DBS Offshore Wind

RWE Renewables UK Dogger Bank South (West) Limited

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Dogger Bank South Offshore Wind Farms

The Applicants' Reponses to the Report on the Implications for European Sites

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Glossary

Term	Definition
Array Areas	The DBS East and DBS West offshore Array Areas, where the wind turbines, offshore platforms and array cables would be located. The Array Areas do not include the Offshore Export Cable Corridor or the Inter-Platform Cable Corridor within which no wind turbines are proposed. Each area is referred to separately as an Array Area.
Development Consent Order (DCO)	An order made under the Planning Act 2008 granting development consent for one or more Nationally Significant Infrastructure Project (NSIP).
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 Directive and EIA Regulations, including the publication of an Environmental Statement (ES).
Environmental Statement (ES)	A document reporting the findings of the EIA and produced in accordance with the EIA Directive as transposed into UK law by the EIA Regulations.
Habitats Regulations Assessment (HRA)	The process that determines whether or not a plan or project may have an adverse effect on the integrity of a European Site or European Offshore Marine Site.
Impact	Used to describe a change resulting from an activity via the Projects, i.e. increased suspended sediments / increased noise.
Inter-Platform Cable Corridor	The area where Inter-Platform Cables would route between platforms within the DBS East and DBS West Array Areas, should both Projects be constructed.
Offshore Converter Platforms (OCPs)	The OCPs are fixed structures located within the Array Areas that collect the AC power generated by the wind turbines and convert the power to DC, before transmission through the Offshore Export Cables to the Project's Onshore Grid Connection Points.
Offshore Development Area	The Offshore Development Area for ES encompasses both the DBS East and West Array Areas, the Inter-Platform Cable Corridor, the Offshore Export Cable Corridor, plus the associated Construction Buffer Zones.
Offshore Export Cable Corridor	This is the area which will contain the offshore export cables between the Offshore Converter Platforms and Transition Joint Bays at the landfall.

Term	Definition
Sand wave	Bedforms with wavelengths of 10 to 100m, with amplitudes of 1 to 10m.
Scour protection	Protective materials to avoid sediment erosion from the base of the wind turbine foundations and offshore substation platform foundations due to water flow.
Sediment	Particulate matter derived from rock, minerals or bioclastic matter.
Sediment transport	The movement of a mass of sediment by the forces of currents and waves.
Special Area of Conservation (SAC)	Strictly protected sites designated pursuant to Article 3 of the Habitats Directive (via the Habitats Regulations) for habitats listed on Annex I and species listed on Annex II of the Directive
The Applicants	The Applicants for the Projects are RWE Renewables UK Dogger Bank South (East) Limited and RWE Renewables UK Dogger Bank South (West) Limited. The Applicants are themselves jointly owned by the RWE Group of companies (51% stake) and Masdar (49% stake).
The Projects	DBS East and DBS West (collectively referred to as the Dogger Bank South Offshore Wind Farms).

Acronyms

Term	Definition
AEoI	Adverse Effects on Integrity
ANS	Artificial Nest Structures
BNNC	Berwickshire North Northumberland Coast
DBS	Dogger Bank South
DCO	Development Consent Order
Defra	Department for Environment, Food and Rural Affairs
DESNZ	Department of Energy Security and Net Zero
DL	Deadline
DML	Deemed Marine Licence
EIA	Environmental Impact Assessment
EMF	Electromagnetic Field
ERYC	East Riding of Yorkshire Council
ES	Environmental Statement
ExA	Examining Authority
ExQ2	Examining Authority's Second Written Questions
FFC	Flamborough and Filey Coast
HPAI	Highly Pathogenic Avian Influenza
HRA	Habitats Regulations Assessment
IoS	Isles of Scilly
IPMP	In Principle Monitoring Plan
LSE	Likely Significant Effect
MoU	Memorandum of Understanding

Term	Definition
MPA	Marine Protected Area
NE	Natural England
NSIP	Nationally Significant Infrastructure Project
NSSS	North Sea Sandeel Survey
ODOW	Outer Dowsing Offshore Windfarm
OWF	Offshore Wind Farm
PEIR	Preliminary Environmental Information Report
PVA	Population Viability Assessment
RIAA	Report to Inform Appropriate Assessment
RIES	Report on the Implications for European Sites
SAC	Special Area of Conservation
SCM	Strategic Compensatory Measures
SEP & DEP	Sheringham and Dudgeon Extension Projects
SNCB	Statutory Nature Conservation Bodies
SNS	Southern North Sea
SoS	Secretary of State
SPA	Special Protection Area
UXO	Unexploded Ordnance

1 Introduction

1. The Report on the Implications for European Sites (RIES) [PD-025] was published by the Planning Inspectorate on 6th June 2025.

2. This document outlines how RWE Renewables UK Dogger Bank South (West) Limited and RWE Renewables UK Dogger Bank South (East) Limited ('the Applicants') for the Projects have addressed each of the questions within the RIES (and Annex 1).

2 Comments on the RIES

Table 2-1 – The Applicants' Comments on the RIES [PD-025]

I.D.	Question	Applicants' Response
RIES Q1	To NE: Can NE confirm whether it agrees with the applicants' conclusion of no LSE, either alone or in combination with other projects or plans, on all qualifying features of the European sites listed in paragraph 2.4.4 above?	No response required, question directed to Natural England.
RIES Q2	To the applicants and NE: The applicants and NE are requested to confirm whether they consider that LSE can be excluded for the vegetated sea cliffs of the Atlantic and Baltic Coasts feature of the Flamborough Head SAC.	As stated by Natural England in their response to Action Point BE 2.6 (see REP5-062: BE.2.6 of **The Applicants' Comments on the Responses to ExQ2** [REP6-051]: *'Natural England considers that the biotopes have now been sufficiently considered and characterised within the Flamborough Head SAC from the updates to [REP3-025] and Appendix D of the Report to Inform Appropriate Assessment [REP4-015]. We are content that all necessary information has been provided with respect to Flamborough Head.'* As such the Applicants confirm that LSE can be excluded for the vegetated sea cliffs of the Atlantic and Baltic Coasts feature of the Flamborough Head SAC.
RIES Q3	To NE: NE is requested to confirm which phase(s) it considers this impact pathway should be screened in for.	No response required, question directed to Natural England.
RIES Q4	To the applicants: The applicants are requested to confirm how they have considered LSE on sea lamprey and river lamprey of the Humber Estuary Ramsar.	The Humber Estuary Ramsar covers the same geographic area as the Humber Estuary SAC. As such, the Applicants can confirm that the conclusions with regards to sea lamprey and river lamprey of the Humber Estuary SAC (presented in section 7.5 of the **Report to Inform Appropriate Assessment (RIAA) Habitats Regulations Assessment (HRA) – Part 2 of 4 - Annex I Offshore Habitats and Annex II Migratory Fish (Revision 5)** [document reference 6.1]) equally apply to the Humber Estuary Ramsar. The Applicants have updated this section of the RIAA at Deadline 7 to also refer to the Humber Estuary Ramsar.
RIES Q5	To NE: Can NE please provide details as to its concerns in relation to the assessment of natterjack toads of the Humber Estuary Ramsar site.	No response required, question directed to Natural England.
RIES Q6	To NE: Can NE please provide details as to the nature of its concerns, in terms of how impacts on benthic habitats could result in indirect effects on qualifying features of the Humber Estuary SPA and Ramsar site?	
RIES Q7	To NE: Can NE provide comment on the applicants 'Ecological Halo Effects Technical Note' [REP5-041]? Does NE consider the applicants' suggested methodology for quantifying ecological halo effects to be appropriate?	
RIES Q8	To NE: In its RR [RR-039, NE6, C6], NE refer to halo effects as habitat loss/ change. The Risk and Issues Log [REP5-061, D21] states that compensation measures for habitat disturbance should be provided, and infers that halo effects are the disturbance effects of concern. Can NE clarify whether it considers halo effects to represent permanent habitat loss or temporary habitat disturbance? (Please see also ID 3.2.9 of this RIES)	

