THE PLANNING ACT 2008

THE INFRASTRUCTURE PLANNING (EXAMINATION PROCEDURE) RULES 2010

Dogger Bank South Offshore Wind Farm

Appendix E8 to the Natural England Deadline 8 Submission
Natural England's comments and updated advice on Fish and Shellfish

For:

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

Planning Inspectorate Reference EN010125

4th July 2025

Appendix E7 – Natural England's Advice on Fish and Shellfish at Deadline 7

In formulating these comments, the following documents submitted by the Applicant have been considered in relation to the impacts of Dogger Bank South (East and West) Offshore Wind Farm (DBS) on Fish and Shellfish:

- [REP6-050] 14.8 Effects on Prey Species Technical Note (Revision 2) (Tracked)
- [REP6-052] 15.3 The Applicants' Responses to Deadline 5 Documents
- [REP7-135] 17.8 'Without Prejudice' Herring Spawning Plan
- [REP7-011] 3.1 Draft Development Consent Order (Revision 10)
- [REP7-017] 6.1 RIAA HRA Part 2 of 4 – Annex I Offshore Habitats and Annex II Migratory Fish (Revision 5) (Tracked)
- [REP7-043] 7.10 ES Chapter 10 - Fish and Shellfish Ecology (Revision 2) (Tracked)
- [REP7-044] 7.10.1 ES Chapter 10 - Fish and Shellfish Ecology Figure 10-1 to Figure 10-10 (Revision 2).pdf
- [REP7-126] 14.9 Illustrative Noise Reduction Technical Note (Revision 3) (Tracked).pdf

1. Indirect effects

Natural England have previously provided detailed advice on the indirect effects assessment and impacts to sandeel in [REP3-057], [REP5-056], [REP7-152]. We have not repeated this advice within this document, but have referenced it within the text so it can be read alongside as needed.

Natural England provided our final conclusions with respect to indirect impacts on designated predator species through impacts on prey species in our response to the RIES [REP7-152]. With respect to harbour porpoise, were an AEoI to be concluded for SNS SAC harbour porpoise overall, we would have considered that indirect impacts to prey species would likely be having a contributing effect. However, with the securing of additional mitigation for underwater noise impacts, we do not consider the risk to harbour porpoise from indirect impacts on prey species is sufficient to drive an AEoI conclusion for SNS SAS harbour porpoise alone. For ornithology receptors, Natural England consider that for those features where AEoI cannot be ruled out (kittiwake, guillemot and razorbill at FFC SPA), this impact pathway will, without resulting in an AEoI in its own right, intensify the effects on those species.

Whilst Natural England would have welcomed a more robust assessment by the Applicant, we acknowledge any such assessment would carry a high degree of uncertainty and consider

that provision of such an assessment at this stage would be unlikely to materially affect our conclusions.

1.1 Updated sandeel mapping

In the updated Effects on Prey Species Technical Note [REP6-050], Figures 7-1 to 7-4 present the same data sets provided in the Heat Mapping Report Atlantic Herring and Sandeel [AS-105], however the following text has not been carried over: *'it can be assumed that the heat scores of <0.08 are indicative of 'high-higher' potential* [sandeel] *supporting habitat at a regional scale'*. We consider this to provide important context when interpreting the figures. We also note the confidence scoring system is different to that presented in previous assessments, and therefore alters the references outlined in the RIAA HRA Part 2 of 4 – Annex I Offshore Habitats and Annex II Migratory Fish [REP4-015].

1.2 Ornithology prey availability

Natural England note the Applicant's argument that *'where birds are subject to displacement effects (such as razorbill, guillemot and potentially gannet), 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 birds are already displaced from the Array Areas so effects on prey within these locations have no additional effect)'.* Natural England do not disagree with this and consider that is supports impacts to/access to prey as a valid likely significant effect (LSE) pathway contributing to AEoI conclusions.

Where predators are not subject to displacement, the Applicant considers the following: *"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"*. However, this does not take into account the long term operational impacts from loss of spawning habitat, which may have implications over a wider area beyond where predators are directly excluded.

We also note that the Applicant has highlighted that climate change and fisheries have been identified as the main drivers of impacts on sandeel/prey rather than offshore wind farms (OWF). Natural England do not dispute this, however not being a dominant driver of impacts does not mean that an OWF is not having an impact, particularly when it is located in an area known to be important for sandeel.

1.3 Habitat loss in the fish study area

Whilst we welcome the Applicant's additional calculation of habitat loss resulting from ecological halo effects, UXO clearance and jack-up operations provided in the Updated RIAA HRA Part 2 of 4 [REP7-017], Natural England maintain our previous advice [REP5-056] that it would be beneficial for updated estimates to be provided including potential sandeel habitat loss from both existing and proposed developments (e.g. aggregates, oil and gas, cables and pipelines) occurring within the foraging ranges of affected designated predator species, or within Dogger Bank SAC and Southern North Sea SAC as a minimum. Whilst the Applicant lists potential developments to screen in for the final cumulative effects assessment (CEA) in ES Chapter 10 [REP7-043], they are not taken through to the screened in developments for further assessments due to operational projects (Tier 1 schemes) being considered part of the baseline for the CEA methodology. Whilst we acknowledge that this is usually the case, we highlight that this does not align with the approach taken by the Applicant to cumulative impacts caused by other offshore wind farms in Dogger Bank SAC and SNS SAC in 6.1.2 Appendix B - Sandeel Habitat Potential in the Dogger Bank SAC and Southern North Sea SAC [APP-050].

