

August  
2021

# Hornsea Four Targeted Consultation



Non-statutory consultation on potential  
Compensation Measures for seabirds, relating  
to the Hornsea Project Four Offshore Wind  
Farm, 05 August – 06 September 2021

 Orsted

# Introduction

This targeted consultation leaflet explains how we intend to consult with you on our proposals for Compensation Measures associated with the development of a proposed offshore wind farm for the Hornsea Project Four Offshore Wind Farm ('Hornsea Project Four') that Ørsted Hornsea Project Four Ltd ('the Applicant') is currently developing.

The Applicant recognises consultation to be a vital stage in the development of Hornsea Four. We are now undertaking non-statutory consultation on the Compensation Measures and are inviting your views on the measures proposed, as outlined in this document and the supporting information available on our website, at [hornseaprojects.co.uk/hornsea-project-four/compensation-measures-consultation](http://hornseaprojects.co.uk/hornsea-project-four/compensation-measures-consultation).

## The purpose of this targeted consultation

Hornsea Four will be located in the southern North Sea and will comprise a maximum of 180 wind turbine generators, plus other offshore and onshore infrastructure required to connect Hornsea Four to the National Grid, at Creyke Beck.

The proposed measures we are consulting on are referred to in this document as "Compensation Measures". As part of the planning process for Hornsea Four, the Applicant may be required to deliver the Compensation Measures to compensate for potential impacts from Hornsea Four on certain seabird species at the Flamborough and Filey Coast (FFC)

Special Protection Area (SPA), located on the East Coast of England.

We will have regard to any consultation responses received as part of our application for a Development Consent Order (DCO) which is due to be submitted in Autumn 2021.

This targeted consultation will begin on 05 August 2021 and run until 06 September 2021. Throughout this period, we will be welcoming your comments and feedback.

# Background to Ørsted

Ørsted is a renewable energy company taking tangible action to create a world that runs entirely on green energy, and is the parent company of Hornsea Four. We have invested significantly in the UK, where we develop, construct and operate offshore wind farms and innovative waste-to-energy technology.

The UK is home to the world's largest offshore wind farms and here we have 12 operational offshore wind farms that we either own or partly own, one wind farm under construction and a further three in our development pipeline. We have 1,000 offshore wind turbines installed, which produce enough green energy to power over 4.4 million UK homes a year.



**Our UK offshore wind farms produce enough electricity to power over 4.4 million homes**



**We are currently investigating an offshore area of up to 468 km<sup>2</sup> where up to 180 wind turbines could be located**



- Wind power under construction
- Wind power in operation
- Wind power post-consent

## The planning process

Hornsea Four has an expected generating capacity of greater than 100 megawatts (MW) and is therefore defined as a Nationally Significant Infrastructure Project (NSIP) under Section 15(3) of the Planning Act 2008 (the '2008 Act'). As such, the Applicant is required to apply for a DCO to the Planning Inspectorate (PINS), who administer the examination of applications on behalf of the relevant Secretary of State (SoS).

Following this targeted consultation on the Compensation Measures, the Applicant expects to submit an Application for a DCO to PINS in Autumn 2021. If accepted, the Application will be examined by an appointed Examining Authority, that will make a recommendation to the SoS for

Business Energy and Industrial Strategy (BEIS). The SoS will review and comment on this recommendation before determining whether to grant a DCO for Hornsea Four.

As part of the planning process, the SoS is legally required to carry out an assessment of the likely significant effects from Hornsea Four on protected sites (known as European sites or European offshore marine sites in the relevant legislation). If the SoS finds that Hornsea Four will have an adverse effects on the integrity of any European site or European offshore marine site (or adverse effects cannot be ruled out) then they must ensure that any necessary compensation measures are secured to compensate for those adverse effects.

The Applicant's position, based on its ecological assessments, is that there will be no Adverse Effect on Integrity (AEol) of the Flamborough and Filey Coast SPA. However, should the SoS disagree with that position, the Applicant is required to provide information on compensation measures to enable the SoS to grant the DCO.

