

DOGGER BANK D WIND FARM

Guillemot and Razorbill Compensation

Roadmap & Evidence (without prejudice)

Document Reference No: 5.4.3

Date: June 2025

Revision: V1



www.doggerbankd.com

Document Title: Dogger Bank D Guillemot and Razorbill Compensation - Roadmap & Evidence	Document No. C01497a_SSE_REP_D0537
Prepared By: MacArthur Green & Collaborative Environmental Advisors	Prepared For: Dogger Bank D Offshore Wind Farm

Revision No.	Date	Status / Reason for Issue	Author	Checked by	Approved by
1	28.05.2025	Final version for PEIR	CEA	LT	RH

Table of Contents

Glossary.....3

1 Introduction.....4

1.1 Background4

1.2 Compensation Approach.....4

1.3 Purpose of this Document5

1.4 Consultation.....6

2 Flamborough and Filey Coast Special Protection Area and Project Impact 11

2.1 Overview 11

2.2 Conservation Objectives 11

2.3 Summary of Potential Impact..... 11

2.3.1 Guillemot 11

2.3.2 Razorbill 12

2.4 Estimated Compensation Quantum 12

2.4.1 Guillemot and Razorbill Ecology 13

3 Compensation Approach.....14

3.1 Guidance 14

3.2 Delivery Approach..... 14

3.3 Strategic Compensation Delivery 14

3.4 Developing and Refining Compensation Measures 15

3.4.1 Method 15

3.4.2 Longlist 15

3.4.3 Shortlist 15

4 Predator Control18

4.1 Overview 18

4.1.1 Delivery 18

4.1.2 Measure of Success / Effectiveness 19

4.1.3 Scale 20

4.1.4 Site Selection 20

4.1.5 Monitoring and Adaptive Management 20

4.1.6 Next Steps 21

5 Disturbance Reduction.....21

5.1 Overview 21

5.1.1 Delivery 21

5.1.2 Measure of Success / Effectiveness 22

5.1.3 Scale 22

5.1.4 Site Selection 22

5.1.5 Monitoring and Adaptive Management 23

5.1.6 Next Steps 23

6 Conclusion 24

References 28

List of Tables 29

7 Appendices 30

7.1 ‘Potential Compensation Measures: First phase for Recreational disturbance reduction project at auk colonies in Cornwall’ from Cornwall Wildlife Trust 30

7.2 ‘Isles of Scilly Predator Reduction Strategic Compensation Scheme Update’ Letter from OWIC 31

7.3 ‘Joint Statement from the Predator Eradication Task and Finish Group’ email from Defra 32

List of Acronyms..... 33

Glossary

Term	Definition
DBD Array Area	The area within which the wind turbines, inter-array cables and Offshore Platform(s) will be located.
Deemed Marine Licence (dML)	A consent required under the Marine and Coastal Access Act 2009 for certain activities undertaken within the UK marine area, which may be granted as part of the Development Consent Order.
Development Consent Order (DCO)	A consent required under the Planning Act 2008 to authorise the development of a Nationally Significant Infrastructure Project, which is granted by the relevant Secretary of State following an application to the Planning Inspectorate.
Effect	An effect is the consequence of an impact when considered in combination with the receptor’s sensitivity/value/importance, defined in terms of significance.
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, and includes the publication of an Environmental Statement.
Environmental Statement (ES)	A document reporting the findings of the EIA which describes the measures proposed to mitigate any likely significant effects.
Evidence Plan Process (EPP)	A voluntary consultation process with technical stakeholders via Expert Topic Group (ETG) meetings to encourage upfront agreement on the nature, volume and range of supporting evidence required to inform the EIA and HRA process.
Expert Topic Group (ETG)	A forum for targeted technical engagement with relevant stakeholders through the EPP.
Habitat Regulations	<p>As set out in the Planning Inspectorate’s Advice Note 10 (Habitats Regulations Assessment relevant to nationally significant infrastructure projects) the following are covered by the term ‘Habitats Regulations’: the Conservation of Habitats and Species Regulations 2017 (as amended), and the Conservation of Offshore Marine Habitats and Species Regulations 2017 (as amended) (for plans and projects beyond UK territorial waters (12 nautical miles).</p> <p>Such regulations set out the requirement for Competent Authorities to consider whether a development will have a likely significant effect (LSE) on a European site (now known as National Network Sites). Where LSE are likely and a project is not directly connected with or necessary to the management of that site(s), an appropriate assessment (AA) is required of the implications of the plan or project for that site(s) in view of its conservation objectives.</p>
HRA Stage 1: Screening	In Stage 1 of the HRA process, European sites are screened for LSE (either alone or in-combination with other plans or projects). Where it can be determined that there is no potential for LSE to occur to qualifying features of a site, that site is sought to be

Term	Definition
	‘screened out’.
HRA Stage 2: Appropriate Assessment	In Stage 2 of the HRA process, for sites where LSE cannot be excluded in HRA Stage 1: Screening, further information to inform an appropriate assessment is prepared by the Applicant. The assessment will determine whether the Project alone or in-combination could adversely affect the integrity of the European site in view of its conservation objectives. The Competent Authority (CA) will then draw its own conclusions based on this Report to Inform Appropriate Assessment (RIAA).
Impact	An impact is a change resulting from an activity associated with the Project, defined in terms of magnitude.
Monitoring	<p>Measures to ensure the systematic and ongoing collection, analysis and evaluation of data related to the implementation and performance of a development. Monitoring can be undertaken to monitor conditions in the future to verify any environmental effects identified by the EIA, the effectiveness of mitigation or enhancement measures or ensure remedial action are taken should adverse effects above a set threshold occur.</p> <p>All monitoring measures adopted by the Project are provided in the Commitment Register.</p>
National Site Network	A network of core breeding and resting sites for rare and threatened species and habitats on land and at sea in the UK, adapted from the European Union’s Natura 2000 ecological network post-Brexit. National Site Network sites are formerly known as European protected sites.
Offshore Development Area	The area in which all offshore infrastructure associated with the Project will be located, including any temporary works area during construction, which extends seaward of Mean High Water Springs.
Offshore Export Cable Corridor	The area within which the offshore export cables will be located, extending from the DBD Array Area to Mean High Water Springs at the landfall.
Onshore Export Cable Corridor (ECC)	The area within which the onshore export cables will be located, extending from the landfall to the Onshore Converter Station Zone and Birkhill Wood Substation.
The Applicant	SSE Renewables and Equinor acting through Dogger Bank Offshore Wind Farm Project 4 Projco.
The Project	Dogger Bank D (DBD) Offshore Wind Farm Project.
Wind Turbines	Power generating devices located within the DBD Array Area that convert kinetic energy from wind into electricity.

