

## THE INFRASTRUCTURE PLANNING (EXAMINATION PROCEDURE) RULES 2010

# Appendix B8 to the Natural England Deadline 8 Submission Natural England's End of Examination Position on the Applicant's Assessment of Marine Physical Environment & Benthic and Intertidal Ecology

For:

The construction and operation of the Dogger Bank South (East and West) Offshore Wind Farm located approximately 100-122 km off the Northeast Coast in the Southern North Sea

Planning Inspectorate Reference EN010125

## Appendix B8 - Natural England's End of Examination Position on the Applicant's Assessment of Marine Physical Environment & Benthic and Intertidal Ecology

In formulating Natural England's final position on the Applicant's Assessment of Marine Physical Environment & Benthic and Intertidal Ecology, the following documents, in addition to those previously submitted into examination and reviewed, have been considered:

- [REP5-040] 15.6 Assessment of Coastal Processes at the Dogger Bank South Landfall
- [REP6-044] 8.20 Cable Statement (Revision 5) (Tracked)
- [REP7-017] 6.1 RIAA HRA Part 2 of 4 Annex I Offshore Habitats and Annex II
   Migratory Fish (Revision 5) (Tracked).pdf
- [REP7-131] 17.4 The Applicants' Responses to Deadline 6 Documents
- [REP7-102] 8.6 Commitments Register (Revision 3) (Tracked)
- [REP7-112] 8.17 Stage 1 Marine Conservation Zone Assessment (Revision 2)
   (Tracked).pdf
- [REP7-116] 8.23 In Principle Monitoring Plan (Revision 5) (Tracked)
- [REP7-128] 15.7 Appendix E Ecological Halo Effects Technical Note (Revision 2)
- [PD-028] The Examining Authority's Schedule of Recommended Amendments to the Applicant's draft DCO

We also highlight that due the limited time between Deadlines 7 and 8, we have been unable to fully review the updated ES chapters. Therefore, this final position statement is subject to change dependent on the outcome of that review.

#### 1. Introduction

This document provides our final advice on the principal areas of disagreement in regard to marine physical environment and benthic and intertidal ecology elements for Dogger Bank South (East and West) offshore wind farms (OWF). When compiling this document, we have primarily used the submissions from the Applicant listed above.

We highlight that our principal outstanding concerns as set out below may have progressed in level of significance on the RAG scale according to relevant issues, as set out in our latest Risk and Issues Log (submission at Deadline 8) – see our guidance on 'How to read Risk and Issues Log' in the first worksheet of the aforementioned log for further explanation on the RAG scale.

#### 2. Importance of Dogger Bank SAC

Natural England highlights that not all Annex I sandbanks are equal. Therefore, due to the uniqueness and ecological importance of the Dogger Bank relic sandbank and the wider ecosystem services it provides, which are sui generis; the Dogger Bank SAC remains at the centre of our concerns with the proposed Dogger Bank South (DBS) East and West OWF.

As highlighted by our Ornithology position statement (see Appendix G8), the Dogger Bank South developments are located in a hotspot area for foraging Kittiwake from FFC SPA, as well as other mobile species from designated sites. This is likely due to elevated prey availability. Therefore, minor changes to benthos extent and structure and marine processes have the potential to impact supporting habitat and thereby cause wider disruption to the ecosystem

Not only is the Dogger Bank SAC unique in the UK, it provides a substantial proportion of sandbank to achieve Designated Sites Network sufficiency requirements and is in unfavourable condition. The recent updates to the conservation advice package for the site indicates that long term plans and projects such as OWF industry (as well as cumulative impacts from the presence of other infrastructure and industries operating within) can not only lead to a long recovery period, but the presence of new infrastructure is hindering the conservation objectives of the site, preventing this site from recovering as set out in the conservation objectives. We highlight that this restore objective is not, as the Applicant has set out in [REP7- 128], to an unknown pre impacted state, but to one at the time of designation. However, it is recognised that the banning of bottom towed trawling will also restore the site to a more natural state.