I.D.	Question	Applicants' Response
RIES Q9	To the applicants: The applicants confirmed a plan showing indicative remedial protection locations and protected site boundaries can be provided within an update to the Cable Statement at DL6 [REP5-036]. The ExA assume this is likely to mean it will be provided, but for the avoidance of doubt the ExA request that this is provided by the applicants within an update to the Cable Statement at DL6.	The Applicants confirm a plan showing indicative remedial protection locations and protected site boundaries was included alongside the updated **Cable Statement (Revision 5)** [REP6-043] at Deadline 6.
RIES Q10	To NE: On the basis that the applicants are due to submit an updated Cable Statement at DL6, please confirm whether the updated document together with the applicants' responses to ExQ2 [REP5-036, MCP 2.8 and 2.9] address your concerns?	No response required, question directed to Natural England.
RIES Q11	To the applicants: NE has provided a link to additional guidance relating to decommissioning works [REP5-062]. Can the applicants confirm whether their current assessments and position on decommissioning complies with the advice of this guidance document? If not, can the applicants explain if and/ or how they intend to consider the advice of this guidance?	The Applicants note that the guidance referred to by Natural England is the same guidance referred to by the Applicants in their responses to Examiners Questions BE.2.10 c) and d) submitted in **The Applicants Responses to the Examining Authority's Second Written Questions (ExQ2)** [REP5-036]. The guidance in question is *Decommissioning of offshore renewable energy installations under the Energy Act 2004: guidance notes for industry* (2019). The Applicants note that it is the explicit position of Government in the Guidance that the Energy Act (2004) process should form a "one-stop shop" for decommissioning of offshore windfarms. The Applicants provided a comprehensive response to the questions posed by the Examining Authority on this issue in **The Applicants Responses to the Examining Authority's Second Written Questions (ExQ2)** [REP5-036]. The Applicants intend to comply with the Guidance in relation to the preparation and submission of the decommissioning programmes required under requirement 7 of the **Draft DCO (Revision 10)** [document reference 3.1].
RIES Q12	To NE: Does NE agree with the applicants' calculations [REP5- 037] that if these impacts were to be considered as permanent habitat loss, the total habitat loss would be 2.12km2 (a 17% increase in footprint for habitat loss)?	No response required, question directed to Natural England.
RIES Q13	To the applicants: As requested by NE, the ExA strongly suggests the applicants update the Commitments Register [REP2- 025] to include the agreed mitigation of depositing like sediment on like sediment (as committed to in the Cable Statement [REP4-050]).	The Applicants confirm C0192 of the **Commitments Register (Revision 3)** [document reference 8.6] has been added at Deadline 7 to include the agreed mitigation of depositing like sediment on like sediment within and outside of the Dogger Bank SAC.
RIES Q14	To the applicants: As requested by NE, can the applicants update the Cable Statement [REP4- 050] to secure provision of an outline sandwave levelling, deposition and recovery plan, should sandwave levelling be needed?	The Applicants confirm that that a plan for sand wave levelling will be provided as an Appendix to the Final Cable Statement(s) should sandwave levelling be required as part of the Projects, the Cable **Statement (Revision 5)** [REP6-043] has been updated to reflect this position. The Applicants note this mitigation is already included in the Applicants' proposals, namely through commitment C089 in the **Commitments Register (Revision 3)** [document reference 8.6] which states," Route *selection and micro-siting of the cables will be used to avoid areas of seabed that pose a significant challenge to their installation where practicable, including for example areas of sand waves and megaripples. This will minimise the requirement for seabed preparation (levelling) and the associated seabed disturbance*".
RIES Q15	To the applicants and NE: NE has suggested further mitigation measures to reduce impacts of depositing sediment. Is the applicant willing to commit to these measures? Does NE consider these measures (and the need for a downpipe) are required in order to exclude AEoI from this LSE pathway?	The Applicants responded to this query in REP5-054: B2 of **The Applicants' Responses to Deadline 5 Documents** [REP6-052], which is repeated below for convenience: *The Applicants provide the following comments on each mitigation measure suggested below under the headings used by Natural England.*

I.D.	Question	Applicants' Response
		• *Depositing like sediment on like sediment.* *This commitment will be added to the next update of the* ***Commitments Register (Revision 2)*** *[REP2-025], to be submitted at Deadline 7.* • *A fall/down pipe is used (should a trailing suction hopper dredger be used) to minimise sediment dispersal.* *As previously noted in responses on this topic, such as that provided most recently in response to MCP.2.7 in* ***The Applicants Responses to the Examining Authority's Second Written Questions (ExQ2)*** *[REP5-036], the Applicants do not believe the suggested mitigation to be technically feasible and, as such, can make no commitments to delivering it. Having reviewed the submissions made by Outer Dowsing into their examination, the Applicants note that this project does not appear to have made any commitment to the use of a fall pipe.* • *An outline sand wave levelling, deposition and recovery plan should be provided as either a standalone document or as part of the Cable Statement /Outline Cable Burial Risk Assessment (see Table 2 for further detail).* *The Applicants have noted in the* ***Cable Statement (Revision 4)*** *[REP4-050] that a plan for sand wave levelling will be provided as an Appendix to the Final Cable Statement(s) should sand wave levelling be required as part of the Projects.* • *Pre- and post-construction monitoring should be used to assess geomorphological recovery after cable installation (with management interventions identified).* *The Applicants have committed within the* ***In Principle Monitoring Plan (Revision 4)*** *(REP5-027) to pre-construction geophysical surveys to characterise seabed bed geomorphology (e.g. sand waves and sand banks) and post-construction geophysical surveys to monitor geomorphological change and seabed recovery. Within Appendix J of REP3-056, Natural England advises that "the hypotheses to be tested by the monitoring should be agreed as part of the IPMP" (NE ref 3 Table 1-2). Defining appropriate and measurable hypotheses requires:* • *A plan for sand wave levelling which will be provided as an Appendix to the Final Cable Statement(s) should sand wave levelling be required as part of the Projects.* • *The results of pre-construction monitoring as defined in* ***In Principle Monitoring Plan (Revision 4)*** *(REP5-027).* *Therefore, the Applicants consider the In Principle Monitoring Plan (IPMP) in its current format is appropriate at this stage of the development of the Projects and note there will be opportunities for Natural England to engage and agree the details of the hypotheses in relation to sand wave levelling in the post consent stage of the Projects.*
RIES Q16	To NE: The applicants have provided information [REP5- 037] in relation to the placement and retention of drill arisings in close proximity to drilling locations. Is this information sufficient to address your concerns on this matter?	No response required, question directed to Natural England.
RIES Q17	To the applicants: Can the applicants clarify the habitat disturbance footprint as the figures in [REP4- 014, Table 6-3] do not accord with those in [REP4- 086]?	The Applicants confirm that the lower habitat disturbance footprint stated in Table 6-3 of the **Report to Inform Appropriate Assessment (RIAA) Habitats Regulations Assessment (HRA) Part 2 of 4 Annex I Offshore Habitats and Annex II Migratory Fish (Revision 4)** [REP4-014] is correct, with the figures stated in **The Applicants' Written Summaries of Oral Submissions made at CAH2, ISH3, ISH4 and ISH5** [REP4- 086] being based on previous estimates for the Projects. Note that this reduction in habitat disturbance footprint does not alter the Applicants position as outlined in paragraph 266 of **The Applicants' Written Summaries of Oral Submissions made at CAH2, ISH3, ISH4 and ISH5** [REP4- 086]. For avoidance of doubt, **Table A-2** of Appendix A of this document provides an updated summary of the permanent habitat loss / temporary habitat disturbance footprints within the Dogger Bank SAC for the Projects estimated by the Applicants.

I.D.	Question	Applicants' Response
		In addition, there are significant areas of disagreement between the Applicants and Natural England with regard to whether abrasion / disturbance contributes to AEoI, potential for loss of habitat from 'halo effects' and inclusion of UXO clearance and jack-up operations in permanent habitat loss estimates. Therefore, in line with comments received from Natural England at Deadline 6 of the Projects Examination, **Table A-2** presents four without prejudice scenarios for the consideration by the Secretary of State for different scenarios that could lead to AEoI: • Habitat loss from infrastructure alone (the Applicants conclusion); • Habitat loss from infrastructure, UXO clearance activities and jack-up footprint; ○ **Appendix B - Dogger Bank B Unexploded Ordnance (UXO) Crater Survey Results of Review of Evidence on Recovery of Sandbank Habitat Following Habitat Damage (Revision 2)** [REP3-021] provides the results from several high-order UXO clearances. These show a maximum crater diameter of around 5m. – therefore a crater would be around 20m². As noted in section 5.6.7.4.3 of **Chapter 5 Project Description (Revision 4)** [document reference 7.5] however, it is expected that 41 UXO would need to be cleared during the construction phase across the entirety of the Offshore Development Area. Assuming all of these occur within the Dogger Bank Special Area of Conservation (SAC) the total footprint would be 820m², adding 0.05% to the assessed footprint. It is expected that given these depths, any sediments expelled by the detonation would be similar in character to the surrounding surficial and near surface sediments which subsequently infill. Considering the limited fines content in seabed sediments, the sediment disturbed during detonation would be deposited within the immediate vicinity of the site of the detonation. This sediment would then become entrained by currents and transported as bedload, providing a source of sediment to infill the indentation until it becomes completely infilled over a period of months to a few years (see below), after which seabed morphology and sediment transport regime returns to baseline conditions. The UXO clearance campaign referenced in Appendix B, was completed in February-March 2023, with a survey of the craters in June 2023 at five of six clearance locations. Surveys showed that in all cases the craters had infilled rapidly, in some cases infilling was largely complete, and even where there was the least recovery in (DBB_027) a 0.8m crater infilled to approximately 0.4m depth (see Appendix B - Dogger Bank B UXO crater survey results). The Applicants consider from this evidence that a) infilling is rapid and b) infilling will be from local surface sediments. Therefore, this would not constitute permanent habitat loss and additional consideration of footprint is not required. Notwithstanding the above, the Applicants have provided a without prejudice habitat loss footprint inclusive of estimated UXO clearance activities should the Secretary of State (SoS) conclude that UXO clearance activities should be considered as habitat loss. ○ The Applicants note that if the SoS concludes that habitat disturbance contributes to Adverse Effects on Integrity (AEoI) then the jacking-up footprint would be within the disturbance footprint and therefore already taken into account. Therefore, the footprint of jacking-up should only be added to the permanent habitat loss footprint if a) SoS agrees that this is not a temporary disturbance impact and b) if the SoS agrees with the Applicants that other construction disturbance is temporary and does not contribute to AEoI. • Habitat loss and temporary habitat disturbance; and • Habitat loss in addition to an estimated 50m halo effect plus area of temporary habitat disturbance. It should be noted that these potential effects would overlap (e.g. infrastructure is within the footprint of disturbance, halo effects and area of temporary habitat disturbance would overlap) and would therefore not be additive.
TTRIES Q18	To NE: Noting that NE consider jack up activities and UXO clearance to represent permanent habitat loss and contribute to AEoI for habitat loss, can it confirm the basis upon which it considers there to be an AEoI from abrasion/ disturbance?	No response required, question directed to Natural England.

