

Hornsea Project Three
Offshore Wind Farm



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Appendix 22 to Deadline 9 submission -
Hornsea Three Proposals to Support Achievement of SAC
Conservation Objectives

Date: March 2019

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Front cover picture: Kite surfer near a UK offshore wind farm © Ørsted Hornsea Project Three (UK) Ltd., 2019.

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1. Introduction

- 1.1 This document outlines four proposals by the Applicant relating to the North Norfolk Sandbanks and Saturn Reef SAC and The Wash and North Norfolk Coast SAC. The objectives of these proposals are to improve the knowledge in relation to the existing site condition for these SACs by enhancing the evidence base for features within the designated sites. The overall aim of these proposals is to aid JNCC, Natural England and the Eastern IFCA in the achievement of conservation objectives for the SACs.
- 1.2 In particular, the proposals have been developed with consideration of the Supplementary Advice on Conservation Objectives for the North Norfolk Sandbanks and Saturn Reef SAC (JNCC, 2017) which states: *“Our confidence in this [restore] objective would be improved with longer-term monitoring and access to better information on the activities taking place within the site.”* The projects outlined here will provide valuable data to support the achievement of conservation objectives.
- 1.3 For the avoidance of doubt, these proposals have been made by the Applicant without prejudice to the Applicant’s position that the maximum design scenario for Hornsea Three (when considered alone or in combination with other plans or projects) would not give rise to an adverse effect on the integrity of either the North Norfolk Sandbanks and Saturn Reef SAC or The Wash and North Norfolk Coast SAC.
- 1.4 To be clear, the proposals in this paper are considered beneficial to facilitate a more precise and holistic understanding of the condition of the protected features of these sites and the implications of, and therefore the best approach to managing, the various pressures from existing infrastructure and activities within these sites. While it is considered by the Applicant that this would help contextualise the impacts of Hornsea Three (e.g. it may show the sites are in better condition and/or less vulnerable / sensitive than assumed in the absence of such information) and may demonstrate certain impacts would be less than predicted (e.g. by demonstrating improved decommissioning techniques), these proposals are not considered by the Applicant to be necessary for the Secretary of State to reach a positive conclusion with the required degree of certainty in regard to the impacts of Hornsea Three on the features of these sites for HRA (or EIA) purposes and - owing to the highly precautionary nature of the RIAA – the findings would not alter any conclusions (i.e. impacts would be no worse than predicted).

2. Proposals to aid the achievement of conservation objectives

Wash and North Norfolk Coast SAC: Investigating the effectiveness of fisheries closures on subtidal mixed sediments and subtidal coarse sediments on the North Norfolk Coast.

- 2.1 The Applicant understands that the Eastern IFCA are working with Defra to put in place a fisheries closure within the Wash and North Norfolk Coast SAC to reduce pressure and help to restore to favourable condition the subtidal mixed sediments and subtidal coarse sediments sub-features of the Annex I sandbanks feature of this SAC. An existing fishery closure already exists along the eastern boundary of the SAC, extending into the Cromer Shoal Chalk Beds MCZ.

2.2 The Applicant understands that a Monitoring and Control Plan for the proposed shrimp beam trawling closure in the east of the Wash and North Norfolk Coast SAC is being produced by the Eastern IFCA, although this has yet to be drafted. The Applicant proposes a collaborative project with the Eastern IFCA to investigate the effectiveness of the closure and help meet the relevant targets and attributes for the relevant sub-features (i.e. maintain the species composition of component communities, maintain the presence and spatial distribution of component communities). This proposal may include:

- Working with the Eastern IFCA to develop the Monitoring and Control Plan;
- Sampling of biological communities (e.g. by sediment sampling and seabed imagery) within the proposed closure(s) on the North Norfolk Coast;
- Analysis of sample data (e.g. PSA, benthic infaunal datasets, seabed imagery and video footage) to monitor component communities of the subtidal mixed sediments and subtidal coarse sediment subfeatures.
- Working with Eastern IFCA to analyse data and report on the effectiveness of the closure and therefore condition of sub-features of the Annex I Sandbanks feature.

