

Statement of Common Ground between Hornsea Project Three (UK) Ltd. and the Environment Agency

Date: 7th November 2018







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Ørsted

5 Howick Place,

London, SW1P 1WG

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Front cover picture: Kite surfer near a UK offshore wind farm © Orsted Hornsea Project Three (UK) Ltd., 2018.







## **Revision History**

Version	Date	Author	Context
1	August 2018	Ørsted	Pre-examination: Initial draft for discussion with Environment Agency
2	October 2018	Ørsted and EA	Second draft following input from Environment Agency and meeting on 24.10.18
3	November 2018	Ørsted and EA	Final draft for signing following phone meeting on 01.11.18

# **Signatories**

Signed	
Name	Andrew Guyton
Position	Hornsea Project Three Consents Manager
For	Ørsted Hornsea Project Three (UK) Ltd

Signed	
Name	Ali Taylor
Position	Environment Planning and Engagement Manager
For	Environment Agency







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# **Acronyms**

Acronym	Description
CoCP	Code of Construction Practice
CEA	Cumulative Effect Assessment
DCO	Development Consent Order
DML	Deemed Marine Licence
EIA	Environmental Impact Assessment
EMP	Ecological Management Plan
EWG	Expert Working Group
Ex.A	Examining Authority
HDD	Horizontal Directional Drilling
HVAC	High Voltage Alternating Current
HVDC	High Voltage Directional Current
nm	Nautical mile
PEIR	Preliminary Environmental Information Report
RIAA	Report to Inform Appropriate Assessment
SoCG	Statement of Common Ground
SPZ	Source Protection Zone
WFD	Water Framework Directive







#### 1. Introduction

#### Overview

1.1 This Statement of Common Ground (SoCG) has been prepared by Orsted Hornsea Project Three (UK) Ltd. ('the Applicant') and Environment Agency (together 'the parties') as a means of clearly stating the areas of agreement, and any areas of disagreement, between the two parties in relation to the proposed Development Consent Order (DCO) application for the Hornsea Project Three offshore wind farm (hereafter referred to as 'Hornsea Three'). This SoCG does not deal with or extend to any development other than Hornsea Three.

#### Approach to SoCG

- 1.2 This SoCG has been developed during the pre-examination phase of Hornsea Three. In accordance with discussions between the parties, the SoCG is therefore focused on those issues raised by the Environment Agency within its response to Scoping, Section 42 consultation and as raised through the Evidence Plan process that has underpinned the pre-application consultation between the parties.
- 1.3 The structure of this SoCG is as follows:
  - Section 1: Introduction:
  - Section 2: Consultation;
  - Section 3: Agreements Log (offshore);
  - Section 4: Agreements Log (onshore); and
  - Section 5: Summary.
- 1.4 It is the intention that this document will help facilitate post application discussions between the parties and also give the Examining Authority (Ex.A) an early sight of the level of common ground between both parties from the outset of the examination process.

### **Hornsea Three**

- 1.5 Hornsea Three is a proposed offshore wind farm located in the southern North Sea and will include all associated offshore (including up to 300 turbines) and onshore infrastructure.
- 1.6 The key components of Hornsea Three include:
  - Turbines and associated foundations;
  - Turbine foundations;
  - Array cables;
  - Offshore substation(s), and platform(s) and associated foundations;
  - Offshore accommodation platform/s and associated foundations;
  - Offshore export cable/s;
  - Offshore and/or onshore High Voltage Alternating Current (HVAC) booster station/s (HVAC transmission option only);
  - Onshore export cables; and
  - Onshore High Voltage Direct Current (HVDC) converter/HVAC substation.







- 1.7 The Hornsea Three array area (i.e. the area in which the turbines are located) is approximately 696 km<sup>2</sup> and is located approximately 121 km northeast off the Norfolk coast and 160 km east of the Yorkshire coast.
- 1.8 The Hornsea Three offshore cable corridor extends from the Norfolk coast, offshore in a northeasterly direction to the western and southern boundary of the Hornsea Three array area. The Hornsea Three offshore cable corridor is approximately 163 km in length.
- 1.9 From the Norfolk coast, underground onshore cables will connect the offshore wind farm to an onshore HVDC converter/HVAC substation, which will in turn, connect to an existing National Grid substation. Hornsea Three will connect to the Norwich Main National Grid substation, located to the south of Norwich. The Hornsea Three onshore cable corridor is approximately 55 km in length at its fullest extent.







#### 2. Consultation

## <u>Application elements under Environment Agency's remit</u>

Work Nos. 2 and 4 to 1 NM off the coast (offshore works), and 6 to 15 (onshore works) detailed in Part 1 of Schedule 1 of the draft DCO (Document A3.1) describe the elements of Hornsea Three which may affect the interests of the Environment Agency.

#### **Consultation Summary**

- 2.2 This section briefly summarises the consultation that the Applicant has undertaken with the Environment Agency. Those technical topics of the DCO application of relevance to the Environment Agency (and therefore considered within this SoCG) comprise:
  - Marine Processes;
  - Water Framework Directive (WFD) offshore;
  - Geology and Ground Conditions (in respect to groundwater and WFD onshore);
  - Hydrology and Flood Risk (including WFD onshore); and
  - Ecology and Nature Conservation.

#### **Pre-Application**

- 2.3 The Applicant has engaged with the Environment Agency on Hornsea Three during the preapplication process, both in terms of informal non-statutory engagement and formal consultation carried out pursuant to section 42 of the Planning Act 2008.
- 2.4 Table 2.1 summarises the consultation undertaken between the parties during the pre-application phase, including consultation through scoping, consultation on the Preliminary Environmental Information Report (PEIR), further section 42 consultation undertaken in November 2017 and the focused section 42 consultation in February 2018.

# **Post-Application**

2.5 Table 2.2 summarises the consultation undertaken between the parties during the post-application phase.







Table 2.1: Pre-application consultation with Environment Agency.

Date	Meeting attendance	Detail		
Overarching	Overarching			
14 September 2016	Environment Agency (onshore and offshore)	Hornsea Three was introduced to the Environment Agency (onshore and offshore) and topics upon which the Applicant should engage with the Environment Agency (onshore and offshore) were agreed.		
26 October 2016	N/A	Scoping report published for consultation by the Applicant.		
24 November 2016	N/A	Environment Agency letter response to scoping report.		
26 July 2017	N/A	PEIR published by the Applicant for consultation (section 42).		
19 September 2017	N/A	Environment Agency letter response providing comments on PEIR.		
16 November 2017	N/A	Further statutory consultation published by the Applicant.		
21 December 2017	N/A	Environment Agency letter response to further statutory consultation.		
28 February 2018	N/A	Focused statutory consultation published by the Applicant.		
9 March 2018	N/A	Environment Agency letter response to focused statutory consultation.		
Offshore	Offshore			
26 February 2018	Environment Agency (offshore)	Meeting to discuss marine processes assessment in the Environmental Statement.		
Onshore				
17 February 2017	Environment Agency, Natural England, The Wildlife Trust, Norfolk County Council, RSPB, North Norfolk District Council	Onshore Ecology Expert Working Group (EWG)		
28 February 2017	Environment Agency	Meeting to discuss Hornsea Three updates.		
28 April 2017	Environment Agency, Natural England, The Wildlife Trust, Norfolk County Council, RSPB, North Norfolk District Council	Onshore Ecology EWG		







Date	Meeting attendance	Detail
20 June 2017	Environment Agency	Meeting to discuss Hornsea Three updates, including programme, content of forthcoming PEIR for key topics and the activities to be undertaken leading up to the DCO application.
25 July 2017	Environment Agency, Natural England, The Wildlife Trust, Norfolk County Council, RSPB	Onshore Ecology EWG
29 September 2017	Environment Agency	Meeting to discuss Hornsea Three updates.
2 November 2017	Environment Agency, The Wildlife Trust, Norfolk County Council, RSPB	Onshore Ecology EWG
13 November 2017	Environment Agency	Meeting to discuss project updates in particular the re- routes of the Hornsea Three onshore cable corridor presented alongside the PEIR.
23 March 2018	Environment Agency, The Wildlife Trust, Norfolk County Council, RSPB, North Norfolk District Council	Onshore Ecology EWG

Table 2.2: Post application consultation with Environment Agency.