#### 3. Applicants Approach

#### 3.1 Mitigation Hierarchy

Given the uniqueness of the Dogger Bank Sand Bank/SAC and its associated ecosystem services, we advise that it is unlikely that the strategic compensation through the designation and/or extension of Marine Protected Areas will provide fully like for like compensation. Therefore, we emphasise the importance of the Applicant implementing the mitigation hierarchy of avoid, reduce, mitigate, and exhausting all options to minimise the impacts to the designated site feature and aid recoverability. Therefore, we advise that more could/should be done to secure appropriate mitigation for these projects, rather than relying on compensation and having the flexibility to build out to the current maximum design scenario. Please see [REP5-02] and [REP6-073] where more detail is given.

We also highlight that whilst opportunities have been presented to the Applicant to refine their estimates on the potential impacts based on evidence they have submitted, they have elected not to. Natural England advises that where impacts are not mitigated and refined, it is to be expected that a higher degree of evidence is required to demonstrate that the impacts will not be significant and that a realistic worst-case scenario is provided. Further, where refinements have been presented, but not secured, they cannot be considered mitigation for assessment purposes.

#### 3.2 <u>Habitats Regulation Requirements</u>

For the avoidance of doubt and audit trail purposes, under the Habitats Regulations, the onus is on the Applicant to demonstrate that there will not be an Adverse Effect on Integrity (AEoI). It is not for Natural England to demonstrate that there will be one. There appears to be a misconception by the Applicant throughout their response(s) in this regard

#### 4. Cable protection within designated sites (Dogger Bank SAC)

Natural England remains concerned that the presence of cable protection measures on Dogger Bank sandbank (and within Dogger Bank SAC) could modify the hydrodynamic regime and affect sediment transport pathways contributing to the 'halo effect' (see Section 8 below). As previously advised in our Relevant Representations (B11, [RR-039]), further justification is needed for the volumes and extent of proposed external cable protection within Dogger Bank SAC.

As outlined in our Deadline 6 Submission (Appendix C6, [REP6-073]), we noted that in [REP5-040], the Applicant has stated that cable protection may be required within the array areas and inter-platform cable corridor where bedrock is exposed at the seabed. The known and expected locations where cable protection will be required have not been provided. Natural England acknowledges that the Applicant does not intend to update the Cable Burial Risk Assessment (CBRA) further within Examination timeframes. However, we consider that particularly within Designated Sites, cable protection requirements should be justified by evidence rather than arbitrary figures. We accept that conditions based on 10% of cable lengths being protected have been widely implemented. However, we advise that in each case it should be demonstrated that these requirements are necessary, especially where works are taking place in designated sites. And as highlighted above, due the uniqueness and ecological importance of Dogger Bank SAC, it is to be expected that the burden of evidence to demonstrate necessity is higher, as is the increased emphasis on avoiding, reducing and mitigating impacts wherever possible.

In addition, we highlight that the Applicant has already included provisions for sandwave levelling to ensure burial, and fisheries byelaws within Dogger Bank SAC significantly reduce risks to asset integrity. And with the potential to implement further mitigation, we do not believe that this is a realistic worst-case scenario and does not sufficiently manage down the environmental risks.

Natural England highlights that the Secretary of State, when determining the Application, will need to be satisfied that as part of the derogations case that the public interest tests have been satisfactorily met. Specifically, that all reasonable alternatives have been explored and implemented to reduce the environmental impacts. We advise that by not reducing the impacts and proposing to build out to the maximum 10%, which will be compensated for, when there are alternative options to reduce impacts, there is a risk of undermining their derogations case.

[R&I B3, C3]

#### 5. Cable protection outside of designated sites

#### 5.1 Export Cable Corridor (ECC)

As outlined in Natural England's Relevant Representations (B12, [RR-039]), we note that the WCS for remedial cable protection assumes 20% of the export cable route will require external protection outside of Dogger Bank SAC. With the exception of the nearshore (subtidal) part of the Offshore Export Cable Corridor (OECC), it is unclear where along the cable route this may be required. Natural England has previously advised that a realistic worst-case scenario on the locations for cable protection should be identified and that the rationale for this requirement should be provided. This is particularly relevant where there are designated sites and/or features of conservation importance which are reliant on marine processes, which could be disrupted by the presence of the cable protection. Please see the guidance provided in Natural England's Deadline 2 submission [REP2-066] regarding licensing requirements for cable protection (N.B. requirements with respect to designated sites is covered in Section 4).