I.D.	Question	Applicants' Response
RIES Q19	To the applicants: NE has provided [REP5- 061] [REP5-062] a list of outstanding elements of its previous advice that it considered should be addressed in relation to changes to the wave and tidal regime throughout the operational lifespan of the proposed development. Can the applicants submit this information at DL7? If not, why not?	The Applicants responded to this query in REP5-062: MCP.2.3 of **The Applicants' Comments on the Responses to ExQ2** [REP6-051], which is repeated below for convenience: *The Applicants note that, as is common practice for offshore wind farms and as supported by policies such as those presented in section 2.6 of EN-3, the assessments they have provided within the Environmental Statement are based on worst case scenarios. As such, they afford the Secretary of State with a level of comfort in their decision making on the scale and significance of potential nature conservation impacts. Where required and relevant, mitigation measures have been developed and secured based on the worst case design envelope used to complete the Projects' environmental assessments in a manner which is both precautionary and evidence led.* *As noted in response to REP5-062: MCP.2.2, the Applicants will continue to acquire geophysical and geotechnical site information from the Offshore Development Area. The results of these future surveys will inform updates to the Cable Burial Risk Assessments presented within the final Cable Statement(s) submitted to discharge relevant deemed Marine Licence conditions post consent (e.g. condition 15 (1) (i) of Deemed Marine Licence 1 presented in the **Draft DCO (Revision 9)** [document reference 3.1]). The CBRA will ensure that the project design is appropriate, such that from an engineering perspective the cable routing and burial plans will be established on the basis of the best available information* *The Applicants have refined the baseline understanding of sediment transport pathways which is the narrative underpinning the conceptual sediment transport model in **Assessment of Coastal Processes at the Dogger Bank South Landfall** [REP5-039] and also updated Figure 8-5 of **Chapter 8 – Marine Physical Environment - Figure 8-1 to Figure 8-13 - Volume 7** [APP-081]. These changes will also be incorporated in the revised version of **Chapter 8 Marine Physical Environment** [APP-080] to be submitted at Deadline 7. The Applicants have updated predictions of future wave climate within section 8.6.3 of the revised version of **Chapter 8 Marine Physical Environment** [APP-080] to be submitted at Deadline 7 and have considered these changes in the assessment of construction activities and infrastructure at the landfall where waves are the dominant driver of sediment transport. There are no predicted changes in tidal regimes as a result of climate change, however, changes in water level have been considered in section 8.6.1 and considered in the assessment of bedload sediment transport at the landfall in section 8.7.4.5.1. The Applicants have updated the assessment of significance within **Chapter 8 Marine Physical Environment** [APP-080] where appropriate to incorporate the additional information.* The Applicants confirm that the updated version of **Chapter 8 Marine Physical Environment (Revision 2)** [document reference 7.8] referenced in this response has been submitted at Deadline 7.
RIES Q20	To NE: Can NE confirm the LSE pathway that changes to wave and tidal regime relate to?	No response required, question directed to Natural England.
RIES Q21	To the applicants: NE has provided [REP5- 056] a list of outstanding elements of its previous advice that it considered should be addressed in relation to localised impacts on sandeel (and herring). Can the applicants submit this information at DL7? If not, why not?	See the Applicants' responses to Natural England's list of outstanding elements below: *Data on relative abundance/population distribution of sandeel within the project area compared to wider region. It is our understanding that abundance indices are available from the North Sea Sandeel Survey (NSSS) data set and would help to support the assessment of sandeel suitability. Whilst the Applicant has previously provided a figure of the NSSS data [REP3-028], there was no presentation of data on relative abundance/population distribution within the project area compared to the wider region (R&I ref. E5).* As has been stated by the Applicants throughout the pre-DCO application and Examination period, confidence in the accuracy of sandeel abundance data (including the NSSS) is inherently limited by survey equipment and the poor resolution at a project-specific scale. The Applicants have included NSSS data in their responses throughout the consultation period via presence/absence at sample stations, rather than the abundance value at the sample stations. This enables NSSS data to be

I.D.	Question	Applicants' Response
		aligned (not included) with the Reach *et al.* (2024) heat mapping methodology used to inform the location of potential supporting habitat for sandeel. Furthermore, there is limited information available within the public domain that describes the exact method of data collection within the NSSS. It is understood that **the total number of sandeel caught within each sample is not recorded** but extrapolated from a subset of the sample used to collect biometric information (e.g. age class, length, weight, etc). Therefore, the Applicants maintain that the inclusion of the NSSS data to support the presence/absence OneBenthic data layer used in the heat mapping methodology is the most appropriate use of the NSSS data. If it were the case that NSSS data was available at sufficient resolution within the Offshore Development Area, (such as the resolution provided by the environmental survey to characterise the distribution of sediment) it would be more appropriate to extract abundance data for the purposes of characterising variation in the size of the stock. In the absence of this resolution, the NSSS has been included in a manner that maximises confidence in the data it portrays. Through this use of the NSSS dataset, the Applicants have provided a worst-case assessment of sandeel abundance in the ES. NSSS abundance data has been explored on the DATRAS/ICES Data Portal, however no way to investigate these data as requested appears available. Whilst the dataset can be downloaded, spatial and abundance data are provided as separate files, with no way to match them. As a result, any abundance data relates to the entire North Sea area, presented within the indicative data extent window as reaching from the UK all the way to territorial waters of the Netherlands, Germany, Denmark, and Norway. As a result, any investigation of abundance data is not considered fit for purpose as it is currently available. Further, the MMO state in REP5-049: 1.7.2 that they *"do not believe the presentation of this data at this late stage in the application processs will significantly change the outcomes of the assessment".* It must be restated that, even in the absence of NSSS data, sandeel were assumed to have been present across the whole of the Offshore Development Area based on Reach *et al*. (2024) methodology heat mapping (i.e. the potential for spawning habitat is used as a proxy for sandeel presence, which is a worst case assumption). Whilst examination of NSSS data confirms this finding, it does not change any assessment made throughout the ES. This is clarified within REP2-061:19 where it is stated that *"the inclusion of NSSS would not add benefit to the assessment or change the conclusions of the* ***Heat Mapping Report*** *[AS-105]. Furthermore, sandeel were originally considered to be present within the Array Areas and assessed as such within the Environmental Impact Assessment (EIA), and therefore the addition of NSSS data would not alter the original EIA conclusions made within the ES."* *Assessment for localised heating of sediment and possible impacts to high/very high potential sandeel and herring spawning habitat (See Section 3, R&I ref. E8 & ISH Action No.27).* As stated within 10.6.2.7 of **Chapter 10 Fish and Shellfish Ecology (Revision 2)** [document reference 7.8] *"Localised heating of sea water may occur, but this is limited to distances of tens of cm, and is likely to be of small magnitude, therefore no additional impact is predicted from heating effects (Boehlert and Gill, 2010[1]; Moray Offshore Windfarm Ltd, 2018[2]).*" Even when considering lab-based studies, heat transfer around subsea cables, under optimal heat transfer conditions, are shown to be limited to an order of metres in sediments of maximum permeability. Sediment of lower permeability limited heat transfer effects to approximately 40cm (Emeana *et al*., 2016[3]). Assumptions made for the potential impacts of Electromagnetic Field (EMF) assume a 4m radius, with findings indicating a negligible effect, which is not significant in EIA terms. Whilst it is evident that the cable route will pass through regions suitable for sandeel potential, any change in sediment temperature will

[1] Boehlert, G.W., and Gill, A.B. (2010). Environmental and ecological effects of ocean renewable energy development: a current synthesis. Oceanography, 23, pp. 68-81

[2] Moray Offshore Windfarm (West) Limited (2018). Moray West Offshore Windfarm Offshore EIA Report, Chapter 1 Introduction. Available at: https://marine.gov.scot/sites/default/files/00538033.pdf (Accessed: Feb 2023).

[3] Emeana, C.J., Hughes, T.J., Dix, J.K., Gernon, T.M., Henstock, T.J., Thompson, C.E.L., and Pilgrim, J.A. (2016). The thermal regime around buried submarine high-voltage cables, Geophysical Journal International, 206, pp 1051–1064