Date	Detail
25/09/2018	Phone meeting to discuss Examination logistics and the Statement of Common Ground between the parties
11/10/2018	Phone meeting to discuss the Examination timetable and the Statement of Common Ground between the parties
25/10/2018	Meeting to discuss the Statement of Common Ground between the parties
01/11/2018	Phone meeting to discuss the Statement of Common Ground between the parties







# 3. Agreement Log (Offshore)

- 3.1 The following section of this SoCG identifies the level of agreement between the parties for each relevant component of the DCO application (as identified in paragraph 2.1) seaward of Mean High Water Springs (MHWS) to 1 NM off the coast. In order to easily identify whether a matter is "agreed", "under discussion" or indeed "not agreed" a colour coding system of green, yellow and orange, respectively, is used in the "final position" column to represent the respective status of discussions.
- 3.2 Section 4 of this SoCG identifies the level of agreement between the parties for each relevant component of the DCO application (as identified in paragraph 2.1) landward of MHWS.

#### Marine processes

- 3.3 Hornsea Three has the potential to impact upon marine processes and these interactions are duly considered within Volume 2, Chapter 1: Marine Processes of the Environmental Statement (Document A6.2.1).
- 3.4 Table 3.1 identifies the status of discussions relating to marine processes between the parties.

#### **Water Framework Directive (offshore)**

- 3.5 Hornsea Three has the potential to impact upon coastal water bodies and these interactions are duly considered within Volume 5, Annex 2.2: Water Framework Directive Assessment of the Environmental Statement (Document A6.5.2.2). Hornsea Three related activities of relevance to the WFD Assessment relate to the installation and operation of offshore export cables within 1 nm off the coast and at the landfall, and possible changes to the wave regime due to the presence of operational turbines. The WFD Assessment therefore did not consider any of the offshore elements of the Hornsea Three seawards of 1 nm from the coast (other than possible indirect effects on wave regime as described above).
- 3.6 Table 3.2 identifies the status of discussions relating to the WFD assessment (offshore) between the parties.







Table 3.1: Marine processes.

Discussion point	The Applicant's position	Environment Agency's position	Final position
Environmental Impac	t Assessment (EIA)		
Policy and planning	Section 1.4 of Volume 2, Chapter 1: Marine Processes of the Environmental Statement has identified all appropriate plans and policies relevant to marine processes and due regard has been given to them within the assessment.  Following a request for clarification, the Applicant confirms that the North Norfolk Shoreline Management Plan has been included among the desktop review material in Table 1.5 of Volume 2, Chapter 1: Marine Processes of the Environmental Statement (APP-061). The River Basin Management Plan is not considered relevant to the Marine Processes assessment but is considered in Volume 3, Chapter 2: Hydrology and Flood Risk of the Environmental Statement (APP-074).	The Environment Agency (EA) has no issues to raise concerning the policies and plans considered.  The Environment Agency is satisfied with the clarification provided on the consideration of the RBMP and SMP.	Agreed
Baseline environment	Sufficient primary and secondary data seaward of MHWS to 1 NM off the coast, as listed in Section 1.6 of Volume 2, Chapter 1: Marine Processes of the Environmental Statement, has been collated to appropriately characterise the baseline environment (in Section 1.7 of Volume 2, Chapter 1: Marine Processes of the Environmental Statement) to inform the EIA.	The EA has no issues to raise concerning these data and their sources with regards to informing the baseline environment.	Agreed







Discussion point	The Applicant's position	Environment Agency's position	Final position
Assessment	The potential impacts identified within Section 1.8 of Volume 2, Chapter 1: Marine Processes of the Environmental Statement represent a comprehensive list of the potential effects on marine processes seaward of MHWS to 1 NM off the coast.	The EA has no issues to raise concerning the potential impacts that have been identified in section 1.8, however we have only assessed those that will impact upon our 1 nm boundary and not impacts within the Hornsea 3 array other than potential impacts on the wave climate	Agreed (regarding impacts relating to EA's remit only)
methodology	The definitions used for magnitude and sensitivity, as outlined in Section 1.9 of Volume 2, Chapter 1: Marine Processes of the Environmental Statement, are appropriate.	The EA has no issues with the definitions used for magnitude and sensitivity as outlined in section 1.9.	Agreed
	The maximum design scenarios identified for each impact in Table 1.12 of Volume 2, Chapter 1: Marine Processes (APP-061) of the Environmental Statement are appropriate based on the information presented in Volume 1, Chapter 3: Project Description of the Environmental Statement (APP-058).	The EA has no concerns with the maximum design scenarios identified.	Agreed
	The list of projects screened into the cumulative effects assessment (CEA) in Section 1.12.1 of Volume 2, Chapter 1: Marine Processes of the Environmental Statement (APP-061) are appropriate.	The EA has no issues with the projects screened for the CEA.	Agreed







Discussion point	The Applicant's position	Environment Agency's position	Final position
Assessment conclusions	The assessment of potential changes to marine processes seaward of MHWS to 1 NM off the coast in Section 1.11 Volume 2, Chapter 1: Marine Processes of the Environmental Statement is appropriate and no impacts from the construction, operation and maintenance and/or decommissioning of Hornsea Three on marine processes receptors will be significant in EIA terms given the implementation of the measures adopted as part of Hornsea Three (see Section 1.10 of Volume 2, Chapter 1: Marine Processes of the Environmental Statement, APP-061).	The EA agrees that the assessment of potential changes to marine processes is suitable and that there will be no significant changes to marine processes receptors	Agreed
	No further mitigation to those embedded measures identified in Section 1.10 of Volume 2, Chapter 1: Marine Processes of the Environmental Statement (APP-061) is necessitated as a result of the assessment conclusions.	The EA agrees with this statement.	Agreed
	No monitoring relating to potential effects on marine processes seaward of MHWS to 1 NM off the coast is proposed as no significant impacts were identified in Volume 2, Chapter 1: Marine Processes of the Environmental Statement (APP-061).	The EA agrees with this statement.	Agreed
	The assessment of potential cumulative changes seaward of MHWS to 1 NM off the coast to marine processes in Section 1.13 Volume 2, Chapter 1: Marine Processes of the Environmental Statement (APP-061) is appropriate and no impacts from the construction, operation and maintenance and/or decommissioning of Hornsea Three, alongside other projects, plans and activities on marine processes receptors will be significant in EIA terms.	The EA has no issues to raise concerning the assessment of potential cumulative changes.	Agreed







Discussion point	The Applicant's position	Environment Agency's position	Final position
Draft Development Co	onsent Order		
Commitments / restrictions	The commitment to producing a cable specification and installation plan (Schedule 11, Part 2, Condition 11(1)(h) and Schedule 12, Part 2, Condition 12(1)(h) of the draft DCO), that must be submitted to and approved by the Marine Management Organisation (MMO) prior to the commencement of construction activities, is an appropriate control measure for detailing the technical specification of offshore cables below MHWS, a detailed cable laying plan and proposals for monitoring offshore cables during the operational lifetime of Hornsea Three.	The EA agrees with this statement.	Agreed







Table 3.2: Water Framework Directive assessment (offshore).