The Applicant therefore proposes to provide information on compensation measures for Hornsea Four in its DCO application. The Compensation Measures listed in this document are the measures which the Applicant has identified to date via its extensive research and engagement with stakeholders, and on which we are now seeking your views.

Consultation to date on the Compensation Measures has been carried out via a series of online compensation workshops between June 2020 and August 2021. The online workshops were attended variably by Natural England, the Marine Management Organisation (MMO), the Department for Environment, Food and Rural Affairs (Defra), the Joint Nature Conservation Committee (JNCC), The Wildlife Trust (TWT), Royal Society for the Protection of Birds (RSPB), National Federation of Fishermen's Organisations (NFFO) the Planning Inspectorate (PINS), East Riding of Yorkshire Council (ERYC)

and The Crown Estate (TCE). A summary of the compensation workshops will be made available in a Record of Consultation, which will be submitted as part of our DCO application.

Consultation has also been undertaken by the Applicant on the wider Environmental Impact Assessment process and Habitat Regulations Assessment (HRA) matters which are available from the Hornsea Four Documents library at:

**[hornseaprojects.co.uk/hornsea-project-four/documents-library](https://hornseaprojects.co.uk/hornsea-project-four/documents-library)**

We are currently also undertaking a series of environmental studies and assessments as part of the EIA process. Feedback received during the period will help us to refine our proposals and work towards delivering an environmentally informed design for Hornsea Four at DCO application.



<sup>1</sup> Conservation of Habitats and Species Regulations 2017 and the Conservation of Offshore Marine Habitats and Species Regulations 2017 as amended and retained by the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019.

# Hornsea Project Four Offshore Wind Farm

Hornsea Four will be located approximately 69 km offshore and will be to the west of the operational Hornsea Project One, Hornsea Project Two (which is under construction) and Hornsea Project Three (which was awarded a DCO on 31 December 2020).

Electricity generated by the Hornsea Four offshore wind farm will be brought ashore via electrical subsea cables and connect into an onshore substation at our proposed grid connection at National Grid Creyke Beck.

Further information on Hornsea Four can be found at [hornseaprojects.co.uk/hornsea-project-four](https://hornseaprojects.co.uk/hornsea-project-four)



- Current DCO Order Limits (468 km<sup>2</sup>)
- Existing operational Ørsted offshore wind farms
- Under construction
- Granted consent

## Who are we consulting?

We are consulting with statutory consultees who may have an interest in the proposed Compensation Measures, and certain stakeholders located in the vicinity of the land potentially affected by the measures. This consultation is also open to anyone who may be interested or in any way feel impacted by the Compensation Measures.

As well as participating in this consultation, consultees can also register their interest at our project website ([hornseaprojects.co.uk/hornsea-project-four](https://hornseaprojects.co.uk/hornsea-project-four)) to receive regular updates on Hornsea Four.

## What are we consulting on?

Our proposed Compensation Measures are:

- Offshore nesting
- Onshore nesting
- Predator eradication
- Bycatch reduction
- Fish habitat management

We are seeking feedback on these Compensation Measures which are described in more detail in the following sections. A map showing the potential areas of search of the proposed measures is included in Annex 1.

A detailed description of each measure, location maps and an impacts register are also available on our website at: [hornseaprojects.co.uk/hornsea-project-four/compensation-measures-consultation](https://hornseaprojects.co.uk/hornsea-project-four/compensation-measures-consultation)

We welcome feedback to help develop our proposals regarding impacts such as, but not limited to:

- Environmental (e.g. landscape and visual amenity, local/marine ecology, wildlife)
- Economical (e.g. commercial activities such as shipping and fisheries, employment opportunities)
- Social (e.g. Public Rights of Way and noise)

More information will be available regarding technical aspects of the Compensation Measures as our proposals develop including as part of the DCO application process.

