



THE PLANNING ACT 2008
THE INFRASTRUCTURE PLANNING (EXAMINATION PROCEDURE)
RULES 2010

HORNSEA PROJECT THREE OFFSHORE WIND FARM

Planning Inspectorate Reference: EN10080

**Annex D1: Natural England advice on The Wash and North Norfolk
Coast SAC Clarification Note**

7 November 2018

1. Introduction

- 1.1. Natural England received an additional document from the Applicant on 4th October 2018, titled: The Wash and North Norfolk Coast SAC Clarification Note – Baseline and impacts of cable installation. This Annex presents Natural England's general and detailed comments on the document.

2. Additional survey data

- 2.1. Throughout the documents received to date the words baseline and characterisation are used interchangeably and wrongly.
- 2.2. In the application, subsequent documents and clarification notes the Applicant states that:

'The desktop data indicated that the sediment types were broadly similar across the area with sandy sediments inshore grading into coarse/mixed sediments further offshore within The Wash and North Norfolk Coast SAC. The consistency of this pattern across datasets and over a long time series, provided confidence in the extrapolation of biotopes into areas where there had been no site-specific sampling and confidence in the sufficiency of this information for the purposes of the Environmental Impact Assessment.'
- 2.3. However, Natural England's view is that insufficient data is presented in the EIA to confidently make those statements. The data the Applicant is using was not ground truthed following the indication of underlying geophysical.
- 2.4. Figure 2.1 in the document shows where their new Drop Down Video (DDV) sampling was carried out. There are 5 stations along the SS.SBR.PoR predicted habitat area, this seems an appropriate number of stations to ground truth geophysical data.
- 2.5. However, as far as Natural England is aware there is still no geophysical data to underpin this. This undermines the extrapolation between even these cruciform stations. Whilst this may be acceptable for characterisation, it does not address any uncertainty about the ability to bury the cables. As previously advised the undertaking of a pre-construction survey will be needed to form a baseline from which changes to geophysical and biology can be monitored.
- 2.6. Geo-tech information to assist in understanding if the cable can be installed as stated in the ES would be required before any conclusions regarding the impacts on the designated site and its features could be drawn.
- 2.7. Regarding the reef assessment, from the information provided Natural England would agree this does not constitute stony reef, as it lacks elevation. However, it does represent coarse sediment characterised by interesting epifauna and some slightly longer-lived species as you would expect to find in more stable sediment conditions.
- 2.8. It should also be recognised that these sub-features are still part of the Annex I sandbank features of the site. We advise that the most recent survey does not enable an appropriate best practice 'reef assessment' to be undertaken. This is contrary to Irving (2009) in which it is said *'...when conducting an offshore survey, it was important to conduct a geo-physical survey first and then hone in on the most interesting bits to assess the biology.'*
- 2.9. Similar DDV returns have been provided at other locations in The Wash & North Norfolk Coast (W&NNC) SAC, in which burying the cable to the optimum depth has proven to be challenging. Consequently, there needs to be better geotechnical information and hydrodynamic modelling presented to demonstrate that cable burial is achievable within this designated site and that there will be recoverability.

3. Physical recovery of seabed topography

- 3.1. As with the other documents provided, Natural England's view is that the reasoning is not unsound, but that it could have been evidenced further. Overall we believe that it is likely that the sediments will recover from cable installation, assuming that the sediments are as indicated and that no protection/ sand wave clearance occurs. It should be recognised that in coarser sediment areas scarring will remain, but if the benthos recovers (which is likely if the sediment composition remains unchanged) we believe that it is unlikely to impact the conservation objective for the site.

