceed the ALC guidance for soil surveys. This ensures that the survey methodology will be suitably detailed and fit for purpose for this specific site and the relevant parties affected. According to MAFF guidance, laboratory testing on soils is not mandatory, as the visual assessment and hand texturing conducted during the survey are sufficient to determine soil textures and properties. By strategically timing the ALC and soil surveys, the Applicant has been able to incorporate additional surveying commitments within the oSMP, specifically addressing the concerns of TH Clements and Woodlands, thereby ensuring a more comprehensive and beneficial outcome for the landowners. Peat mapping may identify peat and peaty soils within the Order Limits. However, it is important to note that the land in question is subject to intensive agriculture, understood to be cereal cropping. The use of the land for intensive agriculture will disrupt and damage the natural structure of peat deposits. To make peaty soils suitable for agriculture, they are often drained. This drainage and cultivation of peat leads to a degradation and alters the structure. As set out in point 1 of this table the Applicant has committed with the oCOCP and oSMP to low resolution peat surveys and preparation of a peat management plan, should one be required.

Table 2-33: The Applicant's Comments on the Natural England's Deadline 5 Appendix I3 Comments on Onshore Ornithology

Ref No	Natural England's Submission	Applicant Response
Introduction		
0.1	Natural England has reviewed the Applicant's updates to the mitigation measures in relation to onshore ornithology stipulated in the Schedule of mitigations [REP4a-144], the Outline Landscape and Ecological	This comment has been noted and is welcomed by the Applicant.

Ref No	Natural England's Submission	Applicant Response
	Management Strategy (OLEMS) [REP4a-084] and the Report to Inform Appropriate Assessment (RIAA) [REP4-031]. In particular, Natural England welcomes the Applicant's inclusion of additional pink-footed geese mitigation within the OLEMS [REP4a-04] and Schedule of Mitigation [REP4a-144] in relation to impacts on this Annex I bird species of The Wash Special Protection Area (SPA) utilising functionally linked land during the passage and overwintering period. We advise the approach presented is sufficient to satisfy our concerns. Providing our comments below are addressed by the Applicant, we expect to be in a position to be able to agree with the Applicant's conclusion of No Adverse Effect on integrity to the pink-footed goose feature of the Wash SPA at the close of Examination. Our detailed advice is set out below	
	1. [PD1-059] 8.13 Updated Schedule of mitigations V2 (Tracked) and [REP4a-084] 8.10 Outline Landscape and Ecological Management Strategy (OLEMS) (Tracked) V6	
1.1	Pink Footed Geese 1. Natural England has engaged directly with the Applicant through our discretionary advice service (DAS) on onshore ornithology mitigation, specifically pink-footed geese matters. We advised our preferred mitigation approach to pink footed geese is for avoidance of works for the months of November to January inclusive or for the Applicant to adopt a strategic mitigation approach to provide an area of supplementary feeding within the area of functionally linked land (FLL) adjacent to the Wash SPA. 2. Natural England welcomes the Applicant's inclusion of additional pink-footed geese mitigation within the Outline Landscape and Ecological Management Strategy (OLEMS) [REP4a-04] and Schedule of Mitigation [REP4a-144] in relation to impacts on this Annex I bird species of The Wash Special Protection Area (SPA) utilising functionally linked land during the passage and overwintering period. We note that as well as aligning with our suggested approach every effort /measure option has been included to mitigate the impacts. 3. Section 3.7.5.7 Para 182: While Natural England welcomes the Applicant's commitment to develop a Construction Programme Management Plan, the OLEMS continues to state in preceding Para 181 that "a separate outline Annex 1 species (including pink-footed goose) management plan is not considered to be necessary, as the relevant measures have been presented herein". We advise this paragraph is removed as it is contradictory to the update thereafter regarding a Construction Programme Management Plan 4. Collaboration with Farmers and Construction Activity Planning Paras 183 to 186: Natural England welcomes the commitment to working with farmers in advance on their three year crop rotation pattern and seasonal scheduling, ensuring avoidance of construction activities near cereal crops during the months of November to January is the primary form of mitigation. For the avoidance of doubt, Natural England advises the OLEMs is updated to reflect the months of November to January is inclusive. Natural England also advises 'near cereal crops' should be further defined. We refer the Applicant to 'Natural England's best practice advice on North Norfolk Coast SPA Pink Footed Geese – April 2024 (included within our Relevant representation [RR- 045]). The best practice states that "If the proposed works are out with a beet field/250m away from foraging geese in a neighbouring	The Applicant has responded to each of Natural England's points in turn as follows: 1. The comments are noted. The Applicant responded to this advice at Deadline 4A and inserted the required measures into Section 3.7.5.7 of the OLEMS. 2. The comments are noted and welcomed. 3. This text was retained in error and has now been removed from the OLEMS (document reference 8.10, V8,submitted at Deadline 6). 4. Paragraph 187 of the OLEMS has been updated to confirm that the reference to November to January is inclusive. The text has also been updated to further define 'working near cereal crops' with reference to NE's best practice advice on North Norfolk Coast SPA pink-footed geese dated April 2024. 5. The comment is noted and welcomed. 6. The relevant authority, outlined within the OLEMS, has been changed from Lincolnshire County Council to the local planning authority.

Ref No	Natural England's Submission	Applicant Response
	post-harvest beet field separated / screened by a hedgerow then works can proceed". This, or a suitable alternative should be provided and agreed, to ensure a disturbance buffer is agreed. 5. Mitigation Measures Paras 187 to 189: Should the avoidance measures not be possible we welcome the commitment to provide supplementary feeding. 6. Detailed Plan Development Paras 190 and 191: Natural England welcomes that the plan will be secured by the final OLEMS and that we will be named consultee from the local planning authority (not Lincolnshire County Council as currently proposed).	
1.2	Dark Bellied Brent Geese 7. As advised in Appendix I2 at Deadline 3 [REP3-073], we welcome the commitment to not undertake construction works within 400m of The Wash, The Haven or areas designed to enhance bird numbers e.g. compensation areas, during the sensitive periods for Dark Bellied Brent Geese between November and March inclusive. Furthermore, that no drilling will take place in April and visual screening will be installed, in the seasonally restricted area around The Haven in April in order to minimise potential visual disturbance arising from soft start works. 8. However, we highlight that careful consideration will need to be given to the necessity of screening at each location and material used, due to potential noise and visual disturbance from screening being moved by wind and noise associated with that. 9. We welcome the inclusion of the commitment within the OLEMS Para 269 [REP4a- 084 and] and Schedule of mitigation [REP4a-144] to undertake a pre-construction survey for dark-bellied brent goose at the seasonally restricted area at The Haven and adjacent land to ensure that the proposed mitigation remains appropriate. Refer to Appendix J5 Risk and Issues Log, Tab I, Point 9. However, Natural England continues to query if further mitigation measures can be adopted to minimise visual disturbance impacts to dark bellied brent geese.	Taking Natural England's (NE) comments in relation to Dark Bellied Brent Geese in turn, the Applicant responds as follows: 7. The comments are noted and welcomed. 8. Text has been added to Section 3.7.5.5 of the OLEMS (document reference 8.10, V8, submitted at Deadline 6) to confirm that consideration will be given to the necessity for screening in each location and the material to be used, in order to minimise the potential for disturbance caused by the screening itself being moved by wind. This was shared with Natural England in advance of Deadline 6 and Natural England welcomed the additional text but queried what contingency there was should screening not be practicable. The Applicant has addressed this by adding further clarification to Section 3.7.5.5 of the OLEMS which clarifies the action to be taken in adverse weather and includes a commitment to contingency measures. 9. The comment regarding the additional measure is noted and welcomed. The Applicant has considered whether further mitigation measures can be adopted to minimise visual disturbance impacts on dark-bellied brent geese during the April soft start works and has added text to Section 3.7.5.5 of the OLEMS (document reference 8.10, V8, submitted at Deadline 6) in this regard, wherein the Applicant has committed to exploring potential mitigation measures at the detailed design stage which will be documented and secured in the EMP.
1.3	Golden Plover, Curlew and Lapwing Features of The Wash SPA, SSSI and Ramsar 10. For the other Annex I birds of concern, golden plover, curlew and lapwing, it remains our view that there is limited mitigation for disturbance, particularly in the Export Cable Corridor (ECC) running parallel to the A52. Natural England understands the Applicant intends to engage further directly on this matter between Deadlines 5 and 6. We will provide an update at Deadline 6. 11. While Natural England's concerns regarding the overall assessment of noise disturbance to designated bird features are resolved (refer to our advice in Appendix H7), we advise it would be pertinent to ensure that impacts from noise pollution during construction and decommissioning to noise sensitive designated features of designated ecological sites are monitored and activities adjusted where an impact is identified.	Taking Natural England's (NE) comments in relation to the Golden Plover, Curlew and Lapwing Features of The Wash SPA, SSSI and Ramsar, the Applicant responds as follows: 10. The Applicant has engaged directly with NE on this matter at a meeting held on 24 March 2025 and NE provided advice and clarification on the further measures that have been requested, which are sufficient to address NE's concerns on this matter. The Applicant has incorporated these additional measures into Section 3.7.5.5 of the OLEMS (document reference 8.10, V8, submitted at Deadline 6), which has been shared with Natural England in advance of Deadline 6 in order to achieve resolution at Deadline 6. Natural England responded via email on 03 April 2025 and recognised the intention to mitigate the impacts, however asked that the types of measures that could be used be stated and also that the freezing weather restriction be extended throughout the winter period from October to March inclusive. In response, the Applicant has added this extra information and clarification to the OLEMS and considers that this matter can now be marked as resolved. 11. The comments confirming resolution regarding the noise assessment are noted and welcomed. Please refer to the Applicant's response to Point 6 of Appendix H7 (document reference 24.2, V1, submitted at Deadline 6) for a detailed response to NE's request for noise monitoring.
1.4	Landfall Noise Bund	A commitment to employing an Ecological Clerk of Works for the landfall mitigation bund soft start works has been added to Section 3.7.5.4 of the OLEMS (document reference 8.10, V8, submitted at Deadline 6).

Ref No	Natural England's Submission	Applicant Response
	Natural England welcomes the commitment within the OLEMs in Para 155 that March will be avoided for constructing the mitigation bund at landfall. We further welcome the additional detail on the soft start works that may be undertaken within this period as set out in Para 155 of the OLEMS which includes ground preparation, land drainage, fencing, signage, access haul road, material storage, and establishment of laydown for welfare. We would welcome further efforts being made in the final OLEMS to minimise disturbance from these activities, and an Ecological Clerk of Works (ECOW) advising on potential risks to aggregations of birds from activities and implementation of further measures if bird disturbance behaviours are shown.	
	2. [REP4-031] 7.1 Report to Inform Appropriate Assessment Redacted (Tracked)	
2.1	12. We welcome the Report to Inform Appropriate Assessment (RIAA) [REP4-031] which now includes the second year of onshore bird data along with the in-combination assessment incorporating the Viking Link Carbon Capture Storage project and Eastern Green Link 3 & 4 Interconnector projects. We advise that the Ossian offshore windfarm transmission project, also proposing landfall at Anderby Creek and currently undertaking a scoping consultation is also included within the next version of the RIAA for transparency	The Ossian Transmission Infrastructure project has been added to the RIAA (document reference 7.1, V5, submitted at Deadline 6) at Deadline 6.
2.2	13. Natural England advises that the RIAA is updated to include the mitigation propose for a Construction Management Plan for Pink Footed Geese (PFG) and dark- bellied brent geese included within the Schedule of Mitigation [REP4a-144] and OLEMS [REP4a-084].	The additional mitigation for pink-footed goose was included in the RIAA (REP5-101) submitted at Deadline 5. The additional mitigation measures for dark-bellied brent goose have been added to the RIAA (document reference 7.1, V5, submitted at Deadline 6) submitted at Deadline 6.

Table 2-34: The Applicant's Response to Natural England's Comments on ODOW auk compensation – potential considerations for increasing confidence in the package of measures

Ref	Natural England's Comments on Auk Compensation	The Applicant's Response
Predator exclusion, Jersey		
	Fenced reduced from 32.3ha to 3.34ha, this should be expanded back at least in an Easterly direction, recognising that there may be constraints with the original plan to include the headland.	The Applicant reiterates that the current fenced area encompasses all of the habitat that was utilised by guillemot at the time of the historic peak population and almost all of the habitat utilised by razorbill at the time of the historic peak population. (Without Prejudice Predator Control Evidence Base and Road Map (document reference 7.7.5, V4, submitted at Deadline 6)), The Applicant's Responses to The ExA's Second Written Questions (REP4a-110) Should it be necessary in the future, the Applicant could explore the extension of the fence. However, it must be noted that the any extension to the currently proposed area (for which it has been conformed is available subject to planning by the state of Jersey) would be subject to further private land agreement and cannot therefore be guaranteed, assuming that it would be necessary to ever extend the fenced area beyond its currently proposed footprint.
	Consider wider predator control measures to reduce predator numbers across Jersey, potentially focusing on inhabited areas within an inland 'buffer zone' along the fence; this would reduce the risk of reinvasion via the intertidal and access gates	As part of the NTJ project it is already proposed that 'halo' trapping will be undertaken in a 50m strip between the external side of the fence and the public footpath on land which is in the control of the state of Jersey. If it is deemed necessary and appropriate at a later date, the Applicant will investigate options for the deployment of control measures on the landward side of the predator proof fence in a wider area of the Island. However, it must be noted that this would be subject to further private land agreements and as such cannot be guaranteed at this stage. This detail has now been added into the Predator Control Evidence Base and Roadmap (document reference 7.7.5, V4, submittted at Deadline 6).

