



Hornsea Project Four

G1.13 Statement of Common Ground between Hornsea Project Four and Natural England: Other Offshore Matters

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Hornsea 4

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Hornsea 4

Table of Contents

1. Introduction.....	5
1.1. Reason for this document.....	5
1.2. Approach to SoCG.....	5
1.3. Application elements under Natural England’s remit	6
1.4. Overview of Hornsea Four	6
2. Consultation	7
2.1. Summary of consultation with Natural England	7
3. Agreement Logs	10
3.1. Overview	10
3.2. Marine Geology, Oceanography and Physical Processes	12
Benthic and Intertidal Ecology	16
3.3. Fish and Shellfish Ecology	20
3.4. Marine Mammals.....	24
3.5. Seascape, Landscape and Visual Resources	29
3.6. Other Documents and Plans.....	30
4. Summary.....	33

List of Tables

Table 1: Summary of all SoCGs sought with Natural England.	5
Table 2: Summary of pre-application consultation with Natural England.	7
Table 3: Position Status Key.....	10
Table 4: Agreement Log - Marine Geology, Oceanography and Physical Processes.	12
Table 5: Agreement Log – Benthic and Intertidal Ecology.	16
Table 6: Agreement Log – Fish and Shellfish Ecology.	20
Table 7: Agreement Log – Marine Mammals.....	24
Table 8: Agreement Log – Seascape, Landscape and Visual Resources.	29
Table 9: Agreement Log – Other Documents and Plans.....	30

Hornsea 4

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.
Orsted Hornsea Project Four Ltd	The Applicant for the proposed Hornsea Project Four Offshore Wind Farm Development Consent Order (DCO).

Acronyms

Acronym	Definition
CEA	Cumulative Effects Assessment
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
PINS	The Planning Inspectorate
SNCB	Statutory Nature Conservation Body
SoCG	Statement of Common Ground

Hornsea 4

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 Natural England 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 other offshore matters which includes the topics of:
- Marine Geology, Oceanography and Physical Processes;
 - Benthic and Intertidal Ecology;
 - Fish and Shellfish Ecology;
 - Marine Mammals;
 - Seascape, Landscape and Visual Resources; and
 - Other Plans and Documents.
- 1.1.1.3. This SoCG covers offshore matters only, which for the purposes of this document, are defined as matters below Mean High Water Springs (MHWS).
- 1.1.1.4. Due to the nature and complexities of offshore ornithology and the Derogations Case, separate SoCGs have been developed with Natural England to address these topics as set out in [Table 1](#) below.

Table 1: Summary of all SoCGs sought with Natural England.

SoCG's sought with Natural England	Document Reference
SoCG between Hornsea Project Four and Natural England: Offshore and Intertidal Ornithology	G1.9
SoCG between Hornsea Project Four and Natural England: Onshore Matters	G1.10
SoCG between Hornsea Project Four and Natural England: Derogation and Compensation	F3.4

- 1.1.1.5. The need for a SoCG between the Applicant and Natural England is set out within the Rule 6 letter issued by the Planning Inspectorate (PINS) on 24 January 2022.
- 1.1.1.6. Following detailed discussions undertaken through the Evidence Plan Process, the Applicant and Natural England have sought to progress a SoCG. It is the intention that this document will provide the PINS with a clear overview of the level of common ground between both parties. This document will facilitate further discussions between the Applicant and Natural England and the SoCG will be updated as discussions progress during the Hornsea Four 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 DCO application. The Impacts Register (see [Volume A4, Annex 5.1: Impacts](#)

Hornsea 4

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, PEIR and DCO). In line with the Applicant's approach to proportionality, only Likely Significant Effects (LSE) were included within the individual topic assessments within the relevant chapters of the Environmental Statement (ES). This SoCG seeks to set out the agreements reached with Natural England on the proportionate approach to EIA in addition to other matters such as (but not limited to) the adequacy of baseline data collection, the assessment methodology and conclusions reached (**Section 3.7**).

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 Natural England's remit

1.3.1.1. The elements of Hornsea Four which may affect the interests of Natural England are Work Numbers 1 to 10, covering both onshore and offshore works. These are detailed in Part 1 (Authorised Development) of Schedule 1 (Authorised Project) of the draft DCO (**Volume C1.1: Draft DCO**).

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 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 HVDC converter/HVAC substation, energy balancing infrastructure and connections to the National Grid) will be located.

Hornsea 4

2. Consultation

2.1. Summary of consultation with Natural England

2.1.1.1. **Table 2** below summarises the consultation that the Applicant has undertaken with Natural England relevant to Other Offshore Matters during the pre-application phase.

Table 2: Summary of pre-application consultation with Natural England.

Date	Form of consultation	Statutory/Non Statutory	Summary
07/08/2018	Meeting	Non Statutory	Evidence Plan Steering Group Meeting 1 Introduction to the proposed project and project teams and summary, reflections, agreement and sign off on the Terms of Reference.
12/09/2018	Meeting	Non Statutory	Marine Processes & Ecology Evidence Plan Technical Panel Meeting 1 Meeting to introduce Hornsea Four, the consenting programme, evidence plan process and the proportionate approach to EIA. An overview of work undertaken to date was provided, including scoping and approach to baseline.
13/09/2018	Meeting	Non Statutory	Marine Mammals Evidence Plan Technical Panel Meeting 1 Introduction to the project. Introduction to the TP, the EP process and the proportionate approach to EIA; and Discussion on key position papers.
03/10/2018	Meeting	Non Statutory	Marine Mammals Evidence Plan Technical Panel Meeting 2 Introduction to the project. Introduction to the TP, the EP process and the proportionate approach to EIA; and Discussion on key position papers.
15/10/2018	Consultation	Statutory	Hornsea Four Scoping Report
26/11/2018	Consultation	Statutory	Scoping Opinion Consultation response on the Scoping Report from Natural England.
12/12/2018	Meeting	Non Statutory	Evidence Plan Steering Group Meeting 2 Update on the project development activities. Review of the Scoping Opinion responses and discussion on the next steps in relation to seeking agreement with key stakeholders on the data to be included in the PEIR and ES.
12/12/2018	Meeting	Non Statutory	Marine Processes & Ecology Evidence Plan Technical Panel Meeting 2 Meeting to provide Hornsea Four update, recap of the EIA scoping report and approach to EIA proportionality. Scoping opinions received were discussed, and necessary next steps, including survey and assessment work.
14/01/2019	Meeting	Non Statutory	Marine Mammals Evidence Plan Technical Panel Meeting 3 Project updates, review of responses received during the Scoping process. Discuss the next steps in relation to seeking agreement with stakeholders on the data and information to be included in the PEIR and ES.
06/03/2019	Consultation	Non Statutory	Responses to Benthic and Intertidal Technical Note.