Discussion point	The Applicant's position	Environment Agency's position	Final position
Baseline environment	The relevant water bodies identified in Sections 2 and 3 of Volume 5, Annex 2.2: Water Framework Directive Assessment of the Environmental Statement (APP-103) are accurately characterised.	The EA agrees with this statement.	Agreed
Assessment	The methodology for the WFD assessment, as set out in Section 2 of Volume 5, Annex 2.2: Water Framework Directive Assessment of the Environmental Statement (APP-103), is acceptable.	The EA agrees with this statement.	Agreed
methodology	Both the Scoping and Impact Assessment stages of the WFD assessment has adequately assessed the maximum design scenarios of the development (both alone and at a cumulative level) on matters relating to the relevant water bodies.	The EA agrees with this statement.	Agreed
Scoping process	The Scoping process for the WFD Assessment has identified the appropriate WFD receptors for each of the relevant water bodies.	The EA agrees with this statement.	Agreed
WFD Assessment	The conclusions of the Scoping stage of the WFD assessment (Sections 4 and 6 of Volume 5, Annex 2.2: Water Framework Directive Assessment of the Environmental Statement (APP-103)) are appropriate, with two receptor groups scoped in to the impact assessment (i.e. Biology: habitats for the Norfolk North waterbody and Protected areas).	The EA agrees with this statement.	Agreed
Conclusions	The conclusions of the Impact Assessment are appropriate (as set out in Section 6 of Volume 5, Annex 2.2: Water Framework Directive Assessment of the Environmental Statement (APP-103)) with no potential for deterioration of the status of the Norfolk North and Norfolk East water bodies as a result of Hornsea Three.	The EA agrees with this statement.	Agreed







# 4. Agreements Log (Onshore)

- 4.1 The following section of this SoCG identifies the level of agreement between the parties for each relevant component of the DCO application (as identified in paragraph 2.1) landward of MHWS. In order to easily identify whether a matter is "agreed", "under discussion" or indeed "not agreed" a colour coding system of green, yellow and orange, respectively, is used in the "final position" column to represent the respective status of discussions.
- 4.2 Section 3 of this SoCG identifies the level of agreement between the parties for each relevant component of the DCO application (as identified in paragraph 2.1) seaward of MHWS.

### **Geology and ground conditions**

- 4.3 Hornsea Three has the potential to impact upon onshore geology and ground conditions and these interactions are duly considered within Volume 3, Chapter 1: Geology and Ground Conditions of the Environmental Statement (APP-073). An Outline Code of Construction Practice (CoCP) has been prepared (APP-179) that captures all relevant management and mitigation measures associated with this topic.
- 4.4 In respect to the Environment Agency's remit the interactions relate to the appropriate management of contaminated land to ensure no risk to surface or ground waters; and managing waste in accordance with the Environmental Permitting Regulations 2010 as amended.
- 4.5 Table 4.1 identifies the status of discussions relating to geology and ground conditions between the parties.

# **Hydrology and flood risk**

- 4.6 Hornsea Three has the potential to impact upon hydrology and flood risk and these interactions are duly considered within Volume 3, Chapter 2: Hydrology and Flood Risk of the Environmental Statement (APP-074). An Outline CoCP has been prepared that captures all relevant management and mitigation measures associated with this topic.
- 4.7 Table 4.2 identifies the status of discussions relating to hydrology and flood risk between the parties.

# **Ecology and Nature Conservation**

- 4.8 Hornsea Three has the potential to impact upon onshore ecology and nature conservation and these interactions are duly considered within Volume 3, Chapter 3: Ecology and Nature Conversation of the Environmental Statement (APP-075). An Outline Ecological Management Plan (EMP) (APP-180) and an Outline CoCP have been prepared that capture all relevant management and mitigation measures associated with this topic.
- 4.9 Table 4.3 identifies the status of discussions relating to ecology and nature conservation between the parties. The Report to Inform Appropriate Assessment does not fall with the Environment Agency's remit and therefore, is not included in this SoCG.







Table 4.1: Geology and ground conditions (including Water Framework Directive Groundwater Assessment)

Discussion point	The Applicant's position	Environment Agency's position	Final position	
Design, Site Selection	Design, Site Selection and Route Refinement			
Site selection of the onshore HVDC converter/HVAC substation and HVAC booster station	The sites selected for the onshore HVAC booster station and onshore HVDC converter/HVAC substation are appropriate given the avoidance of designated geological sites, potentially contaminated land and Source Protection Zones (SPZs).	Although the substation at Dunston is within SPZ2, the EA has no significant concerns about this site due to the designed in mitigations and management plans. The EA agrees that on balance, the site selection process and the site selected is appropriate.	Agreed	







Route of Hornsea Three onshore cable corridor The Hornsea Three onshore cable corridor was refined from 200 m, as reported in the PEIR, to 80 m to minimise potential impacts on sensitive groundwater areas taking into consideration comments received through the statutory consultation process in respect to the use of HDD and inclusion of control measures (e.g. standoff distances between the HDD and principal aquifer and management plans) to minimise the impacts during construction. The route selected for the Hornsea Three onshore cable corridor is therefore appropriate given its avoidance of designated geological sites, current and former waste management sites, and where possible, SPZs.

The Applicant has considered the potential for contamination to have occurred as a result of historic and current land uses. Whilst the review of historic maps has not identified any land uses that are likely to result in significant widespread contamination, there are a number of uses which may have potentially caused localised land and groundwater contamination (paragraphs 1.7.4.34 to 1.7.4.39 of volume 3, Chapter 1: Geology and Ground Conditions of the Environmental Statement [APP-073].

The Applicant therefore acknowledges that there may be previously unidentified contamination of land or water discovered during construction. The 'Written Scheme to deal with any Contamination of Land' will be an accompanying plan to the CoCP [Section 3, APP-179], and is included to address this issue. The scheme will include a Preliminary Risk Assessment where appropriate (i.e. if an area of land contamination is identified within the cable corridor which may affect principle and secondary aquifers). As with all the plans accompanying the CoCP, it will be submitted to and approved by the Environment Agency among other stakeholders prior to the commencement of construction (for the phase the CoCP relates to). This is secured in Requirement 17 of the draft DCO [APP-027].

The decision to reduce the onshore cable corridor route width from 200m to 80m, the use of HDD and control measures assists in mitigating impacts on sensitive groundwater areas. It is noted that the route selected was chosen to avoid many sensitive sites. However, it should be noted that the route does pass through the groundwater dependent Booton Common, an SPZ1 at Marlingford and SPZ2 at Dunston and Alderford.