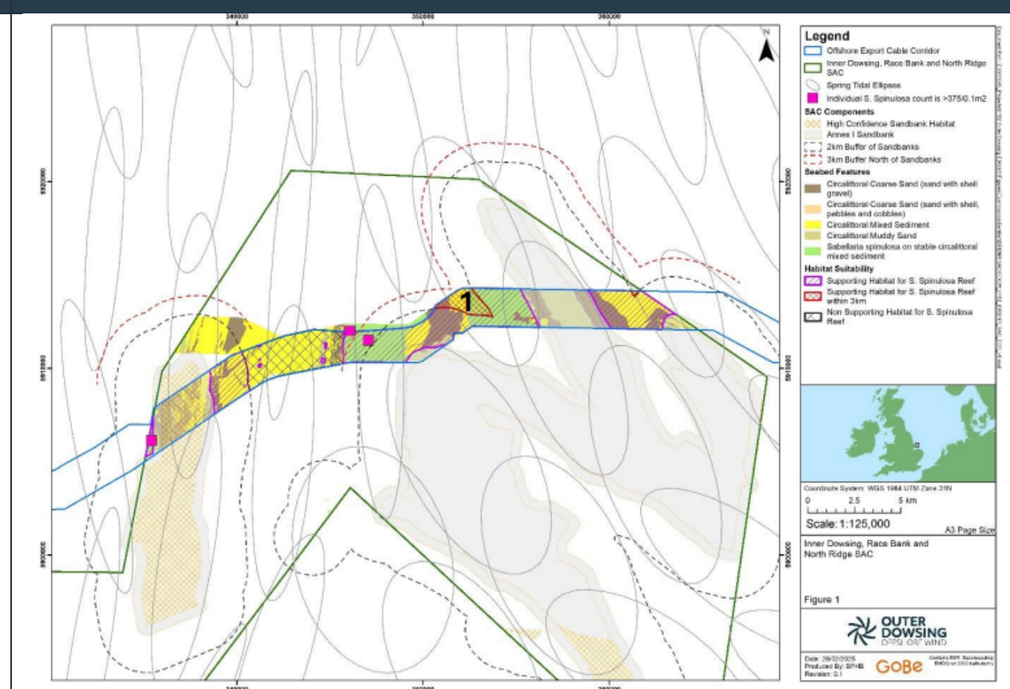
Ref	Natural England's Comments on Auk Compensation	The Applicant's Response
	Provide further detail on how reinvasion via the intertidal and gates will be minimised – have the points at which the fence ends been chosen with this in mind?	The intertidal zone is almost exclusively inaccessible via the fence ends as the fence ends will be placed on sheer cliff faces. Fence ends will extend to as close as possible to the high water mark and will be placed on a rocky substrate rather than one with a covering of vegetation. In addition the ends will turn in in order to make re-invasion more difficult around the fence ends. Gates will have limited access (i.e. will not be publicly accessible to all) and are designed to limit opportunities through having double gates, with all of the fence design elements (i.e. the mesh size, skirt, and lip) incorporated into the gate design. Gates will also be monitored by camera and alarmed in order to further reduce opportunities for re-invasion. This detail has now been added into the Predator Control Evidence Base and Roadmap (document reference 7.7.5, V4, submitted at Deadline 6).
	Include the use of guillemot and razorbill decoys (this is mentioned in the feasibility study so may already be planned)	The Applicant will deploy decoys of both guillemot and razorbill in areas of appropriate habitat in order to encourage recruitment and recolonisation of both species. Additional methods of encouragement (for example, playback of seasonally relevant calls/colony soundscapes from successful colonies is also being considered). This already referenced in Annex 1 of Predator Control Evidence Base and Roadmap (document reference 7.7.5, V4, submitted at Deadline 6).
	Explore the opportunity for measures to reduce disturbance from watercraft and vessels, which may currently be a pressure on razorbill (and puffin) as outlined by the feasibility study; this may include improving awareness of or enforcement of (acknowledging that it is voluntary and not legally enforceable) the Seabird Protection Zone which includes the proposed fenced area.	The Applicant will consider this as an area for potential monitoring and action going forward, noting that this may not be necessary given that there are voluntary restrictions in place for commercial vessels such as fishing boats and tourist boats that appear to be well observed. This is also well adhered to members of the public using SUPs and kayaks and the area is visited infrequently by such marine users. The voluntary exclusion is promoted on social media where it is monitored by the public, the Jersey Government website, and signage at the relevant launches and slipways. The Applicant will also monitor for any impacts during the relevant periods and further action could be taken should this be identified as an active pressure on the site. This detail has now been added into the Predator Control Evidence Base and Roadmap (document reference 7.7.5, V4, submitted at Deadline 6).
SW colonies		
	Data from 2024 surveys is not enough to establish a baseline of disturbance caused by recreational activity, and issues with methods for measuring abundance and productivity, as well as calculating a theoretical increase in productivity using a regional mean productivity that may not reflect likely productivity at these sites, means it is not possible to reliably quantitatively predict or measure benefits	The Applicant will be collecting data during the breeding season of 2025 and beyond in order to ensure that the baseline upon which potential benefits is measured is as robust as possible. Plans to monitor size and productivity at key colonies are being developed for the breeding season of 2025 and 2026, with additional disturbance monitoring at each site. Monitoring plans are also in development with Cornwall Wildlife Trust and the University of Exeter with regards to the delivery of collaborative compensation across Cornish colonies. This detail has now been added into the Additional Measures for Compensation of Guillemot and Razorbill (document reference 7.7.6, V4, submitted at Deadline 6).
	Monitoring of these sites both pre- and post- implementation will be critical in evidencing success and informing adaptive management o Three visits to sites will not be sufficient to measure productivity, need to take photographs of plots and visit regularly during breeding season (e.g. FFC SPA monitor every 3 days)	To date monitoring activities have not been finalised as monitoring plans for the Project and those being delivered as part of the collaborative measure are still to be agreed. However, the Project will aim to implement a cost effective and robust monitoring program which can be maintained across the whole suite of relevant colonies over the whole lifetime of the measure.

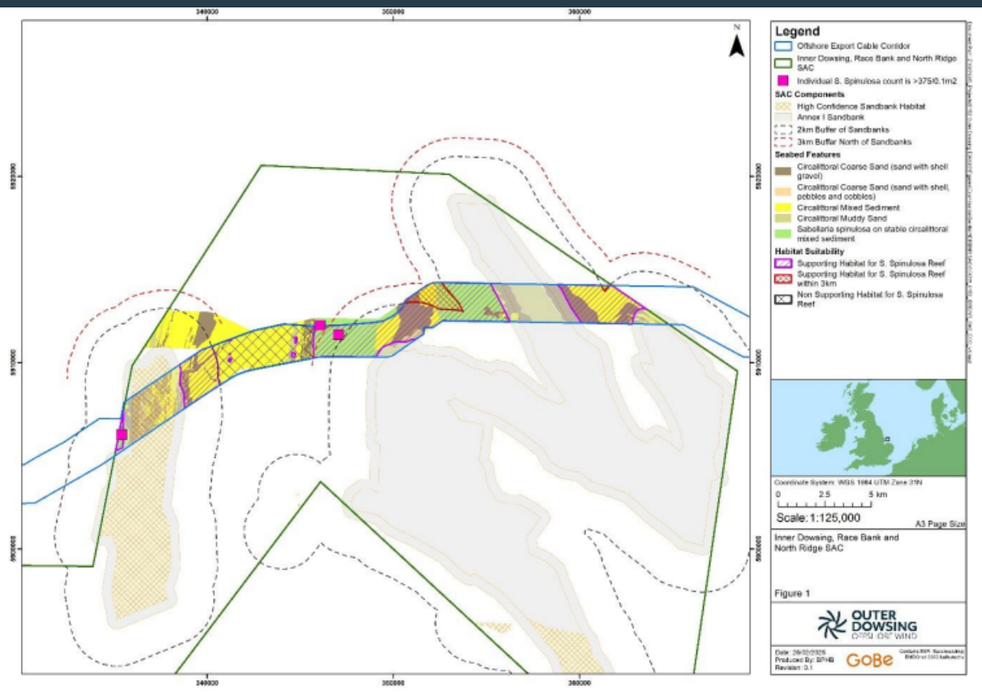
Ref	Natural England's Comments on Auk Compensation	The Applicant's Response
	o Due to issues with access and lack of suitable VPs from land, consider other methods such as boat-based, drones, etc. o Even with the above, it may be difficult to measure success via improvements to abundance or productivity in which case monitoring of disturbance is even more important	Colony size can be monitored from boats or using drones but monitoring productivity from a vessel or a drone is extremely difficult and unlikely to represent an efficient approach. Use of trail cameras for the monitoring of disturbance and responses within the colony to disturbance events are also being considered for the monitoring work to be delivered collaboratively through the Cornwall Wildlife Trust and the University of Exeter. Although colonies will be monitored for both size of the breeding population and productivity, it may be difficult to categorically attribute any benefits recorded at colonies to the measures in place. As such, the success of the disturbance reduction measures may not be quantifiable through increases in colony size or productivity, and success may need to be measured through quantifying reductions in levels of disturbance. This detail has now been added into the Additional Measures for Compensation of Guillemot and Razorbill (document reference 7.7.6, V4, submitted at Deadline 6).
	The 'active period' outlined by the Applicant of May to August does not take into account pre-laying attendance and should be extended to start in March; this is when reducing disturbance is likely to have the greatest benefit (birds less attached to nest sites, importance of egg-laying synchrony)	The Applicant agrees that early season surveys would be important in terms of monitoring impacts of disturbance as this is when disturbance events would be most likely to impact breeding attempts. As such this period will be built into monitoring schedules for when the disturbance impact monitoring commences. This detail has now been added into the Additional Measures for Compensation of Guillemot and Razorbill (document reference 7.7.6, V4, submitted at Deadline 6).
	As identified by the Applicant, there is unlikely to be significant pressure from human disturbance from land. Therefore, efforts should focus on reducing disturbance from the sea, and this would require significant presence (of a warden in a boat) to be effective; having wardens present on the water could work if done collaboratively with other Developers (i.e. share resource across sites that are in close proximity to each other) and should be considered alongside the need for monitoring.	The Applicant agrees that the majority of the anthropogenic disturbance would come from the seaward side and considers that wardens will comprise a fundamental part of the measure to reduce disturbance. This has been proposed as part of the measures in development in collaboration with delivery partners and is detailed in Section 6 of Additional Measures for Compensation of Guillemot and Razorbill (document reference 7.7.6, V4, submitted at Deadline 6).
Artificial Nesting Structure (ANS)		
	Proposals within ANS Evidence Base and Roadmap Rev 2 [REP4-062] still fairly limited for auks, making it difficult to determine how this may contribute to the package of measures; making more detailed plans available would help with this.	As noted in response to ID 34 of the Risk and Issues log (Document reference 21.8, V3, submitted at Deadline 6) with specific reference to the consideration of auk nesting space design, the Applicant recognises that the design parameters referenced by Natural England , including shape and size of ledges would be beneficial. As noted in The Applicant's Responses to The ExA's Second Written Questions (REP4-107), the Applicant's position is that adequate detail has been provided in relation to the ANS compensation measure and that the measure is sufficiently well evidenced to demonstrate that the measure can be secured and delivered. The Applicant also notes in The Applicant's Responses to The ExA's Second Written Questions (REP4-107) that it has continued to progress an ANS concept study, the primary purpose of which is to identify the functional specifications required to support a call for tenders as part of the detailed design which will form part of the EPCI ANS procurement process. The Applicant can confirm that as part of the concept study and later detailed design process, different sized and shaped ledges, that would allow for a testing of the species' preferences and provide resilience to the measure, will be considered. Updates on the capacity of the ANS in relation to auks are provided in the following documents:

Ref	Natural England's Comments on Auk Compensation	The Applicant's Response
		• Artificial Nesting Structures Evidence Base and Roadmap (document reference 7.7.4, V3, submitted at Deadline 6) • 21.3 The Applicant's comments on Deadline 3 submissions (REP4-108)
	Consideration of boulder fields on top of ANS to test this for razorbill.	The Applicant will consider this option in order to provide additional habitat for razorbill at the detailed design stage.

Table 2-35: The Applicant's Comments on Natural England's Advice on Sabellaria spinulosa supporting habitat Technical Note 2025 Document Reference: 22.11

Ref	Natural England's Deadline 5 Submission	The Applicant's Response
	The following Natural England advice is provided to GTR4 (ODOW) under our DAS contract on 25th March 2025. Our direct response/advice on your response to our advice on Sabellaria spinulosa supporting habitat Technical Note 2025 Document Reference: 22.11 Rev: 0.1 is highlighted in blue text below.	
Methodology		
1. NE previous advice: Table 2, optional parameter 1 – It is not clear if this parameter has considered dominant direction tidal flows which would require an increase in the buffer from 2km to 3km. The figures in 'Chapter 7 Marine Physical Processes Figures Part 1 of 2' demonstrate that the dominant tidal flows and bedload transport across the ECC are in the NNW and SSW directions, and as such, we advise that the 2km buffers applied should be extended to 3km to align with the description of optional parameter 1 within the Technical Note		
	ODOW response: The Applicant notes difficulty in interpreting 'Optional parameter 1,' specifically the phrasing: "within 2 km of sandbanks in any direction OR within 3km in the direction of tidal stream, whichever is the greater 2." Our initial interpretation was that the worst-case area for the majority of the Offshore ECC was 'within a 2 km radius of the sandbanks'. This interpretation arose due to the direction of the tidal stream (approximately NW-SE/ N-S, see Figure below which presents tidal ellipses), we therefore did not anticipate that this would have a greater impact on the width of the corridor than the 2 km buffer applied around the entire sandbank.	
	Furthermore, there was additional confusion surrounding the phrase "OR within 3km in the direction of tidal stream," as it does not clearly state what the 3km buffer is associated in relation to the tidal stream – we assume that this would be the northern points of the sandbanks for the current features of interest. We have mapped the tidal ellipse data (see figure below), which demonstrates that a 3 km buffer could be applied to the north of the sandbank features, specifically "in the direction of tidal stream." This would result in two small areas highlighted by the red cross hatch in the figure below being included as supporting habitat. This additional area is 2.5km2 . As illustrated in the figure, no other additional adjustments in relation to 'Optional parameter 1' are necessary.	
	Natural England welcomes the addition of the 3km buffer to the north of the sandbank features. While this satisfies our previous advice; to ensure joint understanding of the approach, we highlight that according to the methods outlined within the Applicants [Sabellaria spinulosa reef supporting habitat Technical Note: February 2025], much of the red cross hatch area which we have annotated with number '1' below should have been already included as supporting habitat owing to the presence of the 'SS.SBR.PoR.SspiMx - Sabellaria spinulosa on stable circalittoral mixed sediment' which has been mapped in that location (in alignment with optional parameters 2 and 4). Natural England are satisfied with the Applicants proposed approach in this respect for this project and within this designated site.	The Applicant welcomes this response.

