



# Hornsea Project Four: Derogation Information

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## Volume B2, Chapter 10: Without Prejudice Derogation Funding Statement

**Prepared** Francesca De Vita, Orsted, September 2021  
**Checked** Kaitlin Eames, Orsted, September 2021  
**Accepted** Sarah Randall, Orsted, September 2021  
**Approved** Julian Carolan, Orsted September 2021

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## Glossary

Term	Definition
Agreement for Lease (AfL)	An agreement for lease (AfL) is a non-binding agreement between a landlord and prospective tenant to grant and/or to accept a lease in the future. The AfL only gives the option to investigate a site for potential development. There is no obligation on the developer to execute a lease if they do not wish to.
Contracts for Difference (CfD)	The Contracts for Difference (CfD) scheme is the government's main mechanism for supporting low-carbon electricity generation. CfDs incentivise investment in renewable energy by providing developers of projects with high upfront costs and long lifetimes with direct protection from volatile wholesale prices, and they protect consumers from paying increased support costs when electricity prices are high.
Commitment	A term used interchangeably with mitigation and enhancement measures. The purpose of Commitments is to reduce and/or eliminate Likely Significant Effects (LSEs), in EIA terms. Primary (Design) or Tertiary (Inherent) are both embedded within the assessment at the relevant point in the EIA (e.g. at Scoping, Preliminary Environmental Information Report (PEIR) or ES). Secondary commitments are incorporated to reduce LSE to environmentally acceptable levels following initial assessment i.e. so that residual effects are acceptable.
Development Consent Order (DCO)	An order made under the Planning Act 2008 granting development consent for one or more Nationally Significant Infrastructure Projects (NSIP).
Effect	Term used to express the consequence of an impact. The significance of an effect is determined by correlating the magnitude of the impact with the importance, or sensitivity, of the receptor or resource in accordance with defined significance criteria.
Environmental Impact Assessment (EIA)	A statutory process by which certain planned projects must be assessed before a formal decision to proceed can be made. It involves the collection and consideration of environmental information, which fulfils the assessment requirements of the EIA Directive and EIA Regulations, including the publication of an Environmental Statement (ES).
Environmental Statement (ES)	A document reporting the findings of the EIA and produced in accordance with the EIA Directive as transposed into UK law by the EIA Regulations.
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.
Landfall	The generic term applied to the entire landfall area between Mean Low Water Spring (MLWS) tide and the Transition Joint Bay (TJB) inclusive of all construction works, including the offshore and onshore Export Cable Corridor (ECC), intertidal working area and landfall compound. Where the offshore cables come ashore east of Fraisthorpe.

Term	Definition
Orsted Hornsea Project Four Ltd.	The Applicant for the proposed Hornsea Project Four Offshore Wind Farm Development Consent Order (DCO).
The Secretary of State (SoS) for Business, Energy and Industrial Strategy	The ultimate decision maker with regards to Hornsea Four's application for Development Consent.

## Acronyms

Acronym	Definition
AEoI	Adverse Effect on Integrity
AFL	Agreement for Lease
A/S	Aktieselskab (Danish: Joint Stock Company)
CfD	Contracts for Difference
DCO	Development Consent Order
EC	European Community
EIA	Environmental Impact Assessment
ES	Environmental Statement
FFC	Flamborough and Filey Coast
FID	Final Investment Decision
GKCP	Gannet and Kittiwake Compensation Plan
HVAC	High Voltage Alternating Current
HVDC	High Voltage Direct Current
LSE	Likely Significant Effect
MHWS	Mean High Water Springs
MLWS	Mean Low Water Springs
NSIP	Nationally Significant Infrastructure Project
OnSS	Onshore Substation
PEIR	Preliminary Environmental Information Report
PINS	Planning Inspectorate
SoS	Secretary of State
SNCB	Statutory nature conservation bodies
SPA	Special Protection Area
TJB	Transition Joint Bay
UK	United Kingdom