Hornsea 4

Date	Form of consultation	Statutory/Non Statutory	Summary
30/04/2019	Meeting	Non Statutory	Marine Processes & Ecology Evidence Plan Technical Panel Meeting 3 Meeting to provide Hornsea Four update since receipt of Scoping Opinion. Review of responses to both the Scoping Report and the HRA Screening Report, and the approach to the RIAA. Discussion on the next steps to seeking agreement in relation to data to be included in the PEIR and ES. Discussion on Biodiversity Net Gain.
30/04/2019	Meeting	Non Statutory	Marine Mammals Evidence Plan Technical Panel Meeting 4 Meeting to provide a Hornsea Four update and updates on ongoing baseline surveys. Section 42 comments received were discussed (including the provision of necessary further information or evidence, and /or the Applicant's proposed response). Consensus was sought on the proposed approach to ES (impacts to be covered in detail in the ES chapter) and what additional evidence or information is required. Comments on the Noise modelling methodology and RIAA.
25/06/2019	Meeting	Non Statutory	Evidence Plan Steering Group Meeting 3 Update on project information, local information events, onshore and offshore Technical Panels and non-Evidence Plan consultation.
26/06/2019	Meeting	Non Statutory	Marine Mammals Evidence Plan Technical Panel meeting 5 Project updates and discussion around the scope of the PEIR and ES. Review of the impacts register and discussion on next steps to seeking agreement with stakeholders on the data and information to be included in the PEIR and ES.
13/08/2019	Consultation	Statutory	Hornsea Four PEIR Published for statutory Section 42 consultation.
23/09/2019	Consultation response	Statutory	Natural England letter response to PEIR Providing comments on the PEIR.
06/11/2019	Meeting	Non Statutory	Evidence Plan Steering Group Meeting 4 Update on project information and overview of the programme to DCO application. Update to Terms of Reference to reflect Historic England joining Steering Group. Updates to the Impacts Register and Commitments Register. Discussion on the Draft DCO and DMLs.
06/11/2019	Meeting	Non Statutory	Marine Mammals Technical Panel Meeting 6 Data collection and description of the baseline environment and the inclusion of bottlenose dolphin in the baseline; impact assessment methodology in response to Section 42 comments regarding simultaneous piling, ramp-up hammer energy scenarios and Unexploded Ordnance (UXO); and the RIAA.
13/11/2019	Meeting	Non Statutory	Marine Processes & Ecology Evidence Plan Technical Panel Meeting 4 Meeting to provide a Hornsea Four update and updates on ongoing baseline surveys. Section 42 comments received were discussed (including the provision of necessary further

Hornsea 4

Date	Form of consultation	Statutory/Non Statutory	Summary
			information or evidence, and /or the Applicant's proposed response). Consensus was sought on the proposed approach to ES (impacts to be covered in detail in the ES chapter) and what additional evidence or information is required. New commitments in relation to the Dogger Bank Creyke Beck cable crossing and Smithic Bank.
17/12/2019	Meeting	Non Statutory	Marine Mammals Technical Panel Meeting 7 Project and programme updates; and updates to the Impacts Register.
16/03/2020	Meeting	Non Statutory	Evidence Plan Steering Group Meeting 5 Review of draft ES documents by the relevant Technical Panels. Overview of planned seabed investigations. Project updates and updates to the Impacts Register, Commitments Register, Draft DCO and DMLs.
06/06/2020	Meeting	Non Statutory	Marine Mammals Technical Panel Meeting 8 Discussion on the draft ES documents provided for review prior to the meeting; Presentation of updated HRA screening for marine mammals; Discussion on the approach to the UXO assessment; and Presentation of grey seal information that will form part of the RIAA.
10/05/2021	Meeting	Non Statutory	Marine Mammals Technical Panel Meeting 9 Project updates including the reduction in the developable area and the change to the project programme; Discussion on the bottlenose dolphin Management Unit and assessment; presentation of approach to the cumulative assessment in relation to seismic surveys, disturbance impacts, simultaneous piling and a new form of result presentation; and updates required to the modelling as a result of the change to Order Limits.
21/10/2020	Meeting	Non Statutory	Evidence Plan Steering Group Meeting 6 Review of draft ES documents by the relevant Technical Panels. Project updates on change to Hornsea Four Order Limits. DCO application submission programme, SoCCs and Project Seabird and Derogation. Overview of Design Vision Statement and planned seabed investigations.
11/05/2021	Meeting	Non Statutory	Marine Ecology and Processes Technical Panel Meeting 5C – Fish and Shellfish Ecology Project updates including the reduction in the developable area. Discussion on key issues raised in the consultee comments (spawning timings for Banks herring and the conclusions of assessments); and updates required to the draft ES documents as a result of the change to Order Limits.
13/05/2021	Meeting	Non Statutory	Marine Ecology and Processes Technical Panel Meeting 5A – Marine Processes Project updates including the reduction in the developable area and the change to the project programme. Review of consultee