Ref	Natural England's Deadline 5 Submission	The Applicant's Response
		

Ref	Natural England's Deadline 5 Submission	The Applicant's Response
		
2. NE previous advice: In addition, for the avoidance of doubt, Figure 1 of the report should be updated and areas of Annex I sandbank delineated as potentially supporting habitat to Annex I Sabellaria spinulosa reef (i.e. using the purple hash) included/differentiated.		
	ODOW Response: The Applicant notes that the Annex I sandbanks are not identified as supporting habitats for S. spinulosa reefs, in accordance with the methodology documentation and as established in the research. Sandbank features have been addressed with specific mitigation measures in their own context.	
	Natural England are satisfied with the Applicants proposed approach in this respect for this project and within this designated site.	The Applicant welcomes this response.
3. NE previous advice: Table 2, optional parameter 2 and 4 – Natural England advises that were this parameter to be appropriately applied to the data presented in Figure 1, then all areas of the SS.SBR.PoR.SspiMx biotope (including that outside of 2km sandbank buffer) should have been included as supporting habitat for Annex I Sabellaria spinulosa reef.		
	ODOW Response: The Applicant notes that this area has now been included as supporting habitat for Annex I Sabellaria spinulosa reef as demonstrated in the Figures above, when applying the 3 km buffer to the north of the middle sandbank feature.	
	See response to point 1 above.	
4. NE Previous Advice: In addition, Figure 1 does not appear to include all areas that were identified as SS.SBR.PoR.SspiMx within the Offshore Export Cable Corridor Sabellaria Spinulosa Reanalysis and Report Date: December 2024 Document Reference: 15.13 V2 Revision: 2.0 and labelled as "Figure 2. Marine habitat map at Level 4 MNCR for the Project ECC, produced using project specific data from the most recent benthic habitat surveys (ENVISION, 2024)."		
	ODOW Response: The Applicant notes that there is no figure labelled "Figure 2. Marine habitat map at Level 4 MNCR for the Project ECC, produced using project specific data from the most recent benthic habitat surveys (ENVISION, 2024)" however, the Applicant has applied the SS.SBR.PoR.SspiMx biotope that has been identified across all figures within this report. Most of these areas correspond with the site-specific data [APP-155], however 4 discreet patched have been identified and included in the supporting habitat for S. spinulosa reef area, as identified in the Figures above.	
	Natural England uphold our previous reference to "Figure 2. Marine habitat map at Level 4 MNCR for the Project ECC, produced using project specific data from the most recent benthic habitat surveys (ENVISION, 2024i)" which exists with within [REP4a-070]. However, we are now satisfied that optional	The Applicant welcomes this response.

Ref	Natural England's Deadline 5 Submission	The Applicant's Response
	parameter 2 has now been met and that areas which have been previously identified as SS.SBR.PoR.SspiMx biotope have now also been included as supporting habitat.	
	NE Previous advice: Accordingly, we believe that the area of supporting habitat for Annex I S. spinulosa reef should be greater than that represented in Figure 1 of the S. spinulosa reef supporting habitat Technical Note. Taking the above points into consideration the difference in supporting habitat for S. spinulosa reef from that previously presented is 2.64 km2 , equating to a total area of 31.23 km2	
	Natural England welcomes this adjustment to the area delineated as supporting habitat and agree the area of cable corridor overlap with supporting habitat impacted is 31.23km2. In order to address some of the outstanding issues raised by the ExA in their Rule 17 request, Natural England would welcome a realistic worst-case figure for the total area of cable protection predicted within Annex I supporting habitat being provided directly to NE by yourselves in advance of Deadline 6. We also acknowledge that there is likely to be a need for further dialogue with yourselves on the likely implications of those impacts. Please see next point.	The Applicant welcomes this response and the agreement on the total extent of supporting habitat and the Applicant has provided an assessment of a realistic worst-case scenario for the total area of removable cable protection predicted within Annex I supporting habitats in section 3 of the *Sabellaria spinulosa* reef supporting habitat technical note (document reference 22.11, V3, submitted at Deadline 6). Regarding the final point, the Applicant has updated the RIAA with an assessment of supporting habitat at Deadline 6 (document reference 7.1, V5, submitted at Deadline 6) and has updated the without prejudice compensation case to include the quantification of impact to Annex I supporting habitat. The following compensation documents have therefore been updated and submitted at Deadline 6 if any agreement can't be reached on no Adverse Effect on Integrity (AEoI). ▪ Without Prejudice Benthic Compensation Evidence Base and Roadmap (document reference 7.6.3, V4, submitted at Deadline 6) and, ▪ Without Prejudice Biogenic Reef Compensation Plan (document reference 7.6.2, V4, submitted at Deadline 6)
Mitigation measures		
5. NE previous advice: Natural England notes that ODOW are proposing to commit to installing removable cable protection within areas identified as potentially supporting for S. spinulosa reef. Whilst this is welcomed and demonstrates adoption of the mitigation hierarchy in minimising the impacts; it does not secure the removal of the cable protection and nor does it avoid hindering the conservation objectives for the site to restore 'the supporting processes on which qualifying natural habitats and the habitats of qualifying species rely'. Natural England advises that this requires further consideration by ODOW.		
	The Applicant notes that, at Deadline 4 (REP4-137), Natural England commented: 'NE advises the Applicant undertakes and submits into examination an assessment of supporting habitats and processes for potential Annex I S. spinulosa reef, to demonstrate that the recovery of this feature will not be hindered by the installation of the export cable and/or the lasting placement of cable protection. This will provide the Secretary of State comfort an adverse effect on integrity to IDRBNR SAC Annex I reef features and habitats/processes in which it relies upon will be avoided.' The Applicant's commitment to installing removable cable protection within areas identified as potentially supporting for S. spinulosa reef is detailed within the 8.21 Outline Scour and Cable Protection Management (REP4a-104) and the Outline Cable Specification and Layout Plan (REP4a-097).	

Ref	Natural England's Deadline 5 Submission	The Applicant's Response
	Whilst Natural England welcomes the commitment to use only removable cable protection, we highlight that any removability shouldn't be to the wider detriment of the Annex I features, which would be the case currently in relation to rock protection. In addition, and as highlighted by the Secretary of State Decision for Norfolk Boreas, that even with the commitment to using removable cable protection and committing to removing said protection at the time of decommissioning, the impacts over the lifetime of the project, while the protection is in situ, were considered by the SoS to hinder the conservation objectives and have an adverse effect on integrity. Therefore, further consideration of the implications are required by the project.	It should be noted that the conservation objectives of the SAC do not require that habitats with the potential to support designated habitats receive the same level of protection as the designated habitats themselves. Whilst the conservation objective focuses on maintaining and restoring the supporting processes necessary for qualifying habitats, it is not reasonable to interpret this as a requirement to protect all habitats within the SAC that could develop into Annex I reef at some undefined time as if they were reef features themselves, nor has Natural England provided a justification for such an approach. The Applicant considers that the further analysis and further commitment to removable cable protection in defined areas of supporting habitat bolsters the existing conclusions of the assessment that there is no AEoI. the Applicant has updated the RIAA with an assessment of supporting habitat at Deadline 6 (document reference 7.1, V5, submitted at Deadline 6) and has updated the without prejudice compensation case to include the quantification of impact to Annex I supporting habitat. The following compensation documents have therefore been updated and submitted at Deadline 6 if any agreement can't be reached on AEoI. ▪ Without Prejudice Benthic Compensation Evidence Base and Roadmap (document reference 7.6.3, V4, submitted at Deadline 6) and, ▪ Without Prejudice Biogenic Reef Compensation Plan (document reference 7.6.2, V4, submitted at Deadline 6)
Other Matters		
6. NE previous Advice: We note the mitigation measure 'Ecological based solutions for scour protection will be prioritised where practicable' has been included in several documents. It is not clear to Natural England what is meant by this mitigation measure and we would welcome some clarity on this.		
	The Applicant notes this reference and has previously discussed the use of novel engineering solutions such as reef cubes or scour protection that promote ecological biodiversity.	
	Natural England advises that the use of reef cubes within the designated site and/or solutions which promote ecological biodiversity would not mitigate the impacts to interest features of the designated site because the outcome would be the same as that as cable protection i.e. a loss of Annex I Sabellaria Reef support habitat.	The Applicant notes that ecological based solutions for scour protection will be prioritised in areas where it is appropriate to do so, where practicable. Ecological based scour will not be considered within the nearshore area (within the inner depth of closure)

Ref	Natural England's Deadline 5 Submission	The Applicant's Response
		or the Inner Dowsing, Race Bank and North Ridge SAC, as outlined in the Outline Scour Protection and Cable Protection Management Plan (document reference 8.21, V5, submitted at Deadline 6).
	Natural England's (and other SNCBs) agree that Sabellaria spinulosa could colonise rock protection/artificial substrate, but we consider the establishment of Sabellaria spinulosa reef on artificial substrate as not "counting" towards favourable condition of the feature and/or designated site. This is because it is not a replacement for Annex I Sabellaria spinulosa reef on natural site sediment as set out at the time of designation and within the conservation advice package for the site.	This is noted by the Applicant, however the Applicant considers that the proposed scale of rock protection within the SAC would adversely affect the conservation objectives relating to supporting habitat for *S. spinulosa* reef, given the relatively small impact from the Project and the availability of reef forming habitats within the SAC. Furthermore, it should be emphasized that while rock protection may limit the potential for 'natural' *S. spinulosa* reef formation in an area, it would not generate additional negative impacts beyond the affected footprint. The structural complexity of the rock protection would support epifaunal 'influential species' or communities similar to those found in biogenic reef habitats, unlike other pressures (such as fishing). Furthermore, *S. spinulosa* is known to form on silty turbid circatlittoral rock (Tillin et al. 2024; Connor et al., 2004) and whilst we understand that this is not seen as 'natural' reef (by Natural England) it would provide the presence and spatial distribution of reef communities. It should be noted that the conservation objectives of the SAC do not require that habitats with the potential to support designated habitats receive the same level of protection as the designated habitats themselves. Whilst the conservation objective focuses on maintaining and restoring the supporting processes necessary for qualifying habitats, it is not reasonable to interpret this as a requirement to protect all habitats within the SAC that could develop into Annex I reef at some undefined time as if they were reef features themselves, nor has Natural England provided a justification for such an approach. The Applicant considers that the further analysis and further commitment to removable cable protection in defined areas of supporting habitat bolsters the existing conclusions of the assessment that there is no AEoI. The Applicant has updated the RIAA with this
	This is Natural England's consistent advice, which is also included within the conservation advice package for Inner Dowsing, Race Bank and North Ridge Special Area of Conservation (SAC), which was produced in consultation with JNCC. The same advice has been included in our advice across multiple offshore wind farm examinations including Hornsea Project 3 OWF (2019), Norfolk Vanguard (2019), Norfolk Boreas (2019), and in particular Outer Dowsing OWF (2024) which impacts upon IDRBNR SAC [REP3-068].	
	Whilst Natural England believes that the detail and evidence in the conservation advice package, and further set out in our examination advise, is sufficient justification of our position on the matter, in order to be helpful, we have provided additional potentially useful ecological information below.	
	The conservation objectives for IDRBNR SAC include an objective to restore 'the supporting processes on which qualifying natural habitats and the habitats of qualifying species rely' but artificial substrate does not maintain/restore the seabed/supporting habitats within the designated sites. As stated in our conservation advice, the development of Annex I Sabellaria spinulosa reef acts to stabilise the sediment and provide structural complexity, including an attachment surface for other species. We advise that it follows that the lasting placement of introduced materials, such as cable/scour protection fundamentally changes the underlying seabed conditions, which would make Sabellaria spinulosa reef on such introduced material ecologically different to the Annex I Sabellaria spinulosa reef on natural site sediment as set out at the time of designation and as included within the conservation advice package for the site.	
	We noted as part of a brief literature review that it has been found that 'S. spinulosa communities on infralittoral rock and circalittoral rock (Sabellaria reefs on rock CR.MCR.CSab/EUNIS A4.22) cannot be considered as biogenic reef since many of the associated species are capable of living on stable rock, irrespective of the presence of S. spinulosa reef (Foster-Smith and Hendrick (2003)). Another supplementary point is that the habitat complexity offered by S. spinulosa reef on sediments results in the provision of habitats similar to both sedimentary and hard substratum environments, a complexity which S. spinulosa reef on rock does not offer. The number of potential niches offered by S. spinulosa reef on sediment are therefore increased and support a broader range of taxa ranging from sessile or sedentary epifauna, to burrowing fauna (Tillin et al., 2024). These, points offer further support for maintaining our conservation advice that in an area where artificial substate is present, Sabellaria spinulosa is not providing the same structure and function	
	References: Tillin, H.M., Marshall, C.E., Garrard, S.L.,, Gibb, N., & Watson, A., (2024). Sabellaria spinulosa on stable circalittoral mixed sediment. In Tyler-Walters H. and Hiscock K. (eds) Marine Life Information Network: Biology and Sensitivity Key Information Reviews, [on-line]. Plymouth: Marine Biological Association of the United Kingdom. [cited 09-12-2024]. Available from: https://www.marlin.ac.uk/habitat/detail/377 Foster-Smith, R.L. & Hendrick, V.J., (2003). Sabellaria spinulosa reef in The Wash and North Norfolk cSAC and its approaches: Part III, summary of knowledge, recommended monitoring strategies and outstanding research requirements. Rep. 543	

Ref	Natural England's Deadline 5 Submission	The Applicant's Response
		detail at Deadline 6 (document reference 7.1, V5, submitted at Deadline 6). The Applicant has updated the RIAA with this detail at Deadline 6 (document reference 7.1, V5, submitted at Deadline 6). The commitment is secured within the Outline Scour and Cable Protection Management Plan (REP5-129) and in the Outline Cable Specification and Installation Plan (REP5-117) secured under condition 13(1)(d), Part 2, Schedule 11 of the DCO). The Applicant has updated the RIAA with this detail at Deadline 6 (document reference 7.1, V5, submitted at Deadline 6) and has updated the without prejudice compensation case to include the quantification of impact to Annex I supporting habitat. The following compensation documents have been updated and submitted at Deadline 6, in the event that an agreement cannot be reached regarding no AEoI. ▪ Without Prejudice Benthic Compensation Evidence Base and Roadmap (document reference 7.6.3, V4, submitted at Deadline 6) and, ▪ Without Prejudice Biogenic Reef Compensation Plan (document reference 7.6.2, V4, submitted at Deadline 6)

Table 2-36: The Applicant's Response to Natural England's Comments on 15.12 Interim Population Consequences of Disturbance Modelling Report V3 (Tracked) [REP4a-107]

Ref	Natural England's Comments on iPCoD [REP4a-107]	The Applicant's Response
Introduction		
0.1	The following Natural England advice is provided to GTR4 (ODOW) under our Discretionary Advice Service (DAS) contract on 27th March 2025. Please see our advice below on the 15.12 Interim Population Consequences of Disturbance Modelling Report V3 (Tracked) [REP4a-107]. Natural England is providing this directly to ODOW via DAS to allow time for further consideration and for any update at Deadline 6. Unless there is further update, Natural England intends to submit this advice into examination at Deadline 6.	This comment is noted by the Applicant.
Detailed Advice		