I.D.	Question	Applicants' Response
		be limited to the area immediately surrounding the cable and thus, it can be reasonable to assume that there would be no likely significant effects as a result. As such, the Applicants do not consider it necessary to include validation of heat impacts into the monitoring proposed under conditions 22 of DMLs 1 and 2. *Localised impact assessments, e.g. localised depletion and/or reduced resilience of the wider stock. This should include an assessment of the worst-case area of high potential spawning habitat loss due to cable/scour protection and UXO clearance. The assessments should consider both direct and indirect impact pathways to sandeel and herring at a biologically relevant population scale, for both the construction and operation phases of the Projects. (R&I ref. E7, E9, E10, E21 & ISH Action No.28, 37 & 57)* The worst case assessment for habitat loss has been undertaken for EIA and HRA in terms of the worst case footprint of infrastructure. Where this habitat loss relates to sandeel, the assessment is based on the assumption that ***any potential*** sandeel spawning habitat is indeed sandeel spawning habitat. This is conservative as not all of this habitat will actually have sandeel present. For example, the **Report to Inform Appropriate Assessment Habitats Regulations Assessment Part 2 of 4 Annex I Offshore Habitats and Annex II Migratory Fish (Revision 5)** [document reference 6.1] presents this in section 6.4.2.6.1 Physical change (to another seabed / sediment type). Note that footprint was only based upon the footprint of infrastructure which will be above the seabed (foundation and cable/scour protection). Natural England considered that disturbance from construction, UXO footprint and ecological halo footprint should also be included under this. The RIAA has been updated at Deadline 7 to itemise these additional footprints (some of which are coincident and therefore **NOT** additive) so that the ExA and SoS are able to clearly understand what these footprints are should they agree with Natural England's position.
RIES Q22	To the applicants and NE: Please provide your current views on whether impacts on sandeel can be excluded as a contributing factor to the AEoI conclusions for Dogger Bank SAC.	The Applicants highlight that the seabed within the Offshore Development Area within the Dogger Bank SAC, as well as being Annex I sandbank, is all potential spawning habitat for sandeel. This is highlighted in the **RIAA HRA Part 2 of 4 Annex I Offshore Habitats and Annex II Migratory Fish (Revision 5)** [document reference 6.1] (see paragraphs 40 and 81). Therefore, any seabed habitat loss or disturbance within the SAC is also loss or disturbance of potential sandeel spawning habitat. However, it should be noted this would not be an additive loss / disturbance of habitat, instead representing the same area of seabed just categorised for different elements of the community. It cannot be lost more than once. The Applicants consider that habitat loss due to the permanent footprint of above surface infrastructure is a contributing factor to AEOI. As highlighted above, this includes the potential sandeel spawning habitat affected. The Applicants do not consider that temporary disturbance during construction, operation or decommissioning is a contributing factor to AEoI due to the recoverability of the habitat present and limited temporal nature of the potential effects. This includes UXO clearance and jack-up operations. The Applicants have provided comprehensive evidence of this case in **Review of Evidence on Recovery of Sandbank Habitat Following Habitat Damage (Revision 2)** [REP3-021] which covers both the recovery of the biotopes and sandeel.
RIES Q23	To NE: Please provide comments for DL7 on the applicants' technical note 'Assessment of Coastal Processes at the Dogger Bank South Landfall' [REP5-040].	No response required, question directed to Natural England.
RIES Q24	To NE: Please also confirm your latest position on whether AEoI on benthic habitat features of the Humber Estuary SAC can be excluded in relation to changes to smothering and siltation rates.	

I.D.	Question	Applicants' Response
RIES Q25	To NE: The ExA notes that NE's concerns were reported for the Humber Estuary SPA, SAC and Ramsar site in [RR-039]. However, further to examination submissions, the ExA understands the air quality concerns relate solely to Annex I habitats of the Humber Estuary SAC. The ExA requests confirmation from NE as to whether this assumption is correct. If it is not correct, NE is requested to clarify the sites and features which the air quality concerns relate to.	
RIES Q26	To ERYC: ERYC's LIR [PDC-007] raised a number of points in relation to air quality impacts on the Humber Estuary SAC, SPA and Ramsar site. Can ERYC confirm, with supporting reasoning, whether it has any outstanding concerns regarding air quality impacts on these sites?	
RIES Q27	To the applicants: The applicants are requested to provide an update to their assessments once Dogger Bank D's PEIR is publicised. On the basis that this is on or shortly after 6 June 2025, the revised assessment should be submitted alongside comments on the RIES for DL7. An updated version of ES Figure 16-2 [REP3-014] showing Dogger Bank D OWF including its export cable corridor, should also be provided.	The Applicants have reviewed the Dogger Bank D PEIR and provided an update at Deadline 7 in **The Applicant's Consideration of the Dogger Bank D Preliminary Environmental Information Report** [document reference 17.6] submitted at Deadline 7 which considers the potential in-combination effects with DBD in the context of the RIAA.
RIES Q28	To NE and the MMO: Please confirm whether you are satisfied with the updates made by the applicants to the dDML conditions [REP5-002], to include wording suggested by the MMO on noise reduction in [REP4-115]. NE is also requested to confirm whether these updates change its DL5 position that an AEoI cannot be excluded for grey seal of BNNC SAC (alone and in-combination), grey seal of the Humber Estuary SAC (incombination) and harbour porpoise of the SNS SAC (in-combination).	No response required, question directed to Natural England.
RIES Q29	To the applicants: In line with NE's suggestion, are the applicants willing to commit at this stage to achieving a 10dB reduction in underwater noise during construction from levels predicted in the environmental assessment via primary and/ or secondary mitigation, with the exact systems and/ or technologies to be determined post-consent? If so, the applicants are requested to confirm how this commitment would be secured through the dDCO.	The Applicants have agreed wording with Natural England and the MMO by email on 20th June 2025 and 24th June 2025 respectively for a condition in the relevant DMLs that secures the use of primary and/or secondary mitigation measures to ensure that no AEoI for marine mammals arises as a result of the noise from piling activities. This wording has been included in the **Draft DCO (Revision 10)** [document reference 3.1].
RIES Q30	To NE: The ExA understands that resolution of the underwater noise concerns relating to grey seal of the Humber Estuary SAC would also resolve this concern for grey seal of the Humber Estuary Ramsar. The ExA requests confirmation from NE as to whether this assumption is correct.	No response required, question directed to Natural England.
RIES Q31	To NE: Please also confirm whether you currently consider an AEoI can be ruled out for grey seal of the Humber Estuary Ramsar site.	

I.D.	Question	Applicants' Response
RIES Q32	To NE: NE maintains that there is still a risk of AEoI for harbour porpoise of SNS SAC as a result of impacts to prey species [REP5-061, NE12]. Can NE confirm whether this applies to the project alone and/ or incombination?	
RIES Q33	To the applicants: Can the applicants provide an expanded assessment for indirect effects on harbour porpoise of the SNS SAC from impacts on forage fish prey species, using the example information provided by NE in [REP5- 036] and submit this for DL7? If not, why not?	The Applicants responded to this query in REP5-056: E4.1 of **The Applicants' Responses to Deadline 5 Documents** [REP6-052], which is repeated below for convenience: *The Applicants acknowledge the important link between harbour porpoise distribution, ranges and feeding grounds with the main prey species being sandeels and clupeids. Distribution of harbour porpoises is thought to be prey driven and it is likely that the high densities of harbour porpoises that occur at the Dogger Bank are due to a particularly rich area for feeding (Ransijn et al. 2021[Error! Bookmark not defined.]). Important harbour porpoise prey also includes cod (Gadus morhua), whiting (Merlangius merlangus) and sprat (Sprattus sprattus). Sprats are also high in fat, therefore a good quality of prey. All of these prey species are present within the wider Dogger Bank area and Southern North Sea.* *A southward shift in distribution of harbour porpoise is supported by data from smaller scale surveys in the Southern North Sea which show increasing numbers of porpoises and aggregations in French, Belgian, Dutch and German waters (e.g., Gilles et al. 2011[4], 2016[Error! Bookmark not defined.]; Haelters et al. 2011[5]; Scheidat et al. 2012[6]; Peschko et al. 2016[7]; Laran et al. 2017[8]; Nachtsheim et al. 2021[9]). This shift in harbour porpoise distribution is probably related to changes in prey distribution and abundance (Hammond et al. 2013[10]). Data from SCANS-III in 2016 and the recent SCANS-IV survey in 2022 confirm that the shift to the south has been maintained (Hammond et al. 2021[11]; Gilles et al. 2023[12]).* *There is already a documented shift in harbour porpoise distribution likely due to prey availability. As such, the Applicants maintain their position that the Projects effects are not likely significant impacts as part of the comprehensive Environmental Impact Assessment that has been undertaken.* *The Applicants note that Natural England's comment does not include any further request to amend the assessment or advice on additional information required. No updates are therefore proposed to be made to the assessments.*

[4] Gilles, A., Adler, S., Kaschner, K., Scheidat, M., Siebert U. (2011). Modelling harbour porpoise seasonal density as a function of the German Bight environment: implications for management. Endangered Species Research 14: 157-169

[5] Haelters, J., Kerckhof, F., Jacques, T. G., Degraer, S. (2011). The harbour porpoise *Phocoena phocoena* in the Belgian part of the North Sea: trends in abundance and distribution. Belgian J. Zool. 141, 75–84.

[6] Scheidat, M., Verdaat, H., Aarts, G. (2012). Using aerial surveys to estimate density and distribution of harbour porpoises in Dutch waters. J. Sea Res. 69, 1–7. doi: 10.1016/j.seares.2011.12.004

[7] Peschko, V., Ronnenberg, K., Siebert, U., and Gilles, A. (2016). Trends of harbour porpoise (*Phocoena phocoena*) density in the southern North Sea. Ecol. Indic. 60, 174–183. doi: 10.1016/j.ecolind.2015.06.030

[8] Laran, S., Authier, M., Blanck, A., Doremus, G., Falchetto, H., Monestiez, P., Pettex, E., Stephan, E., Van Canneyt, O., Ridoux, V. (2017). Seasonal distribution and abundance of cetaceans within French waters- Part II: The Bay of Biscay and the English Channel. Deep Sea Research Part II: Topical Studies in Oceanography 141, 31-40. https://doi.org/10.1016/j.dsr2.2016.11.012

[9] Nachtsheim, D., Viquerat, S., Ramirez-Martinez, N.C., Unger, B., Siebert, U., Gilles, A. (2021). Small cetaceans in a human high-use area: Trends in harbour por-poise abundance in the North Sea over two decades. Frontiers in Marine Science. Frontiers in Marine Science 7:606609. doi: 10.3389/fmars.2020.606609

[10] Hammond, PS, Macleod, K, Berggren, P, Borchers, DL, Burt, ML, Cañadas, A, Des-portes, G, Donovan, GP, Gilles, A, Gillespie, D, Gordon, J, Hedley, S, Hiby, L, Kuklik, I, Leaper, R, Lehnert, K, Leopold, M, Lovell, P, Øien, N, Paxton, CGM, Ridoux, V, Rogan, E, Samarra, F, Scheidat, M, Sequeira, M, Siebert, U, Skov, H, Swift, R, Tasker, ML, Teilmann, J, Van Canneyt, O, Vázquez, JA. (2013). Cetacean abundance and distribution in European Atlantic shelf waters to inform conservation and management. Biological Conservation 164: 107-122