We noted in our Risk and Issues Log [REP6-077] (Point B4) that the Applicant has updated the Cable Statement [REP6-044] with a figure showing indicative locations of protection along the ECC (outside of Dogger Bank SAC). This has been based on the 2024 Burial Assessment Study in [REP6-044], which they have highlighted is preliminary and indicative only. However, the WCS for external cable protection (20% of the cable route) outside Dogger Bank SAC has not been refined down based on this latest information. We therefore maintain our advice that the rationale for cable protection requirement is provided. [R&I B4]

#### 5.2 Cable protection in the nearshore

Natural England is concerned that the placement of cable protection in the nearshore could cause permanent disruption to nearshore and longshore sediment transport on the Holderness Coast, and impact features of the Holderness Inshore MCZ, the Humber Estuary SAC and Smithic Bank (please see our Relevant Representations (B2, B35, B50 [RR-039])). We highlighted in our Risk and Issues Log Deadline 6 [REP6-077] (Point B23), that the Applicant has carried out a more detailed assessment [REP5-040] of the potential impacts of nearshore cable protection on nearshore sediment transport processes and coastal morphology. However, it was not sufficient to address our concerns (see [REP6-072]). We advise that there remains uncertainty regarding potential impacts to the adjacent coastline, and therefore we remain unable to rule out an AEoI on the Humber Estuary SAC and maintain the view that hinderance of the conservation objectives of the Holderness Inshore MCZ cannot be excluded. Whilst the Applicant has provided a response to this [REP7-131], our position remains unchanged. In addition, contrary to the Applicant's assertions, modelling of nearshore sediment processes where impacts to designated sites are predicted is expected, and has been provided for North Falls, Five Estuaries and Outer Dowsing OWFs.

[R&I, B23, B28, B41]

#### 6. Cable protection deployment and replenishment (including DCO)

As stated in Natural England's Relevant Representations (A19, [RR-039]), our standard advice is that cable protection should only be deployed for a maximum period of 10 years from the commencement of operations, this is the maximum scope that we can support outside of designated sites. Within any designated sites for benthic features such as the Dogger Bank SAC, the DCO should stipulate that there should be no deployment of cable protection after the completion of construction [REP2-066]. We therefore advise a precautionary approach to cable protection within designated sites, whereby each campaign of cable protection would require a new marine licence along with a full assessment. This is due to our understanding of impacts, the habitat that is there and its evolving condition, as well as changes in law. Thus, where further cable protection is proposed within a designated site during the operational phase of a project, it should be assumed that there will be a likely significant effect due to lasting habitat loss from the cable protection and there would be a requirement for a further appropriate assessment [REP2-066].

We note, and as highlighted in Risk and Issues Log Deadline 7 [REP7-154] (Point A15), within The Examining Authority's Schedule of Recommended Amendments to the Applicant's draft DCO [PD-028], the ExA has recommended the following additions for cable protection:

- "(g) Cable protection replenishment outside European marine designated sites with benthic habitats as qualifying features for a maximum period of ten years post construction;
- (7) No cable protection can be replenished within European marine designated sites with benthic habitats as qualifying features unless otherwise agreed in writing by the MMO in consultation with the relevant statutory nature conservation body and the Maritime and Coastguard Agency.
- (8) The undertaker is not required to comply with sub-paragraph (7) in a case of emergency."

As noted in our response [REP7-151] to [PD-028], Natural England welcomes the inclusions at article (g). However, we advise that for (7), it should be stated that replenishment of cable protection, should be subject to a new separate Marine Licence.

[R&I, A15]

#### 7. Decommissioning

Natural England has previously highlighted concerns that there is currently no commitment to the removal of cable/scour protection at end of project life (decommissioning) (see our Relevant Representations (B3, B37, C43, [RR-039])). We highlight that in the Guidance Notes for Industry for the Decommissioning of Offshore Renewable Energy Installations under the Energy Act, 2004, it is expected that "all installations and structures will be fully removed at the end of their operational life to minimise residual liabilities and that approval of decommissioning programmes will be based on this assumption" in accordance with the assumptions set by the International Maritime Organisation in 1989 and in line with OSPAR requirements. Moreover, returning the seabed to its pre-development status will contribute to achieving Good Environmental Status of the wider marine environment as required by the UK's Marine Strategy, and as above is in line with OSPAR requirements. We have advised that the Applicant should commit to the removal of all structures on and above the seabed at the point of decommissioning, as has been conditioned on all previous OWF within Dogger Bank SAC, and consider the potential decommissioning of any proposed external cable/scour protection (including evidence on the likelihood of its success and impacts) should be factored into considerations at the time of deployment. Furthermore, the Applicant should consider and