Ref	Natural England's Comments on iPCoD [REP4a-107]	The Applicant's Response
1..1	Natural England does not support the Applicants method of defining significance from the Interim Population Consequences of Disturbance (iPCoD) model results for the project alone. The method is not conservative as other threats which also impact populations, such as bycatch, prey availability and shipping are not included in the model, and therefore, conclusions on the significance of impacts at the population level need to also take account of other threats that could also cause a decline at a population level.	The purpose of the Project Alone iPCoD modelling was to provide further justification for the magnitude score for the impact of disturbance from pile driving presented in Chapter 11 Marine Mammals (Document reference 6.1.11, V3, submitted at Deadline 6). This impact is assessed in isolation in the Section 11.6 of Chapter 11 Marine Mammals and in the iPCoD model (REP4a-106). The Applicant agrees that other threats and impact pathways can affect the population level; however, this would be part of a cumulative assessment, not the project alone assessment. For a cumulative assessment within Chapter 11 Marine Mammals (Document reference 6.1.11, V3, submitted at Deadline 6), it is typical to assume (unless there is evidence to suggest otherwise) that impacts such as bycatch and shipping are existing and ongoing threats which are present in the baseline and will continue in the future. Therefore, the CEA screened out these impact pathways as part of the existing baseline. Additionally, the model uses demographic rates which match the best available knowledge on harbour porpoise population trend (i.e. that the population is not increasing or decreasing). These demographic rates capture the impact of other stressors on the population (i.e. bycatch, shipping and prey changes are considered to have been captured in the demographic rates).
2.1	There is limited understanding of how disturbance leads to health, reproduction and consequently population level impacts in marine mammals; although iPCoD is the best available tool to predict these impacts, there are still limitations to this model, and therefore conclusions of significance cannot be based solely on iPCoD results, but instead should be viewed in context alongside outcomes of Effective Deterrence Range (EDR) and dose response assessment methods.	The Applicant agrees with Natural England that there is limited understanding on how disturbance leads to health, reproduction and consequently population level impacts. The Applicant agrees with Natural England that while iPCoD is the best available tool at this time, there are limitations to the model. These are detailed in the iPCoD Model Limitations section of the iPCoD Modelling Report (Cumulative) (document reference 6.3.11.3, V1, submitted at Deadline 6). However, the Applicant is unsure what Natural England means when it says that conclusions of significance "should be viewed in context alongside outcomes of Effective Deterrence Range (EDR) and dose response assessment methods". The dose-response assessment method was presented in Chapter 11 Marine Mammals (Document reference 6.1.11, V3, submitted at Deadline 6) to estimate the number of animals potentially disturbed per day of piling. This is what the conclusions of significance were based on in Chapter 11 Marine Mammals (Document reference 6.1.11, V3, submitted at Deadline 6) or the Project alone. The results of the dose-response assessment were used as inputs into the iPCoD model. The two methods provide very different information: the dose-response assessment is used to calculate the number of animals potentially disturbed per day of piling. EDRs, while primarily implemented in porpoise SAC management to assess the area of habitat disturbed, can also be used to estimate the number of animals potentially disturbed per day of piling (as is often done in cumulative impact assessment where project-specific estimates are lacking). By contrast, iPCoD uses the outputs of dose-response and EDR assessments (number of animals disturbed per piling day) in combination with the piling schedule to determine if there is a population level effect. The iPCoD model includes parameters which link daily disturbance to impacts on vital rates, allowing estimation of population-level effects; this cannot be done from dose-response or EDR outputs alone.
2.2	The results of iPCoD modelling for the project alone show a decline for several scenarios such as; • harbour porpoise (summer density) for construction with jackets in which the impacted population is predicted to be 99.83% of the unimpacted population	The results of the iPCoD model for porpoise were that the mean impacted population size was 99.83% of the size of the mean un-impacted population size over 1,000 simulations. After the piling activity ceases, the impacted population is predicted to continue on a stable trajectory, the same as the un-impacted

Ref	Natural England's Comments on iPCoD [REP4a-107]	The Applicant's Response
	• Bottlenose dolphins for construction with jackets in which the impacted population is predicted to be reduced to 99.85% of the unimpacted population. • Therefore, Natural England request the Applicant uses iPCoD to assess the impacts of the project in-combination with other projects as we believe it is possible a greater level of impact may be identified than for the project alone, which may be significant at a population level.	population. The Applicant does not consider this to be evidence of a population-level effect (i.e. that a mean reduction of 0.17% is very small – and likely recoverable). It is noted that the current iPCoD model does not account for density-dependent factors; in reality, it is expected that the impacted population size would soon return to that of an undisturbed state following the end of the disturbance. This has been detailed in Section 3 of the iPCoD Modelling Report (Cumulative) (document reference 6.3.11.3, V1, submitted at Deadline 6). Such recovery was observed across simulations of varying levels of disturbance (of up to 20% population decline) within the DEPONS model, which does allow for density-dependent recovery (Nabe-Nielsen et al 2018). For further discussion on issues of carrying capacity and density dependence in relation to harbour porpoise, the Applicant encourages reading of Section 4 and 6 of Brown et al. (2023). As requested by Natural England, the Applicant has provided cumulative iPCoD Modelling Report (Cumulative) at Deadline 6 (document reference 6.3.11.3, submitted at Deadline 6).

2.10 The Applicant's Response to Orsted's Deadline 5 Submission Response

Table 2-37: The Applicant's Comments on the Orsted IPs' Deadline 5 submission PPs

Ref	Orsted's Deadline 5 Submission	Applicant Response
	FOR THE PROTECTION OF HORNSEA 1 LIMITED, BREESEA LIMITED, SOUNDMARK WIND LIMITED, SONNINGMAY WIND LIMITED, OPTIMUS WIND LIMITED, RACE BANK WIND FARM LIMITED AND LINCS WIND FARM LIMITED	
Application		
1.	The provisions of this Part of this Schedule have effect, unless otherwise agreed in writing between the Ørsted IPs and the undertaker.	The Applicant has proposed an alternative set of PPs for the protection of Lincs Wind Farm Limited and Race Bank Wind Farm Limited at Parts 13 and 14 of Schedule 18 of the draft DCO (3.1) in order to provide sufficient comfort that these projects are protected and co-existence can operate effectively. Whilst the terms of these PPs are not agreed with the relevant parties, in each case, the Applicant is in active negotiations with the relevant IPs with a view to agreeing a proximity agreement to govern the interaction of the Project with the relevant IP project.
Interpretation		
2.	In this Part of this Schedule: "GW" means gigawatts; "Hornsea One Offshore Wind Farm" means the 1.2 GW wind farm located 120 kilometres off the Yorkshire coast; "Hornsea Two Offshore Wind Farm" means the 1.3 GW wind farm located 89 kilometres off the Yorkshire coast;	The Orsted IPs have commented that the Applicant should be obliged to enter into a proximity agreement prior to commencement of the works. The Applicant considers that: a. The works controlled by the PPs should be limited to those within the "control area", not the works as a whole (a point that has been accepted by the Orsted IPs in discussions); and

	"Lincs" means Lincs Wind Farm Limited (company number SC213646, with registered office at 13 Queens Road, Aberdeen, AB15 4YL); "Lincs Offshore Wind Farm" means the 270 MW wind farm located 8 kilometres off the east coast of England, near Skegness in Lincolnshire; "MW" means megawatts; "Ørsted IPs" means, together or in any combination, Hornsea 1 Limited (company number 07640868), Breesea Limited (company number 07883217), Soundmark Wind Limited (company number 10721881), Sonningmay Wind Limited (company number 10722635), Optimus Wind Limited (company number 07883284) and Race Bank. The registered office for each Ørsted IP is 5 Howick Place, London, SW1P 1WG; "Ørsted IPs' Projects" means, together or in any combination, the Hornsea One Offshore Wind Farm, the Hornsea Two Offshore Wind Farm and the Race Bank Offshore Wind Farm. "Race Bank" means Race Bank Wind Farm Limited (company number 05017828, with registered office at 5 Howick Place, London, SW1P 1WG); and "Race Bank Offshore Wind Farm" means the 573 MW wind farm located 17 miles off Blakeney Point on the North Norfolk coast and 17 miles off the Lincolnshire coast at Chapel St Leonards.	b. That the approval mechanism set out in the PPs provides sufficient control for the IPs in each case in the absence of a proximity agreement being completed as the relevant works cannot commence until such time as the protected party has confirmed that they are content with the specifications of those works. The ExA and the SoS can therefore be satisfied that the assets of Lincs Wind Farm Limited and Race Bank Wind Farm Limited are sufficiently protected such that any effects on third party infrastructure are negated or reduced to a level sufficient to enable the Secretary of State to grant consent in accordance with paragraph 2.8.348 of NPS EN-3.
Compensation		
3.	Prior to the commencement of the authorised development, the undertaker must either: a. provide sufficient measures to mitigate in full; or b. compensate the Ørsted IPs for, the wake loss impact of the authorised development on the Ørsted IPs' Projects.	The Applicant and the Orsted IPs remain fundamentally disagreed on the appropriateness of protective provisions covering wake effects. The Applicant maintains that such provisions fail to meet the required tests for inclusion and would be entirely inappropriate to include in the DCO.
4.	The magnitude and form of the mitigation or compensation in paragraph 3 above shall be assessed and determined by an independent third party expert, the appointment of whom shall be agreed between the undertaker and the Ørsted IPs, acting reasonably.	The Applicant refers to its submissions in The Applicant's Submissions on Wake Loss Matters (24.12).
Proximity Agreement – Race Bank		
5.	Prior to the commencement of the authorised development the undertaker and Race Bank must, acting reasonably, negotiate and enter into a signed and completed proximity agreement to govern the interaction between the authorised development and the Race Bank Offshore Wind Farm.	See response at 2. above.
Proximity Agreement – Lincs		
6.	Prior to the commencement of the authorised development the undertaker and Lincs, acting reasonably, negotiate and enter into a signed and completed proximity agreement to govern the interaction between the authorised development and the Lincs Offshore Wind Farm.	See response at 2. above.
Disputes		
7.	Unless otherwise agreed in writing between the undertaker and the Ørsted IPs, any dispute arising between the undertaker and the Ørsted IPs under this Part of this Schedule is to be determined by arbitration as provided in article 39 (arbitration) of this Order.	See responses at 3. and 4. above.

2.10.1 The Applicant's Comments on Orsted's Deadline 5 submission Wake Loss Financial Impact Assessment on behalf of the Orsted IPs

2. The Applicant has responded to these submissions in The Applicant's Submissions on Wake Loss Matters (Document 24.12).

2.11 The Applicant's Response to Perenco's Deadline 5 Submission Response

Table 2-38: The Applicant's Comments on the Perenco's Deadline 5 submission

Ref No	Submission	Applicant Response
1.	As noted in Perenco's Written Representation at DL1, Perenco's answers to EXQ1 at DL2, and the introductory comments to Perenco's draft PPs submitted at DL4, good progress towards a confidential commercial agreement between the Applicant and Perenco has continued to be made. On this basis, Perenco has not to date provided further details of its concerns or the mitigations sought beyond those referred to in the above submissions. Perenco (and, we believe, the Applicant) remain confident of reaching a commercial agreement.	As noted in the Applicant's Planning Obligations and Side Agreements Tracker (Doc Ref. 18.4) the commercial agreement in relation to curtailment of helicopter operations will be finalised as soon as possible after close of Examination, noting that agreement of all Protected Provisions in relation to helicopter operations, including the Protected Provisions Plan, provides sufficient control to Perenco for the protection of their current and future helicopter operations.
2.	Perenco notes that the ExA has proposed that "Co-operation and agreements" be covered as part of agenda item 3.2 at ISH8 but has not specifically requested Perenco's attendance. Perenco would, if required, be happy to attend ISH8 to allow the ExA to question ourselves and the Applicant regarding progress.	The Applicant notes the Written Summary of Oral Case Put at ISH8 held on 19 March 2025 (Doc Ref. 24.4) where the topic of Cooperation and Agreements was discussed.
3.	In good faith, Perenco is not submitting further information regarding its position at this DL5 beyond an updated set of protective provisions (based on agreement being reached with the Applicant). Should agreement not have been reached by the close of the examination, Perenco requests that the SoS consult with Perenco and the Applicant to expedite their entering into such an agreement.	As noted in the Applicant's Planning Obligations and Side Agreements Tracker (Doc Ref. 18.4), the Applicant and Perenco have agreed the principles of the commercial agreement and continue to progress to a final form of agreement.
4.	Whilst negotiations with the Applicant are ongoing, these PPs reflect Perenco's current position of PPs that would be acceptable in conjunction with an agreement. These may differ from PPs that the Applicant may submit. It should also be noted that, should agreement not be reached, some of the provisions, particularly the definitions of the relevant aviation corridors and relevant WTG exclusion zones would need to be substantially modified in order to be acceptable to Perenco. The agreement anticipated to be reached with the Applicant would provide alternative mitigations for the disruption and economic loss associated with restrictions to Perenco's operations arising from the proposed proximity of wind turbine generators to Perenco's assets.	As noted in the Applicant's Planning Obligations and Side Agreements Tracker (Doc Ref. 18.4), the Applicant and Perenco have agreed Protected Provisions with the exception of the 50m radius distance used to define the communication corridors. The PP's are presented in the DCO and accompanying documents (3.1; 3.1.1; and 3.2).