Hornsea 4

Date	Form of consultation	Statutory/Non Statutory	Summary
			comments on the draft ES Chapter and Technical Report and the key issues identified; and updates required to the modelling as a result of the change to Order Limits.
13/05/2021	Meeting	Non Statutory	Marine Ecology and Processes Technical Panel Meeting 5B – Benthic and Intertidal Ecology Project updates including the reduction in the developable area and the change to the project programme. General agreements from consultee comments on the draft ES Chapter and Technical Report. Discussion on key issues raised in the consultee comments; and updates required to the draft ES documents as a result of the change to Order Limits.
29/07/2021	Meeting	Non Statutory	Evidence Plan Steering Group Meeting 7 Project updates on change to DCO application submission programme, SoCGs and non-statutory compensation consultation. Overview of geophysical and geotechnical investigations.
17/08/2021	Meeting	Non Statutory	Outline Marine Monitoring Plan Meeting To discuss consultee comments on the Outline Marine Monitoring Plan document provided for consultation to Natural England and the MMO in consultation with Cefas.

3. Agreement Logs

3.1. Overview

- 3.1.1.1. The following sections of this SoCG set out the level of agreement between the parties for each relevant component of the application (as identified in [paragraph 1.3.1.1](#)) seaward of MHWS.
- 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 3](#) below is used within the ‘position’ column of the following sections of this document.

Table 3: Position Status Key.

Position Status	Position Colour Coding
Agreed The matter is considered to be agreed between the parties	Agreed
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 Natural England is not considered to result in a material impact to the assessment conclusions or Natural England’s overall advice.	Not Agreed – no material impact
Not Agreed – material impact The matter is not agreed between the parties and the outcome of the approach taken by either the Applicant or Natural England is considered to result in a materially different impact to the assessment conclusions or Natural England’s overall advice.	Not Agreed – material impact

Hornsea 4

Position Status	Position Colour Coding
<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 Natural England).</p>	Ongoing point of discussion

3.2. Marine Geology, Oceanography and Physical Processes

Table 4: Agreement Log - Marine Geology, Oceanography and Physical Processes.

ID	Hornsea Fours Position	Natural England's Position	Position Summary
Environmental Impact Assessment			
NE-MPOFF-01	Existing and project-specific survey data is sufficient to inform the assessment.	<p>The Marine Geology, Oceanography and Physical Processes chapter and technical report provide an extensive range of information and evidence. However, we consider there to be a number of gaps in the baseline characterisation and therefore, we do not consider the baseline characterisation to be complete. Although REP4 –043 Marine Processes Supplementary Report build on this and draws on the best available evidence, a large amount of uncertainty remains in relation to Smithic Bank and its interrelationship with the Holderness Coast and the form, function and influence of the Flamborough Front.</p> <p>The Applicant at Deadline 4 provided further information on the position and formation of the Flamborough Front and the geomorphology of Smithic Bank in REP4-043 Marine Processes Supplementary Report. However, there are still considerable gaps in the evidence for both these features. The Applicant has marshalled all of the evidence that we are aware of, nevertheless with the project as currently designed we are not able to exclude the risk of significant/adverse effects arising. NE's advice now focusses on reducing the level of risk to designated sites and associated receptors, through identifying design changes and advising on the monitoring required to detect change and trigger counter measures.</p> <p>Whilst we do not consider the evidence gaps to be addressed, we are changing the status to reflect that - in terms of evidence provision - we do not consider there is any more the applicant can do at this stage.</p>	Not Agreed – Material Impact
NE-MPOFF-02	The impact assessment methodologies used for the EIA provide an appropriate approach to assessing potential impacts of Hornsea Four.	Natural England have raised general concerns with the methodologies used for the EIA which we believe have the potential to impact the conclusions on the significance of impacts. We recognise that these concerns apply beyond the Hornsea Four project and that it is unlikely they will be addressed within this examination.	Not Agreed – Material Impact

ID	Hornsea Fours Position	Natural England's Position	Position Summary
		<p>Natural England does not agree that appropriate marine process receptors have been identified for assessment within the ES. Although additional information REP4 – 043 Marine Processes Supplementary Report partly addresses this and the MCZs, SACs/SPAs are considered within the MCZ and Habitats Regulations Assessments respectively, and the potential for significant impacts on the Hills and Outer Silverpit can be ruled out based on additional information supplied within the examination, the impacts to SSSIs are not addressed, particularly Dimlington Cliffs SSSI.</p>	<p>Not Agreed – Material Impact</p>
<p>NE-MPOFF-03</p>	<p>The maximum design scenario (MDS) presented in the assessment is appropriate.</p> <p>The Worst Case Scenario (WCS) of impact to this receptor which could occur within the parameters of the MDS has been assessed.</p>	<p>Although we welcome the elements of further refinement within REP4-043, Natural England's broad concerns relating to the precautionary nature of some of the MDS, and the difficulties this then poses in ensuring a realistic worst case scenario for marine process receptors as assessed, remain unchanged.</p> <p>This approach conflicts with the principles of the 'mitigation hierarchy' and the emphasis within it on avoiding and reducing impacts.</p>	<p>Not Agreed – Material Impact</p>
<p>NE-MPOFF-04</p>	<p>The conclusions of the assessment of impacts for construction, operation and decommissioning are appropriate</p>	<p>Given our concerns relating to the identification of receptors, data gaps and incomplete assessments, we are unable to agree with the conclusions of the ES.</p> <p>Whilst we welcome the additional work undertaken by the Applicant, we recognise that considerable uncertainty remains in relation to the baseline characterisation and are unable to agree with the conclusions drawn by the applicant in a number of areas.</p>	<p>Not Agreed – Material Impact</p>
<p>NE-MPOFF-05</p>	<p>The conclusions of the assessment of cumulative impacts are appropriate.</p>	<p>Certain impacts assessed for the project alone are not considered in the cumulative assessment as they are assessed as 'not significant' on a project alone basis. Natural England believe these should be carried forward to the CEA or the Applicant needs to provide further detail to justify the exclusion of these potential cumulative impacts.</p> <p>Further consideration needs to be given to the multiple projects all proposing cable crossings at Smithic Bank in terms of potential impacts to the form and function of the sandbank and in relation to nearshore sediment pathways.</p>	<p>Not Agreed – No Material Impact</p>
<p>NE-MPOFF-06</p>	<p>Given the impacts of the project, the proposed Commitments outlined in Volume A4, Annex 5.2: Commitments Register are appropriate.</p>	<p>Please see our R&I log for our outstanding comments on Marine Processes.</p>	<p>Ongoing point of discussion</p>

