



Hornsea Project Four

Statement of Common Ground between Hornsea Project Four and NATS (En Route) plc (NATS)

Deadline: 1, Date: 08 March 2022

Document Reference: G1.31

Revision: 01

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G1.31
Revision 01

Revision History

Date	Revision	Reason for issue
08 March 2022	01	First draft for review.
	02	
	03	

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Glossary

Term	Definition
Development Consent Order (DCO)	An order made under the Planning Act 2008 granting development consent for one or more Nationally Significant Infrastructure Projects (NSIP).
Hornsea Project Four Offshore Wind Farm	The term covers all elements of the project (i.e. both the offshore and onshore). Hornsea Four infrastructure will include offshore generating stations (wind turbines), electrical export cables to landfall, and connection to the electricity transmission network. Hereafter referred to as Hornsea Four.

Acronyms

Acronym	Definition
DMLs	Deemed Marine Licences
DCO	Development Consent Order
EIA	Environmental Impact Assessment
ES	Environmental Statement
HVAC	High Voltage Alternating Current
HVDC	High Voltage Direct Current
LSE	Likely Significant Effect
MHWS	Mean High Water Springs
MLWS	Mean Low Water Springs
PEIR	Preliminary Environmental Information Report
SoCG	Statement of Common Ground

1 Introduction

1.1 Reason for this document

- 1.1.1.1 This Statement of Common Ground (SoCG) has been prepared between Orsted Hornsea Project Four Limited ('the Applicant') and NATS (En Route) plc ('NATS') to set out the areas of agreement and disagreement between the two parties in relation to the Development Consent Order (DCO) application for the Hornsea Project Four offshore wind farm (hereafter referred to as 'Hornsea Four').
- 1.1.1.2 This SoCG covers all topics of relevance and interest to NATS in the marine environment seaward of Mean High Water Springs (MHWS).
- 1.1.1.3 The need for a SoCG between the Applicant and NATS is set out within the Rule 6 letter issued by the Planning Inspectorate (PINS) on 24 January 2022.
- 1.1.1.4 It is the intention that this document will facilitate further discussions between the Applicant and NATS and will provide the Examining Authority (ExA) with a clear overview of the level of common ground between parties. This SoCG will be updated as discussions progress during the examination process.

1.2 Approach to SoCG

- 1.2.1.1 The Applicant took the decision at an early stage to adopt a proportionate approach to Environmental Impact Assessment (EIA) for Hornsea Four which is detailed and integrated throughout the application for development consent. The Impacts Register ([Volume A4, Annex 5.1: Impacts Register](#)) is a key tool that details all potential impacts identified for Hornsea Four and sets the scope of the EIA at various stages of the project (Scoping, Preliminary Environmental Information Report (PEIR) and DCO). In line with the Applicant's approach to proportionality, only Likely Significant Effects are included within the individual topic assessments of the Environmental Statement (ES).
- 1.2.1.2 The structure of this SoCG is as follows:
- [Section 1](#): Introduction;
 - [Section 2](#): Consultation;
 - [Section 3](#): Agreement Logs; and
 - [Section 4](#): Summary.

1.3 Application elements under NATS' remit

- 1.3.1.1 The elements of Hornsea Four which may affect the interests of NATS are Work Numbers 1 to 5, covering the intertidal (seaward of MHWS) and offshore works. These are detailed in Part 1 (Authorised Development) of Schedule 1 (Authorised Project) of the draft DCO ([C1.1: Draft DCO including Draft DML](#)).