The EA agree that while the HOW03 order limits do cross sensitive sites at an SPZ1 at Marlingford, SPZ2 at Dunston and Alderford, and the groundwater dependent Booton Common, the EA is comfortable that sufficient designed in measures and management plans are proposed to avoid significant effects and make this acceptable.

The investigations taken to inform site selection should not be assumed to confirm that there is no contamination and it will still be necessary to undertake investigations prior to work commencing in a Preliminary Risk Assessment (PRA). It should be

**Agreed** 







Discussion point	The Applicant's position	Environment Agency's position	Final position
		noted that the route crosses railway lines, runs adjacent to a former depot and historic landfill and crosses an abandoned MOD pipeline all of which have the potential to cause or caused contamination in the cable route area. The EA agree that the Applicant's approach to potentially contaminated land, including the commitment to go through an approval process with the Environment Agency, is appropriate.	
EIA			
Policy and planning	Section 1.4 of Volume 3, Chapter 1: Geology and Ground Conditions of the Environmental Statement (APP-073) has identified all appropriate plans and policies relevant to geology and ground conditions and due regard has been given to them within the assessment.	Agreed	Agreed







Discussion point	The Applicant's position	Environment Agency's position	Final position
Baseline environment	Sufficient primary and secondary data, as listed in Section 1.6 of Volume 3, Chapter 1: Geology and Ground Conditions of the Environmental Statement (APP-073), has been collated to appropriately characterise the baseline environment (in Section 1.7 of Volume 3, Chapter 1: Geology and Ground Conditions of the Environmental Statement) to inform the EIA.	The characterisation of the baseline environment doesn't include information on dewatering at existing mineral extraction site; the degree of confinement of the chalk requires more in-depth assessment at sensitive locations (e.g. SPPZ1); further assessment is needed to properly characterise the Crag aquifer; WFD Cycle 2 data should be used throughout to assess groundwater body status.  Notwithstanding this, we agree that there is sufficient data (on the basis that the abstraction licence information is provided within ES, Vol.6, Annex 1.2) on which to base the assessment such that potential effects have been identified and appropriate mitigation will be secured under appropriate consultation with the EA.	Agreed
	The future baseline identified in Section 1.7.5 of Volume 3, Chapter 1: Geology and Ground Conditions of the Environmental Statement (APP-073) is considered appropriate.	Agreed	Agreed







Discussion point	The Applicant's position	Environment Agency's position	Final position
Assessment methodology	The potential impacts identified in Section 1.10 of Volume 3, Chapter 1: Geology and Ground Conditions of the Environmental Statement (APP-073) represent a comprehensive list of potential impacts on geology and ground conditions from the construction, operation and maintenance and/or decommissioning of Hornsea Three.  Paragraph 6.9.1.5 of the Outline CoCP (APP-179) has been updated to include the sentence 'Where agreed with the Environment Agency, site investigation boreholes within SPZ1 and other sensitive sites will be used to monitor groundwater flows for an agreed period.' Any monitoring will be discussed with the Environment Agency as part of consultation on site investigation methodologies.  The Applicant has consulted with Anglian Water regarding its concerns about potential impacts on groundwater sources in the vicinity of Marlingford and have agreed that suitable protection measures are included in the draft DCO [APP-027].  As stated in paragraph 6.8.1.6 of the Outline CoCP [APP-179], 'existing water supplies and drainage systems will be maintained and reinstated wherever reasonably practicable during the construction process'. Option and lease agreements with individual landowners within the order limits secure protection for their private water supplies.	The EA is satisfied that following clarification from the Applicant, there are sufficient and appropriate measures to protect groundwater resources including public (Marlingford) and private groundwater abstractions in close proximity to the cable corridor.	Agreed







Discussion point	The Applicant's position	Environment Agency's position	Final position
	The definitions used for magnitude and sensitivity, as outlined in Section 1.9 of Volume 3, Chapter 1: Geology and Ground Conditions of the Environmental Statement (APP-073) are appropriate.  The Applicant acknowledges that the matrix approach is not prescriptive and where appropriate, consideration is given to site specific issues in line with professional judgement to ensure locally important impacts are sufficiently considered. This is the case with regard to impacts on private domestic abstractions. As noted above, option and lease agreements with individual landowners within the order limits secure protection for their private water supplies.	If groundwater flow to a private domestic abstraction which may not have access to mains water (classified as 'negligible' sensitivity) were to be subject to a 'major' magnitude impact, the significance would be determined to be 'minor'. Whilst this would be the case in terms of the EIA, such an impact would require the applicant to drill a new borehole/connect the abstractor to the mains. This scheme may therefore mask impacts that are locally critical.  On the basis of the Applicant's clarification, the EA are in general in agreement with the definitions.	Agreed







Discussion point	The Applicant's position	Environment Agency's position	Final position
	The maximum design scenarios identified for each impact in Table 1.10 of Volume 3, Chapter 1: Geology and Ground Conditions of the Environmental Statement are appropriate based on the information presented in Volume 1, Chapter 3: Project Description of the Environmental Statement [APP-073].  Impacts on wetland sites fed by groundwater have been fully considered in Volume 3, Chapter 2: Hydrology and Flood Risk of the Environmental Statement [APP-074], and Volume 3, Chapter 3: Ecology and Nature Conservation of the Environmental Statement [APP-075].  Additional information about the hydrological and ecological features of wetland sites and how they interact has been presented in volume 6, Annex 2.4: Hydrological Characterisation Study [APP-127]. Potential constraints have been mapped and have been used to inform the principles of the crossing method statements (which will be developed in consultation with the Environment Agency) in these areas (a process that will continue into detailed design).	The EA agree that the potential for impacts on the quality and quantity of wetlands fed by groundwater has been appropriately addressed in the Environmental Statement.	Agree
	The list of projects screened into the CEA in Section 1.12.1 of Volume 3, Chapter 1: Geology and Ground Conditions of the Environmental Statement [APP-073] are appropriate.	Agreed	Agreed







Discussion point	The Applicant's position	Environment Agency's position	Final position
Assessment conclusions	The assessment of potential effects on geology and ground conditions receptors in Section 1.11 of Volume 3, Chapter 1: Geology and Ground Conditions of the Environmental Statement [APP-073], in particular the effects on groundwater quality and groundwater flow is appropriate and no impacts from the construction, operation and maintenance and/or decommissioning of Hornsea Three will be significant in EIA terms given the implementation of the measures adopted as part of Hornsea three (see Section 1.10 of Volume 3, Chapter 1: Geology and Ground Conditions of the Environmental Statement [APP-073]).  The Environment Agency will be consulted on the methodologies of site investigations at sensitive crossing points, which would include an agreement on any monitoring required. This is secured in the updated paragraph 6.9.1.5 of the outline CoCP [APP-179]. Site investigations would take place during the detailed design phase to confirm local geological conditions and hence the crossing method statement.  Section 6.9 of the Outline CoCP includes measures to protect groundwater flow. Furthermore, an Emergency Response and Pollution Control Plan will be prepared in consultation with the Environment Agency prior to the commencement of any activities that could trigger a pollution incident (such as HDD activities) to include measures to protect surface and groundwater during construction [Section 3 of the Outline CoCP, APP-179].  The location of Environment Agency monitoring boreholes is acknowledged in volume 6, Annex 1.4: Water Framework Directive Groundwater Assessment [APP-123].  As noted above, option and lease agreements with individual landowners within the order limits secure protection for their private water supplies.	This is agreed, as detailed assessments will be provided to inform the final Code of Construction Practice in consultation with the Environment Agency. The CoCP includes (in Section 6.9) the need to consider potential impacts of changes to shallow aquifer flow on any private abstractors in close proximity, and the Agency's key groundwater levels monitoring site at Weston Longville (used to assess abstraction licence permissions).	Agreed