assess the long-term impacts to the marine physical environment of any assets left in situ for the lifetime of the assets, ideally within an outline Decommissioning plan at the consenting phase, but no later that pre-construction.

As outlined in Appendix C2.1 of Natural England's Deadline 2 submission [REP2-065], we acknowledge that technologies and understanding might change by the time the Project reaches decommissioning. However, we do not consider this to be sufficient reason for not committing to decommissioning. We highlight that advances in technology and engineering methods could allow for complete removal of offshore windfarm infrastructure in the future. Furthermore, as stated in our Relevant Representations (B68, C59 [RR-039]), consideration should be given to minimising environmental impacts as much as possible through the choice of scour prevention/cable protection. Every effort should be made to avoid using those that are least likely to be recovered at the time of decommissioning. We refer the Applicant to Natural England's Scour and Cable Protection Decommissioning Study:

#### https://publications.naturalengland.org.uk/publication/5938793965420544.

Whilst we acknowledge that a conclusion of Adverse Effect on Integrity on Dogger Bank SAC has already been confirmed in the Plan Level HRA and that compensation will be provided for the habitat loss from cable and scour protection, the Defra guidance for marine compensatory measures is clear that the mitigation hierarchy must be applied to avoid and reduce impacts as much as possible, even if compensation measures are being implemented (Best practice guidance for developing compensatory measures in relation to Marine Protected Areas) (2021). This is further supported by 090224 OWEIP Consultation on updated policies to inform guidance for MPA assessments\_.pdf, which includes a step wise approach to avoiding, reducing and minimising impacts and the scale of compensation required.

We have noted in our Risk and Issues Log Deadline 7 [REP7-154] (Point B7) that the Applicant has committed [REP6-044] to consider removability of cable protection as parts of the development of the final Cable Statement and Decommissioning Programme to be produced for submission to the SoS pre-construction. Whilst this is welcome, it is not sufficient to resolve concerns regarding the lack of a full commitment to decommissioning. As previously advised (Risk and Issues Log Deadline 5 [REP5-061] (Point B7)), we continue to disagree with the Applicant's position regarding infrastructure decommissioning as we do not believe it is in the spirit of the Strategic Compensation Strategy or Marine Recovery Fund. In addition, there is no certainty that the Applicant will be able to use the MRF in the way they propose as the policy is not yet final. Therefore, we advise that they are planning at own risk until the MRF launches and the guidance is published. We are in discussions with DEFRA and DESNZ

benthic compensation and MRF teams (respectively) and we will provide further update accordingly.

#### 8. Sandwave clearance

Natural England is concerned that removal or modification of sandwaves could adversely affect nearby sandbanks, seabed topography, and affect flow and sediment transport patterns, with offshore levelling having potential impacts to Holderness Offshore MCZ and nearshore levelling having potential impacts to Holderness Inshore MCZ. Natural England accepts the Applicant's assessment that sediment deposition from sandwave clearance is predicted to be localised and the seabed recoverable within a year with respect to Suspended Sediment Concentrations (SSC). However, this is dependent on appropriate mitigation being secured and only relates to seabed and not recovery on Annex I sandbank features. We have previously discussed [REP5-054] mitigation measures to minimise impacts and confirm modelling predictions for sandwave levelling associated with sandbank systems, and for ease provide them below with the latest status.

#### 8.1 Depositing like sediment on like sediment

The Applicant has now committed to this in the Cable Statement [REP6-044] for both within and outside of Dogger Bank SAC which is welcomed. It has also been included in an updated Commitments Register (rev03) [REP7-102] under C192 whereby "Detail relating to sand wave levelling, deposition and sandbank recovery will be provided in the form of a plan provided as an Appendix to the Final Cable Statement(s) should sand wave levelling be required as part of the Projects Dredging will be minimised where possible. Dredged material will be disposed of on like sediments for both within and beyond the boundary of the Dogger Bank SAC."