2.12 The Applicant's Response to T.H. Clements' Deadline 5 Submission Response

Table 2-39: The Applicant's Comments on the T.H. Clements' Deadline 5 submissions

Ref No	Submission	The Applicant Response
1 Comments on ExA's commentary on, or schedule of changes to, the draft DCO		
1.1	T.H. Clements welcomes the inclusion of its proposed changes to (i) Article 22(1) and (ii) para (c) of the restrictive covenant drafting in Schedule 7, in the ExA's recommended changes to the dDCO [PD-026].	Please see the Applicants response within The Applicant's Comments on The Examining Authority's schedule of proposed changes to the draft Development Consent Order [REP5-148].
2 Comments on the Applicant's Response to Action Points recorded at ISH5 [REP4a-120]		

Ref No	Submission	The Applicant Response
2.1	Please refer to Appendix 1 which sets out T.H. Clements' comments on the Applicant's response to action points recorded at ISH5.	Please refer to Table below.
3 Comments on Outline Code of Construction Practice [REP4a-076]		
3.1	Appendix 2 comprises an updated copy of the Outline Code of Construction Practice provided to T.H. Clements by the Applicant after Deadline 4(a), with T.H. Clements' requested changes shown in track.	The Applicant has met and discussed TH Clement's outstanding concerns in further detail and have submitted at Deadline 6 an updated version of the oCoCP (document reference 8.1, V8, submitted at Deadline 6). The Applicant can confirm that the OCoCP submitted at D6 is now in an agreed form with TH Clements.
4 Comments on Outline Soil Management Plan [REP4a-080]		
4.1	Appendix 3 comprises an updated copy of the Outline Soil Management Plan provided to T.H. Clements by the Applicant after Deadline 4(a), with T.H. Clements' requested changes shown in track.	The Applicant has met and discussed TH Clements' outstanding concerns in further detail and have submitted at Deadline 6 an updated version of the oSMP (document reference 8.13, V7, submitted at Deadline 6). The Applicant can confirm that the oSMP submitted at D6 is now in an agreed form with TH Clements.
5 Adverse impact of electromagnetic radiation and heat from the cables on the soil and its microorganisms		
5.1	At Table 35, Ref No 4.3.16 of the Applicant's Comments on Deadline 4 Submissions [REP4a-115], the Applicant responds to T.H. Clements' comments on the adverse impact of electromagnetic radiation and heat from the cables on the soil and its microorganisms. T.H. Clements' responds to the Applicants' comments as follows:	In the Applicant's Responses to The ExA's First Written Questions (REP2-051, Q1 LU 1.16), the Applicant considered a series of scientific studies presented by T.H. Clements to support its claim, and set out why each was not comparable to the scenario under consideration, and also directed the ExA to a number of scientific studies that had been carried out as field trials with growing crops, above cables, and which had assessed a variety of crop types including, potatoes, winter wheat, maize, and mustard (noting that mustard is a brassica species, brassicas being most commonly farmed by T.H. Clements) covering a wide range of rooting depths and which found there to be negligible or no significant effects to soils and cropping. The Applicant has put forward the best scientific evidence available as provided in REP2-051, LU1.16. As described within the studies presented there, no negative effects have been found as part of published research, for crops rooting at and beyond cable depth.
5.2	T.H. Clements have consistently maintained that any changes to the soil environment due to radiation (including, but not exclusively, soil heating) in the zone of the cables is likely to influence establishment, growth and marketable yield of high value vegetable crops as evidenced in our case studies. Influences on yield could be positive or negative, but in either case soil heating leads to a differential in ripening. Harvesting will therefore be adversely affected, as some of the crop will be ripe, and elsewhere not.	
5.3	In the case of combinable crops (which generally feature in the Applicant's cited research), once ripe, they can stand in the field for at least a number of days in order for any unripe crop in other field areas to 'catch up'. Hence for combinable crops, differential ripening (caused by a cable soil heating effects, for example) is far less of an issue. The photographs at Appendix 4 of these submissions show variable crop ripening in fields through which the onshore electricity connection cable for the Triton Knoll offshore wind farm run, with the combinable crops shown being beans or wheat. It is clear that there is a significant effect on crop ripening. Translating these effects on to high value vegetable crops is clearly going to have a significant effect on marketable yield – where field areas above the cable are at harvest ripeness, for example, those adjacent will not be. Marketable yield of either the cable area, or those adjacent, will be lost as it will not be practical or financially viable to harvest the crops at different times.	The Applicant notes photographs submitted by T.H. Clements, and notes the linear discolouration across the field, as can be seen in the presented images. There is no evidence before the ExA which would allow a conclusion that the difference in colour within the fields is as a result of soil heating caused by heat emanating from the buried cables. There are a number of factors which could cause this such as ground type (geology), water table depth, land drainage, reinstatement and associated construction methodologies. The difference in colour shown is isolated to certain fields; and is not consistent along the cable route which suggests this is an isolated issue unrelated to cable heating, which would be more likely to present consistently across the full length of the cable route.
6 Dust Contamination: Responses to the Applicant's submission at Deadline 4a		
6.1	Please refer to Appendix 5 which sets out T.H. Clements' response to the Applicant's submissions at Deadline 4a in relation to dust contamination. The Applicant's Deadline 4(a) submissions commented on are: • REP4a-078 – Outline Air Quality Management Plan; • REP4a-110 – The Applicant's Responses to The ExA's Second Written Questions (particularly LU 1.6);	Please refer to Table below.

Ref No	Submission	The Applicant Response
	• REP4a-114 – The Applicant's Comments on T.H. Clements' Responses to The ExA's Second Written Questions (particularly LU 1.3 and LU 1.6); and • REP4a-116 – The Applicant's Written Summary of Oral Case put at the Issue Specific Hearing 5 held on 12 February 2025;	
7 Economic impact on T.H. Clement's agricultural operations		
7.1	At Q2 SE 1.1 of the ExA's Second Written Questions [PD-020], the Examining Authority asked the Applicant and interested parties to explain and quantify in the context of a local, regional and national scale, the likely impacts on agricultural operations from the proposed development, including but not limited to, land severance, dust contamination and crop quality.	The Applicant notes the scale of TH Clements business as outlined in Appendix 6 of [REP5-173]. The Applicant can confirm that they will be directly affecting 147 acres within the order limits plus a potential further 42.9 acres where land will become severed as agreed with TH Clements. This totals 190 acres. When this is applied to the circa. 12,000 acres that TH Clements have stated they farm within [REP5-173], the Applicant will impact 1.58% of their business. The Applicant notes that TH Clements has already secured 1,050 acres of mitigation land at Gosberton Farm to mitigate the possible impact on the business and has confirmed that this will be sufficient to mitigate their losses, despite there being disagreement between the parties over the precise area that could be impacted by dust, with TH Clements considering this area to be circa 250 acres. The Applicant has made a commercial offer to TH Clements based on the Applicant's assessment of costs associated with the mitigation land with a guarantee that any proven losses over and above this will also be paid by the Applicant. While the Applicant maintains there would be no existential threat to TH Clements's business, if this offer were to be accepted, TH Clements would not be putting forward evidence that it would still face an existential threat to its business. At CAH2, Senior Counsel on behalf of TH Clements confirmed that there would only be an existential threat if no agreement was reached. The Applicant notes TH Clement's position that TH Clements as an occupier does not have automatic rights to compensation under the Compensation Code. The Applicant has now offered a unilateral commitment by way of formal agreement to TH Clements which would provide TH Clements with the same rights to claim compensation as if they were a formal tenant and would be entitled under the Compensation Code, The draft agreement imposes no obligations on TH Clements and the Applicant would be bound by it in terms that TH Clements would be compensated as agreed by the parties or as may be settled by third party determination. The Applicant is awaiting a response from TH Clements on this matter.
7.2	At Deadline 4a, the Applicant commented on this question at REP4a-110 and REP4a-114.	
7.3	Please refer to Appendix 6 which sets out a detailed note on the economic impact of the scheme on T.H. Clements' agricultural operations.	
8 March Hearings		
8.1	We note that the ExA has specifically requested that T.H. Clements attend the next set of hearings (CAH2 and ISH8 being the relevant hearings) and T.H. Clements would appreciate the opportunity to discuss further its concerns regarding dust impacts and mitigation.	
8.2	Should the ExA require any additional information in relation to this representation, please contact Fiona Barker or Melanie Grimshaw of Mills & Reeve at fiona.barker@mills-reeve.com or melanie.grimshaw@mills-reeve.com.	

Table 2-40: The Applicant's Comments on TH Clements' comments on the Applicant's Response to Action Points recorded at ISH5 [REP4a-120]– **Appendix 1**

ID	Response to Action Point from Issue Specific Hearing 5	Applicant's Response	T.H. Clements' Response	Applicant's Response
Applicant's Response to Action Point 14				

ID	Response to Action Point from Issue Specific Hearing 5	Applicant's Response	T.H. Clements' Response	Applicant's Response
ISH5 AP14	Engage in discussions and provide a note of respective positions regarding the cable corridor width and ability for micro-siting	The Applicant has outlined its position on cable corridor width and micrositing within 22.2 The Applicant's Comments on Responses to the Examining Authority's Written Questions - Q2 LU1.3 and 22.4. The Applicant's Written Summary of Oral Case put at the Issue Specific Hearing held on 12 February 2025. The Applicant has met with TH Clements on Wednesday 12th February and subsequently on Wednesday 19th February and Thursday 20th February. The Applicant then sent TH Clements the Applicant's position on cable corridor width in writing on the 20th February in an attempt to reach agreements on this matter before D4a. The Applicant has not received feedback from TH Clements regarding this matter and assumes that TH Clements will respond in writing to the ExA.	T.H. Clements' position is set out at [REP4a-140, App.1, §7] and [REP4-150, Q2 LU.1.3]. Action point 14 from ISH5 was for the Applicant and T.H. Clements to engage in discussions and provide a note of respective positions regarding the cable corridor width and ability for micro-siting. T.H. Clements requested from the Applicant justification of its claimed need for 20m micro-siting where trenchless techniques are used. This explanation was provided by email on 20 February 2025 by reference to [PD1-07, p.403]. This shows a cross section of the typical 60m easement width for four circuits in flat formation installed via trenchless technique. It provides: "In this flat formation each cable in a circuit is installed with a 5m separation between each of the three cables meaning each circuit is 10m wide – totalling 40m for four circuits. Each circuit is then separated by a 5m gap - meaning a total width of 15m across the four circuits. A 2.5m buffer/exclusion zone on either side of the corridor is then considered to protect the cables from third parties and to ensure the cables can be safely operated – this adds another 5m to the corridor. Adding these components together (40m + 15m + 5m) gives the 60m easement width outlined by the Applicant in paragraphs 25 and 75 of the Statement of Reasons." Paragraphs 25 and 27 of the Statement of Reasons [AS1-032] do not in fact provide any further reasoning. Nor does the above provide any justification of the 80m working corridor where trenchless techniques are used. The Applicant has referred to the need to micro-site orally but has not explained why that is required where trenchless techniques are used and not where ordinary installation occurs (and where there is no scope for micro-	The Applicant notes that during CAH2, TH Clements has confirmed, following further explanation provided by the Applicant at Deadline 5 (REP5-150), that T.H. Clements was satisfied that the 80-metre width of the working corridor is justified and that they were now taking no point in relation to alternatives arising from the width of the onshore cable corridor.

ID	Response to Action Point from Issue Specific Hearing 5	Applicant's Response	T.H. Clements' Response	Applicant's Response
			siting as all of the corridor is required (see [PD1-07, pp.400-402])). No examples are given of when micro-siting might be required. No explanation is provided as to the extent to which micro-siting is realistic given the clear engineering preference is to bury cables in as straight a line as possible and the very short distances over which trenchless techniques are proposed (see for example the plans at [APP-089, Figures 4.3.32-4.3.32] which show trenchless techniques being used over lengths of as little as 50m). T.H. Clements remains unconvinced of the need for the 80m corridor where trenchless techniques are used.	
Applicant's Response to Action Point 15				
ISH5 AP15	Consider additional wording to the drafting of the consultation requirements with affected landowners to be set out in the Soil Management Plan (SMP) and provide a commentary note on this and also on the issue of when after a period of heavy rain the land would be able to accommodate heavy machinery on it.	<u>oSMP consultation</u> It would not be practical to consult, in a timely manner, with every landowner and tenant on the content of final plans such as the CoCP and SMP on an individual basis. A decision was therefore made for the LIG, who represent 88.75% of landowners affected by the project, to be the consultees. Following ISH5, where TH Clements made a request to be a consultee, the Applicant has also committed in paragraph 3 of section 2.1 that the views of TH Clements and the LIG will be submitted to the discharging authority with the final CoCP and SMP. The outline Organic Land Protocol ("oOLP") has also been updated to mirror the requirement that the views of the LIG will be submitted to the discharging authority with the final oOLP. <u>Heavy Rain/adverse weather</u> The oSMP Section 1.19 sets out requirements for soil handling in the event of adverse weather. The measures set out within this section are derived from guidance within Code of practice for the sustainable use of soils on construction sites (DEFRA) and Good Practice Guide for Handling Soils in Mineral Workings (IQ, 2021). In relation to soil handling after periods of heavy rain	<u>oSMP consultation</u> T.H. Clements welcome the amendments to the oSMP [REP4a-080] and oCoCP [REP4a-076] which confirm that they will be consulted prior to the final SMP and CoCP being submitted to the discharging authority for approval. <u>Heavy Rain/adverse weather</u> Section 1.19 of the oSMP [REP4a-080] (at the third bullet point of paragraph 52) provides that: "If sustained heavy rainfall (e.g., >10mm in 24 hours) occurs, soil handling operations must be suspended. Soil handling operations must not restart until the ground has had at least one full dry day or an agreed moisture criteria of the soil can be met (such as 'drier than the plastic limit') as advised by the SCoW;" T.H. Clement's silt loams have naturally high water tables requiring effective drainage. As a result, the soil can be wet for extended periods. This is outlined in Paragraph 22 (p 7) of the Clarification Note on ClimateChange, Increased Rainfall & Soil Impacts [REP3-055]. This states: "Field capacity refers to the amount of soil moisture or water content held in the soil after excess water has drained away and the rate of downward movement has decreased, typically occurring two	The Applicant updated the oSMP at Deadline 5 (REP5-115) to commit to only re-commencing soil handling operations following sustained heavy rainfall once an agreed moisture criteria of the soil can be met (such as 'drier than the plastic limit') as advised by the SCoW, removing the alternative option that soil handling operations could commence after the ground has had at least one full dry day. The wording of paragraph 52 matches what was requested by T.H. Clements in REP5-173 (Appendix 3). The Applicant therefore considers this point to be agreed between the parties.

ID	Response to Action Point from Issue Specific Hearing 5	Applicant's Response	T.H. Clements' Response	Applicant's Response
		the following criteria must be met before soil handling can recommence "If sustained heavy rainfall (e.g., >10mm in 24 hours) occurs, soil handling operations must be suspended. Soil operations must not restart until the ground has had at least one full dry day or an agreed moisture criteria of the soil can be met (such as 'drier than the plastic limit') as advised by the SCoW;" After heavy rain, soils can become overly saturated and exceed their plastic limit, which can lead to compaction and soil structure damage. Understanding the plastic limit and ensuring soils are below their plastic limit before handling ensures that soil handling operations are conducted efficiently and safely, minimising environmental impact and ensuring structural stability. It was noted during ISH5, that TH Clements requested it would be more appropriate that s1.19 be amended to state that 'soil operations must not restart until the ground has had at least one full dry day and an agreed moisture criteria of the soil can be met (such as 'drier than the plastic limit') as advised by the SCoW;' The Applicant maintains the position that this should be 'or' as currently drafted as this follows best practice guidance within DEFRA Construction Code of Practice for the Sustainable Use of Soils on Construction Sites and the Institute of Quarrying Good Practice for Handling Soils.	to three days after rain or irrigation in soils with uniform structure and texture". After heavy rainfall, soil moisture will still be above field capacity after only one full dry day. Allowing soil handling operations to restart in these circumstances will result in operations being carried out when the soil is significantly above plastic limit, and thus liable to extensive damage. In addition, damage can be incurred at all depths including the lower subsoil when it is exposed, and trafficked during construction. Farming operations rarely cause significant damage to the upper horizons, which can in any event be repaired easily as crop roots grow in high volumes at such depths and this facilitates natural soil repair processes. Silt loam soils especially rely on natural root growth to provide soil repair which is sustainable. Mechanical ripping can only open the soil, and the slumping prone nature of silt loams requires natural stabilising processes afforded by crop roots to make such repairs permanent. Damage to deeper levels, caused for example, when trafficking plastic subsoils during construction, when moisture levels are too high, is more difficult to repair since rooting is less intensive naturally at such depths. As such, soil operations should only restart once the agreed moisture criteria is met on these naturally fragile soils. In the Applicant's Deadline 4a response to AP15 , they say that the current measures are derived from guidance within Code of practice for the sustainable use of soils on construction sites (DEFRA). The argument that one dry day is part of the Code of Construction Practice for the Sustainable Use of Soils on Construction Sites requires clarification. This code applies to general soils on construction sites, not the grade 1 silt loams needed to grow high value vegetable crops to exacting standards. The preceding comments give background to this.	