## Units

Unit	Definition
km	kilometre
kV	kilovolt

Unit	Definition
GW	Gigawatt
MW	Megawatt

## 1. Introduction

- 1.1.1.1 This Funding Statement forms part of the suite of documents in support of the Gannet and Kittiwake Compensation Plan and the Gannet Guillemot and Razorbill Compensation Plan (together the “Compensation Plans”) for the Flamborough and Filey Coast (FFC) Special Protection Area (SPA).
- 1.1.1.2 This Funding Statement is supplemental to the Funding Statement reference [Funding Statement E.1.1](#) which forms part of the Application.
- 1.1.1.3 It has been developed in response to the Development Consent Order (“DCO”) Decision letter issued by the Secretary of State for the Department of Business, Energy and Industrial Strategy on 31<sup>st</sup> December 2020 on matters relating to the delivery of compensatory measures for the Hornsea Three Offshore Wind Farm (Hornsea Three). The Secretary of State (SoS) clarified the importance of (i) identifying the potential for adverse impacts on the integrity of designated sites during the pre-application period and (ii) considered the need for derogation of the Habitats Regulations during the examination where there is potential for Adverse Effect on Integrity (AEoI). The SoS further expected Applicants and statutory nature conservation bodies (SNCB’s) to engage constructively during the pre-application period and on these matters, include possible compensatory measures, for consideration during the examination. The SoS was clear that this does not necessarily require that agreement is reached between the Applicant and the SNCB’s on the potential for significant adverse impacts on designated sites and evidence relating to derogation can be provided on a “without prejudice” basis, as the final decision on such matters remains for the SoS.<sup>1</sup>
- 1.1.1.4 The Applicant is submitting a “without prejudice derogation case” which forms part of the Application. Its purpose is to provide, without prejudice, information to demonstrate that the Article 6(4) derogation tests could be met for Hornsea Four if it is necessary to rely upon them to authorise the offshore wind farm.
- 1.1.1.5 The Applicants position, based on its ecological assessments, is that there will be no adverse effects on the integrity of the FFC SPA (or any other protected site) from Hornsea Four.
- 1.1.1.6 The Gannet and Kittiwake Compensation Plan (GKCP) sets out the proposed compensation pursuant to Article 6(4) of the Habitats Directive<sup>2</sup> relating to the project alone effects on the kittiwake and gannet population designated at the FFC SPA and how this will be secured and delivered. The proposed compensation is set out within the GKCP. If required the Applicant will implement an onshore artificial nesting structure designed specifically for kittiwake and gannet within search zones identified on the east coast of England or the Applicant will construct a new structure offshore or repurpose an existing oil and gas platform or similar for nesting kittiwake and gannet, with repurposing as the Applicant’s preference. An additional resilience measure to enhance fish habitat is also proposed.

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<sup>1</sup> See para 6.3 and 6.4 of the letter of the Department for Business, Energy & Industrial Strategy Decision Letter for Hornsea dated 31 December 2020. Available [here](#)

<sup>2</sup> 92/43/EEC

- 1.1.1.7 The Gannet, Guillemot and Razorbill Compensation Plan (GGRCP) sets out the proposed compensation pursuant to Article 6(4) of the Habitats Directive relating to project alone effects on those species and how this will be secured and delivered. The proposed compensation is set out within the GGRCP. If required the Applicant will implement predator eradication at specific locations to benefit guillemot and razorbill and/or bycatch reduction measures to benefit gannet, guillemot and razorbill. An additional resilience measure to enhance fish habitat is also proposed.
- 1.1.1.8 This Funding Statement should be read in conjunction with the Compensation Plans.
- 1.1.1.9 This Funding Statement has been prepared taking into consideration guidance from Defra 2012 Guidance<sup>3</sup>, Defra Best Practice Guidance for developing compensatory measures in relation to Marine Protected Areas 2021 (in consultation),<sup>4</sup> EC 2018 Managing Natura 2000 sites<sup>5</sup>, (Guidance) the Planning Inspectorate's Advice Note Ten<sup>6</sup>, and Tyldesley and Chapman's Habitats Regulations Assessment (HRA) Handbook<sup>7</sup>. The EC 2018 guidance states that the following criteria must be considered when developing compensatory measures:
- The financial feasibility of the measures according to the timing required; and
  - The financing programme to be approved during the necessary period to guarantee the success of the measure.
- 1.1.1.10 In addition, the guidance states that "*all necessary provisions, technical, legal or **financial**, necessary to implement the compensatory measures must be completed before the plan or project implementation starts...*".
- 1.1.1.11 This Funding Statement has been submitted to demonstrate that the costs associated with implementing the compensation measures will utilise the same financing arrangements in place to finance the construction of the Hornsea Four windfarm. [Section 1.3](#) sets out the estimated costs associated with the implementation of the compensation measures. An outline programme has been included in the Compensation Plans that the Applicant commits to continuing to develop the compensation measures ahead of final investment decision (FID) in line with the [Road Maps reference Volume B2 Annex 7.2, Annex 7.4, Annex 8.2, Annex 8.4 and Annex 8.6](#).
- 1.1.1.12 It will be necessary to acquire land and rights over land in order to develop an artificial nesting structure and for the predator eradication/control measures in England or Wales therefore powers of compulsory acquisition may be needed if voluntary agreements cannot be reached. The enabling powers in the Electricity Act 1989 would be used in this context.

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<sup>3</sup> Defra (2012), Habitats and Wild Birds Directives: Guidance on the application of article 6(4) - alternative solutions, imperative reasons of overriding public interest (IROPI) and compensatory measures. December 2012.