# Components of our Compensation Measures

The Compensation Measures proposed by Hornsea Four are designed to offset potential impacts upon the kittiwake, gannet, guillemot and razorbill seabird species, which are features of the Flamborough and Filey Coast SPA. The Compensation Measures are intended to maintain coherence of the national site network.

The compensation measures currently being considered are presented in Table 1, and in Annex 1, which has been attached to this consultation leaflet.



Compensation Measure	Option	Location	Location ID	Kittiwake	Gannet	Guillemot	Razorbill
Offshore nesting	New	Southern North Sea	A1				
Offshore nesting	Repurposed	Southern North Sea	A1				
Onshore nesting	New	Clayton Bay to Newbiggin-by-the-Sea	B1				
		Suffolk Coast	B2				
Bycatch		Thames Estuary	C1				
		South coast of England: Broadstairs to Plymouth	C2				
		Isles of Scilly	D1				
		Rathlin Island, Moyle, Northern Ireland	D2				
Predator eradication		Torquay, Devon	D3				
		Guernsey and Alderney	D4				
		Rathlin Island, Moyle, Northern Ireland	E1				
		Isles of Scilly	E2				
Fish habitat management	Seagrass	Celtic Sea, Wales	E3				
		Plymouth Sound to Helford River	E4				
		Solent	E5				
		Lindisfarne	E6				
		Humber Estuary	E7				

Table 1: Compensation Measures, options, locations and species being compensated.

The Compensation Measures that could be delivered for kittiwake and gannet include either new or repurposed offshore nesting structures or onshore nesting opportunities. Predator eradication could be delivered at one or more of the proposed island locations for guillemot and razorbill. Bycatch mechanisms (for gannet, guillemot and razorbill) may potentially be delivered at one or more areas as will Fish Habitat Management (all species).

It is currently not anticipated that all Compensation Measures for all species will be required at all the locations being consulted upon, as identified in Table 1. The exact compensation measures, their location(s) and spatial extent will be determined during project development, as the DCO application progresses, and post-consent.

## Offshore nesting

The Applicant is currently investigating the construction of an offshore artificial nest site(s) or the repurposing of existing oil and gas assets to increase the annual recruitment of black-legged kittiwake (kittiwake) into the regional population of the southern North Sea. Kittiwake have been observed readily utilising man-made structures and therefore it is considered the establishment of an artificial nest site(s) would provide a viable compensation option.

The Applicant has consulted with various oil and gas operators for the purposes of identifying opportunities to repurpose an existing offshore platform. Alternatively, the Applicant is considering

the construction of purpose-built offshore nesting platform(s).

Whether new or repurposed, the compensation structure would be located within the Southern North Sea area of search (please refer to location ID A1 in Annex 1) and comprise:

- High and steep sided structure, narrow horizontal ledge for nests, small overhang above nest
- Inaccessible to predators
- Some shelter from high winds and other adverse weather conditions; and
- Presence of other breeding kittiwakes



## Onshore nesting

The artificial nesting structures will be located within one of two search zones (one in East Suffolk, and the other from Clyton Bay to Blyth). The structures will be designed to accommodate nesting pairs of Kittiwake.

Once the construction is complete, it is proposed that the site will be secured using fencing and the structures will be operational for a minimum of 35 years.

The design principles for onshore artificial nesting structures are subject to significant further development. However, the design principles of direct relevance to the size or appearance of the structures are as follows:

- Located close to water, facing out to sea
- High and steep sided structure, narrow horizontal ledge for nests
- Inaccessible to predators; and
- Overhang/roof to buffer against weather conditions



## Predator eradication

Seabirds have a number of natural predators distributed across their range. Many seabirds choose to nest on remote islands which are free from ground dwelling predators. When non-native predators are introduced to these island colonies, they may have profound impacts on the native fauna. The most prevalent predator to seabirds generally are rats. Both brown and black rats are known predators of many small-bodied seabird species, however, when available, the majority of predation is focused on eggs and chicks, impacting guillemot and razorbill.

