



THE PLANNING ACT 2008

THE INFRASTRUCTURE PLANNING (EXAMINATION PROCEDURE) RULES
2010

Dogger Bank South Offshore Wind Farm

Appendix E6 to the Natural England Deadline 6 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

13th June 2025

Appendix E6 – Natural England’s Advice on Fish and Shellfish at Deadline 6

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:

- [REP5-033] 14.9 Illustrative Underwater Noise Reduction Technical Note (Revision 2) (Tracked)
- [REP5-042] 15.8 Modelling of underwater noise associated with alternative piling locations to inform potential impacts on Atlantic herring spawning grounds.pdf
- [REP5-037] 15.3 The Applicants’ Responses to Deadline 4 Documents
- [APP-091] 7.10 ES Chapter 10- Fish and Shellfish

Our detailed comments on documents submitted by the Applicant in relation to Fish and Shellfish as listed above are provided below.

1. Modelling of underwater noise associated with alternative piling locations to inform potential impacts on Atlantic herring spawning grounds.

Natural England welcome the Applicant’s provision of the updated modelling in [REP5-042]. This modelling demonstrates that, should concurrent piling occur across the two arrays in the southwest corner of the DBS West array and the south location of DBS East, the area of overlap between underwater noise impacts and high potential herring spawning habitat would be approximately double that when using the locations assessed in the original worst-case scenario (WCS; increasing from 14.38% to 30.41%, using the 135 dB contour). The impacts also encompass a larger area of preferred substrates, both closer to the coastline and to the north of the arrays within the 135 dB behaviour contour. With the 135 dB contour moving 10-20 km south, this also brings it into closer proximity of the seabird colony at Flamborough and Filey Coast Special Protection Area.

We also welcome that the Applicant has included the outputs with a 10 dB reduction applied as a result of underwater noise mitigation. This greatly reduces the area of overlap with high-moderate potential spawning habitat and eliminates the overlap with very high potential herring spawning habitat. However, Natural England’s Deadline 5 advice [REF5-056] remains that whilst the illustration of the 10 dB reduction is welcomed, until the Applicant commits to delivering this reduction through the application of primary and/or secondary mitigation, we cannot currently deem the impacts on fish to be resolved.

Natural England have discussed the results with respect to the WCS for the arrays in-isolation and in-combination below, and advise that the Environmental Statement assessment for herring should be updated to reflect the revised piling locations. Acknowledging the limited time remaining in Examination, we would welcome discussion with the Applicant on what is practicable.

- Worst Case Scenario: Arrays together

Based on the results presented, Natural England disagrees with the Applicant's view that this '*does not represent a change in the worst-case scenario*'. We acknowledge that the WCS originally assessed was selected to maximise the spatial extent over which underwater noise could impact fish receptors as defined in Popper et al, (2014). However, we consider this report demonstrates a more appropriate WCS of the impacts of the arrays in-combination on herring specifically. As noted by the Applicant, "*it is reasonable to expect that these areas [spawning habitat] coincide with an increased population of adult Atlantic herring during the spawning period. It would be these increased populations of adult fish that would, therefore, be potentially susceptible to impacts from underwater noise*". This would also be in-keeping with Natural England's advice for consideration to be given to population specific impacts with respect to indirect effects [REF5-056].

- Worst Case Scenario: Arrays in-isolation

The Applicant has acknowledged that modelling two monopile locations within a single array area would represent the realistic WCS for the in-isolation build out scenario, however one monopile was modelled in each array as they considered it would be more precautionary by maximising the spatial extent of impacts [REP5-033]. Natural England raised concerns about this approach in our Relevant Representations [RR-039] and advised that a WCS should be provided for each build-out scenario; for underwater noise and vibration impacts this would be two simultaneous monopile piling events in the DBS West array area. Whilst this advice was originally provided in the context of sandeel, the Applicant's inclusion of the previously modelled DBS West west location alongside the DBS West south-west location in Figures 2.1 and 2.3 of the updated modelling [REP5-042] has provided a visual representation of this WCS for herring. The figures demonstrate that under this WCS, there would be a greater overlap of the 135 dB contour with high-moderate suitability herring spawning habitat than the current WCS of one monopile in each array.

2. Illustrative Underwater Noise Reduction Technical Note

Natural England welcomes the Applicant's update of the Illustrative Underwater Noise Reduction Technical Note [REP5-033]. However, we note that the modelling data presented in Appendix A does not include values for the 135 dB behaviour thresholds for mitigated or unmitigated piling. We request that this is provided.

Appendix A of this document outlines that the 10 dB reduction was proposed following evidence of how Noise Abatement Systems (NAS) can reduce the impacts to the most sensitive frequency bands for marine mammals (250Hz and above). However, the Applicant does not currently provide evidence as to how NAS impacts the frequency sensitivity bands for fish species, particularly herring. Natural England highlight that Popper & Hawkins (2018)¹, suggest that herring are in the group of species which are '*primarily sensitive to sound pressure but can also detect particle motion and have a wider frequency range*'. We therefore advise the Applicant to include clarification on why the 10db reduction at this frequency band was selected for fish species, particularly herring.

¹ Popper AN, Hawkins AD.(2018). An overview of fish bioacoustics and the impacts of anthropogenic sounds on fishes. J Fish Biol 2019;94:692– 713. <https://doi.org/10.1111/jfb.13948>