Discussion point	The Applicant's position	Environment Agency's position	Final position
	No further mitigation to those embedded measures identified in Section 1.10 of Volume 3, Chapter 1: Geology and Ground Conditions of the Environmental Statement and the Outline CoCP (APP-179) are necessary as a result of the assessment conclusions.  The final CoCP, of which Section 6.9 relates to the protection of groundwater, will be submitted to and approved by the Environment Agency. This is secured in Schedule 1, Part 3, Requirement 17 of the draft DCO [APP-027].	Agreed. The detailed CoCP will include measures to protect groundwater abstractors from effects on shallow aquifers.	Agreed
	The assessment of potential cumulative changes to geology and ground conditions in Section 1.13 of Volume 3, Chapter 1: Geology and Ground Conditions of the Environmental Statement [APP-073] is appropriate and no impacts from the construction, operation and maintenance and/or decommissioning of Hornsea Three, alongside other projects, plans and activities on geology and ground conditions will be significant in EIA terms.	Agreed, under EIA terms	Agreed
Draft Development	Consent Order		
Commitments / restrictions	The commitment to produce a CoCP (Schedule 1, Part 3, Requirement 17 of the draft DCO), that must be approved prior to the commencement of consented works, is an appropriate control measure for managing the potential effects on geology and ground conditions. The final version of the CoCP will be based on the Outline CoCP [APP-179], and will include all relevant embedded measures specified within Volume 3, Chapter 1: Geology and Ground Conditions of the Environmental Statement [APP-073].	Agreed	Agreed







Discussion point	The Applicant's position	Environment Agency's position	Final position
Water Framework D	Directive Groundwater Assessment		
Baseline environment	The relevant groundwater bodies have been identified and accurately characterised in Section 5 of Volume 6, Annex 1.4: Water Framework Directive Groundwater Assessment [APP-123] of the Environmental Statement.	Although there is confusion over qualitative and quantitative tests and status with the results for the groundwater dependent terrestrial ecosystems and saline intrusion tests being omitted; the EA agrees that sufficient and appropriate information has been provided to make Annex 1.4 a reasonable characterisation of WFD groundwater bodies.	Agreed
Assessment methodology	The methodology for the WFD assessment in Section 3.2 of Volume 6, Annex 1.4: Water Framework Directive Groundwater Assessment of the Environmental Statement [APP-123] is acceptable.  The potential impacts and effects on groundwater flows, including around Booton Common SSSI, are considered in Volume 3, Chapter 1: Geology and Ground Conditions of the Environmental Statement [APP-073], and no significant effects from cabling or HDD were identified. On this basis, the provisions to carry out a hydrogeological risk assessment and prepare a site-specific method statement for the nearby HDD crossing (of Blackwater Drain), which will incorporate areas for consideration identified in the Hydrological Characterisation Study (Volume 6, Annex 2.4 of the Environmental Statement [APP-127]) are appropriate control measures for impacts on Booton Common SSSI. The site-specific HDD method statement will be prepared in discussion the Environment Agency and Natural England.	Agree that the potential for impacts on groundwater dependent terrestrial ecosystems has been appropriately addressed in the Environmental Statement through a combination of Volume 3, Chapter 1 and 2, as well as Volume 6, Annex 2.4 (including Booton Common (part of the Norfolk Valley Fens SAC)).	Agreed







Discussion point	The Applicant's position	Environment Agency's position	Final position
	The assessments within the WFD groundwater assessment has adequately assessed the maximum design scenario of Hornsea Three relating to the relevant water bodies (see Section 6 of Volume 6, Annex 1.4: Water Framework Directive Groundwater Assessment of the Environmental Statement [APP-123]).	Agreed	Agreed
Assessment conclusions	The conclusion of the WFD groundwater assessment (in Section 6 of Volume 6, Annex 1.4: Water Framework Directive Groundwater Assessment of the Environmental Statement [APP-123]) that the construction, operation and maintenance, and/or decommissioning of Hornsea Three will not result in the deterioration of the groundwater bodies is appropriate.	Agreed	Agreed
Outline Managemen	nt Plans		
Outline CoCP	The management measures identified within the Outline CoCP [APP-179] are appropriate and adequate for controlling any potentially significant effects on geology and ground conditions.  The Applicant is adding the following sentence to the Outline CoCP: 'Where agreed with the Environment Agency, site investigation boreholes within SPZ1 and other sensitive sites will be used to monitor groundwater flows for an agreed period.'. Hydrogeological risk assessments based on site investigations will inform detailed design, and the final CoCP will be submitted to and approved by the Environment Agency prior to the commencement of consented works. Furthermore, option and lease agreements with individual landowners within the order limits secure protection for their private water supplies.	The EA is satisfied that the amended wording in the outline CoCP, in combination with landowner agreements, includes appropriate measures for private abstractions from the shallow aquifer and wetlands.	Agreed







Discussion point	The Applicant's position	Environment Agency's position	Final position
Method statements	The Outline Method Statement for Crossing Techniques in Annex B of the Outline CoCP [APP-179] sets out appropriate principles and measures for watercourse crossings. The measures for watercourse crossings will be developed further in consultation with the Environment Agency to be included in the final version of the CoCP. Paragraph 6.9.1.5 of the Outline CoCP [APP-179] has been updated to include the sentence 'Where agreed with the Environment Agency, site investigation boreholes within SPZ1 and other sensitive sites will be used to monitor groundwater flows for an agreed period.' Any monitoring will be discussed with the Environment Agency as part of consultation on site investigation methodologies.  All plans included in Section 3 of the Outline CoCP (which include the bentonite break out plan and the pollution control plan) will be submitted to and approved by the Environment Agency prior to the commencement of consented works.	Agreed. The Applicant's post- application commitment to groundwater levels monitoring at sensitive sites, included within the CoCP, is appropriate. The Applicant has confirmed that the Environment Agency will have the opportunity to approve the Bentonite Break Out Plan and the Pollution Control Plan prior to the commencement of construction activities. The EA welcomes this commitment.	Agreed







Table 4.2: Hydrology and flood risk (including Water Framework Directive Surface Water Assessment).