1.3.1.2 This SoCG focuses on specific issues relating to aviation and radar which have been raised during consultation undertaken in respect of Hornsea Four by NATS. In line with the information provided by NATS in their Relevant Representation (PINS Reference RR-028), key areas of outstanding concern and therefore taken forward for consideration in the SoCG, include:

- Draft DCO and Deemed Marine Licences; and
- Civil Aviation & Radar

1.4 Overview of Hornsea Four

1.4.1.1 Hornsea Four is an offshore wind farm which will be located approximately 69 km offshore the East Riding of Yorkshire in the Southern North Sea and will be the fourth project to be developed in the former Hornsea Zone. Hornsea Four will include both offshore and onshore infrastructure and consists of:

- **Hornsea Four array area:** This is where the offshore wind generating station will be located which will include the turbines, array cables, offshore accommodation platforms and a range of offshore substations as well as offshore interconnector cables and export cables;
- **Hornsea Four offshore export cable corridor:** This is where the permanent offshore electrical infrastructure (offshore export cables, as well as the High Voltage Alternating Current (HVAC) booster station (if required), will be located;
- **Hornsea Four intertidal area:** This is the area between MHWS and Mean Low Water Springs (MLWS) through which all of the offshore export cables will be installed;
- **Hornsea Four onshore export cable corridor:** This is where the permanent onshore electrical cable infrastructure will be located; and
- **Hornsea Four onshore substation including energy balancing infrastructure:** This is where the permanent onshore electrical substation infrastructure (onshore High Voltage Direct Current (HVDC) converter/HVAC substation, energy balancing infrastructure and connections to the National Grid) will be located.

2 Consultation

2.1 Summary of consultation with NATS

2.1.1.1 **Table 1** below summarises the consultation that the Applicant has undertaken with NATS during the pre-application phase for each relevant component of the application (as identified in **paragraph 1.3.1.1**).

Table 1: Summary of pre-application consultation with NATS.

Date	Form of consultation	Statutory/Non Statutory	Summary
15/10/2018	Consultation	Statutory	Hornsea Four Scoping Report
31/10/2018	Scoping opinion	Statutory	Scoping response NATS stated that it has been unable to assess effects fully; however, NATS indicated that Hornsea Four would conflict with NATS safeguarding criteria and it would object to the proposal.
05/04/2019	Telephone	Non statutory	NATS stated that subject to feedback from their engineers, the NATS preferred mitigation solution to address the impact that Hornsea Four would create on the NATS radar systems would likely comprise blanking of the affected radar systems, together with a proposal to change airspace ¹ (through an airspace change proposal) above the array area.
11/06/2019	Email	Non statutory	Confirmation from NATS was provided that the preferred mitigation solution would be that outlined by telephone on the 5 April 2019; however, this would only be applied to the Claxby Primary Surveillance Radar (PSR).
13/08/2019	Consultation	Statutory	Hornsea Four PEIR Published for statutory Section 42 consultation.
14/08/2019	Section 42 consultation response	Statutory	NATS response to PEIR NATS confirmed that Hornsea Four would degrade the performance of installed radar infrastructure. NATS believe that a 'two phase' mitigation is possible consisting of an approval of an airspace change proposal by the CAA and radar blanking of the Claxby PSR (see NATS update 13 October 2020 below).
05/02/2020	Meeting	Non statutory	Meeting to discuss proposed mitigation for NATS radar. NATS agreed that a proposed mitigation solution need only apply to the Claxby PSR.

¹ The airspace change process ensures that when the CAA decides whether or not to approve a proposal to change UK airspace, it does so in an impartial and evidence-based way that takes proper account of the needs and interests of all affected in which all options will be considered within the application.

Date	Form of consultation	Statutory/Non Statutory	Summary
13/10/2020	Email	Non statutory	<p>The Applicant contacted NATS after the publication of a note (by NATS Safeguarding Office) which detailed instances of anomalous propagation being experienced by NATS ATC in the Southern North Sea (NATS 2020). Anomalous propagation can create unexpected radar clutter; this clutter has been observed on radar data provided by the Cromer and Claxby PSRs at the location of Hornsea Project One.</p> <p>NATS responded by email on the 21 October 2020, stating that the Cromer PSR would not theoretically detect the array area through direct LOS; however, experience has shown that previously for 'other developments' out of direct radar LOS that under specific meteorological conditions WTGs beyond radar horizon can 'appear on radar'. Therefore, NATS stated an updated position from that received during Section 42 consultation in that NATS seek mitigation to be applied to both the Cromer and Claxby PSR systems.</p>
10/02/2021	Telephone	Non statutory	<p>The Applicant followed-up on call with NATS reiterating Hornsea Four's understanding that a mitigation requirement should not apply to the Cromer PSR, given that (a) the Hornsea Four WTC's will not be within radar LoS of the Cromer PSR - as confirmed by radar LoS modelling, including NATS's Technical and Operational Assessment (TOPA); that (b) the Hornsea Four array area is understood to be beyond the instrumented (operational) range of the Cromer PSR; and that (c) a requirement for mitigation linked to Anoprop effects would need to be preceded by a wider, cross-sector discussion.</p>