ID	Response to Action Point from Issue Specific Hearing 5	Applicant's Response	T.H. Clements' Response	Applicant's Response
			With regard to the Good Practice Guide for Handling Soils in Mineral Workings (IQ, 2021), clearly such workings are of limited relevance to silt loam soils farmed to exacting standards for top quality vegetable production as in the case of TH Clements. Section 1.20 of the oSMP [REP4a-080] describes determining Soil Moisture, and specifically para 58: "The appropriate methodology for handling and storage of the soils will be determined and approved via the final SMP based on the plasticity and the moisture content of the soils." This section is completely at odds with the (erroneous) principle of "one full dry day before work re-commences" when soils are already at field capacity, which is likely for many parts of the year.	
Applicant's Response to Action Point 16				
ISH5 AP16	Clarification to be provided on the current and future role and status of the Land Interest Group and any implications for the appropriate consultation body for the outline SMP and oCoCP.	In Autumn 2022, The Applicant was advised that a working group of land agents had formed known as the Land Interest Group (LIG) who represent 88.75% of landowners affected by the Project. To date the Applicant has used this forum to share project updates, to develop Heads of Terms and to obtain feedback on application documents such as the oCoCP and the oSMP. Going forward, this group will continue to be used for sharing project updates and obtaining feedback as and when required. The Applicant is of the opinion that this group is very much needed through to the end of Examination and on-going in the lead up to construction to streamline communication with landowners given there are over 160 interests affected by the Project. It would not be practical to consult, in a timely manner, with every landowner and tenant on the content of final plans such as the CoCP and SMP on an individual basis.	T.H. Clements welcome the amendments to the oSMP [REP4a-080] and oCoCP [REP4a-076] which confirm that they will be consulted prior to the final SMP and CoCP being submitted to the discharging authority for approval.	The Applicant notes TH Clements acceptance of the amendments made to the oSMP [REP4a-80] and the oCoCP (REP4a-76) which confirms that they will be consulted prior to the final SMP and CoCP being submitted to the discharging authority for approval.
Applicant's Response to Action Point 19				
ISH5 AP19	Consider providing amendments to the wording of the Soil Management Plan to ensure there is no deterioration of the ALC grade, whilst also safeguarding the need to restore soil profiles to their preconstruction condition.	The Applicant has amended the paragraph 92 of the oSMP (document 8.1.3) to clarify that the approach proposed by the Applicant of reinstating land to its pre-development quality as far as is reasonably practicable will result in the land being returned	T.H. Clements' carried out soil tests at Foxholes which identified three distinct soil horizons. The test results are contained at Appendix 2 of T.H. Clements' Responses to ExQ1 [REP2-079] and	The Applicant and TH Clements are both content with the revised drafting in relation to ALC grade submitted at Deadline 4a [REP4a-079]. The Applicant has submitted final versions of the oSMP (document 8.1.3, V7, submitted at

ID	Response to Action Point from Issue Specific Hearing 5	Applicant's Response	T.H. Clements' Response	Applicant's Response
		toits baseline agricultural land classification, and is therefore in compliance with NPS EN-5 paragraph 2.9.25 as it relates to mitigating effects on ALC grade land.	referred to in their response to LU 1.12 and LU 1.13. Where distinct soil horizons exist, each having different characteristics, these must: 1. Be identified, and recorded 2. Be stripped and stored separately 3. Be reinstated to enable the distinct horizons to be maintained, and for this to be confirmed post reinstatement. Such requirements enable the general principle as outlined in Section 1.26 of the oSMP [REP4a-080] at paragraph 92 to be met: "The main objectives for the reinstatement of the land will be to restore it to its pre-development quality as far as is reasonably practicable, as determined by the information obtained during the pre-construction soils survey and agreed with the landowner. This will primarily be achieved by ensuring that the full soil profile is reinstated in the correct sequence of horizons, and in a state where good soil profile drainage and plant root development are achieved; and by ensuring that the reinstatement works cause minimum damage to soil structure". At Appendix 2 and 3 of these Deadline 5 submissions, T.H. Clements have submitted an amended version of the oCoCP and oSMP respectively in track changes. Amendments made to both have been made in order that these objectives can be met. These reflect the need for consistent description of soil horizons throughout, including in both the pre- and post- construction surveys.	Deadline 6) and the oCoCP (document reference 8.1, V8, submitted at Deadline 6) at Deadline 6 which incorporate further changes related to soil testing on upper subsoil requested by TH Clements.
Applicant's Response to Action Point 20				
ISH5 AP20	Amend wording in the CoCP to remove the 'where practical' tailpiece in regard to cable burial depth.	The Applicant has at Deadline 4a updated 8.1 Outline Code of Construction Practice (revision 6) paragraph 109 to accommodate the changes discussed at ISH5 and set out in 22.4 The Applicant's Written Summary of Oral Case put at the Issue Specific Hearing held on 12 February 2025.	<u>Cable burial depth</u> Please see T.H. Clements response to AP20 action point at Appendix 2 of T.H. Clements' Deadline 4a submission [REP4a-140]. <u>Drainage – Alternative schemes over part of a field</u>	<u>Cable burial depth</u> The Applicant updated the Outline Code of Construction Practice (oCoCP) at paragraph 109 to commit to installing cables 300mm below any existing or reinstated drainage system or any alternative drainage system installed by the Applicant. The wording of paragraph 109

ID	Response to Action Point from Issue Specific Hearing 5	Applicant's Response	T.H. Clements' Response	Applicant's Response
		Revised wording has been shared with TH Clements and the revised wording has been updated to state 'The cable shall be installed 300mm below any current drainage system or any alternative drainage system installed by the Applicant' The Applicant has removed the wording 'where practical' at the request of TH Clements but has, as set out at ISH5 (document 22.4) added 'or any alternative drainage system installed by the Applicant' in order to account for drainage buried at significant depths. For example, this would be relevant where land drainage outfalls can be up to 2m deep and it would not be practical for the Applicant to bury cables 300m below this depth. In instances where this occurs, a post construction drainage scheme would be installed above the cable to ensure the integrity of the land drainage in the field. The Applicant has been advised that TH Clements do not agree with the amendments that have been made. The Applicant will continue proactive discussions with TH Clements.	At Section 5.15 of the oCoCP [REP4a-076], at the fifth bullet point of paragraph 111 and the eighth bullet point of paragraph 112, the oCoCP provides that: "In instances where the existing drainage scheme cannot be adequately reinstated, the Applicant may design an alternative drainage scheme over part or the entirety of a field. Such design to be agreed with the landowner." We have added into the oCoCP the requirement that reinstated and alternative drainage schemes must maintain a consistent water table height across the entirety of the field, in order that crop growth and maturity is similarly consistent across the field for vegetable crops on silt loam soils. This is included in bullet 7 para 111, and bullet 10, para 112. <u>Drainage – Shallower alternative schemes</u> T.H. Clements have a further concern where drainage schemes are replaced by shallower versions to allow shallower cable depths to be employed. Shallower drainage systems provide less soil above to accept and store water. This will diminish the effectiveness of drainage and lead to raised water tables compared to the pre-construction situation. In turn, this results in the fields being less capable of coping with current rainfall levels (intensity and frequency), let alone increases due to climate change. In such circumstances, the need for an effective, and consistent replacement scheme over the entirety (as opposed to part) of the field becomes essential. <u>Drainage – Approval of plans</u> At Q2 LU 1.9 of the Applicant's Comments on Responses to the ExA's Second Written Questions [REP4a110], the Applicant states that conceptual drainage plans had been discussed with T.H. Clements, which did not show the need for redundant schemes to be removed. T.H. Clements rejected the proposed scheme (to replace the	matches what was requested by T.H. Clements in REP5-173 (Appendix 2). The Applicant therefore considers this point to be agreed between the parties. <u>Drainage – Alternative schemes over part of a field</u> The requested text relating to maintaining a consistent water table height has not been included in the oCoCP as the Project is a long linear route and land conditions and drainage requirements across the route will vary, and this is an outline plan which will apply across the onshore Order Limits. This particular detail will not be relevant to all landowners' drainage schemes, and there are mechanisms within the oCoCP as part of the pre and post construction drainage plans to enable this to be dealt with on a case-by-case basis. <u>Drainage – Shallower alternative schemes</u> This request is too specific and not suitable for an outline plan however the oCoCP contains mechanisms as part of the pre and post construction drainage plans to enable the landowner to provide their comments on pre and post construction drainage schemes and the Applicant is bound to take these comments on board. The expert determination provision within the oCoCP will enable a landowner to seek independent verification of the plans. <u>Drainage – Approval of plans</u> The Applicant welcomes TH Clements acceptance of the wording provided within the oCoCP.

ID	Response to Action Point from Issue Specific Hearing 5	Applicant's Response	T.H. Clements' Response	Applicant's Response
			existing one) as jetting of the remaining drains not being replaced would not be possible. Instead, cross connection of severed drains was requested with adequate provision (cross-connection supporting lintels) to support the replacement pipes and guard against settlement. Therefore, there was no need to request removal of existing drains in this case. The Applicant's penultimate comment at Q2 LU 1.9 [REP4a-110] that TH Clements did not raise the subject of removing existing redundant drainage was a result of refusing to accept a replacement scheme as it clearly was inappropriate. Land settlement post drainage installation in such cases would not be immediate (likely to occur after 5 to 10 years, or more), hence T.H. Clements' request for an extended (20 year) warranty period for replacement cross-connected drains. In the Applicant's final comments at Q2 LU 1.9 [REP4a-110], they state: *Where appropriate and necessary, upstream drainage will be removed and this will be outlined as part of the pre and post construction drainage designs utilising the process set out in paragraph 111 in the oCoCP (document reference 8.1 revision 6). The Applicant is required under this paragraph to take on board landowner comments and make alterations where appropriate. The Applicant has, at TH Clements request, added an alternative dispute resolution clause to allow expert determination of the matter. During ISH 5, Counsel on behalf of TH Clements confirmed that these provisions gave their client comfort on matters relating to land drainage.* This statement is acceptable. This principle has been incorporated into Section 5.15, paragraph 112 of T.H. Clements' tracked version of the oCoCP at Appendix 2 of these submissions.	
Applicant's Response to Action Point 21				

ID	Response to Action Point from Issue Specific Hearing 5	Applicant's Response	T.H. Clements' Response	Applicant's Response
ISH5 AP21	Arrange discussions to investigate any disparities between their respective assessments of severed land now that the relevant shapefiles have been reviewed.	The Applicant understands that TH Clements is now content with the approach to severed land within the oCoCP (document 8.1, version 6). The Applicant had issued plans to the land agent for review pre ISH5, and following ISH5 on 12th February, TH Clements' agent met with the Applicant on 19th February to review the indicative severed land plans and jointly marked up plans which show the indicative area of severed land to be 42.9 acres for the land in which TH Clements either own or occupy. The Applicant awaits confirmation from the agent that they are in agreement with this figure.	T.H. Clements' agents, Brown & Co, confirm that the severed land areas have been reviewed, and an area of 42.9 acres has been agreed with the Applicant. It has been agreed that this area will be reviewed again prior to construction.	The Applicant welcomes TH Clements' confirmation that this matter is agreed between the parties.
Applicant's Response to Action Point 23				
ISH5 AP23	Confirm how the final documents will take account of the detailed construction data once the Principal Contractor is appointed and will account for evolving best practices in relation to dust contamination.	The Outline Air Quality Management Plan (AQMP) (document 8.1.2, version 2) has been updated to confirm that the construction dust assessment will be revised as part of the final AQMPs for each stage of the onshore transmission works. This revision will incorporate detailed construction data once the Principal Contractor is appointed and will reflect evolving best practices in dust mitigation and control.	T.H. Clements' acknowledges the commitment within the Outline Air Quality Management Plan [REP4a-078] to revise the construction dust assessment for each stage of the works. T.H. Clements would request that, for sections where T.H. Clements land is adjacent to the Order Limits, the revised construction dust assessment(s) specifically accounts for the zero tolerance for visible dust that applies to T.H. Clements Brassica produce. The oAQMP [REP4a-078] includes a measure to "install hard surfaced haul roads" in relation to dust 'trackout', which typically relates to roads entering/exiting the construction site onto the public highway. This measure is unlikely to consider all haul roads within the ECC. T.H. Clements would welcome a commitment to install trackway (or similar) on sections of haul road within the ECC sections that are adjacent to T.H. Clements land, which would serve to reduce wheel-generated dust emissions (where ground/soil conditions are suitable for this). This would align with Section 1.16 (Page 17) of the Outline Soil Management Plan [REP4a-080).	During ISH8, TH Clements confirmed that they were content with the commitments set out in the Outline Air Quality Management Plan (oAQMP) (REP4a-077), which include revising the construction dust assessment for the Final AQMPs. As this is the most recent position, the Applicant understands that Action Point 23 from ISH5 [EV9-001] is now agreed. **<u>Hard-surfaced haul roads</u>** TH Clements seeks to broaden the commitment to install "hard-surfaced haul roads" — as referenced in the oAQMP (REP4a-077) — to ensure consistency with the Outline Soil Management Plan (oSMP) (REP5-115), specifically by: • Applying the commitment more broadly across all haul roads; and • Ensuring it includes haul roads adjacent to TH Clements' land. **1. Clarification on the oAQMP** The oAQMP includes an overarching commitment to "install hard-surfaced haul roads," with the expectation that this will be refined in the Final AQMPs to provide clarity on

ID	Response to Action Point from Issue Specific Hearing 5	Applicant's Response	T.H. Clements' Response	Applicant's Response
				exact specifications, where necessary and feasible. This commitment already applies to all haul roads. This position has been further clarified in the oAQMP submitted at Deadline 6 (document 8.1.2, V3, submitted at Deadline 6). On this basis, the Applicant considers the matter to be addressed. **2. Alignment with the oSMP** The oSMP (document 8.1.3, version 7) does not include a firm commitment to install trackway along all haul roads. Rather, it identifies trackway as one of several potential measures that may be implemented where necessary and feasible. In this respect, the oAQMP (document 8.1.2, V3, submitted at Deadline 6) and the oSMP (document 8.1.3, V7, submitted at Deadline 6) are aligned — both allow for the installation of hard-surfaced haul roads (across all haul roads, where relevant and feasible). The oSMP builds on the oAQMP by providing further detail on the range of technologies that may be deployed. In light of the above clarification regarding the scope of the oAQMP (document 8.1.2, V3, submitted at Deadline 6), the Applicant considers this matter to be resolved. **3. TH Clements' Specific Request for Trackway Adjacent to Their Land** The Applicant acknowledges TH Clements' request to strengthen the oAQMP commitments at this stage, particularly regarding the installation of trackway (or similar measures) on haul roads adjacent to their land. However, as set out in Section 4.2.6 of (REP4-125), it is more appropriate to refine these