[11] Hammond P, Lacey C, Gilles A, Viquerat S, Börjesson P, Herr H, Macleod K, Ridoux V, Santos MB, Scheidat M, Teilmann J, Vingada J, Øien N. 2021. Estimates of cetacean abundance in European Atlantic waters in summer 2016 from the SCANS-III aerial and shipboard surveys – Revised version (June 2021). https://scans3.wp.st-andrews.ac.uk/files/2021/06/SCANS-III_de- sign-based_estimates_final_report_revised_June_2021.pdf

[12] Gilles, A., Authier, M., Ramirez-Martinez, N.C., Araújo, H, Blanchard, A., Carl-ström, J., Eira, C., Dorémus, G., Fernández-Maldonado, C., Geelhoed, S.C.V., Kyhn, L., Laran, S., Nachtsheim, D., Panigada, S., Pigeault, R., Sequeira, M., Sveegaard, S., Taylor, N.L., Owen, K., Saavedra, C., Vázquez-Bonales, J.A., Unger, B., Hammond, P.S. (2023). Estimates of cetacean abundance in Eu-ropean Atlantic waters in summer 2022 from the SCANS-IV aerial and ship-board surveys. Final report published 29 September 2023. 64 pp. https://www.tiho-hannover.de/en/clinics-institutes/institutes/institute-for-terrestrial-and-aquatic-wildlife-research-itaw/scans-iv-survey

I.D.	Question	Applicants' Response
		Natural England maintain that the assessment is simplistic for marine mammals however, the Applicants maintain that this method is considered industry-standard for recent offshore wind farm assessments (such as Rampion 2 and the Morecambe Offshore Wind Farm), and that: • Where individuals (predators) are subject to displacement effects, the mortality from this is assumed to result from a reduction in access to prey. So, in this case, consideration of any indirect effects via effects on prey is double counting to some degree (e.g. the predators are already displaced from the Array Areas so effects on prey within these locations have no additional effect). • Where predators are not displaced, there are two considerations. 1) The area which can no longer be used for foraging which is confined to the immediate footprint of the infrastructure (or disturbance footprint if following Natural England position) within the Array Areas (and within the Export Cable Corridor small sections of cable protection) which is permanently lost. 2) The direct effects on the prey themselves (disturbance, noise impacts etc). • Therefore, the assessment has covered all the potential pathways for impacts. These were assessed in line with standard practice in the Application, with the steps set out in the **Effects on Prey Species Technical Note (Revision 2)** [REP6-049].
RIES Q34	To the applicants: Can the applicants confirm whether they intend to update the in-combination assessment totals for displacement-affected species according to agreed impacts?	The updated displacement sections previously issued in the **RIAA HRA Part 4 of 4 – Marine Ornithological Features (Revision 5)** [REP6-008] include consideration of agreed impacts. For example, guillemot at FFC SPA (section 9.6.2.3.5 paragraph 245, presents and discusses the displacement rates for Hornsea Project 4. The same information is provided for razorbill at FFC SPA (9.6.2.5.5, paragraph 324). Therefore, there is no requirement to make any updates.
RIES Q35	To NE: Can NE explain the basis for its request for in-combination totals for displacement-affected species according to agreed impacts and whether it is likely that receiving such information would materially affect their conclusions?	No response required, question directed to Natural England.
RIES Q36	To the applicants: The applicants are requested to provide an update to their assessments once Dogger Bank D's PEIR is publicised. On the basis that this is on or shortly after 6 June 2025, the revised assessment should be submitted alongside comments on the RIES for DL7.	The Applicants have reviewed the Dogger Bank D PEIR and provided an update at Deadline 7 in **The Applicant's Consideration of the Dogger Bank D Preliminary Environmental Information Report** [document reference 17.6] submitted at Deadline 7 which considers the potential in-combination effects with DBD in the context of the RIAA.
RIES Q37	To the applicants: Can the applicants revise their in-combination assessment for guillemot at the Farne Islands SPA to include all relevant projects, as advised by NE in [REP5-058]?	The Applicants have updated the assessment of guillemot at the Farne Islands SPA to include the other projects identified by Natural England. This was submitted at Deadline 6 in the **RIAA HRA Part 4 of 4 – Marine Ornithological Features (Revision 5)** [REP6-008]. Therefore, there is no requirement to make any updates.
RIES Q38	To NE: Does NE agree with the applicants that an in combination assessment for Atlantic puffin of FFC SPA is not required? If so, can it explain why, given the precedent it set on SEP&DEP?	No response required, question directed to Natural England.
RIES Q39	To the applicants: Can the applicants provide updated in-combination assessment applying a 70% displacement rate and a 5% mortality rate for the impacts of Hornsea 4 on FFC SPA?	As per the answer to RIES Q34, the Applicants provided assessment including Hornsea Project 4 at 70% displaced and 5% mortality in the **RIAA HRA Part 4 of 4 – Marine Ornithological Features (Revision 4)** [REP4-016] submitted at Deadline 4. Therefore, there is no requirement to make any updates.

I.D.	Question	Applicants' Response
RIES Q40	To the applicants: Can the applicants verify and present the PVA for kittiwake, guillemot or razorbill at FFC SPA as requested by NE in [REP5-058]?	The PVA have been reviewed and updated following these comments from Natural England. The **RIAA HRA Part 4 of 4 – Marine Ornithological Features (Revision 5)** [REP6-008] and **Chapter 12 - Offshore Ornithology (Revision 4)** [REP6-015] submitted at Deadline 6 included the updated results. **Appendix 12-13 - Population Viability Analyses (Revision 3)** [REP6-018] was also updated and submitted at Deadline 6.
RIES Q41	To the applicants: Can the applicants clarify the proposed lifetime of the proposed development and confirm whether they will re-run the PVAs?	The Applicants can confirm that the proposed worst-case lifetime of DBS East and DBS West operating concurrently is 30 years and there is therefore no requirement to rerun the PVA for this aspect.
RIES Q42	To NE: Can NE confirm whether it agrees an AEoI from the proposed development alone can be excluded for razorbill and guillemot of FFC SPA?	No response required, question directed to Natural England.
RIES Q43	To the applicants: NE has advised the applicants to check in-combination figures, explain any remaining discrepancies, and ideally re-run PVAs. It also requested that in-combination assessment totals for displacement affected species be presented according to agreed impacts, rather than apportioned abundances. The applicants are requested to submit this information into the examination.	The Applicants have reviewed the in-combination figures and provided a detailed explanation of why these figures are correct and that the apparent discrepancies are in fact due to the mis-application of the latest guidance **in other** wind farm submissions. The Applicants met with Natural England to discuss this on the 6th June and the figures were subsequently agreed. The displacement impacts have also been provided as requested by Natural England (as per RIES Q34 and Q39). There is therefore no requirement to re-run the PVA for these aspects and all relevant and appropriate information has been submitted into the Examination.
RIES Q44	To the applicants: NE has advised the applicants to take a similar approach to SEP&DEP in interpreting the PVAs. Can the applicants confirm if it intends to undertake this work?	The Applicants have responded to Natural England's request on this matter in Table 2-21 of **The Applicants' Responses to Deadline 5 Documents** [REP6-052]. In summary the Applicants consider that the PVA outputs, presented as counterfactuals (comparisons of predictions with and without impacts), are specifically intended to be robust to the sorts of interpretation Natural England has requested. Thus, these 'difference' metrics isolate the potential wind farm effects from other sources of population change (such as HPAI, fish stocks, climate change, etc.) in order that the applications can be judged solely on their effects. This equally applies to the role of density dependence in regulating seabird populations, which Natural England acknowledge exists, recent independent studies have strongly advised should be included in PVA[13], and for which there are established methods for its incorporation in PVA yet Natural England continue to state that instead the PVA should be run without density dependence but the results then be interpreted on the basis that density dependence exists. The Applicants consider that such comparisons would be entirely subjective and therefore of limited value. The Applicants also note that there is no reason why Natural England cannot provide this interpretation of the PVA themselves, and that even if the Applicants presented this there is a reasonable likelihood that Natural England would disagree with their interpretation. The much more appropriate option would be to simply include density dependence in the models (alongside the existing density independent ones) and thereby provide a clear set of predictions for the seabird populations under the conditions that Natural England advise may arise in the future, rather than attempting to force the results from one form of analysis to conform to a different one.
RIES Q45	To NE: Can NE confirm whether it agrees an AEoI on the Atlantic puffin component of the FFC SPA seabird assemblage can be ruled out?	No response required, question directed to Natural England.
RIES Q46	To NE: NE maintains that there is still a risk of AEoI on ornithology receptors at FFC SPA as a result of impacts to prey species [REP5-061, NE12]. Can NE confirm which specific qualifying features of FFC SPA this applies to and whether this is for the project alone and/ or incombination?	

[13] Merrall, E., Green, J.A., Robinson, L.A., Butler, A., Wood, M.J., Newell, M.A., Black, J., Daunt, F. and Horswill, C., 2024. Incorporating density-dependent regulation into impact assessments for seabirds. Journal of Applied Ecology, 61(10), pp.2510-2524.