ID	Hornsea Fours Position	Natural England's Position	Position Summary
Draft DCO and Deemed Marine Licences			
NE-MPOFF-07	<p>The wording of the following requirements and conditions pertaining to marine geology, oceanography and physical processes are appropriate and adequate:</p> <ul style="list-style-type: none"> • Part 2 - Condition 13(1)(c) of DCO Schedules 11 and 12 with reference to a Construction Method Statement; • Part 2 - Condition 13(1)(e) of DCO Schedules 11 and 12, Part 2 - Condition 13(1)(e) with reference to the development of a Scour Protection Management Plan; • Part 2 - Condition 13(1)(h) of DCO Schedules 11 and 12 with reference to a Cable Specification and Installation Plan; • Part 1(6) of DCO Schedules 11 and 12 with reference to a decommissioning plan; • Paragraph 2(a) of Part 1 of DCO Schedules 11 and 12 with reference to the maximum volumes of material to be disposed seaward of Mean High Water Springs (MHWS) within the Hornsea Four Order Limits. 	Please see our R&I log for comments on the DCO.	Ongoing point of discussion

ID	Hornsea Fours Position	Natural England's Position	Position Summary
NE-MPOFF-08	LSE Screening - The RIAA has identified all relevant features of the designated sites (in relation to marine processes) that may be sensitive to changes as a result of the proposed activities.	Based on the information currently available, we consider that Flamborough Head SAC should also be screened in for further assessment of changes to physical processes during construction and decommissioning and beyond the operational lifetime of the project , as well as for potential changes to the hydrodynamic regime (arising as a result of potential impacts to the Flamborough Front). Flamborough and Filey Coast SPA should also be screened in for the same impacts. We also consider that the Humber Estuary SAC/SPA/Ramsar should also be screened in for further assessment of changes to physical processes throughout all stages of the project, and that the Southern North Sea SAC should be screened in for changes to hydrodynamic regime (Flamborough Front) and sediment transport regime.	Not Agreed – Material Impact
NE-MPOFF-09	Outcomes of the RIAA - Conclusion of no AEol at any sites is appropriate in relation to marine processes, either alone or in-combination as a result of the proposed activities.	As a result of Natural England's concerns relating to the LSE Screening and evidence gaps within the Environmental Statement, we are currently unable to exclude beyond reasonable scientific doubt the potential for impacts to Flamborough Head SAC, Flamborough and Filey Coast SPA, Humber Estuary SAC/SPA/Ramsar and Southern North Sea SAC. Additional measures to avoid/reduce/mitigate potential impacts need to be explored.	Not Agreed – Material Impact
Marine Conservation Zone Assessment			
NE-MPOFF-10	Screening – The MCZ assessment has identified all relevant MCZs that may be sensitive to changes as a result of the proposed activities and the associated impacts.	In light of our comments on the ES chapter, we advise that potential impacts to physical process attributes are also considered within the MCZ Assessment. For habitat features this includes: Supporting processes – energy exposure Supporting processes – sediment movement and hydrodynamic regime For the Spurn Head Geological feature of Holderness Inshore this includes: Extent of supporting geomorphological processes and associated sediments Sediment transport pathways and connectivity to wider environment Extent and distribution.	Not Agreed – Material Impact
NE-MPOFF-11	Assessment Conclusion – Conclusion of no potential for significant impacts to Holderness Inshore MCZ and Holderness Offshore MCZ is appropriate.	As a result of Natural England's concerns relating to the screening of potential impact pathways, and the evidence gaps within the ES, we are currently unable to exclude beyond reasonable scientific doubt, the potential for significant impacts to Holderness Inshore MCZ and Holderness Offshore MCZ. Additional measures to avoid/reduce/mitigate potential impacts may need to be explored.	Not Agreed – Material Impact

Benthic and Intertidal Ecology

Table 5: Agreement Log – Benthic and Intertidal Ecology.

ID	Hornsea Fours Position	Natural England's Position	Position Summary
Environmental Impact Assessment			
NE-BEOFF-01	Existing and project-specific survey data is sufficient to inform the assessment.	Natural England are generally satisfied with the project specific baseline data collected including the method and consider the sampling frequency within the order area to be adequate.	Agreed
		It is unclear how the benthic environment as characterised within the benthic study area has been used to inform impacts outside the order limits where habitats may be different, therefore our confidence in this area of the assessment is lower. Clarification on this matter would be useful.	Not Agreed – No Material Impact
NE-BEOFF-02	The impact assessment methodologies used for the EIA provide an appropriate approach to assessing potential impacts of Hornsea Four.	Natural England has outstanding concerns relating to the EIA assessment methodology We do not agree with the definitions used within the assessments of magnitude for permanent and temporary habitat loss.	Not Agreed – material impact
NE-BEOFF-03	The maximum design scenario (MDS) presented in the assessment is appropriate.	Natural England note that there are a number of instances whereby the MDS is based on conservative assumptions resulting in a larger project envelope rather than being underpinned and refined by survey data. Although we welcome the elements of further refinement within REP4-043, Natural England's broad concerns relating to the precautionary nature of some of the MDS, and the difficulties this then poses in ensuring a realistic worst case scenario for benthic receptors is assessed, remain unchanged. This approach conflicts with the principles of the 'mitigation hierarchy' and the emphasis within it on avoiding and reducing impacts.	Not Agreed – No Material Impact
NE-BEOFF-04	The conclusions of the assessment of impacts for construction, operation and decommissioning are appropriate	As NE have outstanding concerns relating to the assessment methodology, we cannot fully support all of the assessment conclusions. This is true for Temporary Habitat disturbance (construction phase), Long-term habitat loss/change, Temporary increase in SSC and sediment deposition (construction phase)	Not Agreed – material impact
NE-BEOFF-05	The conclusions of the assessment of cumulative impacts are appropriate.	Certain impacts assessed for the project alone are not considered in the cumulative assessment, as they are assessed as 'not significant' on a project alone basis. Natural England	Not Agreed – No Material Impact