To compensate for the potential displacement impact on guillemot and razorbill from the operation of Hornsea Four, the Applicant proposes

to implement a predator eradication programme at selected guillemot and/or razorbill breeding colonies, such as Guernsey and Alderney, Isles of Scilly, Rathlin Island. Predator eradication will be undertaken using well established methods evidenced throughout the wealth of previous predator eradication examples from the UK and further afield. For ground predators, such as rats, this usually involves poison bait stations. Before any eradication schemes are actioned at a specific location, an eradication feasibility assessment will be undertaken to ensure measures can be employed to remove the invasive species and that biosecurity measures can be subsequently installed to prevent reinvasion.

## Bycatch reduction

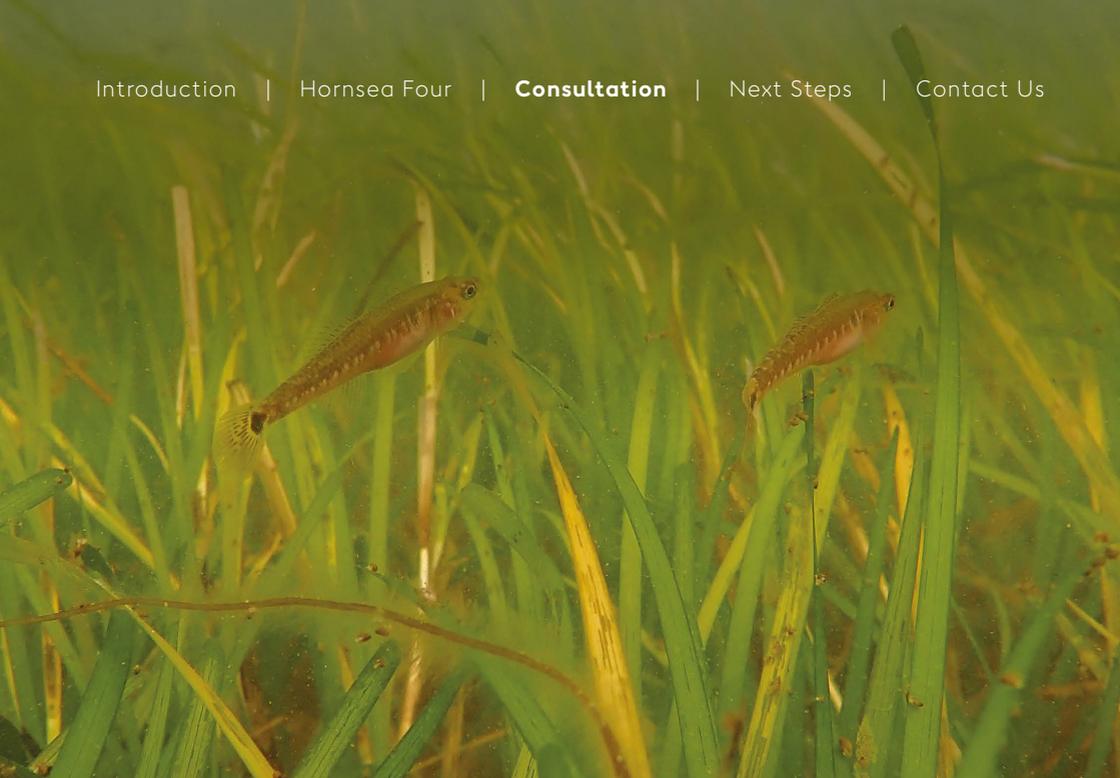
Seabirds are at risk from multiple anthropogenic threats, including as bycatch in UK fishing activities. Bycatch – the incidental capture of non-target species in fisheries – can present a significant pressure on seabird populations. To compensate against the number of seabirds, specifically razorbills and guillemots, that may be at risk of displacement from the operation of Hornsea Four, the Applicant proposes to support the overall numbers of these birds through the reduction of bird bycatch in selected UK fisheries with connectivity to the national site network.