Discussion point	The Applicant's position	Environment Agency's position	Final position		
Design, Site Selecti	Design, Site Selection and Route Refinement				
Site selection of the onshore HVAC booster station and onshore HVDC converter/HVAC substation	The sites selected for the onshore HVAC booster station and onshore HVDC converter/HVAC substation appropriately followed the sequential approach in order to locate the permanent infrastructure within low flood risk areas (Flood Zone 1).	This is not within EA remit but that the booster station is located in FZ 1 suggests that this has been done	This issue is not within the remit of the Environment Agency		
Route of Hornsea Three onshore cable corridor	The Hornsea Three onshore cable corridor was refined from 200 m, as reported in the PEIR, to 80 m to minimise the potential impact on watercourse crossing locations and existing field drainage systems, to take into consideration comments received through the statutory consultation process in respect to using HDD to cross main and (where possible) ordinary watercourses and the inclusion of pollution control measures during construction. The route selected for the Hornsea Three onshore cable corridor is therefore appropriate given its avoidance of formal tidal and flood defences and where possible, it's location on land assessed to be low flood risk.	Agreed. We await further detail in the detailed CoCP.	Agreed		
Design	The content of the outline drainage strategy (see Volume 6, Annex 2.1: Onshore Infrastructure Flood Risk Assessment [APP-124]) meets national and local policy requirements, and SuDS guidelines, including the proposed solution for achieving greenfield run-off rates.	Not within EA remit. We are not the statutory body for surface water flooding.	This issue is not within the remit of the Environment Agency		
EIA	EIA				
Policy and planning	Section 2.4 of Volume 3, Chapter 2: Hydrology and Flood Risk of the Environmental Statement [APP-074] has identified all appropriate plans and policies relevant to hydrology and flood risk, and due regard has been given to them within the assessment.	Agreed. Correct policies have been quoted.	Agreed		







Discussion point	The Applicant's position	Environment Agency's position	Final position
Baseline environment	Sufficient primary and secondary data, as listed in Section 2.6 of Volume 3, Chapter 2: Hydrology and Flood Risk of the Environmental Statement [APP-074], has been collated to appropriately characterise the baseline environment landward of MHWS (in Section 1.7 of Volume 3, Chapter 2: Hydrology and Flood Risk of the Environmental Statement [APP-074]) to inform the EIA.	Agreed We note that the figures used for climate change allowances have been overly precautionary. This means that the assessment has gone beyond 'worst case'. E.g. 2.7.11.4 quotes to use central and upper end for climate change allowances. It would be the 'central' and 'higher central for Less Vulnerable', so a greater percentage change has been applied than is required.	Agreed
	The future baseline identified in Section 2.7.11 of Volume 3, Chapter 2: Hydrology and Flood Risk of the Environmental Statement [APP-074] is considered appropriate	Agreed	Agreed







Discussion point	The Applicant's position	Environment Agency's position	Final position
	The potential impacts identified in Section 2.10 of Volume 3, Chapter 2: Hydrology and Flood Risk of the Environmental Statement [APP-074] (including impacts of flood risk and runoff) represent a comprehensive list of potential impacts on hydrology and flood risk from the construction, operation and maintenance and/or decommissioning of Hornsea Three.	Agreed	Agreed
Assessment methodology	The definitions used for magnitude and sensitivity, outlined in Section 2.9 of Volume 3, Chapter 2: Hydrology and Flood Risk of the Environmental Statement [APP-074] are appropriate.	Whilst we consider that the WFD status of a waterbody should not be used as a proxy for sensitivity; we note that the applicant has addressed this weakness in the methodology by adopting a precautionary approach by assuming that all waterbodies will have achieved 'Good' status at the time of construction. This is described at paragraph 2.11.1.12. We agree that this precaution added to the magnitude is appropriate.	Agreed
	The maximum design scenarios identified for each impact in Table 2.12 of Volume 3, Chapter 2: Hydrology and Flood Risk of the Environmental Statement [APP-074] are appropriate based on the information presented in Volume 1, Chapter 3: Project Description of the Environmental Statement (APP-058).	Most of these related to surface water strategies. The EA are satisfied with the maximum design scenarios that are relevant to their remit.	Agreed
	The list of projects screened into the CEA in Section 2.12 of Volume 3, Chapter 2: Hydrology and Flood Risk of the Environmental Statement [APP-074] are appropriate.	Agreed	Agreed







Discussion point	The Applicant's position	Environment Agency's position	Final position
	The scope of the Hydrological Characterisation Study (see Volume 6, Annex 2.4 of the Environmental Statement (APP-127])) is considered appropriate to identify the linkages between hydrology and designated nature conservation sites, and to guide appropriate measures adopted as part of Hornsea Three (as outlined in Section 2.10 of Volume 3, Chapter 2: Hydrology and Flood Risk of the Environmental Statement [APP-074] and the Outline CoCP [APP-179]).	Agreed	Agreed
	The assessment of potential effects on hydrology and flood risk receptors is appropriate and no impacts from the construction, operation and maintenance, and/or decommissioning of Hornsea Three will be significant in EIA terms given the implementation of the measures adopted as part of Hornsea Three (see Section 2.10 of Volume 3, Chapter 2: Hydrology and Flood Risk [APP-074]).	Agreed	Agreed
Assessment conclusions	No further mitigation to those embedded measures identified in Section 2.10 of Volume 3, Chapter 2: Hydrology and Flood Risk of the Environmental Statement [APP-074] and the Outline CoCP (APP-179) for pollution prevention and to control surface runoff and flood risk are necessary as a result of the assessment conclusions.	Agreed	Agreed
	The assessment of potential cumulative changes to hydrology and flood risk in Section 2.13 of Volume 3, Chapter 2: Hydrology and Flood Risk of the Environmental Statement [APP-074] is appropriate and no impacts from the construction, operation and maintenance and/or decommissioning of Hornsea Three, alongside other projects, plans and activities on geology and ground conditions will be significant in EIA terms.	Agreed	Agreed







Discussion point	The Applicant's position	Environment Agency's position	Final position
Draft Development	Consent Order		
Commitments / restrictions	The commitment to produce a CoCP (Schedule 1, Part 3, Requirement 17 of the draft DCO), that must be approved prior to the commencement of consented works, is an appropriate control measure for managing the potential effects on hydrology and flood risk. The final version of the CoCP will be based on the Outline CoCP [APP-179], and will include all relevant embedded measures specified within Volume 3, Chapter 2: Hydrology and Flood Risk of the Environmental Statement [APP-074].	Agreed	Agreed
Water Framework D	irective Surface Water Assessment		
Baseline environment	The identification of relevant water bodies and their features, as set out in Section 5 of Volume 6, Annex 2.5: Water Framework Directive Surface Water Assessment of the Environmental Statement [APP-128], are appropriate.  The typographic error referring to 'Anglican' rather than 'Anglian' has been addressed in the Errata document submitted as an Appendix to the Applicant's Deadline 1 submission.	Please note that the RBMP was incorrectly recorded as 'Anglican' but other than this, we agree.	Agreed
Accoccment	The methodology for the WFD surface water assessment, as set out in Section 1 of Volume 6, Annex 2.5: Water Framework Directive Surface Water Assessment of the Environmental Statement [APP-128], is acceptable.	Agreed	Agreed
Assessment methodology	The assessments within the WFD surface water assessment has adequately assessed the maximum design scenario of Hornsea Three relating to the relevant water bodies (see Section 6 of Volume 6, Annex 2.5: Water Framework Directive Surface Water Assessment of the Environmental Statement [APP-128]).	Agreed	Agreed







Discussion point	The Applicant's position	Environment Agency's position	Final position
Assessment conclusion	The conclusion of the WFD surface water assessment (in Section 6 of Volume 6, Annex 1.4: Water Framework Directive Groundwater Assessment of the Environmental Statement [APP-123]) that there will be no risk of deterioration of status or the achievement of the WFD objectives is appropriate.  The final CoCP will be submitted to and approved by the Environment Agency prior to the commencement of consented works.	We agree, provided that the detailed CoCP is followed.	Agreed
Outline Managemer	nt Plans		
Outline CoCP	The management measures identified within the Outline CoCP (APP-179) are appropriate and adequate for controlling any potentially significant effects on hydrology and flood risk.	Agreed	Agreed
Method statements	The Outline Method Statement for Crossing Techniques in Annex B of the Outline CoCP (APP-179) sets out appropriate principles and measures for watercourse crossings. The measures for watercourse crossings will be developed further in consultation with the Environment Agency to be included in the final version of the CoCP.	Agreed	Agreed







Table 4.3: Ecology and nature conservation.