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				measures within the targeted Final AQMPs prepared for each specific transmission section, following detailed design. The Outline AQMP (document 8.1.2, V3, submitted at Deadline 6) sets out the overarching strategy for managing air quality during construction across all onshore components of the project. On this basis, the Applicant considers the matter to be appropriately addressed.
Applicant's Response to Action Point 25				
ISH5 AP25	Respond to the applicant's conceptual pre and post-construction drainage plans.	N/A	T.H. Clements have reviewed and commented on the proposed pre and post construction drainage plans provided by the Applicant. Revised plans have been issued to T.H. Clements which are in principle acceptable. However, due to the unique soil conditions and concerns over running silts in particular, T.H. Clements are seeking a longer term drainage indemnity to ensure the post construction drainage is safeguarded for a period of 20 years.	The Applicant responded to this point as part of (REP5-150) which stated the following: *'The Applicant welcomes TH Clements acceptance of the conceptual drainage plans. With regard to extended indemnity, the Applicant understands from discussions with local land drainage contractors a 5-year guarantee is standard for land drainage works in the area with defects typically becoming apparent within 1 – 2 years of the drainage works being completed. Therefore, the Applicant does not believe 20 years is reasonable. This will be a matter for commercial agreement between the parties and is not a point requiring consideration by the ExA.'*
Applicant's Response to Action Point 27				
ISH5 AP27	Respond to the argument put forward by TH Clements in regard to climate change and the increased frequency of heavy rainfall event will leave less time for land to drain.	See response to 22.2 The Applicant's Comments on Responses to the Examining Authority's Written Questions 2, Document 22.2, section 2.3 Applicant's Comments on T.H. Clements Responses to ExA WQ2 – Q2 LU1.12	Please see the above response to ISH5 AP15 on heavy rain/adverse weather. All of the points in that response become more significant as the frequency, and intensity of rainfall events increase as a direct result of Climate Change.	The Applicant notes TH Clements comment on Climate change, increased rainfall and soil impacts and the Applicant responded to TH Clements position in The Applicant's Comments on Responses to The ExA's Second Written Questions, Q2 LU 1.12 (REP4a-114). The key points made were that: • at the stage of increased rainfall and increased intensity by 2050, the cable will be installed, backfilled and fully reinstated and drainage fully reinstated; • once constructed the land along the onshore ECC will be reinstated and there will be no change to existing surface water hydrology and no potential for a change to the soil environment; and

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				• concerns raised by TH Clements are the impacts of climate change as a consequence of broader climatic trends, they are not impacts as a result of the project and would occur independently of the Project, and that the Applicant's efforts are focused on mitigating the potential impacts of the Project to ensure that agricultural land is reinstated to its predevelopment quality as far as is reasonably practicable. While there is some disagreement between the parties on the long-term effects of climate change on soil structure, for the reasons outlined in paragraph 11.16 above and set out in more detail in REP4a-114, this does not alter the likely effects of the Project or the appropriateness of the mitigations being proposed. T.H. Clements' key concern, as expressed at ISH5 (REP4a-140) is the handling of soils during construction in periods of adverse weather. T.H. Clements objected to the wording of the oSMP which provided for soil operations to restart after one full dry day or once an agreed moisture criteria had been met. T.H. Clements raised concerns that one full dry day could pass but that would not in itself mean that the soil moisture criteria was suitable for soil handling. The Applicant took this feedback on board and amended the oSMP at paragraph 52 to commit to only re-commencing soil handling operations following sustained heavy rainfall once an agreed moisture criteria of the soil can be met (such as 'drier than the plastic limit') as advised by the Soil Clerk of Works, removing the alternative option that soil handling operations could commence after the ground has had at least one full dry day. The wording of paragraph 52 matches what was requested by T.H. Clements in REP5-173 (Appendix 3). The Applicant therefore considers this point to be agreed between the parties.

Table 2-41: Dust Contamination: Responses to the Applicant's submissions at Deadline 4a – **Appendix 5**

Ref No	Deadline 4a Document – Applicant Comments	T.H. Clements Response	Applicant's Response
	REP4a-116: Agenda Item 3.5 (Pages 37-42)		
1	To provide some background, HPKC started the Applicant's submissions by providing the following context regarding the nature of dispute for the purpose of decision making: a. As T.H. Clements's response to ExQ2 LU1.6 and T.H. Clements's summary provided at ISH5 explain, this dispute concerns the area of land identified as high risk of visible dust and the appropriate amount of mitigation land which requires to be provided. It is not a dispute about whether additional mitigation measure are needed. Rather the Applicant has committed (as set out in its response at Deadline 4) to best practice mitigation measures. That is the key point which addresses the policy set out in NPS EN-1 Section 5.7. b. With those mitigation measures in place, whether one takes T.H. Clements's estimated area of impact or the Applicant's estimated area of impact, the result is a highly localised and temporary impact even when even on the worst case scenariopresented by T.H. Clements's case. This requires to be viewed in the context of a Nationally Significant Infrastructure Project which compromises CNP Infrastructure, engaging S4.2 of EN1. c. Even if T.H. Clements was correct, it would not mean that further mitigation was required and it would not generate a residual impact which would outweigh the provision of CNP Infrastructure in national policy terms. d. The reason it's being disputed by parties is because it provides an input for a commercial negotiation. However this is not a matter which affects the decision making or the mitigations to be secured, given compensation for financial loss are not a matter for Examination.	**On point a) –** T.H. Clements accepts that the Outline Air Quality Management Plan [REP4a-078] ("oAQMP") prescribes the maximum level of mitigation as per IAQM construction dust (2024) guidance. However, whilst there is a measure to "install hard surfaced haul roads" in relation to dust 'trackout', this is unlikely to consider all haul roads within the Order Limits (ECC). A commitment to consider the use of trackway (or similar) on sections of haul road within the ECC sections that are adjacent to T.H. Clements land would serve to reduce wheel generated dust emissions (where ground/soil conditions are suitable for this). This would then align with Section 1.16 (Page 17) of the Outline Soil Management Plan [REP4a-079)] ("oSMP"). **On point b) –** It is important to clarify that the Applicant has not, at any stage, provided an estimated area of impact from dust emissions (with mitigation) on T.H. Clements land. The Applicant's position is that the use of mitigation will eliminate the risk of visible dust impact. While the Applicant proposes best practice mitigation, it is not reasonable to assume zero dust impact on land adjacent to construction activities (i.e. dust mitigation does not represent the removal of all dust sources). As the IAQM (2024) construction guidance acknowledges, even the most rigorous dust management plan cannot guarantee complete effectiveness at all times. It is reasonable to assume that impacts will be localised and temporary with respect to the duration of dust release/deposition. However, as stated throughout T.H. Clements' written submissions, the sensitivity of T.H. Clements' land within the context of their customer contracts is such that even a short-term impact in the order of days could result in visible dust contamination. This would result in a significant detrimental impact to the business. **On point c) –** This statement is not challenged per se, but please see T.H. Clements' above response to point a) regarding the use of trackway on haul roads within the ECC as a means to reduce wheel-generated dust, to align with the oSMP.	**Point a): oAQMP Commitments** This point has been addressed in Table AP23. The Applicant considers the matter to be resolved. **Point b): The Risk of Residual Dust Effects after Mitigation** This matter is addressed in Point 16 of Table 1.17 (REP5-150), which explains why the Applicant is assured that the conclusion of no significant residual dust effects is robust and will be maintained for the duration of construction. Notwithstanding this conclusion, and as also noted in Point 16 of Table 1.17, the Applicant has made an offer to TH Clements for compensation in respect of dust, despite its assessment indicating no significant effects. **Point c):** This point has been addressed in Table AP23. The Applicant considers the matter to be resolved.

Ref No	Deadline 4a Document – Applicant Comments	T.H. Clements Response	Applicant's Response
2	Ben Turner provided a high-level summary in response to Mr Pawson, which the Applicant committed to providing in full in writing. Mr Turner explained that separate assessment for dust have been done by the Applicant and T.H. Clements leading to separate conclusions. Mr Turner provided an overview of the Applicant's assessment: a. The Applicant's approach follows established best practice, used extensively for the past 10 years. It is the standard for onshore linear schemes traversing farmland used on the Sheringham Extension Project ("SEP") and HS2; b. It is a qualitative assessment, whereby the construction activities and sensitivity of the environment are evaluated to determine the level of dust risk. This risk informs the necessary mitigation measures to ensure residual effects remain not significant. c. In response to Mr Pawson's argument that commercially sensitive crops warrant further detailed modelling, the IAQM framework already considers commercially sensitive horticulture within its methodology. d. The Applicant has assigned the maximum protection for dust risk and protection, which is higher than agreed in some other comparable projects (for instance, SEP assigned a "medium" protection). e. The Applicant is providing the full suite of relevant controls for dust, which will be later refined. This includes a monitoring and communications framework, reported to the local authority. f. Based on this approach, the Applicant's view is that there are not significant impacts caused by dust.	**On point a) –** It is acknowledged that the methodology used by the Applicant is standard practice. However, to categorise "farmland" as one receptor type across multiple projects is potentially misleading. In the case of T.H. Clements land and this project, we have a unique scenario whereby highly fertile farmland is used to grow brassica crops with zero tolerance for dust deposition as imposed by T.H. Clements' customer contracts. This land happens to be located immediately adjacent to the ECC, thus driving the need to assess the potential for dust contamination in detail. As Mr Pawson stated at ISH5, the use of dispersion modelling for construction dust assessments is relatively rare. However, given the aforementioned unique scenario, it was wholly appropriate to apply such an approach to robustly assess the potential impact on T.H. Clements land. Again, this approach is appropriate within the context of the IAQM construction dust (2024) guidance. **On point c) –** Mr Pawson's professional view, as well as the Air Quality (Dust Deposition) Impact Report at Appendix 14 of T.H. Clements' Written Representations [REP1-050] (the "T.H. Clements Study"), is based on the same IAQM construction dust guidance that underpins the assessment framework referenced by the Applicant. Furthermore, the T.H. Clements Study applies a common-sense approach, recognising the clear potential for visible dust contamination on T.H. Clements land immediately adjacent to the ECC, even with mitigation in place. Mitigation measures reduce, but do not eliminate, dust emissions. While the qualitative assessment framework acknowledges commercially sensitive horticulture, it does not specifically account for the zero tolerance requirement for visible dust contamination. In this case, the decision to conduct a detailed assessment using dispersion modelling is justified by IAQM guidance, as it provides a means to test the robustness of qualitative assessment outcomes. **On points d) to f) –** The T.H. Clements Study has demonstrated the potential for visible dust impact across a significant area of T.H. Clements land adjacent to the ECC, inclusive of key mitigation being put	These points have been addressed in the Applicant's Deadline 5 response [REP5-150]. Given the complexity of the submissions, individual claims have been disaggregated and addressed in turn, signposting to previous submissions. **On point a)** • **Claim**: TH Clements suggest that the IAQM Construction Dust framework may not adequately account for dust soiling effects on their farmland. • **Response**: The IAQM Construction Dust framework does account for commercially sensitive horticulture. Direct extracts from the IAQM Construction Dust Guidance are provided in Section 3.2.1 of [REP4-125]. Notwithstanding the Applicant's assessment that no significant dust effects are anticipated on commercially sensitive horticulture, the Applicant has nevertheless made an offer to TH Clements for compensation in respect of dust impacts. • **Claim**: TH Clements claim their approach is appropriate within the context of the IAQM Construction Dust (2024) guidance (the same document the Applicant uses). • **Response**: Point 4 of Table 1.19 (pg. 77, REP5-150) demonstrates that this is incorrect. The assessment does not follow the IAQM construction dust (2024) guidance. It relies on inappropriate emission factors from coal stockpiles that were withdrawn 30 years ago. **On point c)** • **Claim**: TH Clements claim their approach is justified by the IAQM Construction Dust (2024) guidance (the same document the Applicant uses). • **Response**: Point 4 of Table 1.19 (pg. 77, REP5-150) demonstrates that this is incorrect. The assessment does not follow the IAQM Construction Dust (2024) guidance. It relies on inappropriate emission factors from coal stockpiles that were withdrawn 30 years ago. **On points d) to f)** • **Claim**: TH Clements assert that their assessment demonstrates a visible dust impact across a significant area of T.H. Clements' land, even with mitigation in place. • **Response**: As set out in Point 3 of Table 1.19 (REP5-150), TH Clements' assessment underpinning the 107-hectare assertion does not fully reflect the 50 mitigation measures secured in the Outline AQMP (REP4a-077). This includes key controls such as solid screens and barriers around dusty

