



# Hornsea Project Four

## Ørsted's approach to strategic ecological compensation

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## Glossary

Term	Definition
BESS	British Energy Security Strategy
Defra	Department for Environment, Food and Rural Affairs
DCO	Development Consent Order
FFC	Flamborough and Filey Coast
MPA	Marine Protection Area
MRF	Marine Recovery Fund
NGO	Non-governmental organisation
OWIC	Offshore Wind Industry Council
OWIC DS	Offshore Wind Industry Council's Derogation Subgroup
P2G	Pathways to Growth
P2G DMTF	Pathways to Growth Delivery Mechanism Task Force
SPA	Special Protection Area
SNCB	Statutory Nature Conservation Body
UK	United Kingdom

## Acronyms

Term	Definition
Compensation / Compensatory Measures	If an Adverse Effect on the Integrity of a designated site is determined during the Secretary of State's Appropriate Assessment, compensatory measures for the impacted site (and relevant features) will be required. The term compensatory measures is not defined in the Habitats Regulations. Compensatory measures are however, considered to comprise those measures which are independent of the project, including any associated mitigation measures, and are intended to offset the negative effects of the plan or project so that the overall ecological coherence of the national site network is maintained.
Development Consent Order (DCO)	An order made under the Planning Act 2008 granting development consent for one or more Nationally Significant Infrastructure Projects (NSIP).
Hornsea Project Four Offshore Wind Farm	The proposed Hornsea Project Four Offshore Wind Farm project. 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.
National Site Network	The network of European Sites in the UK. Prior to the UK's exit from the EU and the coming into force of the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 these sites formed part of the EU ecological network known as "Natura 2000".
Orsted Hornsea Project Four Ltd.	The Applicant for the proposed Hornsea Project Four Offshore Wind Farm Development Consent Order (DCO).
Special Area of Conservation (SAC)	Strictly protected sites designated pursuant to Article 3 of the Habitats Directive (via the Habitats Regulations) for habitats listed on Annex I and species listed on Annex II of the directive.
Special Protection Area (SPA)	Strictly protected sites designated pursuant to Article 4 of the Birds Directive (via the Habitats Regulations) for species listed on Annex I of the Directive and for regularly occurring migratory species.

## 1 Context

1.1.1.1 As part of the Hornsea Four Application, a document describing Ørsted's approach to strategic scale delivery of ecological compensation was submitted ([B2.6.2 Compensation measures for Flamborough and Filey Coast \(FFC\) Special Protection Area \(SPA\) Prey Resource Evidence \(APP-185\): Appendix A](#)) to demonstrate how project specific work on compensation is supported by an industry scale approach. In the time following Application, substantial progress has been made in understanding how ecological compensation may be delivered on a collaborative and/or strategic basis. This update document provides a summary of ongoing activities and workstreams which support the compensation measures put forward for Hornsea Four and demonstrates how the Secretary of State will be able to rely on a strategic approach in his decision to grant Hornsea Four development consent.

## 2 British Energy Security Strategy

2.1.1.1 On 22 April 2022, the UK Government published the 'British Energy Security Strategy' (BESS), which makes a number of new commitments to accelerate the deployment of offshore wind, among other technologies, in response to international energy pressures. The headline commitment relevant to the offshore wind industry is to maintain high environmental standards while increasing the pace of deployment by 25%, with an ambition to deliver up to 50GW by 2030 including 5GW of floating offshore wind.

2.1.1.2 A key target within the BESS is to reduce the time taken to consent offshore wind projects, with the development of ecological compensation flagged as time critical. The following actions to reduce consenting time are directly relevant to Ørsted's consideration of strategic compensation:

**Table 1: BESS Commitments in relation to Ørsted’s strategic compensation approach**

BESS Commitment	Ørsted Notes
<i>“strengthening the Renewable National Policy Statements to reflect the importance of energy security and net zero”</i>	Strengthened National Policy Statements will support project-level derogation, particularly on IROPI and alternatives aspects.
<i>“making environmental considerations at a more strategic level allowing us to speed up the process while improving the marine environment”</i>	Support for a strategic, rather than project-level, view of environmental matters. A wide-ranging goal to ‘improve’ the marine environment, potentially moving to measures which can improve ecosystems and have a nature positive outcome for the National Site Network.
<i>“introducing strategic compensation environmental measures including for projects already in the system to offset environmental effects and reduce delays to projects”</i>	A clear goal for strategic solutions to support projects already in the planning system, such as Hornsea Four. Support to revisit the need for fixed compensation implementation periods, such as defined periods between implementation of compensation measures and operation of a project, with reassurance that strategic solutions will ensure no overall harm to the National Site Network.
<i>“implementing a new Offshore Wind Environmental Improvement Package including an industry-funded Marine Recovery Fund and nature-based design standards to accelerate deployment whilst enhancing the marine environment”</i>	While Ørsted understands that these elements will not be in place within the examination timeline for Hornsea Four, Ørsted have explored the potential to contribute to the Marine Recovery Fund or an equivalent fund to align as much as possible with Government targets (see later sections of this update).
<i>“working with the Offshore Wind Acceleration Task Force; a group of industry experts brought together to work with government, Ofgem and National Grid on further cutting the timeline”</i>	Ørsted is represented on the Offshore Wind Acceleration Task Force, and Ørsted’s Compensation Lead has presented on behalf of the Offshore Wind Industry Council’s Derogation Subgroup, with alignment from Defra and The Crown Estate, in support of strategic solutions and to highlight the challenges with the current approach.

### 3 Offshore Wind Environmental Improvement Package

3.1.1.1 On 16 June 2022, Defra hosted an engagement event in advance of opening a consultation on the Offshore Wind Environmental Improvement Package (anticipated June 2022), which is introduced in the BESS. The material for this consultation will be hosted on the Defra portal when available, anticipated in the week commencing 20 June 2022. The following points provide an outline from Defra on the direction of change and gives comfort that the elements included within the BESS are being taken forward at pace, and therefore can be relied upon when the Secretary of State makes his decision to grant development consent for Hornsea Four:

- Defra are exploring the potential for both non-statutory and legislative reform to support their review of environmental assessment. For non-statutory reforms, Defra are reviewing the way that offshore wind Habitats Regulations Assessments are

undertaken and will be providing recommendations for how to make the process more efficient. Defra will also be defining what can be included as compensatory measures and are providing an explanation around the concept of 'additionality'.

- The intention is to produce a library of compensation measures which developers can explore further on a project level, and to set up the Marine Recovery Fund (MRF) which is intended for measures which are best enabled through a strategic fund held by Government.
- For legislative reforms, Defra are defining mitigation and strategic compensation as legal terms, and enabling earlier assessment of mitigation and compensation measures.
- Defra will enable strategic compensation including cooperating on existing schemes and 'buying into' schemes via the MRF, which will open up measures not available to individual developers and better ensure the coherence of the National Site Network.
- Further to this, Defra are seeking to enable adaptive compensation and increase the bandwidth for what may be considered compensation.

## 4 Marine Recovery Fund (MRF)

4.1.1.1 The creation of the MRF is a clear step forward in establishing a mechanism through which multiple developers can deliver their compensatory proposals in an aligned way. This will enable the maximisation of ecological benefit to the National Site Network, enable timely delivery of required measures, support the delivery of measures which can only be led or secured by Government, and more efficiently allocate resources across Government, regulators and SNCBs.

4.1.1.2 It is understood that the MRF will be fully functional and available to developers in late 2023. However, prior to the MRF being established, Ørsted will support the development of a strategic compensation fund through strategic pilots, and contributions in support of its compensation proposals through this mechanism.

## 5 Industry led work towards strategic compensation

5.1.1.1 Within [Appendix A](#) of: [B2.6.2 Compensation measures for Flamborough and Filey Coast \(FFC\) Special Protection Area \(SPA\) Prey Resource Evidence \(APP-185\)](#), Section 7: Developer Collaboration described progress towards an industry-led approach to strategic compensation. The developer collaboration referenced within this document is now formalised as the Offshore Wind Industry Council's Derogation Subgroup (OWIC DS), which is currently Chaired by Ørsted. The OWIC DS is a trusted industry adviser, which has worked in partnership with the Pathways to Growth<sup>1</sup> (P2G) Coordination Group since August 2021