I.D.	Question	Applicants' Response
RIES Q47	To the applicants: Can the applicants provide an expanded assessment for indirect effects on ornithology receptors of FFC SPA from impacts on forage fish prey species, using the example information provided by NE in [REP5-036] and submit this for DL7? If not, why not?	The Applicants have provided a full exposition of the methodology for assessing prey effects in the **Effects on Prey Species Technical Note (Revision 2)** [REP6-049]. This signposts how the Applicants have assessed these effects across both the EIA and HRA processes and indeed, how these effects were considered by The Crown Estate in the Round 4 Plan Level HRA. In summary the assessment is as follows: • Where individuals (predators) are subject to displacement effects, the mortality from this is assumed to result from a reduction in access to prey. So, in this case, consideration of any indirect effects via effects on prey is double counting to some degree (e.g. the predators are already displaced so effects on prey within these locations have no additional effect). • Where predators are not displaced, there are two considerations. 1) The area which can no longer be used for foraging which is confined to the immediate footprint of the infrastructure (or disturbance footprint if following Natural England position) which is permanently lost. 2) The direct effects on the prey themselves (disturbance, noise impacts etc). • Therefore, the assessment has covered all the potential pathways for impacts. These were assessed in line with standard practice in the Application, with the steps set out in **Chapter 6 - EIA Methodology** [APP-076]. The Applicants met with Natural England on 7th May 2025 to discuss effects on prey species and to determine if any further information could be included in the **Effects on Prey Species Technical Note (Revision 2)** [REP6-049]. Natural England requested mapping of seabird ranges and sandeel and herring spawning potential and therefore this has been included in the updated **Effects on Prey Species Technical Note (Revision 2)** [REP6-049] submitted at Deadline 6. No other information was requested by Natural England. Whilst we note the comments in Appendix E5 to the Natural England Deadline 5 Submission Natural England's comments and updated advice on Fish and Shellfish [REP5-056] and have responded, no additional requests for information or assessment were made.
RIES Q48	To NE and other ANCBs: The ExA has set out its understanding of the ANCB's positions at the time of publication of this RIES in Annex 1. Please review Annex 1 and provide any corrections if necessary.	No response required, question directed to Natural England.
RIES Q49	To NE: Paragraph 17 of the Strategic compensation measures for offshore wind activities: Marine Recovery Fund interim guidance, published 29 January 2025 includes a statement that at all stages of the NSIP planning process, as an application progresses, the draft DCO requirements regarding compensation measures may be updated as more clarity on MPA designations and/ or extensions becomes available, and certainty as to the type of compensation which is available and is being delivered increases over time. Are the requirements in the draft DCO [REP5-002] in relation to the strategic compensation for benthic habitats as up to date and as clear as possible based on the latest information available at this time? If not and further clarity could be provided, please state where and suggest wording if possible.	
RIES Q50	To the applicants: The applicants are requested to update the Guillemot and Razorbill Compensation Plan to include impact values and compensation requirements for guillemot breeding at Farne Islands SPA.	The **Guillemot [and Razorbill] Compensation Plan (Revision 6)** [REP6-012] was updated to include impact values and compensation requirements for guillemot breeding at Farne Islands SPA on a without prejudice basis at Deadline 6.

I.D.	Question	Applicants' Response
RIES Q51	To NE: NE explained in [REP5-062, OR.2.26] that compensation requirements for seabird assemblages are typically handled by the species-specific proposals. Can NE explain whether it considers compensation for the seabird assemblage has been sufficiently accounted for?	No response required, question directed to Natural England.
RIES Q52	To NE: As noted in ID 3.7.4 and ID 3.8.7 of this RIES, NE stated it was unable to rule out AEoI on harbour porpoise of SNS SAC and ornithology features of FFC SPA as a result of indirect impacts on prey species [REP5-053] [REP5-056] [REP5-061, NE12]. Does NE consider the indirect impacts on prey species can be quantified to the extent that the quantum of compensatory measures required can be identified?	
RIES Q53	To NE: What measures does NE consider could be employed to compensate for the indirect impacts on prey species?	
RIES Q54	To the applicants: Paragraph 19 of the Strategic compensation measures for offshore wind activities: Marine Recovery Fund interim guidance, published 29 January 2025 states that where possible, applicants should ensure that larger and fewer offshore artificial nesting structures are placed in optimal sites and that enhanced monitoring to test the efficacy of offshore artificial nesting structures should be put in place. Can you explain how your proposals meet these aspects of this guidance. Cross references to paragraphs within existing submission documents is fine.	As outlined in section 6.3.3 of **Appendix 1 - Project Level Kittiwake Compensation Plan (Revision 6)** [REP6-011] the Applicants plan to deliver a single project led ANS as a project led measure and collaborate with Outer Dowsing Offshore Wind (ODOW) to deliver nesting space on a second structure. This is in line with the requirements of The Crown Estate's **Round 4 Kittiwake Strategic Compensation Plan** [APP-053) of two ANS to provide mitigation of risk of failure at one offshore ANS to compensate for the impacts of the ODOW and DBS. However, it is noted that collaborative delivery is one of the mechanisms proposed in **Round 4 Kittiwake Strategic Compensation Plan** [APP-053] therefore engagement with other OWF developers both through the Kittiwake Steering Group and directly has been undertaken during the pre-application stage to explore opportunities for collaboration between the Applicants, ODOW and other OWF developers. As such a collaborative agreement has been put in place with ODOW in the form of a Memorandum of Understanding (MoU), which will allow sharing of a proportion of each projects nesting space to be located on the other project's structure. This approach aligns with the preference expressed by the Defra SoS (Defra, 2024a) for 'developers to work collaboratively to ensure larger (and likely, fewer) towers are placed in optimal sites within English Waters'. The Applicants plan to deliver a single offshore ANS at a scale sufficient to offset impacts related to kittiwake and situated in an ecologically and logistically viable location to maximise chances of success. The location of the ANS has been chosen to optimise the success of the measure, by selecting areas which are located in waters identified by the **Round 4 Kittiwake Strategic Compensation Plan** [APP-053) of having good ecological potential for kittiwakes, and in locations where installation is technically feasible and the consent constraints are minimal (Project-Level **Kittiwake Artificial Nesting Structure (ANS) Site Selection Report** (Revision 01) [PDB-007] & **Appendix 1 - Project Level Kittiwake Compensation Plan (Revision 6)** [REP4-020]. The Applicants design base case adheres to principles outlined in **Round 4 Kittiwake Strategic Compensation Plan** [APP-053] and as outlined in **Outline Kittiwake Compensation Implementation and Monitoring Plan (Revision 2)** [REP4-022], monitoring plans include the use of a state of the art remote monitoring camera system, combined with a strategically planned in-person survey programme. This will support the collection of high resolution data and allow for the identification of any remedial work that may be required in the future.
RIES Q55	To the applicants: Can the applicants provide the population modelling results for the compensation requirements of the proposed development, according to the SNCB-advised approach?	The Applicants discussed this question with Natural England on 9th June 2025 at which Natural England explained that their query was as to whether the Applicants had included predicted dispersal rates in the projections of colony growth. The Applicants explained that the purpose of these colony growth projections was to illustrate that there was little material difference in the time to payback of mortality debt for an ANS available 4 years before first turbine operation with that if the ANS is available 2 years before operation (i.e. the duration to payback simply occurs 2 years later in the latter scenario).

I.D.	Question	Applicants' Response
		Incorporating dispersal rates may change the time to payback, just as each growth rate scenario has different payback durations, but these will not change the effect of 2 or 4 years lead-in. Although not **explicitly** part of the modelling, It should also be noted that the growth rate values used were drawn from observations of natural colony growth and therefore these already **implicitly** include all the individual demographic rates which affect population growth, including dispersal rates. The Applicants have responded on this matter in REP5-059: H8 of **The Applicants' Responses to Deadline 5 Documents** [REP6-052] and consider that following discussion with Natural England on 9th June 2025 no changes are required to the modelling presented in **Reduction in Kittiwake Breeding Seasons Prior to Artificial Nesting Structure Installation (Revision 2)** [REP4-083].
RIES Q56	To the applicants: Can the applicants explain how their latest auk compensation proposal [REP5-011] fulfils paragraphs 22 and 25 from the strategic compensation measures for offshore wind activities: Marine Recovery Fund interim guidance, published 29 January 2025?	In order to fulfil paragraph 22 of the strategic compensation measures for offshore wind activities: Marine Recovery Fund interim guidance, published 29th January 2025 the Applicants have reported on collaboration with various parties including Defra and Natural England regarding development of the strategic compensation at the Isles of Scilly. This is evidenced by the following jointly agreed statement provided by the Defra-led task and finish group (which includes Desnz, Natural England, The Wildlife Trust, RSPB, The Crown Estate and OWIC) regarding progress of the strategic measure, as previously highlighted in section 5.3.1.3.1 of the **Guillemot and Razorbill Compensation Plan (Revision 5)** [REP5-011]: *"The Isles of Scilly Seabird Recovery Partnership is developing a predator eradication project to recover seabird populations on the Isles of Scilly (IoS) as a strategic compensation measure in relation to offshore wind development. This partnership is led by Isles of Scilly Wildlife Trust, and closely involves the Duchy of Cornwall, RSPB, The Wildlife Trusts and a range of other local and national partners.* *The partnership, with support from The Wildlife Trusts, is developing a predator eradication programme on the Isles of Scilly to cover a 30 year period. This programme will include an operational plan to remove predators from the islands, a long-term maintenance/biosecurity plan to ensure the islands remain predator free, a community engagement plan and a monitoring and evidence plan. It is expected the outputs of this work will be delivered Spring 2027, with the potential delivery of the eradication programme to follow. It is envisaged that this will be one of the first fully developed and costed programmes to be established as a strategic compensation measure for offshore wind farm impacts on protected seabirds.* *Currently, Defra is establishing the Marine Recovery Fund (MRF), to develop strategic compensation measures, which is anticipated to be fully operational by late 2025. A number of organisations have recently met, including Defra, DESNZ, Natural England, The Wildlife Trusts, OWIC, The Crown Estate, and RSPB, to establish a Task and Finish Group to establish the mechanisms required to allow predator eradication to be delivered as a strategic compensation measure, noting the option for this to delivered by the Marine Recovery Fund.* *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 Applicants consider this statement demonstrates deliverability of the Isles of Scilly measure not available at the point the guidance was published as both Defra and DESNZ agreed this wording. However, in line with paragraphs 22 and 25 of the interim guidance, the Applicants are also still pursuing a project-led option to submit alongside the strategic compensation option. As stated in the **Guillemot [and Razorbill] Compensation Plan (Revision 5)** [REP5-011], the Applicants have revisited the longlist of potential compensation sites, including sites in Scotland and initiated surveys at a number of these locations.