Discussion point	The Applicant's position	Environment Agency's position	Final position
Design, Site Select	ion and Route Refinement		
Site Selection of onshore HVAC booster station and onshore HVDC converter/HVAC substation	The site selected for the onshore HVAC booster station and onshore HVDC converter/HVAC substation are appropriate given the avoidance of sensitive habitats and designated sites.	Agreed	Agreed
Route of the Hornsea Three onshore cable corridor	The Hornsea Three onshore cable corridor was refined from 200 m, as reported in the PEIR, to 80 m to minimise the potential impact on habitats and species taking into consideration comments received through the statutory consultation process in respect to using HDD to cross main and ordinary watercourses and those non-statutorily designated sites and sensitive habitats that could not be avoided by route alignment. The route selected for the Hornsea Three onshore cable corridor is therefore appropriate given its avoidance of designated and where possible, non-statutorily designated sites and sensitive habitats and species.	Agreed that the route has avoided many sensitive sites and used HDD where sensitive locations were unavoidable	Agreed
EIA			
Policy and planning	Section 3.4 of Volume 3, Chapter 3: Ecology and Nature Conservation of the Environmental Statement [APP-075] has identified all appropriate plans and policies relevant to ecology and nature conservation landward of MHWS and due regard has been given to them within the assessment.	We agree with the principles established	Agreed







Discussion point	The Applicant's position	Environment Agency's position	Final position
Baseline environment	Sufficient primary and secondary data, as listed in Section 3.6 of Volume 3, Chapter 3: Ecology and Nature Conservation of the Environmental Statement [APP-075], has been collated to appropriately characterise the baseline environment landward of MHWS (in Section 3.7 of Volume 3, Chapter 3: Ecology and Nature Conservation of the Environmental Statement [APP-075]) to inform the EIA.	We agree that the issues raised in relation to waterbodies and areas within our remit have been appropriately characterised.	Agreed
	The scope of the protected species surveys, as outlined in Volume 6, Annex 3.3: Desmoulin's Whorl Snail Survey (APP-131), Annex 3.4: White Clawed Crayfish Survey (APP-132), Annex 3.5: Great Crested Newt Survey (APP-133), Annex 3.6: Reptile Survey (APP-134), Annex 3.7: Water Vole Survey (APP-135), Annex 3.8: Bat Survey (APP-136), Annex 3.9: Onshore Ornithology – Wintering and Migratory Birds (APP-137), Annex 3.10: Onshore Ornithology – Breeding Birds (APP-138), Annex 3.11: Otter Survey (APP-139) and 3.12: Badger Survey (APP-140) of the Environmental Statement were appropriate and adequate (taking into consideration access limitations) to inform the assessment of potential significant effects. No further protected species surveys were considered necessary to inform the characterisation of the baseline environment for the purposes of the EIA.	We agree in respect of those species that fall within the EA remit but do not seek to comment in respect of those where primary responsibility rests with Natural England	Agreed
	Surveys for hazel dormouse, red squirrel, fish and freshwater pearl mussel were not deemed necessary to inform the baseline environment for the purposes of the EIA based on the outcomes of the Hazel Dormouse, Red Squirrel and Freshwater Pearl Mussel Desk Study (Volume 6, Annex 3.13 of the Environmental Statement (APP-141)).	We agree in respect of those species that fall within the EA remit but do not seek to comment in respect of those where primary responsibility rests with Natural England	Agreed







Discussion point	The Applicant's position	Environment Agency's position	Final position
	The potential impacts identified within Section 3.8 of Volume 3, Chapter 3: Ecology and Nature Conservation of the Environmental Statement [APP-075] represent a comprehensive list of potential impacts on ecology and nature conservation from the construction, operation and maintenance and/or decommissioning of Hornsea Three.	We agree in principle and await site specific evaluation in the detailed CoCP.	Agreed
	The definitions used for magnitude and sensitivity, as outlined in Section 3.9 of Volume 3, Chapter 3: Ecology and Nature Conservation of the Environmental Statement [APP-075], are appropriate.	Agreed	Agreed
Assessment methodology	The maximum design scenarios identified for each impact in Table 3.14 of Volume 3, Chapter 3: Ecology and Nature Conservation of the Environmental Statement are appropriate based on the information presented in Volume 1, Chapter 3: Project Description of the Environmental Statement (APP-058).	Agreed	Agreed
	The list of projects screened into the CEA in Section 3.12 of Volume 3, Chapter 3: Ecology and Nature Conservation of the Environmental Statement [APP-075] are appropriate.		
	The Applicant can confirm that the Norwich Northern Distributor Road (NDR) was considered in the identification of potential cumulative projects (Volume 4, Annex 5.2: Cumulative Effects Screening of the Environmental Statement, APP-097). However, this project would be operational during the construction and operational window of Hornsea Project Three such that no cumulative effects relating to ecology would occur.	Agreed	Agreed







Discussion point	The Applicant's position	Environment Agency's position	Final position
	The scope of the Hydrological Characterisation Study (see Volume 6, Annex 2.4 of the Environmental Statement (APP-127)) is considered appropriate to identify the linkages between hydrology and designated nature conservation sites, and to guide appropriate measures adopted as part of Hornsea Three (as outlined in Section 3.10 of Volume 3, Chapter 3: Ecology and Nature Conservation of the Environmental Statement [APP-075] and the Outline CoCP [APP-179]).	Agreed	Agreed
Agggggment	The assessment of potential effects on ecology and nature conservation landward of MHWS during the construction, operation and maintenance, and decommissioning of Hornsea Three in Section 3.11 of Volume 3, Chapter 3: Ecology and Nature Conservation of the Environmental Statement [APP-075] is appropriate and accurate given the implementation of the measures adopted as part of Hornsea Three (outlined in Section 3.10 of Volume 3, Chapter 3: Ecology and Nature Conservation of the Environmental Statement [APP-075]).	We agree in principle and await site specific evaluation in the detailed CoCP	Agreed
Assessment conclusions	With the exception of the impact of open cut trenching, installation of cables, and construction and use of access tracks, to cause temporary habitat loss and disturbance between November and January (inclusive) on Pink Footed Geese, no effects on ecology and nature conservation from the construction, operation and maintenance, and/or decommissioning of Hornsea Three will be significant in EIA terms given the implementation of the measures adopted as part of Hornsea Three (see Section 3.10 of Volume 3, Chapter 3: Ecology and Nature Conservation of the Environmental Statement [APP-075]).	We assume that this statement refers to Pink Footed Geese (PFG) only and advise that PFG are outside of our remit	This issue does not fall within the remit of the Environment Agency