Ref No	Deadline 4a Document – Applicant Comments	T.H. Clements Response	Applicant's Response
		in place (e.g. damping down, reduced drop heights of material, stockpile seeding). Within the context of T.H. Clements' contractual commitments to zero visible dust contamination, this represents a potentially significant impact on their business.	activities (e.g. stockpiles), which are expected to significantly reduce emissions. As a result, the findings do not accurately represent the mitigated scenario outlined in the Outline AQMP.
3	Mr Turner made the following brief remarks about the approach taken in T.H. Clements's assessment: a. T.H. Clements's dispersion modelling approach concludes a 100-hectare impact, even with maximum mitigation—an unusual outcome, especially given Lincolnshire County Council's view that the measures are robust and policy-compliant. b. The study relies on dust emission factors from coal and metalliferous mines in the USA and Australia, which are unvalidated for the UK climate and unsuitable for construction activities. Mr Turner also noted that 83% of emissions are based on a 1988 coal stockpile emission factor, making the approach inappropriate. c. Mr Pawson cited IAQM construction dust guidance to justify dispersion modelling, but this overlooks the Applicant's position. As the study uses mining emission factors, the IAQM's mining guidance applies, which explicitly states that non-UK emission factors should not be used in UK local impact modelling assessments (as T.H. Clements has done).	**On point a) –** The scale of the Project and extent of T.H. Clements' land in proximity to the ECC should be considered. To put the 107 hectares of T.H. Clements land at high risk of visible dust impact into context, there are approximately 1,400 hectares of T.H. Clements land adjacent and in proximity to some 40 km of the proposed ECC. Therefore, the area of impact represents less than 10% of all T.H. Clements land within proximity to the ECC. As detailed in T.H. Clements' written representations [REP1-050], the level of dust deposition required to represent a visible dust impact (i.e. 80 mg/m2/day; 2 g/m2/month) is notably lower than typical 'custom and practice' guideline dust deposition levels (e.g. 200 - 350 mg/m2/day) for dust nuisance / annoyance. This is also a factor that needs to be taken account when judging the extent of impact in this rare scenario versus what might usually be expected. **On points b) & c) –** As stated in T.H. Clements' Comments on The Applicant's Response to T.H. Clements' Dust Report, Assessment and Conclusions [Appendix 3 of REP4a-140], put simply, the action of digging a hole, removing soil, and dropping the material onto the ground on a construction site in the UK, is the same as doing it in on a mining site in Australia. The key differences between the two are the nature of the soil, the climate/weather that the material is exposed to, and the scale of the activity (i.e. activity rate). Crucially, as evidenced in T.H. Clements' written representations [REP1-050], the emission factors used in the T.H. Clements Study relied directly on the location-specific information on soil and weather, which were available for the T.H. Clements Study, with the relevant activity rates for each construction activity based on project-level information published by the client. These emission factors are recognised as global best practice in estimating emissions from the construction activities included in the T.H. Clements Study and are not limited for use in specific countries or industry sectors.	These points have been addressed in the Applicant's Deadline 5 response [REP5-150]. Given the complexity of the submissions, individual claims have been disaggregated and addressed in turn, signposting to previous submissions. **On point a)** To characterise the 107-hectare assertion, TH Clements' modelling suggests that, even with implementation of the Outline AQMP (REP4a-077, now document 8.1.2, Version 3), residual dust effects would extend beyond 150m from the Order Limits (as confirmed by TH Clements in (REP4a-140). This is highly unusual, for the reasons outlined in Point 16 of Table 1.17 (REP5-150). As noted in Point 15 of Table 1.19 (REP5-150), the dust deposition benchmarks applied by TH Clements are not industry-standard and lack regulatory recognition. **On points b) & c)** • **Claim**: TH Clements justify their use of mining emission factors by arguing that the activities involved (e.g. digging, moving, and dropping soil in Australia) are similar to those on construction sites in the UK. • **Response**: 83% of TH Clements' emissions are based on wind erosion from coal stockpiles which do not represent construction activities. This comparison is considered an oversimplification, as outlined in Point 4 of Table 1.19 [REP5-150]. • **Claim**: TH Clements assert that the mining emission factors used in their assessment are recognised as global best practice. **Response**: This is incorrect. Point 4 of Table 1.19 (pg. 76, REP5-150) demonstrates that the factors used were withdrawn 30 years ago. The latest equivalent emission factor is approximately 80 times lower than the one applied in their assessment. • **Claim**: TH Clements state that mining emission factors can be used to represent construction dust emissions. **Response**: This is incorrect. As outlined in Point 4 of Table 1.19 (pg. 77, REP5-150), the emission factors used do not reflect construction activities - they relate to coal stockpiles.

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		The T.H. Clements Study is, by definition, a construction dust modelling assessment and the use of dispersion modelling and the associated globally recognised emission factors is justified and facilitated by the IAQM construction dust guidance (2024). Notwithstanding, the IAQM is currently in the process of updating its mineral dust guidance (2016), a with a recent (Feb 2025) statement by IAQM making it clear that the evolving guidance will need to consider the "…increased application of dispersion modelling…". Given the volume of material being excavated within the ECC, the location of the Project, and the susceptibility of the excavated soil to wind erosion, the predominant source of dust will be wind erosion.	• **Claim**: TH Clements claim their modelling approach is justified and follows the IAQM Construction Dust (2024) guidance. • **Response**: This is incorrect. As outlined in Point 4 of Table 1.19 (pg. 77, REP5-150), the emission factors used are not referenced in the IAQM Construction Dust (2024) guidance. It relies on inappropriate emission factors from coal stockpiles that were withdrawn 30 years ago. • **Claim:** TH Clements refer to the IAQM's Mining Briefing Update (Feb25) to support their approach. • **Response:** This matter is addressed in Point 5 of Table 1.19 (REP5-150). It does not alter the Applicant's position.
	REP4a-114: Question ID Q2 LU 1.3 (Pages 22-24)		
4	The Applicant acknowledges T.H. Clements' recognition of limitations within their dust dispersion modelling study [REP1-050], particularly the reliance on previously unavailable project-specific data regarding excavation and bund volumes. Since activity data is integral to dust emission calculations (activity × emission factor), these discrepancies affect the reliability of the modelling outcomes. T.H. Clements confirm that the total re-calculated mass dust emissions across all three modelled phases using the updated project details in REP3-056 are 5% lower than was assessed in REP1-050. However, as each construction phase was modelled and assessed separately, it is important to consider the variations within individual phases. The phase-specific differences range from +11% to -20%, indicating that certain phases significantly overpredicted emissions, although it is unclear which phases were most affected. This inflates the rate and extent of predicted dust impacts, further undermining the credibility of the 100-hectare impact assertion [REP3-060]. A 20% variation within a single modelled scenario does not constitute a reasonable level of tolerance, contrary to T.H.Clements' assertion. Despite recognising these overpredictions, T.H. Clements has not quantified how this affects their 100-hectare assertion. Without such clarification, it remains unclear whether their conclusions are still supported or to what extent.	It is important to reinforce that the activity rates used in deriving the dust emissions inventory were sourced from project-specific information for each construction activity and location-specific data (i.e. soil and climate characteristics), as explicitly detailed in T.H. Clements' written representations at Section 4.2.3 of Appendix 14 [REP1-050]. Any assumptions made were clearly stated and justified. As stated in T.H. Clements' Responses to LU 1.3 and LU 1.6 of the ExA's further written questions [Appendix 1 of REP4-150], T.H. Clements updated the dust emissions inventory for each construction phase based on revised soil excavation and bund dimensions presented in REP3-056. The updated mass emissions inventories (kg/year) for the two primary dust-generating phases – Enabling Works and Cable Infrastructure Installation – are compared to the equivalent inventories reported in the T.H. Clements Study below. The change in dust mass emissions is expressed as a percentage (%) relative to the initial values reported in the T.H. Clements Study: • Enabling Works: 11% increase in dust emissions (kg/year) compared to REP1-050. • Cable Infrastructure Installation: 20% decrease in dust emissions (kg/year) compared to REP1-050. Whilst remodelling these emissions is not deemed necessary for the reasons outlined in Appendix 1 of REP4-150, a basic linear relationship can be assumed between the change in total dust emissions and the corresponding change in dust deposition	**Revised dust impact assertion to account for updated project data** The Applicant acknowledges the revised figures provided by TH Clements to reflect the updated project data (REP4-150). However, as set out in REP4a-114 and reiterated in REP5-150, several fundamental methodological flaws remain unresolved — including issues where TH Clements have acknowledged inaccuracies. In particular, TH Clements acknowledge that 20% of the study area is flawed as it assumes surface excavation in areas where HDD is proposed [page 28, REP4a-140]. As noted in Section 2.5 of REP4-125, the Applicant had already provided the locations of the HDD in Chapter 3 Project Description Figures [APP-089]. This information was available at the time TH Clements' assessment was undertaken. Despite acknowledging this error, TH Clements have not revised their 107-hectare (now 108-hectare) assertion and continue to rely on it. Their claim that re-modelling is not necessary (REP5-173 and REP4-150) contradicts their own admission and leaves it unclear whether their conclusions remain valid — or to what extent. It is not reasonable to leave a known and significant error uncorrected. **With regards to the Applicant's position** The Applicant has provided a thorough response to REP4a-140 in REP5-150 and maintains its position that TH Clements' assessment: • Is inappropriate, as it uses dust emissions from coal stockpiles in mines in Australia and the USA to represent construction activities that were withdrawn 30 years ago.

Ref No	Deadline 4a Document – Applicant Comments	T.H. Clements Response	Applicant's Response
	This limitation should be considered alongside the fundamental methodological flaws outlined in the Applicant's Deadline 4 submission [REP4-125]. While the Applicant agrees that re-running the dispersion model is not appropriate, this is not solely due to revised excavation and bund volumes. More critically, the model remains inherently unreliable, as outlined in REP4-125 and summarised in REP4-107. The Applicant maintains the IAQM's position is clear: using non-UK mining dust emission factors to model local-scale dust impacts in this context is inappropriate. The 100-hectare impact assertion [REP1-050] is based on a flawed assessment approach which contravenes UK technical guidance. In contrast, the Applicant's assessment follows an industry-established framework, successfully applied to similar NSIPs, which fully accounts for dust impacts on commercial farmland. The Applicant has assigned the maximum level of dust risk and protection, applying the full suite of IAQM best practice controls, as secured through 50 specific mitigation measures in the Outline Air Quality Management Plan [APP-270]. It can be confidently concluded that impacts on commercially sensitive farmland are fully considered and protected to industry best practice standards, ensuring that the conclusion of no significant effect is robust. No further assessment is warranted or necessary.	impact. This allows for a simplified evaluation of potential implications on the impact area – i.e. a 20% reduction in dust emissions would equate to a 20% reduction in the 'high risk' impact area. This is summarised below for each phase, based on the maximum 'high risk' area of visible dust impact reported in the T.H. Clements Study: • Enabling Works: o T.H. Clements Study 'high risk' area: 97 hectares o Adjusted for 11% increase in emissions: 108 hectares • Cable Infrastructure Installation: o T.H. Clements Study 'high risk' area: 107 hectares o Adjusted for 20% decrease in emissions: 89 hectares The above clearly demonstrates that the maximum reported 'high risk' area of visible dust impact, based on the updated emissions inventory (108 ha), remains equivalent to that reported in the T.H. Clements Study (107 ha). Therefore, T.H. Clements' assertion in Appendix 1 of REP4-150 – that the differences in dust emissions represent a reasonable level of tolerance – is justified. This confirms that the project-specific information and assumptions applied to the emissions inventory in the T.H. Clements Study remain appropriate. Additionally, despite the Applicant's updated bund dimension information in REP3-056, the latest iteration of the oSMP maintains that topsoil, subsoil, and lower subsoil bunds "…will be stored in bunds no more than 3 m to 5 m in height". This contradicts the information presented in REP3-056, which specifies that bund heights will be at or below 2m. This inconsistency further reinforces that the project-level information and associated assumptions presented in the T.H. Clements Study remain appropriate and representative. The Applicant's claims of "fundamental methodological flaws" and its restated position regarding the "IAQM's position" are justifiably refuted, as detailed in T.H. Clements' submission in REP4a-140 at Appendix 3.	• Contains fundamental methodological flaws, such as misrepresenting HDD areas as surface excavation (affecting 20% of the study area). • Is not aligned with any current UK Technical Guidance, including the IAQM Construction Dust (2024) guidance which it claims underpins its justification [pdf pg. 89 REP5-173, pdf pg. 22 REP4a-140]. Since TH Clements acknowledge errors in their modelling — including misrepresenting HDD as surface excavation across 20% of the study area — it is clear that fundamental methodological flaws exist. With regard to the bund heights included in the oSMP, these are the maximum heights that will not be exceeded in line with best practice for topsoil and subsoil and are relevant for the wider Project construction. The Clarification Note (REP03-056) shows the indicative cross section of the 80m construction corridor, in which the note provides further information on bund dimensions for one aspect of the Project. There will be other soil bund storage within the project, for example at the landfall, substation and temporary construction compounds, in these locations the soils may be stored in larger bunds, of which will not be more than 3 m to 5 m in height.
	REP4a-110: Question ID Q2 LU 1.6 (Pages 50-51)		
5		The Applicant's text is unchanged from their submission at Deadline 4 [REP4-107]. As such, T.H. Clements' response in REP4a-140 applies.	The Applicant has provided a thorough response to REP4a-140 in REP5-150 and maintains its position that TH Clements' assessment is inappropriate, while the Applicant's assessment is robust and follows established best practice guidance for NSIPs traversing farmland.

Ref No	Deadline 4a Document – Applicant Comments	T.H. Clements Response	Applicant's Response
			There is high confidence that residual dust effects on commercially sensitive horticulture will not be significant following implementation of the oAQMP (REP4a-077).
	REP4a-114: Question ID Q2 LU 1.6		
6		T.H. Clements acknowledges that the Applicant intends to respond to T.H. Clements' submission [REP4a-140].	The Applicant has provided a thorough response to REP4a-140 in REP5-150 and maintains its position that TH Clements' assessment is inappropriate, while the Applicant's assessment is robust and follows established best practice guidance for NSIPs traversing farmland. There is high confidence that residual dust effects on commercially sensitive horticulture will not be significant following implementation of the oAQMP (REP4a-077).

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Appendices

- Appendix A: Compensation requirements based on the Applicant and Natural England approaches to impact calculation and preferred predicted impacts

Appendix A. Compensation requirements based on the Applicant and Natural England approaches to impact calculation and preferred predicted impacts

Table A-1: Compensation requirements based on guillemot impacts to Flamborough and Filey Coast SPA with the updated Natural England Approach

Impact (individuals)	Method	NE design requirement 1:1 (pairs)	NE design requirement 2:1 (pairs)	NE design requirement 3:1 (pairs)	NE success requirement (pairs)	Compensation capability across three measures (pairs)
18.2	Applicant (mean)	77.4	154.7	232.0	77.4	3,196
25.8	Applicant (UCL)	109.7	219.3	328.9		3,196
248.7	Natural England (mean)	1056.8	2113.6	3170.4	1056.8	3,196
375.2	Natural England (UCL)	1594.3	3188.6	4782.9		3,196

Table A-2: Compensation requirements based on guillemot impacts to Flamborough and Filey Coast SPA and the Farne Islands SPA with the updated Natural England Approach

Impact (individuals)	Method	NE design requirement 1:1 (pairs)	NE design requirement 2:1 (pairs)	NE design requirement 3:1 (pairs)	NE success requirement (pairs)	Compensation capability across three measures (pairs)
19.9	Applicant (mean)	84.6	169.2	253.8	84.6	3,196
28.8	Applicant (UCL)	122.4	244.8	367.2		3,196
250.9	Natural England (mean)	1066.1	2132.2	3198.3	1066.1	3,196
377.9	Natural England (UCL)	1605.8	3211.6	4817.4		3,196

Table A-3: Compensation requirements based on guillemot impacts to Flamborough and Filey Coast SPA and the Farne Islands SPA with the updated Natural England Approach

Impact (individuals)	Method	NE design requirement 1:1 (pairs)	NE design requirement 2:1 (pairs)	NE design requirement 3:1 (pairs)	NE success requirement (pairs)	Compensation capability across three measures (pairs)
10.5	Applicant (mean)	92.0	184.0	276.0	92.0	1,932
15.5	Applicant (UCL)	135.8	271.6	407.4		1,932
68.9	Natural England (mean)	603.5	1,207.0	1,810.5	603.5	1,932
108.1	Natural England (UCL)	946.9	1,893.8	2,840.7		1,932