<sup>4</sup> Best Practice guidance for developing compensatory measures in relation to Marine Protected Areas (in consultation).

<sup>5</sup> EC (2018). Managing Natura 2000 sites. The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC. Brussels, 21.11.2018 C(2018) 7621 final.

<sup>6</sup> Planning Inspectorate (2017). Advice Note Ten: Habitat Regulations Assessment relevant to Nationally Significant Infrastructure Projects. November 2017, Version 8.

<sup>7</sup> Tyldesley, D. and Chapman C. (2013-2019). The Habitats Regulations Assessment Handbook, 2019 edition UK: DTA Publications Limited. Note that this publication is an on-line handbook that is updated periodically.

The costs associated with the land acquisition are inclusive of the costs associated with pursuing compulsory purchase powers and claims for compensation.

1.1.1.13 The remainder of this document explains how Orsted Hornsea Project Four Limited (Company Registration Number 08584182 ("the Applicant") and its ultimate parent company expect Hornsea Four will be funded, including the implementation of the compensation measures and the resilience measure as set out in the Compensation Plans.

## 2. Corporate Structure and Assets

2.1.1.1 The Applicant is registered in England and is a wholly owned subsidiary of Orsted Power (UK) Limited, (a company incorporated in England and Wales with Company Registration No. 04984787). Orsted Power UK Limited is a wholly owned subsidiary of Ørsted A/S, a company incorporated in Denmark (Company Number 36213728). There are a number of one hundred percent owned subsidiary companies in the chain of companies between Orsted Power (UK) Limited and Ørsted A/S as shown in [Figure 1](#). These companies are hereinafter referred to collectively as "Ørsted".

2.1.1.2 Ørsted A/S is majority owned by the Danish Government (50.1%) in conjunction with the following shareholders (shareholders with less than 3% not listed):

- Andel A.M.B.A, Denmark
- The Capital Group, United States

2.1.1.3 Ørsted is one of the leading energy businesses in Northern Europe and has its headquarters in Denmark. Its employees averaged 6,429 over 2020 and in that year it generated DKK 52.6 billion (£6.2 billion) in revenue. Ørsted's well established business is based on procuring, producing, distributing and trading in energy and related products in Northern Europe. It has focused its strategy on developing, constructing and maintaining offshore wind projects throughout Northern Europe and has recently expanded into new markets in both North America and Asia. Ørsted is committed to supplying clean and reliable energy and aims to have 50 GW of installed capacity by 2030.

2.1.1.4 The consolidated accounts for Ørsted A/S for the year ending 31<sup>st</sup> December 2020 set out total assets of DKK 148.3 billion (£17.5 billion) and can be found attached to the project [Funding Statement reference Volume E.1 Annex 1.2](#).





Figure 1: Orsted Corporate Structure.

### 3. Project cost

- 3.1.1.1 The current cost estimate for Hornsea Three is approximately £5-8 billion<sup>8</sup>. This cost estimate includes construction costs, operational costs, development costs, project management costs, financing costs and land acquisition costs.
- 3.1.1.2 The Applicant has a signed Agreement for Lease with The Crown Estate in relation to a 846 km<sup>2</sup> seabed area. Within this seabed area, Hornsea Three can execute up to four separate leases with The Crown Estate.
- 3.1.1.3 As at the date of this Statement, the Applicant has entered into voluntary agreements for the Onshore substation and Energy Balancing Infrastructure and landfall with 50.0% of landowners and 40.0% of occupiers (representing 55.9% and 39.5% of the cable route respectively) of the onshore export cable route. Voluntary agreements are in an agreed form and awaiting signature or completion with 27.3% of landowners and 32.0% of occupiers (representing 39.4% and 35.4% of the cable route respectively) of the onshore export cable route. Heads of terms have been agreed with some of the remaining landowners and occupiers.
- 3.1.1.4 The Applicant has estimated the costs associated with developing, constructing and operating the compensation measure as outlined in the Compensation Plans for the lifetime of the windfarm. The costs of decommissioning subject to the necessary consents are also included, in the event this should be required. The total cost for compensation has been estimated at £29.5m and includes costs associated with land acquisition and claims for compensation should they be required. The costs have been broken down below in [Table 1](#).

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<sup>8</sup> Estimate based on CAPEX and OPEX assumptions in the "Review of Renewable Electricity Generation Cost and Technical Assumptions" (DECC, 2016) using a potential project capacity of 2.4GW for calculation

Table 1: The total suite of compensation options for all species.