ID	Hornsea Fours Position	Natural England's Position	Position Summary
		believe these should be carried forward to the CEA or the Applicant needs to provide further detail to justify the exclusion of these potential cumulative impacts.	
NE-BEOFF-06	Given the impacts of the project, the proposed Commitments outlined in Volume A4, Annex 5.2: Commitments Register are appropriate.	Please see our R&I log for our outstanding comments on Benthic and Intertidal Ecology.	Ongoing point of discussion
Report to Inform Appropriate Assessment			
NE-BEOFF-07	LSE Screening - The RIAA has identified all relevant features of the designated sites (in relation to benthic and intertidal ecology) that may be sensitive to changes as a result of the proposed activities.	There are a number of indirect impact pathways described in Appendix E of RR (Marine geology, oceanography and physical processes) of our response which require further consideration.	Not Agreed – Material Impact
NE-BEOFF-08	Outcomes of the RIAA - Conclusion of no AEol at any sites is appropriate in relation to benthic and intertidal ecology, either alone or in-combination as a result of the proposed activities.	Natural England notes that there is no information provided to exclude the potential for large volumes of dredged sediment being deposited in the parts of the order limits closest to designated sites. Whilst we recognise this is potentially represents a “theoretical risk” it remains a potential WCS under the MDS as currently described and therefore should be assessed. Based on our comments in Appendix E of RR, we are unable to exclude the potential for indirect impacts to SACs and supporting habitat.	Not Agreed – Material Impact
MCZ Assessment			
NE-BEOFF-09	Screening – In relation to benthic and intertidal ecology, the MCZ assessment has identified all relevant MCZs that may be sensitive to changes as a result of the proposed activities and the associated impacts.	Natural England notes that there is no information provided to exclude the potential for large volumes of dredged sediment being deposited in the parts of the order limits closest to designated sites. Whilst we recognise this is potentially represents a “theoretical risk” it remains a potential WCS under the MDS as currently described and therefore should be assessed. There are a number of indirect impact pathways described in Appendix E of RR of our response which require further consideration.	Not Agreed – Material Impact
NE-BEOFF-10	Assessment Conclusion – In relation to benthic and intertidal ecology, the conclusion of no potential for	Based on our comments in Appendix E of RR, we are unable to exclude the potential for impacts to a number of designated sites. Please see Appendix E for further details.	Not Agreed – Material Impact

ID	Hornsea Fours Position	Natural England's Position	Position Summary
	significant impacts to Holderness Inshore MCZ and Holderness Offshore MCZ is appropriate.		
Draft DCO and Deemed Marine Licences			
NE-BEOFF-11	<p>The wording of the following requirements and conditions pertaining to benthic and intertidal ecology are appropriate and adequate:</p> <ul style="list-style-type: none"> • Part 2 - Condition 13(1)(a) of DCO Schedules 11 and 12 with reference to a Design Plan; • Part 2 - Condition 13(1)(c) of DCO Schedules 11 and 12 with reference to a Construction Method Statement; • Part 2 - Condition 13(1)(d) of DCO Schedules 11 and 12 with reference to a Construction Project Environmental Management and Monitoring Plan; • Part 2 - Condition 13(1)(e) of DCO Schedules 11 and 12, Part 2 - Condition 13(1)(e) with reference to the development of a Scour Protection Management Plan; • Part 2 - Condition 13(1)(h) of DCO Schedules 11 and 12 with reference to a Cable 	<p>Please see our R&I log for comments on the DCO. We understand that the applicant intends to make further submissions at Deadline 7 and will comment on this as appropriate.</p>	Ongoing point of discussion.

Hornsea 4



ID	Hornsea Fours Position	Natural England's Position	Position Summary
	<p>Specification and Installation Plan; and</p> <ul style="list-style-type: none">• Part 1(6) of DCO Schedules 11 and 12 with reference to a decommissioning plan.		

3.3. Fish and Shellfish Ecology

Table 6: Agreement Log – Fish and Shellfish Ecology.