I.D.	Question	Applicants' Response
RIES Q57	To the applicants: Can the applicants revise the compensation requirements for razorbill in the Guillemot and Razorbill Compensation Plan, as suggested by NE?	The **Guillemot [and Razorbill] Compensation Plan (Revision 5)** [REP6-012] was updated at Deadline 6 to correct the error in razorbill compensation requirements as highlighted by Natural England.
RIES Q58	To the applicants: In the event that a delay was incurred to the delivery of effective compensation, how would the applicant address the risk of the accrual of mortality debt? Can you suggest wording for a draft requirement in the DCO that would adequately address this issue?	In the event that the delivery of commencement of the compensation measure was delayed this would simply delay the delivery of compensation by the equivalent number of years of the delay. Natural England have acknowledged that connectivity with auks at Flamborough and Filey Coast Special Protection Area (FFC SPA and the Isles of Scilly, or any of the Project-led proposals thus far, however confirmed that benefits would be delivered to auks within the UK Western Waters Biologically Defined Minimum Population Scale (BDMPS) population rather than the UK North Sea and Channel BDMPS, which the FFC SPA population sits within [REP3-027- H2 – 4.3]. Given this lack of connectivity with any accrual of mortality debt will not have a material effect on the population of the compensation scheme. Current guidance (EC guidance, 2019), states that any delay in compensation implementation would require the Applicants to over-compensate. As stated in the **Guillemot [and Razorbill] Compensation Plan (Revision 6)** [REP6-012] the Isles of Scilly would provide additional capacity to allow for this over compensation, however it should be noted that the timing of implementation of these scheme is beyond the remit of the Applicants as it is being delivered strategically. It should also be noted that the requirement for over compensation would reduce the compensation available for other projects to utilise in the future. In terms of how this would be secured through the DCO, it is expected that any scheme on the Isles of Scilly would be delivered through the MRF, whereby the Applicants would make a payment to Defra, as the MRFO. The amount of the payment would need to be agreed with Defra and, according to the MRF Consultation Document (March 2025) (paragraph 140) any payment would include a 30% 'adaptive management' charge to cover any adaptive management costs. This fee will be set at 30% of the total estimated cost of delivery, maintenance, monitoring, and any decommissioning of the Strategic Compensation Measure (SCM), and will be applicable to all SCMs in the Library of SCMs. The Consultation states that this charge has been set at 30% to ensure there are sufficient funds to cover any costs incurred while delivering the SCM over the long term, while protecting applicants from further charges. This is necessary to allow the DCO requirement on compensation to be discharged at point of payment into the MRF. The Applicants would therefore expect that any over-compensation required would be provided by Defra as part of delivery of the measure and that the cost of this would already have been factored into any agreed payment. The **Draft DCO (Revision 10)** [document reference 3.1] already includes payment into a Strategic Compensation Fund (i.e. the MRF) as a compensation measure (see paragraph 4(b) of Part 3 Schedule 18), as an alternative or in addition to a project-led measure. It is considered that if the MRF is being used to discharge the requirement to deliver compensation measures then the payment to Defra would be sufficient to discharge this requirement. No updates are therefore proposed to the Draft DCO. This is aligned with the MRF Consultation document, which states (at paragraph 72) that: *"The applicant's DCO requirements pertaining to the reserved measure will be satisfied once DESNZ has received proof of the agreement of payment with the MRFO and evidence that the full payment, or the first of a series of instalments, has been made to the MRF. At this point, the MRFO will take on responsibility for the delivery of the agreed compensation as set out in the MRF IMP, including responsibility for monitoring and adaptive management."*
RIES Q59	To NE: The ExA understands the LSE pathways listed in this row are not of concern to NE. Can NE confirm if it agrees an AEoI can be excluded?	No response required, question directed to Natural England.
RIES Q60	To NE: The ExA understands the LSE pathways listed in this row are not of concern to NE. Can NE confirm if it agrees AEoI can be excluded?	
RIES Q61	To NE: The ExA understands the LSE pathways listed in this row are not of concern to NE. Can NE confirm if it agrees AEoI can be excluded?	

Appendix A – Habitat Loss / Disturbance / Halo Effect Footprints

Table A-1 Estimated Habitat Loss / Habitat Disturbance Footprints Calculated by the Applicants

	DBS East In Isolation	DBS West In Isolation	DBS West and DBS East Concurrently and / or in Sequence
Permanent Habitat Loss Loss of habitat resulting from turbine and offshore platform foundations, scour protection, cable protection measures and cable crossings.	**Total area of habitat loss within the Dogger Bank SAC from Array Area and Offshore Export Cable Corridor footprints combined – 809,495m²** The constituent parts of this value include: **Array Area** **Total area of habitat loss within the Dogger Bank SAC in relation to the Array Area (foundations, scour protection, cable protection and cable crossings) – 741,535m²** Total worst case turbine foundation area, including scour protection – 311,725m² (100 small turbines x 3,117m² total area per turbine) Total worst case offshore platforms foundation area, including scour protection– 10,822m² (2 monopiles x 5,411m² total area per platform) Total area of array and inter-platform cable protection – 363,788m² (326,700m² array cable protection + 37,088m² inter-platform cable protection) Estimated number of array/inter-platform cable pipeline/cable crossings - 21 Total area of pipeline / cable crossing material (array + inter–platform cables) –55,200m² **Offshore Export Cable Corridor** **Total area of habitat loss within the Dogger Bank SAC in relation to the Offshore Export Cable Corridor – 67,960m²** Total area of export cable protection – 61,864m² Estimated number Offshore Export Cable Corridor pipeline/cable crossings - 1 Total area of pipeline / cable crossing material – 6,096m²	**Total area of habitat loss within the Dogger Bank SAC from Array Area and Offshore Export Cable Corridor footprints combined – 766,949m²** The constituent parts of this value include: **Array Area** **Total area of habitat loss within the Array Area (foundations, scour protection, cable protection and cable crossings) – 741,535m²** Total worst case turbine foundation area, including scour protection - 311,725m² (100 small turbines x 3,117m² total area per turbine) Total worst case offshore platforms foundation area, including scour protection– 10,822m² (2 monopiles x 5,411m² total area per platform) Total area of array and inter-platform cable protection – 362,625m² (326,700m² array cable protection + 37,088m² inter-platform cable protection) Estimated number of array/inter-platform cable pipeline/cable crossings - 21 Total area of pipeline / cable crossing material (array + inter–platform cables) –55,200m² **Offshore Export Cable Corridor** **Total area of habitat loss within the Dogger Bank SAC in relation to the Offshore Export Cable Corridor – 25,414m²** Total area of export cable protection – 25,414m² Estimated number Offshore Export Cable Corridor pipeline/cable crossings - 0	**Total area of habitat loss within the Dogger Bank SAC from Array Areas and Offshore Export Cable Corridor footprints combined – 1,815,352m²** The constituent parts of this value include: **Array Areas and Inter Platform Cable Corridor** **Total area of habitat loss within the Array Areas and Inter Platform Cable Corridor (foundations, scour protection, cable protection and cable crossings) – 1,715,882m²** Total worst case turbine foundation area, including scour protection – 623,449m² (200 small turbines x 3,117m² total area per turbine) Total worst case offshore platforms foundation area, including scour protection – 16,233m² (3 monopiles x 5,411m² total area per platform) Total area of array and inter-platform cable protection – 901,160m² (653,400m² array cable protection + 247,760m² inter-platform cable protection) Estimated number of array/inter-platform cable pipeline/cable crossings - 53 Total area of pipeline / cable crossing material (array + inter–platform cables) – 175,040m² **Offshore Export Cable Corridor** **Total area of habitat loss within the Dogger Bank SAC in relation to the Offshore Export Cable Corridor – 99,470m²** Total area of export cable protection – 87,278m² Estimated number Offshore Export Cable Corridor pipeline/cable crossings - 2 Total area of pipeline / cable crossing material – 12,192m²