	Measure	Costs (£)	Rounded costs (£M)
<i>Devex</i>	Artificial Nesting	7,036,000	7
	Bycatch		
	Predator Eradication	1,222,222	1
	Fish Habitat		
<i>CAPEX</i>	Artificial Nesting	973,080	1
	Bycatch	382,000	0.5
	Predator Eradication	397,803	0.5
	Fish Habitat	3,000,000	3
	Prey Availability Fund	500,000	0.5
<i>OPEX</i>	Artificial Nesting	7,541,369	8
	Bycatch	2,960,798	3
	Predator Eradication	3,082,975	3
	Fish Habitat	1,500,000	1.5
<i>ABEX</i>	Artificial Nesting	500,000	0.5
	Bycatch		
	Predator Eradication		
	Fish Habitat		
<b>Total</b>		<b>29.5<sup>9</sup></b>	

3.1.1.6 The cost estimates provided above in **Table 1** include work required ahead of FID and are specific to securing the compensation measure. In relation to artificial nesting they make provision for applications for any necessary consents and permits, land/seabed acquisition and early design and engineering work for one new offshore nesting structure using monopile rather than jacket foundations as this is considered to be the most costly option. In relation to bycatch the costs estimates include the cost of equipment, trials and the commercial agreements with fishers (7 vessels with looming eye buoys) implementing the compensation measure. In relation to predator eradication, the costs include surveys, applications for consents and agreement with landowners regarding access relating to one island. All compensation measures include the costs of stakeholder engagement. In so far as possible, cost estimates have been informed by information provided to the Applicant together with Ørsted's considerable experience with securing consents, permissions and design works particularly in relation to artificial nesting structures. Finally, a £500,000 (five hundred

<sup>9</sup> This figure includes a 50% contingency applied across DEVEX, CAPEX, OPEX and APEX for each compensation measure/resilience measure not including the Prey Availability fund which is £500,000.

thousand pound) prey availability fund will be provided. The Applicant will contribute £100,000 (one hundred thousand pound) each year for five years to the fund.

- 3.1.1.7 Further to advice received by the Applicants Affiliate, Ørsted Hornsea Project Three (UK) Limited that it is considered highly unlikely that third party claims for disturbance will succeed, the Applicant has allocated a modest contingency in addition to the value of land acquisition for the onshore nesting structures themselves and the associated rights.
- 3.1.1.8 Funding costs for construction and operations and maintenance phases of delivery of the compensation measures include monitoring and associated data analysis, reporting and consultation with stakeholders for all compensation measures. In relation to a new artificial nesting structure the fabrication, delivery and installation of the structure has been included. The Applicant has also assessed the costs associated with the fabrication and adaptation of an existing structure together with the costs of transfer from an oil and gas operator/owner and these costs are lower than the costs of a new structure. The Applicant has therefore included the higher costs associated with a new offshore structure. For predator eradication the costs of implementing biosecurity measures have also been included. For bycatch the ongoing costs of fishers utilising the technology has been included. Additional costs have been identified to include costs associated with adaptive measures should they be required, including further consents, land agreements and engineering-related work associated with modifying or moving the artificial nest structures. Costs for monitoring have been informed by environmental consultancy firms whilst fabrication, delivery and installation have also been informed by external specialists, however, due to the newness of such an undertaking a 50% contingency has been applied to those aspects of the work where refinement of costs is needed.

## 4. Capital funding

- 4.1.1.1 The Applicant has assessed the commercial viability of Hornsea Four in light of this information and is confident that Hornsea Four will be commercially viable based on the reasonable assumption that it receives the key consents it requires, including the DCO, and a Final Investment Decision ("FID") is taken, indicating the final unconditional decision of the shareholders to invest in the construction of the wind farm and associated infrastructure.
- 4.1.1.2 The Applicant is a special purpose vehicle, which currently does not have substantial assets. It is funded by its shareholder on the basis of a rolling budget looking ahead to anticipated expenditure. Although the precise funding mechanism for Hornsea Four has not been formally agreed, it has the potential to be via a mixture of funding from the Applicant's parent company combined with project financing from external investors, secured against the revenue streams of the future wind farm. This model has been successfully deployed on Ørsted projects in the past, such as the Race Bank project (573 MW, 50% of the project divested for £1.6 billion), Walney Extension project (659 MW, 50% of the project divested for £2 billion) and Hornsea One project (1,218 MW, 50% of the project divested for £3.5 billion). Ørsted has also indicated that from 2019, it expects its business activities to generate sufficient cashflows in order to finance planned portfolio investments. As a result, it may be possible for Hornsea Four to be financed without the need for any external financing initiatives.

4.1.1.3 Given Ørsted's history of delivering similar projects and its proven track record of securing capital funding, it is expected that the funding mechanisms mentioned in 1.4..2 will meet the capital expenditure for Hornsea Four along with the costs of implementing the compensation measures.

## **5. Conclusion**

5.1.1.1 The explanation set out in this Statement provides a robust basis for concluding that the compensation measures as set out in the Compensation Plans can be financed through the existing financial arrangements in place to develop, construct and operate Hornsea Four.