ID	Hornsea Fours Position	Natural England's Position	Position Summary
Environmental Impact Assessment			
NE-FSEOFF-01	Existing and project-specific survey data is sufficient to inform the assessment.	Natural England is broadly satisfied with data collected and baseline characterisation, although note that some of the data are old (overall 10 years) and would have liked the assessment to have been completed on up-to-date information. Overall, we would defer to Cefas regarding the suitability of data. Natural England agree with the identification of herring and sandeel as key species of concern that require species-specific assessments, owing to their close affiliation with seabed sediments within the project boundary.	Agreed
NE-FSEOFF-02	The impact assessment methodologies used for the EIA provide an appropriate approach to assessing potential impacts of Hornsea Four.	Natural England has outstanding concerns relating to the EIA assessment methodology.	Not Agreed – No Material Impact
NE-FSEOFF-03	The maximum design scenario (MDS) presented in the assessment is appropriate.	Natural England note that there are a number of instances whereby the MDS is based on conservative assumptions resulting in a larger project envelope rather than being underpinned and refined by survey data. Although we welcome the elements of further refinement within REP4-043, Natural England's broad concerns relating to the precautionary nature of some of the MDS, and the difficulties this then poses in ensuring a realistic worst case scenario for fish receptors is assessed, remain unchanged. This approach conflicts with the principles of the 'mitigation hierarchy' and the emphasis within it on avoiding and reducing impacts.	Not Agreed – No Material Impact
NE-FSEOFF-04	The conclusions of the assessment of impacts for construction, operation and decommissioning are appropriate.	We have outstanding concerns around the predicted 'peak' Herring spawning season and the duration of the commitment to limit piling noise. Natural England confirmed at Deadline 6 given the limited amount of time remaining within the Examination and recognising the MMO (advised by Cefas) are investigating this matter; Natural England defer to Cefas' expertise in agreeing a suitable 'peak' herring spawning period.	Not Agreed – Material Impact

ID	Hornsea Fours Position	Natural England's Position	Position Summary
		<p>Certain impacts assessed for the project alone are not considered in the cumulative assessment, as they are assessed as 'not significant' on a project alone basis. Natural England believe these should be carried forward to the CEA or the Applicant needs to provide further detail to justify the exclusion of these potential cumulative impacts.</p>	<p>Not Agreed – No Material Impact</p>
<p>NE-FSEOFF-06</p>	<p>Given the impacts of the project, the proposed Commitments outlined in Volume A4, Annex 5.2: Commitments Register are appropriate. The Applicant has confirmed it will not be undertaking a reading of EMF levels over the cables once operational to validate the predictions and provide additional evidence to support industry and research as requested.</p>	<p>Please see our R&I log for our comments relating to fish and fisheries. We understand that the Applicant intends to make further submissions at Deadline 7 which may address our outstanding comments and we will respond to this in due course.</p>	<p>Ongoing point of discussion</p>
<p>Report to Inform Appropriate Assessment</p>			
<p>NE-FSEOFF-07</p>	<p>LSE Screening - The RIAA has identified all relevant features of the designated sites (in relation to migratory fish) that may be sensitive to changes as a result of the proposed activities.</p>	<p>Natural England would have expected to see the migratory fish features of the Humber Estuary considered in the LSE assessment.</p>	<p>Not Agreed – Material Impact</p>
<p>NE-FSEOFF-08</p>	<p>Outcomes of the RIAA - Conclusion of no AEol at any sites is appropriate in relation to migratory fish, either alone or in-combination as a result of the proposed activities.</p>	<p>Natural England does not consider it possible to carry out a meaningful assessment of impacts to migrating lamprey as there are so many unknowns, however, given the distance from the associated designated sites to the project area we would anticipate the risk to these features to be low.</p>	<p>Not agreed – No Material Impact</p>

ID	Hornsea Fours Position	Natural England's Position	Position Summary
Draft DCO and Deemed Marine Licences			
NE-FSEOFF-09	<p>The wording of the following requirements and conditions pertaining to fish and shellfish ecology are appropriate and adequate:</p> <ul style="list-style-type: none"> • Part 2 - Condition 13(1)(a) of DCO Schedules 11 and 12 with reference to a Design Plan; • Part 2 - Condition 13(1)(c) of DCO Schedules 11 and 12 with reference to a Construction Method Statement; • Part 2 - Condition 13(1)(d) of DCO Schedules 11 and 12 with reference to a Construction Project Environmental Management and Monitoring Plan; • Part 2 - Condition 13(1)(e) of DCO Schedules 11 and 12, Part 2 - Condition 13(1)(e) with reference to the development of a Scour Protection Management Plan; • Part 2 - Condition 13(1)(h) of DCO Schedules 11 and 12 with reference to a Cable Specification and Installation Plan; and • Part 1(6) of DCO Schedules 11 and 12 with reference to a decommissioning plan. 	Please see our R&I log for comments relating to the DCO.	Ongoing point of discussion

ID	Hornsea Fours Position	Natural England's Position	Position Summary
NE-FSEOFF-10	Part 2 - Condition 18(2)(b) of DCO Schedules 11 and 12 with reference to construction noise monitoring is appropriate.	Natural England would consider the first four piles to represent the minimum requirement and would welcome discussion on expanding this proposed monitoring to include an agreed selection of the most resistant piles.	Agreed
NE-FSEOFF-11	Condition 23 of DCO Schedule 12 with reference to a piling restriction between 1 st September and 16 th October is appropriate.	We have outstanding concerns around the predicted 'peak' Herring spawning season and the duration of the commitment to limit piling noise. Natural England confirmed at Deadline 6 given the limited amount of time remaining within the Examination and recognising the MMO (advised by Cefas) are investigating this matter; Natural England defer to Cefas' expertise in agreeing a suitable 'peak' herring spawning period.	Not Agreed – Material impact

3.4. Marine Mammals

Table 7: Agreement Log – Marine Mammals.