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<sup>1</sup> [OWIC | Pathways to Growth](#): The Sector Deal's workstream focussed on identifying and addressing the key environmental and consenting challenges that will be a barrier to the UK meeting its offshore wind 2030 target and playing its full role in delivering net zero. Recognising the scale of the challenge, P2G brings together government representatives, Statutory Nature Conservation Bodies (SNCBs) and industry across the UK's Devolved Administrations to work together in partnership.



to address the top prioritised P2G barrier: *Derogations*. To summarise the work of the OWIC DS to date:

- Q3 2021: Formation of the group. Agreement that strategic solutions to ecological compensation are required in the short term to support project consenting. A collaboration with P2G was established and formalised.
- Q4 2021: Two cross-government workshops were held to seek alignment on a delivery process and roles and responsibilities for progressing a strategic programme. Key outcomes were the initiation of a Delivery Mechanism Task Force hosted under the Pathways to Growth workstream (P2G DMTF), and more formalised engagement on an industry level with Government.
- Q1 2022: First meetings of the P2G DMTF, including a decision on which compensatory measures to take forward to strategic case studies, gathering evidence from industry and stakeholder experts.
- Q2 2022: Agreement across the P2G DMTF and Coordination Group that the development of pilot studies (based on the evidence gathered through the case study process) is supported, as well as the aim for these pilots to be practical, support offshore wind project consenting, and work through a proposed delivery mechanism (considering allocation and enforcement of strategic compensation to individual projects). Two drafting workshops have been held for each of the topics being taken forward by the OWIC DS/P2G collaboration, with the latest in the week commencing 13 June 2022 (which included SNCBs and environmental NGOs). A proposed governance framework and definition for strategic compensation is in consultation via the P2G Coordination Group.

## 6 Development of the strategic case study to pilot approach

6.1.1.1 Four topics are being developed as strategic compensation case studies by the OWIC DS/P2G collaboration:

- 1 Artificial nesting, for seabird compensation. The primary seabird targeted through this route is kittiwake, however the potential benefits to other species such as guillemot, razorbill and gannet have been raised as part of discussions. The direction of this pilot, at the point of writing, is towards implementing an offshore structure, either through a repurposed existing asset or through a new structure, with parallel work supporting prey availability through a government-led pilot (5).
- 2 Predator control or eradication, for seabird compensation. This is intended to support seabirds which are at risk of predation from mammalian predators. The options are to explore eradication at a UK island, which due to the geographical distribution of seabird colonies is likely to be in Scottish or Welsh waters, or to explore high-quality predator proof fencing at a mainland breeding colony, in line with a risk assessment to seabirds present at those colonies.
- 3 Habitat creation, primarily for benthic compensation. This pilot is likely to focus on habitats which provide comparable ecosystem benefits to those which are being impacted by offshore wind developments, namely subtidal sandbanks and reef. Native oysters and seagrass have been the focus of most discussions. There has also been

discussion of habitat creation to support seabirds, with the understanding that quantifying benefits is more challenging in this scenario.

- 4 Infrastructure removal or repurposing. Three avenues have been discussed in these discussions, the first linking in with the artificial nesting topic, in repurposing existing offshore assets which have seabird colonies already present, secondly, to repurpose existing assets to create artificial reef, and thirdly to remove defunct infrastructure.

6.1.1.2 Two further topics are being progressed as pilots by Government:

- 5 Prey availability for seabirds; and
- 6 Enhanced MPA management, including the potential for new or extended sites.

6.1.1.3 The intent is to launch all of these pilots, which will consist of practical measures on which projects can rely for the purpose of compensation under the Habitats Directive or Measures of Equivalent Environmental Benefit to ensure the coherence of the National Site Network of Marine Protected Areas, later in 2022. The pilots which have direct relevance to Hornsea Four include 1 (artificial nesting), 2 (predator control/ eradication) and 5 (prey availability), and the Applicant will look to contribute towards the knowledge base for 3 (habitat creation), and 4 (infrastructure removal/repurposing).

## 7 The Applicant's strategic approach

7.1.1.1 Strategic compensation (as required as part of the derogation process under the Habitats Directive and Measures of Equivalent Environmental Benefit process under the Marine and Coastal Access Act 2009) is a wide-reaching measure or series of measures identified as the most effective way to provide ecological compensation for unavoidable impacts to habitats and species. A strategic approach is particularly important in the marine environment due to the high degree of complexity and connectivity of marine ecosystems, as well as spatial pressures from climate change and other industries.