The reduction of bird bycatch could be achieved using additional deterrent equipment attached on to fishing gear.

There are multiple types of mitigation technique that can be used to reduce the interactions of birds and fishing equipment. Each mitigation technique is more suited to specific fishing gear types and specific target bycatch species of birds. The proposed mitigation methods being considered as part of this project are above water deterrents, net lights, and net panels.

Potential fisheries with reported bird bycatch and population connectivity include the UK South coast, Cornwall, and the Thames Estuary. All of these locations are being considered for potential mitigation trails and future implementation.





## Fish habitat management

Seagrass meadows are amongst the most productive marine habitats in the UK. Seagrass provides rich nursery habitat for a fifth of the world's biggest fishing species including pollock, herring and whiting, meaning their restoration can improve prey availability (Project Seagrass, 2021). Seagrass meadows provide shelter and food for juvenile fish, stabilise the sediment, reduce erosion, improve water quality, absorb excess nutrients and improve nutrient cycling, produce oxygen and store significant amounts of carbon.

The Applicant is exploring opportunities to expand existing seagrass restoration projects that are already underway in the Humber Estuary, Solent, Plymouth Sound and the Celtic Sea.

We are also seeking opportunities to create new projects with the academic community that could potentially form a resilience compensation measure. We recognise the importance of seagrass as a measure that can provide resilience to other compensation measures such as predator eradication, bycatch mitigation and provision of artificial nesting.

## Next steps

Please visit our website to view our full suite of Compensation Measures consultation documents, which will be uploaded prior to the consultation commencing on 05 August 2021. This can be accessed via: [hornseaprojects.co.uk/hornsea-project-four/compensation-measures-consultation](https://hornseaprojects.co.uk/hornsea-project-four/compensation-measures-consultation). We are welcoming feedback on our proposed Compensation Measures until **06 September 2021**.

We will have regard to the feedback we have received on the Compensation Measures. You can provide responses to this consultation in the following ways:



**By email to:**

[hornseaprojectfour@orsted.co.uk](mailto:hornseaprojectfour@orsted.co.uk)



**By post to:**

Hornsea Project Four Offshore Wind Farm  
c/o Humphrey Laidlaw  
Ørsted UK  
5 Howick Place  
Victoria  
London  
SW1P 1WG



**Or via our Freephone information line:**

0808 169 3030

For more information on Hornsea Four you can also visit our website:

[hornseaprojects.co.uk/hornsea-project-four](https://hornseaprojects.co.uk/hornsea-project-four) or follow us on

Twitter: [@OrstedUK](https://twitter.com/OrstedUK) [#HornseaProject4](https://twitter.com/HornseaProject4)

Following submission of the DCO application for Hornsea Four, there will be an opportunity for stakeholders and the public to participate in the Examination of the application.

# Contact us



**Send us an email:**  
**[contact@hornseaprojectfour.co.uk](mailto:contact@hornseaprojectfour.co.uk)**



**Call our Freephone information line:**  
**0808 169 3030**



**Visit our website:**  
**[Hornseaprojects.co.uk/Hornsea-project-four](https://Hornseaprojects.co.uk/Hornsea-project-four)**



**Send us a letter:**  
**Freepost: Hornsea Four**

Should you require this document in large print, audio or braille then please contact us using the details provided.

Please note that the issues raised in any responses and other representations will be recorded in the Consultation Report and may be made public. When responding to our pre-application consultation your personal data will be stored in compliance with GDPR by Ørsted and will not be shared with third parties unless Ørsted is required to do so by law. Your personal details may however be passed on to the Planning Inspectorate to ensure that our pre-application consultation is sufficient and in line with the planning process. Please see the Privacy Notice on our website for further details.

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