ID	Hornsea Fours Position	Natural England's Position	Position Summary
Environmental Impact Assessment			
NE-MMOFF-01	Existing and project-specific survey data is sufficient to inform the assessment.	We consider the data collected, when used in conjunction with other available data, is sufficient. We welcome the inclusion of the latest publications.	Agreed
NE-MMOFF-02	The impact assessment methodologies used for the EIA provide an appropriate approach to assessing potential impacts of Hornsea Four.	Natural England are content that our outstanding concerns with the EIA methodology have been resolved.	Agreed
NE-MMOFF-03	The maximum design scenario (MDS) presented in the assessment is appropriate.	Natural England note that there are a number of instances whereby the MDS is based on conservative assumptions resulting in a larger project envelope rather than being underpinned and refined by survey data.	Not Agreed – No Material Impact
	The Worst Case Scenario (WCS) of impact to this receptor which could occur within the parameters of the MDS has been assessed.	Natural England agrees that the WCS has been assessed.	Agreed
NE-MMOFF-04	The conclusions of the assessment of impacts for construction, operation and decommissioning are agreed.	Natural England broadly agrees with the assessment outcomes.	Agreed
NE-MMOFF-05	The conclusions of the assessment of cumulative impacts are agreed.	The Applicant has provided sufficient information to address our outstanding concerns with respect to vessel collision risk, however we note that it is based on assumptions about other industries rather than evidence.	Not Agreed – No Material Impact
NE-MMOFF-06	Given the impacts of the project, the proposed Commitments outlined in Volume A4, Annex 5.2: Commitments Register are appropriate.	For Natural England's outstanding comments on Marine Mammals please see our Risk and Issues Log. We note that the Applicant intends to make further submissions at Deadline 7 which could address these outstanding concerns and will provide further advice in due course.	Ongoing point of discussion

ID	Hornsea Fours Position	Natural England's Position	Position Summary
	<p>The Applicant at Deadline 6 committed to mitigating cumulative PTS impact ranges in the Outline Marine Mammal Mitigation Plan (MMMP).</p> <p>The Applicant at Deadline 7 will update the Outline Site Integrity Plan (SIP) to detail the process for identifying and securing at source noise mitigation, in order to demonstrate that the requirement for mitigation has already been factored in to project planning.</p>		
Report to Inform Appropriate Assessment			
NE-MMOFF-07	<p>The results of the HRA Screening in relation to marine mammals are agreed.</p>	<p>We are in agreement that there will be no Adverse Effect on Site Integrity on the Wash and North Norfolk Coast SAC in relation to collision effects. However, LSE could not be ruled out for the harbour seal feature of WNNC SAC and should be included in the HRA assessment.</p>	Not Agreed – Material Impact
NE-MMOFF-08	<p>The conclusions of the assessment of adverse effect alone in relation to marine mammals are agreed.</p>	<p>Natural England agree with the conclusions with respect to the impacts of the Project alone.</p>	Agreed
NE-MMOFF-09	<p>The conclusions of the assessment of adverse effect in-combination in relation to marine mammals are agreed.</p> <p>The Applicant at Deadline 7 will update the Outline Site Integrity Plan (SIP) with text providing additional time for consideration of the measures outlines in the SIP. For example Phase 1 a draft SIP will be submitted at 12 months ahead of construction with an updated</p>	<p>Natural England have outstanding concerns with the conclusions of the assessment of adverse effect in-combination in relation to marine mammals, as we feel there is an over-reliance on the SIP process to manage in combination impacts to the SAC. Natural England would like to see a greater commitment to mitigation at this stage.</p> <p>Natural England notes that the Applicant intends to provide an updated SIP at Deadline 7, however it is not clear that this will address our advice regarding the need for a greater commitment to mitigation.</p>	Not agreed – Material Impact

ID	Hornsea Fours Position	Natural England's Position	Position Summary
	assessment and ground model where necessary. At Phase 2 the final confirmation of mitigation (if required) will be submitted 4 months prior to construction following consultation with MMO and Natural England.		
Draft DCO and Deemed Marine Licences			
NE-MMOFF-10	The wording of the following requirements and conditions pertaining to marine mammals are appropriate and adequate: <ul style="list-style-type: none"> • Part 2 - Condition 13(1)(c) of DCO Schedules 11 and 12 with reference to a Construction Method Statement; • Part 2 - Condition 13(1)(d) of DCO Schedules 11 and 12 with reference to a Construction Project Environmental Management and Monitoring Plan; • Part 2 - Condition 13(1)(d)(v) of DCO Schedules 11 and 12 with reference to a Vessel Management Plan; and • Part 1(6) of DCO Schedules 11 and 12 with reference to a decommissioning plan. 	For Natural England's comments on the DCO please see our Risk and Issues Log.	Ongoing point of discussion
NE-MMOFF-11	Part 2 - Condition 13(j) of DCO Schedules 11 and 12 with reference to a site integrity plan is appropriate.	For Natural England's comments on the DCO please see our Risk and Issues Log. Natural England note that the Applicant intends to submit updates at Deadline 7 and will provide further advice accordingly.	Ongoing point of discussion

ID	Hornsea Fours Position	Natural England's Position	Position Summary
	<p>The Applicant at Deadline 7 will update the Outline Site Integrity Plan (SIP) with text providing additional time for consideration of the measures outlines in the SIP. For example Phase 1 a draft SIP will be submitted at 12 months ahead of construction with an updated assessment and ground model where necessary. At Phase 2 the final confirmation of mitigation (if required) will be submitted 4 months prior to construction following consultation with MMO and Natural England.</p> <p>The Applicant at Deadline 7 will update the Outline Site Integrity Plan (SIP) to detail the process for identifying and securing at source noise mitigation, in order to demonstrate that the requirement for mitigation has already been factored in to project planning.</p>		
NE-MMOFF-12	Part 2 - Condition 13(1)(g) of DCO Schedules 11 and 12 with reference to a Marine Mammal Mitigation Protocol is appropriate.	Natural England agree with this statement.	Agreed
NE-MMOFF-13	<p>Part 2 - Condition 18(2)(b) of DCO Schedules 11 and 12 with reference to construction noise monitoring is appropriate.</p> <p>The Applicant has confirmed it does not intend to update the</p>	For Natural England's comments on the DCO please see our Risk and Issues Log.	Not Agreed – Material Impact

ID	Hornsea Fours Position	Natural England's Position	Position Summary
	Outline Marine Monitoring Plan (OMMP) to include the requested operational WTC noise monitoring or distribution of bottlenose dolphin monitoring.		

3.5. Seascape, Landscape and Visual Resources

Table 8: Agreement Log – Seascape, Landscape and Visual Resources.