3 Agreement Log

3.1 Overview

3.1.1.1 The following sections of this SoCG set out the level of agreement between the Applicant and NATS for each relevant component of the Application (as identified in [paragraph 1.3.1.1](#)).

3.1.1.2 In order to easily identify whether a matter is 'agreed', 'not agreed' or an 'ongoing point of discussion', the colour coding system set out in [Table 2](#) below is used within the 'position' column of the following sections of this document.

Table 2: Position Status Key.

Position Status	Position Colour Coding
<p>Agreed The matter is considered to be agreed between the parties</p>	Agreed
<p>Not Agreed – no material impact The matter is not agreed between the parties, however the outcome of the approach taken by either the Applicant or NATS is not considered to result in a material impact to the assessment conclusions.</p>	Not Agreed – no material impact
<p>Not Agreed – material impact The matter is not agreed between the parties and the outcome of the approach taken by either the Applicant or NATS is considered to result in a materially different impact to the assessment conclusions.</p>	Not Agreed – material impact
<p>Ongoing point of discussion The matter is neither 'agreed' nor 'not agreed' and is a matter where further discussion is required between the parties (e.g. where documents are yet to be shared with NATS).</p>	Ongoing point of discussion

3.2 Civil Aviation & Radar

Table 3: Agreement Log: Civil Aviation & Radar Environmental Impact Assessment.

ID	Hornsea Four Position	NATS Position	Position Summary
Environmental Impact Assessment			
NATS-001	Description of baseline conditions is accurate in terms of civil aviation and radar activity undertaken within the Hornsea Four Order Limits and surrounding area.		Ongoing point of discussion
NATS-002	The potential impacts identified represent a comprehensive list of potential impacts on civil aviation and radar from Hornsea Four.		Ongoing point of discussion
NATS-003	The impact assessment methodologies used for the EIA provide an appropriate approach to assessing potential impacts of Hornsea Four.		Ongoing point of discussion
NATS-004	The MDS presented in the assessment is appropriate.		Ongoing point of discussion
NATS-005	Given the impacts of the project, the following proposed Commitments outlined in Volume A4, Annex 5.2: Commitments Register are appropriate: <ul style="list-style-type: none"> • Co93 (aids to navigation); • Co99 (compliance with MGN654); • Co102 (notification of DIO and CAA) • Co181 (offshore decommissioning plan); and • Co200 (HVAC Booster Station Lighting Plan). 		Ongoing point of discussion
NATS-006	The assessment is appropriate and has made the correct conclusions that Hornsea Four will have a significant impact upon Civil Aviation and Radar (specifically Claxby Primary Surveillance Radar).		Ongoing point of discussion
NATS-007	The proposed mitigation is appropriate to reduce the residual impact on Claxby Primary Surveillance Radar to not significant and will be secured through (Condition 28 of Schedule 1.1 of C1.1: Draft DCO including DMLS (APP-203))		Ongoing point of discussion

ID	Hornsea Four Position	NATS Position	Position Summary
Draft DCO and Deemed Marine Licences			
NATS-008	The wording of the following requirement pertaining to Civil Aviation and Radar is appropriate and adequate: <ul style="list-style-type: none">Requirement 28 provided within DCO Schedule 11, Part 3 with reference to Claxby Primary Surveillance Radar (C1.1: Draft DCO including DMLS (APP-203)).		Ongoing point of discussion
Other Matters as Required			
NATS-009			

draft