### 8.2 <u>Use of a fall/down pipe (should a trailing suction hopper dredger be used) to minimise</u> <u>sediment dispersal</u>

We note that for Five Estuaries and Outer Dowsing (and other offshore consented OWFs) there is a commitment to use a downpipe to ensure that sediment can be deposited in a target location adjacent to, but upstream of the sandbank (both Annex I and Feature of Conservation Importance FCI), and within similar sediment type. This is to ensure the greatest likelihood of feature recovery including both structure and function. Therefore, there is an expectation that this is deliverable for all projects.

The Applicant maintains their position [REP7-131] on not committing to depositing sediment updrift of dredging locations and that it is not technically feasible to use a fall pipe for deposition. Therefore, this is an alternative best practice approach not committed to by the Applicant.

8.3 An outline sandwave 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

The Cable Statement [REP6-044] states that "Further detail relating to sand wave levelling, deposition and sandbank recovery will be provided in the final Cable Statement(s)". We consider this should be updated to explicitly include provision of a plan should sandwave levelling be needed. We note that the In Principle Monitoring Plan (IPMP) (rev05) [REP7-116] has been updated with "The results of the pre-construction survey will be combined with existing survey data and other relevant information to define a pre-construction baseline of sediment transport regimes considering morphodynamic processes, seabed sediment composition and thickness, seabed mobility, and wave and tide regime". However, we are unclear as to whether this would constitute a detailed sand wave characterisation study which would help with testing hypotheses within the IPMP. As previously advised in our Risk and Issues Log Deadline 7 [REP7-154] (Point B17) that the provision of a sandwave characterisation study should be explicitly included in the IPMP and secured in the DCO.

#### 9. Habitat loss

#### 9.1 Halo effect

As outlined in our Relevant Representations (C18, [RR-039]) Natural England is concerned about the likely cumulation of benthic 'ecological halo effect' which can be expected following the placement of structures on the seabed. Owing to localised changes in biological communities colonising hard structures, combined with the changes to the physical processes which are expected, the physical structure and function, and subsequent biological structure and function of the benthos can be expected to be altered over an area multiple times that of the original infrastructure footprint.

The Applicant presented an assessment of ecological halo effects [REP5-041] upon which we provided further recommendations for refinement of the worst-case area of habitat loss [REP6-073]. The Applicant has followed up with a submission of '15.7 Appendix E - Ecological Halo

Effects Technical Note (Revision 2)' [REP7-128] which has incorporated our recommendations on such refinement.

Whilst the Applicant and Natural England do not agree on the significance of any potential 'ecological halo effect', we welcome the Applicant's updated habitat loss estimates for halo effects applying a 50m buffer in full. Whilst we stand by the advised 50m buffer for halo effects surrounding turbine foundations and scour, we acknowledge that halo effects around cable protection are likely to be lower and agree with the Applicant's concerns that 50m is likely over-precautionary. On that basis, we'd be happy to consider an alternative buffer for cable protection proposed by the Applicant.

[R&I, C8, C13]

#### 9.2 Seabed recovery

As stated in our Relevant Representations (C21, C31, [RR-039]), Natural England considers that loss of benthic habitat as a result of UXO clearance, particularly within Dogger Bank SAC, should be added to the worst-case calculation for the EIA and RIAA, whether it be temporary or otherwise. We further advised that if depressions are created from UXO clearance or jack-up operations in areas of coarse or mixed sediments, the area may need to be considered as permanent habitat change/loss unless it can be otherwise evidenced that they will backfill with similar sediment types. Our advice in relation to the potential for an AEoI on Dogger Bank SAC resulting from disturbance/damage to Annex I Sandbanks from cable installation remains unchanged. Please see Appendix C2.1 of Natural England's Deadline 2 submission [REP2-065] for further detail. We note the Applicant has submitted RIAA HRA Part 2 of 4 Annex I Offshore Habitats and Annex II Migratory Fish (Revision 5) [REP7-017] on a without prejudice basis to include depressions from UXO clearance and jack-up operations as permanent habitat loss, which we welcome.

[R&I, C11]