ID	Hornsea Fours Position	Natural England's Position	Position Summary
Environmental Impact Assessment			
NE-SVROFF-01	The scoping out of seascape, landscape and visual resources impacts in relation to the array area is agreed, including the cumulative assessment.	Natural England considers that the development does not have the potential to impact on the special character of the Flamborough Head Heritage Coast (FHHC) and its seascape setting.	Agreed
NE-SVROFF-02	The scoping out of seascape, landscape and visual resources impacts in relation to the HVAC booster station(s) is agreed, including the cumulative assessment.	Natural England considers that the development does not have the potential to impact on the special character of the Flamborough Head Heritage Coast (FHHC) and its seascape setting.	Agreed
Draft DCO and Deemed Marine Licences			
NE-SVROFF-08	Part 2 - Condition 22 of DCO Schedule 12 with reference to a HVAC booster station lighting plan is appropriate.	Natural England agree with this statement.	Agreed

3.6. Other Documents and Plans

Table 9: Agreement Log – Other Documents and Plans.

ID	Hornsea Fours Position	Natural England's Position	Position Summary
Outline Marine Mammal Mitigation Protocol			
NE-OTHEROFF-01	<p>F2.5 Outline Marine Mammal Mitigation Protocol provides an appropriate framework for securing marine mammal mitigation measures in agreement with Statutory Nature Conservation Bodies (SNCBs) and the MMO prior to construction.</p>	<p>The Outline Marine Mammal Mitigation Protocol (OMMMP) includes an appropriate range of mitigation measures.</p>	Agreed
Outline Marine Monitoring Plan			
NE-OTHEROFF-02	<p>F2.7 Outline Marine Monitoring Plan provides an appropriate framework to agree monitoring with SNCBs and the MMO prior to construction.</p>	<p>Given the level of uncertainty in relation to key aspects of this project, a robust monitoring strategy will be essential to test assumptions and ensure measures can be taken to manage any risks and issues encountered.</p> <p>Aspects of the OMMP remain extremely short and lacking in detail therefore we are unable to agree the OMMP as it stands.</p> <p>Natural England have made reference throughout our R&I log to aspects that we feel should be captured within the OMMP, however, an updated version of the OMMP is expected to be submitted into examination at deadline 7 so Natural England can't confirm if these points have been addressed.</p> <p>Furthermore, we consider it important that the OMMP and any associated DCO/dML conditions or project commitments clearly secure the purpose of the monitoring, and the steps that should be taken should the outcome of the monitoring indicate that impacts are not as predicted.</p>	Ongoing point of discussion
Outline Southern North Sea Special Area of Conservation Site Integrity Plan			
NE-OTHEROFF-03	<p>F2.11 Outline Southern North Sea Special Area of Conservation Site Integrity Plan provides an appropriate framework to agree mitigation measures for effects on the Southern North Sea SAC with SNCBs and the MMO prior to construction.</p>	<p>The Applicant proposes that mitigation commitments will be managed post-consent via the implementation of the SIP prior to construction. Natural England have significant concerns over the feasibility of adding mitigation at this late stage when decisions around cost, equipment type etc. have already been made. We consider that mitigation should be committed to at this stage within the SIP and MMMP to allow resource to be planned for. We consider</p>	Ongoing point of discussion

ID	Hornsea Fours Position	Natural England's Position	Position Summary
	<p>The Applicant at Deadline 7 will update the Outline Site Integrity Plan (SIP) with text providing additional time for consideration of the measures outlines in the SIP. For example Phase 1 a draft SIP will be submitted at 12 months ahead of construction with an updated assessment and ground model where necessary. At Phase 2 the final confirmation of mitigation (if required) will be submitted 4 months prior to construction following consultation with MMO and Natural England.</p> <p>The Applicant at Deadline 7 will update the Outline Site Integrity Plan (SIP) to detail the process for identifying and securing at source noise mitigation, in order to demonstrate that the requirement for mitigation has already been factored in to project planning.</p>	<p>there to be an over-reliance on the SIP process to manage in-combination impacts to the SNS SAC.</p> <p>Natural England acknowledge that the Applicant intends to provide and updated Outline SIP at Deadline 7 and will comment on this in due course.</p>	
HVAC Booster Station Lighting Plan			
NE-OTHEROFF-04	<p>F2.17 HVAC Booster Station Lighting Plan provides an appropriate framework to secure the lighting requirements for the HVAC booster station(s) to ensure that the night-time effects on the setting of the Flamborough Head Heritage Coast will not be significantly adverse.</p>		Agreed
Outline Cable Specification and Installation Plan			
NE-OTHEROFF-05	<p>F2.15 Outline Cable Specification and Installation Plan provides an appropriate framework to secure the cable installation requirements for offshore export cables and array cables to secure the proposed</p>	<p>Please see our R&I log for comments in relation to cable installation, and suggested areas for inclusion within the outline CSIP.</p>	Ongoing point of discussion

ID	Hornsea Fours Position	Natural England's Position	Position Summary
	structure of the Cable Specification and Installation Plan and the cable burial and protection decision making process.		
Outline Operations and Maintenance Plans			
NE-OTHEROFF-06	G2.7 Outline Offshore Operations and Maintenance Plan provides a description of the reasonably foreseeable maintenance activities and will inform the Operation and Maintenance Plan to be developed post-consent.	Please see our R&I log for comments in relation Operations and Maintenance, and suggested areas for inclusion within the outline Operations and Maintenance Plans.	Ongoing point of discussion

Hornsea 4

4. Summary

- 4.1.1.1. This SoCG has outlined the consultation that has taken place between the Applicant and Natural England during the pre-application phase. The agreement logs present the positions reached between Hornsea Four and Natural England in relation to relevant other offshore matters.
- 4.1.1.2. This SoCG will be updated as discussions progress and made available to PINS as requested through the DCO examination phase.