North Norfolk Sandbanks and Saturn Reef SAC: Study on the implications of existing infrastructure on Annex I features

2.3 A recent JNCC study (Pidduck et al., 2017) was commissioned to generate an improved understanding of the impacts of rock placement from oil and gas decommissioning on the Annex I sandbank features of the NNSSR SAC. The work aimed to provide an evidence base to support management advice and identify evidence gaps and areas of future work. This study identified a key limitation being access to evidence in the public domain and long term monitoring data. This is in line with the NNSSR SAC Supplementary Advice on Conservation Objectives (SAC), which states that “confidence in this objective [i.e. restore] would be improved with longer term monitoring and access to better information on the activities taking place within the site.”

2.4 The Applicant proposes to develop a collaborative project with JNCC to further understand what effect existing infrastructure is having on the NNSSR SAC. Such a study may include:

- Liaising with offshore operators (i.e. oil and gas operators) to gather information on what infrastructure is present within the site;
- Focussing on scour protection and pipeline protection measures (e.g. concrete mattresses and rock placement), determine locations, approximate volumes etc. within the SAC.
- Once a more accurate inventory has been gathered of the amount of infrastructure within the SAC, develop a scope for further study and monitoring (as proposed by Pidduck *et al.*, 2017) to collect further evidence on the effects of such infrastructure on physical and biological attributes of the Annex I features of the SAC, with a view to informing more detailed condition assessments in the future.
- Depending on the outputs of the workstreams above, The Applicant's considerable engineering experience and knowledge of historic and currently used technologies could also be drawn upon, e.g. to gain a better understanding of the type and nature of the infrastructure within the SAC, potential opportunities for future remediation, or consideration of alternatives etc.

North Norfolk Sandbanks and Saturn Reef SAC: Monitoring the extent and condition of *Sabellaria spinulosa* reef habitats

- 2.5 The Applicant understands that there are limited datasets for *Sabellaria spinulosa* reef within the North Norfolk Sandbanks and Saturn Reef SAC to provide high confidence mapping of Annex I reefs within this SAC.
- 2.6 The Applicant proposes a collaborative project with JNCC and Natural England to determine the extents and condition of Annex I *S. spinulosa* reefs in the north west section of the SAC, i.e. the area where Saturn Reef was originally recorded. This proposal would include:
- Bathymetry and sidescan sonar surveys within this part of the SAC.
 - Seabed imagery sampling of historic reef locations and any further potential reefs identified by geophysical datasets to determine the quality of reef habitats;
 - Repeated surveys to provide a time series of the extents and conditions of Annex I reef habitats over time (precise number of surveys to be discussed with Natural England/JNCC);
 - Working with JNCC to analyse and report data in a manner appropriate for condition assessments for the SAC.
- 2.7 The Applicant feel that such a project would be beneficial to JNCC as it would provide a better understanding of the extent and condition of reef features in this part of the SAC and would inform accurate and up to date condition assessments, giving greater confidence in conservation objectives of the SAC.

Decommissioning of rock protection – demonstrating effectiveness and improving efficiency

- 2.8 Recently, offshore wind farm developments have made commitments to decommission all offshore wind farm infrastructure, including scour and cable protection (e.g. Dogger Bank offshore wind farm projects), to ensure no permanent impacts to designated features of SACs.
- 2.9 The Applicant propose a collaborative project with the MMO and Natural England to validate the effectiveness of decommissioning of rock protection for environments with a high degree of similarity to the NNSSR SAC and WNNC SAC and to improve efficiency of the techniques currently available. This may involve:
- A desktop study, including liaison with offshore construction contractors, to identify all viable solutions for decommissioning rock protection (i.e. not necessarily limited to just those outlined in REP6-018) and outline the various benefits and limitations of each method;
 - Develop a short list of methods which could be tested in the field;
 - Field testing of short listed methods, including:
 - Placement of rock protection at an appropriate offshore location to be discussed and agreed with MMO and nature conservation bodies (including application for the necessary marine licence for all proposed activities).
 - Removal of rock protection using the short listed methodologies;
 - Comparison of volumes of material placed with volumes recovered to demonstrate effectiveness of rock removal;
 - Monitoring (bathymetry and seabed imagery) to determine impact to seabed and recovery rates.
 - Reporting of field testing, updating benefits and limitations for each methodology and recommendations for improvements (e.g. increased efficiency of rock removal, minimising impacts on seabed).