4. Detailed comments

Point	Section in the note	Natural England's comments
4.1.	2.12	Please see comment on the Habitats Regulations Assessment (HRA). Natural England doesn't agree that the impacts to The W&NNC SAC will be long term temporary if cable protection is installed and not removed at the time of decommissioning.
4.2.	2.13	Natural England notes that there is not differentiation between the ecology of nearshore more stable sandbanks and those more mobile offshore sandbanks in the site. It should be noted that all of the features within the W&NNC SAC are protected not just Annex I reef habitats.
4.3.	2.14	Natural England advises that any impacts are assessed against the interest features of the site and not the whole site. Again please see our comments on the HRA and Cable protection clarification not in relation to the use the use of 'sensitive cable protection'.
4.4.	2.16	Natural England advises that the 2018 survey was not based on any geophysical survey data and therefore we still have uncertainty about the extent of any reef features that may be found in the area and the ability to bury the cables.
4.5.	2.18	It would be useful if all of the data collected could be presented to gain a better understanding of the habitats.
4.6.	Figure 2.1	Please note that the extrapolation distance in between 4 km and 5 km.
4.7.	2.19	Natural England is uncertain how the elevation was assessed and would like this to be clarified. See comment 4.8.
4.8.	Table 2.1	Natural England notes that there is a degree of uncertainty in the parameters used for the reefiness assessment e.g. 'rough estimate'. Also Side Scan Sonar is often required to determine the extent of any habitat, which we do not have.
4.9.	Table 2.3	Location 1-3 are characteristic of more stable sediments and have been found elsewhere within the site. These areas have less

		sediment transport and mobility and have correlated with sub-optimally buried cables.
4.10.	3.2	Natural England disagrees that there will be temporary habitat loss if cable protection is placed in these locations, due to uncertainty around the ability to decommission cable protection once in situ.
4.11.	3.3 and 3.8	Please note that Natural England has concerns in relation to the placement of HDD exit pits within designated sites due to the requirement for cofferdams and significant structural change in the sediments in those areas.
4.12.	3.6	Whilst it is discussed that mobile sediments are more likely to infill quickly in the nearshore at Hornsea Project Three HDD exit pits than at Barrow or Lynn Inner Dowsing due to higher wave energy, there is no evidence to support this. This is not evidence but Natural England that better evidence could be provided by giving figures from the different sites to demonstrate that wave energy is higher and sediments are more mobile.
4.13.	3.7	Natural England agrees that if trenches and jack up footprints infill with sediment of similar enough type to original then benthic fauna will recover. Please note that within aggregates Marine Licenses, for works in similar areas, a standard condition is applied that the sediment backfilling needs to be within 95% similarity in terms of PSA.
4.14.	3.8	The Applicant refers to supporting habitats of The W&NNC SAC, but these are in fact the habitats/ features for which it is designated. It would be much easier to make an assessment and cross-reference if the documents/assessments cross-reference the information they have with the information in the advice on operations in Natural England conservation advice packages. In the advice on ops sensitivity assessments there are various biotopes associated with each sub feature – mixed sediment, subtidal sand etc. If the information provided (i.e. NcirBat, MoeVen2 and SspiMx3 biotopes) is cross referenced as to which sub feature this relates to and whether they agree that the same biotopes or different ones are present (because they have more data) then this would help to inform a sensitivity assessment.
4.15.	3.9	Whilst Natural England agree that sandy sediments are likely to recover from cable installation (assuming no cable protection and sandwave clearance) we disagree about the mobility of the sediment at survey locations 1-3 and therefore the statements in relation to recoverability.
4.16.	3.12	It should be noted that the data collected for Sheringham Shoal and Dudgeon are outside of the designated sites.
4.17.	3.15	Natural England queries if there has been any ground truthing of the geophysical data along the Sheringham Shoal and Dudgeon export cables i.e. DDV, grabs, Particle Size Analysis (PSA) etc. Whilst it is useful to have reviewed the geophysical and profiles from Sheringham Shoal and Dudgeon cables – it would have been good to mark cable trench location on the profile plots for clarity. The fact that scars from cable installation can still be seen seven

		and two years later implies that the environment is not very dynamic, but in terms of functioning, if the sediments in the trenches are similar, then there should not be a change in benthic fauna.
4.18.	3.17	It is unclear whether there has been rapid recovery in one year or the impacts were just less in this area? Sand ripples in the picture indicate there is some sediment mobility in the area.
4.19.	3.21, 3.25 and 3.28	Please note that the size and scale of the works referenced are different to those being proposed. Therefore some precaution is required when extrapolating between offshore and near shore and even within sites especially along long export cable routes where environmental conditions may change.