Discussion point	The Applicant's position	Environment Agency's position	Final position
	With the exception of the impact of open cut trenching, installation of cables, and construction and use of access tracks, to cause habitat loss and disturbance between November and January (inclusive) on Pink Footed Geese, no further mitigation to those embedded measures identified in Section 3.10 of Volume 3, Chapter 3: Ecology and Nature Conservation of the Environmental Statement [APP-075] and the Outline CoCP (APP-179) are necessary as a result of the assessment conclusions.	We assume that this statement refers to Pink Footed Geese (PFG) only and advise that PFG are outside of our remit	This issue does not fall within the remit of the Environment Agency
	Hornsea Three has adequately sought to minimise the impact from open cut trenching, installation of cables, and construction and use of access tracks, to cause temporary habitat loss and disturbance between November and January (inclusive) on Pink Footed Geese, via the implementation of a pink-footed goose mitigation plan which will be submitted to Natural England for approval in the 12 months prior to construction.	We assume that this statement refers to Pink Footed Geese (PFG) only and advise that PFG are outside of our remit	This issue does not fall within the remit of the Environment Agency
	The replanting of hedgerows removed during the construction of Hornsea Three (including planting up of gaps in existing hedgerows) with a species-rich mix of native species is appropriate ecological enhancement.  As the loss of hedgerow will be temporary along the cable corridor, the commitment to undertake hedgerow enhancement (gap filling with locally appropriate species rich mix) within a 100 m wide corridor that will contain the working corridor (where hedgerows are planned to be removed, and with landowner agreement) would constitute an overall enhancement to hedgerows once planting has matured. Mitigation measures and enhancements relating to hedgerows are included in the Outline Landscape Management Plan [APP-181] and the Outline Ecological Management Plan [APP-180].	Agreed where replacement provides greater diversity to that removed. Please note that this is not solely an ecological enhancement but also mitigation for temporary habitat loss. Species should be appropriate to local provenance.	Agreed







Pre-construction surveys in-line with Table 3.21 of Volume 3, Chapter 3: Ecology and Nature Conservation of the Environmental Statement [APP-075] are proposed. The surveys are deemed appropriate control measures for managing the potential effects on ecology and nature conservation landward of MHWS.

A timetable of ecologically suitable work periods is included as Table 10.1 of the Outline Ecological Management Plan [APP-180]. This includes a specification of when ecology related surveys can and cannot be carried out.

Following input from the Environment Agency, the Applicant has made the following updates to the Outline EMP:

- The 'suboptimal' colouring from Jan-mid Feb and Oct-Dec in the relevant line in Table 10.1 will be removed.
- The row heading in Table 10.1 will be updated to 'Habitat management to deter water voles from working areas (commencing between 15<sup>th</sup> Feb 15<sup>th</sup> April and continuing through active breeding season or until bank works start. Habitat management cannot commence after April 15<sup>th</sup>.')

Paragraph 5.4.8.2 will be amended to:

Method statements will include pre-construction measures to deter water voles from the working corridor and an adequate buffer zone (i.e. up to 15 m where favourable habitat is present). Measures could potentially include:

- Removal of vegetation from channel and bank-side vegetative cover, up to a minimum of 1.5 m inland from the top of the bank between 15th mid-February and 15th early-April;
- Where vegetation is removed from water vole habitat between 15th February – 15th April, regular repeat strimming through the water vole breeding season until bank works commence is

The Applicant has provided proposed timings for ecological surveys in the outline Ecological Management Plan. The EA requires some amendments to the timings of water vole work. The Applicant has proposed changes to the outline EMP to reflect this advice (in the Applicant's position column), and on the basis that this is updated the EA agrees on this issue.

Agreed







Discussion point	The Applicant's position	Environment Agency's position	Final position
	required in order to maintain the habitat in a condition unsuitable for water voles.		
	<ul> <li>The potential capture and translocation of water voles from working areas by an appropriately qualified and experienced ecologist;</li> </ul>		
	<ul> <li>A destructive search of water vole burrows within the working corridor under the watching brief of an appropriately qualified and experienced ecologist; and</li> </ul>		
	<ul> <li>Measures to protect adjacent sections of the watercourse, which will not be directly impacted by trenching, such as marking out on the ground the boundary of the Hornsea Three onshore cable corridor, to control the movement of personnel and vehicles.</li> </ul>		
	Paragraph 4.3.9.5 will be amended to:		
	<ul> <li>Vegetation removal to encourage relocation of water voles to adjacent habitat must commence between 15th February – 15th April. Regular repeat strimming is required in order to maintain habitat in a condition unsuitable for water voles until the commencement of works. Translocation of water voles, if required, should be completed between 15th February - 15th April. Works will be carried out under the guidance of the ECoW and under an ecological watching brief.</li> </ul>		







Discussion point	The Applicant's position	Environment Agency's position	Final position
	The assessment of potential cumulative impacts on ecology and nature conservation receptors landward of MHWS in Section 3.13 of Volume 3, Chapter 3: Ecology and Nature Conservation of the Environmental Statement [APP-075] is appropriate, and no impacts from the construction, operation and maintenance and/or decommissioning of Hornsea Three, alongside other projects, plans and activities on ecology and nature conservation receptors will be significant in EIA terms.	Agreed	Agreed
Draft Development Consent Order			
Commitments / restrictions	The commitment to produce both an EMP (Schedule 1, Part 3, Requirement 10 of the draft DCO) and a CoCP (Schedule 1, Part 3, Requirement 17 of the draft DCO) that must be approved prior to the commencement of works are appropriate control measures for managing the potential effects on ecology and nature conservation landward of MHWS. The EMP and CoCP will include all relevant embedded measures cited within Volume 3, Chapter 3: Ecology and Nature Conservation of the Environmental Statement [APP-075], as well as the Outline EMP [APP-180] and Outline CoCP [APP-179].	Agreed	Agreed
Outline Management Plans			
Outline EMP and Outline CoCP	The management measures identified within the Outline EMP [APP-180] and Outline CoCP [APP-179] are appropriate for managing construction and post construction impacts from Hornsea Three on ecology and nature conservation receptors landward of MHWS.  The Ecological Clerk of Works (ECoW) would report on ecological matters and would be responsible for undertaking preconstruction surveys and monitoring.	Agreed, as the detailed EMP & CoCP have scope for further investigation.	Agreed







# 5. Summary

- This SoCG has been developed with the Environment Agency to capture those matters agreed, under discussion and not agreed in relation to marine processes, the Water Framework Directive assessment (offshore), geology and ground conditions (in respect to groundwater and WFD groundwater assessment), hydrology and flood risk (including WFD surface water assessment, and ecology and nature conservation.
- The Applicant has worked with the Environment Agency to add clarity on a number of issues, including the timings of mitigation works relating to water vole, groundwater monitoring and the protection of private water supplies. The amendments agreed within this SoCG are reflected in the updated versions of the Outline Code of Construction Practice [APP-179] and Outline Ecological Management Plan [AP-180] which have been submitted by the Applicant at Deadline 1.
- 5.3 All matters within the Environment Agency's remit are agreed between the parties.