7.1.1.2 As the development of practical strategic schemes becomes increasingly robust, Hornsea Four has undertaken to support a strategic approach through leading the implementation studies and evidence provision on a number of its proposed compensation measures. The Applicant is strongly supportive of a strategic approach as the best method to ensure the coherence of the National Site Network, and is contributing in the following ways:

- Hornsea Four has already contributed to the knowledge base on which the OWIC-led strategic pilots will be based, and the Applicant has sought to share learnings and experience from the process of developing novel compensatory solutions for four seabird species, with considerations for how these could be adapted to a strategic approach.
- During the implementation phase of its compensatory measures, Hornsea Four will continue to share learnings and look to align as much as possible with evolving strategic measures, to ensure a consistent and robust approach with the best ecological outcomes. Hornsea Four will be able to take advantage of the ecological

evidence obtained through the delivery of strategic pilots, alongside evolving Defra-led plans for strategic monitoring (also committed to within the BESS).

- Ørsted, the Applicant's parent company, has created a full-time role within the UK Environment and Consents team to support projects which are considering a derogation case. This role has been instrumental in driving forward the development of strategic compensation across the offshore wind industry, since Q3 2021, and is currently the Chair of the OWIC DS detailed above.
- The Applicant has included a paragraph in the draft DCO to contribute to the MRF (or an equivalent fund) prior to the operation of Hornsea Four (para. 7.1.1.3)
- The Applicant has also included options within the Compensation Plans and proposed wording to be included in the DCO for a contribution to the MRF (or equivalent fund) in place of all or part of its developed compensatory measures.
- The Applicant has further included options for a contribution to the MRF (or equivalent fund) if required as part of its adaptive management approach.
- Outwith the MRF, the Applicant continues to work closely with other developers currently in the planning process to find opportunities for early collaboration. This is in parallel with the case studies/pilots referred to above, and the Applicant will, where appropriate, identify opportunities for co-location of measures.

7.1.1.3 The Applicant refers to the ongoing Marine Net Gain Consultation on the principles of marine net gain dated 7 June 2022 (Defra, 2022), which includes reference to the newly announced Marine Recovery Fund (MRF). The Applicant originally committed at paragraph 3.1.1.7 of the [B2.6 Compensation Measures for FFC SPA Overview \(APP-183\)](#) to contribute to a fund (£100,000 per year for 5 years) to develop further research to support evidence gathering, such as the research led by the Offshore Wind Strategic Monitoring and Research Forum. This commitment is also detailed in the Applicant's [B2.10 Without Prejudice Derogation Funding Statement \(APP-202\)](#) and [Appendix A of: B2.6.2 Compensation measures for Flamborough and Filey Coast \(FFC\) Special Protection Area \(SPA\) Prey Resource Evidence \(APP-185\)](#). The Applicant has updated their position and now considers the MRF or other equivalent fund to be an appropriate fund for the sums to be paid and has drafted specific wording to include in the DCO.

7.1.1.4 Further specifics are included within the Compensation Plans and Roadmaps (submitted at Deadline 5).

7.1.1.5 This approach supersedes the following statement in [Appendix A of: B2.6.2 Compensation measures for Flamborough and Filey Coast \(FFC\) Special Protection Area \(SPA\) Prey Resource Evidence \(APP-185\)](#)

7.1.1.6 *"1.1.1.16 While Ørsted supports strategic delivery of ecological compensation, it is not in any way the intention for project specific plans which are already significantly developed, such as those presented for the Applicant, to be replaced by compensation delivered on a strategic scale. This is necessarily due to the very early stage of strategic proposals."* It is possible for

the Applicant to move on from the original approach because of the progress made on strategic compensation following the submission of Hornsea Four's Application.

## 8 Summary

8.1.1.1 This update note provides an overview of how Ørsted has evolved its approach to strategic delivery of compensation following the Application. Progress is happening swiftly on this topic, and Ørsted are a key part of the conversation on what offshore wind ecological compensation will look like to enable delivery of net zero targets. The degree of collaboration across Government, industry, and subject experts has so far resulted in agreement on direction and delivery timelines, and therefore decision makers can be comfortable that strategic solutions will be in place to support projects currently in the planning system, including Hornsea Four.