	DBS East In Isolation	DBS West In Isolation	DBS West and DBS East Concurrently and / or in Sequence
Temporary Habitat Disturbance Temporary disturbance of habitat resulting from array cable, inter-platform cable and offshore export cable trenching, sandwave levelling, foundation installation, vessel jack-up & anchoring impacts and UXO clearance activities. This area is **not** additive to estimates of permanent habitat loss. Area of temporary habitat disturbance also includes that of permanent habitat loss.	**Total area of disturbance within Dogger Bank SAC – 11,820,141m²** The constituent parts of this value include: Array and Inter-platform Cables **Maximum area disturbed (trenching + sandwave levelling) – 8,392,500m²** Array cable trench area (350,000m x 20m boulder plough width) – 7,000,000m² Inter-platform cable trench area (23,000m x 20m disturbance width) – 460,000m² Maximum seabed area disturbed by sandwave levelling – 932,500m² Foundations and Vessel Impacts **Maximum area disturbed (foundations, platforms, vessel jack-up locations and anchoring) – 1,278,583m²** Seabed preparation area for 100 small turbine monopile foundations (including scour protection) – 358,498m² Seabed preparation area for two offshore platforms (monopile foundations), including scour protection – 12,445m² Area of seabed contact for vessel jack-up assuming six jack-up locations per turbine (275m² per jack up leg x four legs x six operations per turbine x 100 small turbines) - 660,000m² Area of seabed contact for vessel jack-up for all platforms in Array Areas (1,100m² combined leg area x five operations per platform x two offshore platforms) – 11,000m² Anchoring area (116m² area x four anchors per activity x five activities requiring the deployment of anchors x 100 small turbines + two offshore platforms) – 236,640m² Offshore Export Cable Corridor **Total temporary area disturbed for export cable installation within the Dogger Bank SAC (trenching, sandwave levelling and anchoring) – 2,148,238m²** Maximum number of cables required – Two	**Total area of disturbance within Dogger Bank SAC – 10,600,677m²** The constituent parts of this value include: Array and Inter-platform Cables **Maximum area disturbed (trenching + sandwave levelling) – 8,392,500m²** Array cable trench area (350,000m x 20m boulder plough width) – 7,000,000m² Inter-platform cable trench area (23,000m x 20m disturbance width) – 460,000m² Maximum seabed area disturbed by sandwave levelling – 932,500m² Foundations and Vessel Impacts **Maximum area disturbed (foundations, platforms, vessel jack-up locations and anchoring) – 1,278,583m²** Seabed preparation area for 100 small turbine monopile foundations (including scour protection) – 358,498m² Seabed preparation area for two offshore platforms (monopile foundations), including scour protection – 12,445m² Area of seabed contact for vessel jack-up – assuming six jack-up locations per turbine (275m² per jack up leg x four legs x six operations per turbine x 100 small turbines) – 660,000m² Area of seabed contact for vessel jack-up for all platforms in Array Areas (1,100m² combined leg area x five operations per platform x two offshore platforms) – 11,000m² Anchoring area (116m² area x four anchors per activity x five activities requiring the deployment of anchors x 100 small turbines + two offshore platforms) – 236,640m² Offshore Export Cable Corridor **Total temporary area disturbed for export cable installation within the Dogger Bank SAC (trenching, sandwave levelling and anchoring) – 928,774m²** Maximum number of cables required – Two	**Total area of disturbance within Dogger Bank SAC – 25,018,524m²** The constituent parts of this value include: Array and Inter-platform Cables **Maximum area disturbed (trenching + sandwave levelling) – 19,372,500m²** Array cable trench area (700,000m x 20m boulder plough width) – 14,000,000m² Inter-platform cable trench area (161,000m x 20m disturbance width) – 3,220,000m² Maximum seabed area disturbed by sandwave levelling – 2,152,500m² Foundations and Vessel Impacts **Maximum area disturbed (foundations, platforms, vessel jack-up locations and anchoring) – 2,543,094m²** Seabed preparation area for 200 small turbine monopile foundations (including scour protection) – 716,966m² Seabed preparation area for three offshore platforms (monopile foundations), including scour protection – 18,668m² Area of seabed contact for vessel jack-up vessel jack-up assuming six jack-up locations per turbine (275m² per jack up leg x four legs x six operations per turbine x 200 small turbines) – 1,320,000m² Area of seabed contact for vessel jack-up for all platforms in Array Areas (1,100m² combined leg area x five operations per platform x three offshore platforms) – 16,500m² Anchoring area (116m² area x four anchors per activity x five activities requiring the deployment of anchors x 200 small turbines + three offshore platforms) – 470,960m² Offshore Export Cable Corridor **Total temporary area disturbed for export cable installation within the Dogger Bank SAC (trenching, sandwave levelling and anchoring) – 3,102,100m²** Maximum number of cables required – Four

	DBS East In Isolation	DBS West In Isolation	DBS West and DBS East Concurrently and / or in Sequence
	Total offshore cable length of bundled cables within the Dogger Bank SAC – 40.7km Maximum temporary disturbance area for cable installation within Dogger Bank SAC – 814,000m² (based on 40,700m distance x 20m width of temporary disturbance) Maximum estimated seabed area disturbed by sandwave levelling within Dogger Bank SAC – 1,329,462m² Maximum estimated area impacted by anchoring – 4,776m² UXO Clearance Activities Worst case number of UXO requiring clearance – 41 Worst-case crater area – 20m² Total footprint of UXO clearance activities – 820m²	Total offshore cable length of bundled cables within the Dogger Bank SAC – 16.72km Maximum temporary disturbance area for cable installation within Dogger Bank SAC – 334,400m² (based on 16,720m distance x 20m width of temporary disturbance) Maximum estimated seabed area disturbed by sandwave levelling within Dogger Bank SAC – 591,966m² Maximum estimated total impacted by anchoring – 2,408m² UXO Clearance Activities Worst case number of UXO requiring clearance – 41 Worst-case crater area – 20m² Total footprint of UXO clearance activities – 820m²	Total offshore cable length of bundled cables within Dogger Bank SAC – 40.7km for DBS East, 16.72km for DBS West Maximum temporary disturbance area for cable installation within Dogger Bank SAC – 1,148,400m² (based on 57,420m distance x 20m width of temporary disturbance) Maximum estimated seabed area disturbed by sandwave levelling within Dogger Bank SAC – 1,946,205m² Maximum estimated area impacted by anchoring – 7,505m² UXO Clearance Activities Worst case number of UXO requiring clearance – 41 Worst-case crater area – 20m² Total footprint of UXO clearance activities – 820m²

Table A-2 Scenarios for Consideration Regarding Habitat Loss, Disturbance and Inclusion of Estimated Halo Effects

Parameter	Scenario 1 – Habitat Loss from Infrastructure Only	Scenario 2 - Habitat Loss from Infrastructure, UXO Clearance Activities and Jack-up Footprint	Scenario 2 – Habitat Loss + Disturbance (Habitat Loss Within Disturbance Footprint)	Scenario 3 – Habitat Loss Including Halo Effect + Disturbance
Foundations (turbines + offshore platforms)	**639,682m²** The constituent parts of this value include: 623,449m² small turbine foundation area 16,233m² offshore platform foundation area.	**1,977,002m²** The constituent parts of this value include: 623,449m² small turbine foundation area 16,233m² offshore platform foundation area 820m² for UXO clearance activities 1,320,000m² jack-up footprint for turbines 16,500m² jack-up footprint for offshore platforms	**2,543,094m²** The constituent parts of this value include: 716,966m² seabed preparation area for 200 small turbines 18,668m² seabed preparation area for three offshore platforms 1,320,000m² jack-up footprint for turbines 16,500m² jack-up footprint for offshore platforms 470,960m² anchoring footprint for turbine and offshore platform installation. Note that all foundations are within the disturbance footprint therefore is not additional footprint	**4,252,856.73m²** The constituent parts of this value include: 4,173,989.90m² area of turbine foundations and 50m halo 78,916.83m² area of offshore platform foundations and 50m halo Note that all foundations are within the halo effect footprint therefore is not additional footprint
Cable Protection + Cable Crossings (Array, Inter-Platform and Offshore Export Cables)	**1,175,670m²** The constituent parts of this value include: 653,400m² array cable protection 247,760m² inter-platform cable protection 87,278m² cable protection 175,040m² array / inter-platform cable crossing material 12,192m² cable crossing material	**1,175,670m²** The constituent parts of this value include: 653,400m² array cable protection 247,760m² inter-platform cable protection 87,278m² cable protection 175,040m² array / inter-platform cable crossing material 12,192m² cable crossing material	**22,474,610m²** The constituent parts of this value include: 14,000,000m² array cable trench area 3,220,000m² inter-platform cable trench area 1,148,400m² offshore export cable trench area 2,152,500m² sandwave levelling area for array and inter-platform cables 1,946,205m² sandwave levelling area for offshore export cables 7,505m² anchoring footprint for offshore export cable installation. Note that all cable protection is within the disturbance footprint therefore is not additional footprint	**30,807,334.4m²** The constituent parts of this value include: 10,580,194.4m² area of cable protection / crossing material and 50m halo 20,227,140m² disturbance area for array, inter-platform and offshore export cable installation works. Note that where cable protection is required, and a 50m halo applied, this encompasses the disturbance footprint. Therefore, the residual disturbance footprint relates only to the buried cable extent (i.e. 90% of the total 22,474,600m² disturbance area estimated for array, inter-platform and offshore export cable installation works).
Total	**1,815,352m²** As stated in **Table 6-3** of **RIAA HRA Part 2 of 4 Annex I Offshore Habitats and Annex**	**3,152,672m²**	**25,017,704m²**	**35,069,191,13m²**

Parameter	Scenario 1 – Habitat Loss from Infrastructure Only	Scenario 2 - Habitat Loss from Infrastructure, UXO Clearance Activities and Jack-up Footprint	Scenario 2 – Habitat Loss + Disturbance (Habitat Loss Within Disturbance Footprint)	Scenario 3 – Habitat Loss Including Halo Effect + Disturbance
	II Migratory Fish (Revision 5) [document reference 6.1]		As stated in **Table 6-3** of **RIAA HRA Part 2 of 4 Annex I Offshore Habitats and Annex II Migratory Fish (Revision 5)** [document reference 6.1]	

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