In addition, the Applicant has repeatedly stated that suitable sandeel (and herring) habitat and foraging areas are available elsewhere, for example "*the potential area of habitat affected within the sites* [Dogger Bank SAC] *is a small fraction of the available habitat. The habitat within the designated sites is not unique in its potential to support sandeel, with areas of similar potential surrounding the sites"* [REP6-050]. Whilst the area of habitat affected might be a small percentage of the SAC, the SAC cannot be considered to be uniformly important to sandeel or to foraging birds. This is evidenced in the Applicant's mapping (Figure 7-1, [REP6-050]), in vessel fishing data [AS-105], in tracking data from FFC SPA and the predator impact values of these projects (see Appendix G8 of our Deadline 8 submission) which show that the Western edge, and the Dogger Bank South location specifically, is more important than elsewhere in the SAC. The Applicant's position also does not account for loss that may have occurred in these areas due to existing industry (e.g. existing Dogger Bank OWFs present in high-very high potential habitat to the north (Figure 7-1, [REP6-050])). We therefore consider that the provision of the requested wider habitat loss information would have provided important additional context to the Applicant's positions. However, we acknowledge that at this late stage in the Examination, the provision of this information would not materially affect our conclusions.

2. Heat Impacts on sandeel

In response to Natural England's advice on heat impacts on sandeel [REP5-056], the Applicant has cited research (Emeana *et al*., 2016, [REP6-052]) that suggests that heat transfer from high voltage cables can occur to distances of 40 cm – 1 m depending on the sediment type, with sediment temperature increases of >10 °C possible. Given that sandeel are a burrowing species and the target cable burial depth for inter-array cables is 0.5-1.5 m, we consider that overlap between cable heat transfer and habitat utilised by sandeel cannot be ruled out. We highlight that the inter-array cables will be High Voltage Alternating Current, which are known to be less efficient (i.e. emit more heat). Natural England therefore maintain our previous advice that monitoring to validate the thermal radius of heat transfer from inter-array cables buried in high potential sandeel habitat is secured in the In-Principle Monitoring Plan and/or DCO/dML.

3. Herring mitigation

The Applicant has provided clarification in their Response to Deadline 6 Documents [REP7-131], that the modelling presented in the Illustrative Underwater Noise Reduction Technical Note [REP7-126] to demonstrate impacts with a 10 dB reduction in underwater noise applied, used frequency bands applicable to fish receptors as well as marine mammals. We advise this same approach should be taken for any post-consent modelling provided in support of the DCO conditions discussed below.

Natural England welcomes the Applicant's inclusion of a condition in the DCO [REP7-011] to restrict export cable preparatory and installation works within the area of highest potential herring spawning habitat (depicted in [REP7-135]) during the herring spawning season. We also welcome the piling restriction condition included in the DCO [REP7-011] and are supportive of the need for a restriction being implemented being determined post-consent, once there is a better understanding of the final design parameters and mitigation to be applied. We acknowledge that the piling restriction condition has been provided on a without prejudice basis, however Natural England advise that this should be secured in the DCO.

Combined with the updated DCO [REP7-011] condition to secure additional primary and/or secondary mitigation for underwater noise impacts, we consider that were all of these conditions secured in the consented DCO, the predicted impacts to herring would be significantly reduced.

To note – we believe there may be an error in the restriction boundary line presented in the Herring Spawning Plan [REP7-135] where it does not align with the underlying marginal substrates boundary (Figure 1).

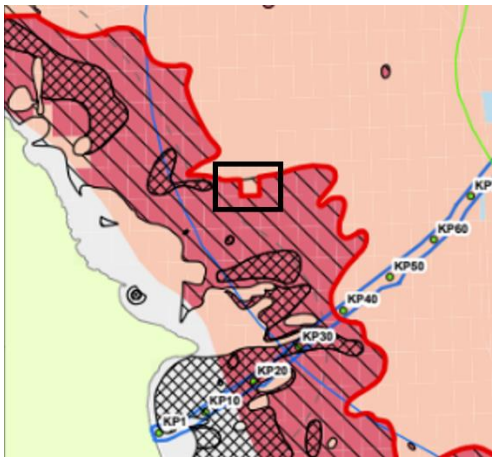

Figure 1: Section of Figure 17.8 taken from the Applicant's Herring Spawning Plan [REP7-135]. The black rectangle has been added by Natural England to highlight where the restriction boundary (red line) does not align with the underlying substrate boundary (black line).