1 Introduction

1.1 Background

1. As part of its third licensing round in 2008, The Crown Estate identified the Dogger Bank Zone, located between 125km and 290km off the east coast of Yorkshire, as one of the nine offshore wind farm development zones in the UK. Following the 2008 licensing round, four project areas were identified within the zone to take to development consent, namely Creyke Beck A, Creyke Beck B, Teesside A, and Teesside B. In 2015, development consent was granted for all four project areas.
2. In 2017, the four project areas were restructured under new ownership arrangements. Creyke Beck A, Creyke Beck B, and Teesside A were renamed as Dogger Bank A (DBA), Dogger Bank B (DBB), and Dogger Bank C (DBC) respectively and would progress collectively as the Dogger Bank Wind Farm in three build-out phases developed by SSE Renewables, Equinor and Vårgrønn. Teesside B was renamed as Sofia Offshore Wind Farm and would be progressed separately from the Dogger Bank Wind Farm by RWE.
3. In 2021, an opportunity was identified by the Applicant to maximise the capacity of the third phase of the Dogger Bank Wind Farm, namely DBC, such that additional capacity of up to 1.5 Gigawatts (GW) of renewable energy could potentially be consented and constructed in the eastern part of the original DBC site. This new development phase is known as Dogger Bank D (DBD), and is an independent project being promoted by a separate commercial entity from the previous phases of the Dogger Bank Wind Farm.
4. The Dogger Bank D Offshore Wind Farm (hereafter referred to as the “Project”) is a proposed offshore wind farm located on a shallow sandbank known as the Dogger Bank in the North Sea. The DBD Array Area covers an area of approximately 262km² and is located approximately 210km off the north-east coast of England. The Project will have an overall capacity of over 100 Megawatts (MW) and therefore constitute a Nationally Significant Infrastructure Project (NSIP) under Section 15 (3) of the Planning Act 2008. Full details are presented in the Project Description (**Volume 1, Chapter 4 Project Description**).
5. SSE Renewables and Equinor acting through 'Dogger Bank Offshore Wind Farm Project 4 Projco Limited', hereafter referred to as 'The Applicant', is applying for a Development Consent Order (DCO) supported by a range of plans and documents, including an Environmental Statement (ES), which will set out the results of the Environmental Impact Assessment (EIA). The Applicant is also providing a Report to Inform Appropriate Assessment (RIAA) (**document reference 5.3**) alongside the Preliminary Environmental Impact Report (PEIR) for consultation. When submitted as final, these documents will set out the information necessary for the Competent Authority (CA), in this case the Department for Energy Security and Net Zero (DESNZ) Secretary of State (SoS), to fulfil its statutory duty to carry out an Appropriate Assessment (AA). The Habitats Regulations

Assessment (HRA) process and AA will evaluate potential impacts of the Project on species and habitats protected under the Habitats Regulations (the collective term used for the Conservation of Habitats and Species Regulations 2017; and the Conservation of Offshore Marine Habitats and Species Regulations 2017). If the AA process concludes that Adverse Effect on Integrity (AEoI) on designated features of protected sites cannot be excluded, a derogation under the requirements of the Habitats Regulations is required. If no suitable alternatives are available, and if there are Imperative Reasons of Overriding Public Interest (IROPI), the Project may proceed, provided that appropriate compensation measures are secured to offset the adverse effects of the Project on a site's protected features.

6. Full details of the RIAA are presented in (**document reference 5.3**). This compensation roadmap has been prepared on a 'without prejudice' basis to present a roadmap for securing a compensation measures to support a potential HRA derogation case for potential Project impacts to guillemot *Uria aalge* and / or razorbill *Alca torda* features of the Flamborough and Filey Coast (FFC) Special Protection Area (SPA).
7. In 2023, The Crown Estate confirmed that a Plan-Level Habitat Regulations Assessment (HRA) would be undertaken to assess the collective environmental impact at plan level of DBD together with six other offshore wind projects identified in either The Crown Estate's Offshore Wind Leasing Round 3 or The Crown Estate's 2021 Offshore Wind Extensions opportunity, collectively known as the Capacity Increase Programme (CIP). The Crown Estate's Capacity Increase Programme (CIP) Plan Level HRA was published in March 2025 (The Crown Estate, 2025). In relation to guillemot and razorbill the CIP Plan Level HRA concludes there is potential for AEoI at FFC SPA in relation to the projects included in the Plan. The CIP Plan Level HRA therefore goes on to present a derogation case and potentially suitable compensation measures for all of the relevant projects. This document sets out the Applicant's roadmap for securing and delivering compensation, taking into account the recommendations for compensation set out in the CIP Plan Level HRA and the project level RIAA (which reflects the detailed project level assessment, which supersedes the high-level plan level assessment).

1.2 Compensation Approach

8. The proposed Array Area and offshore export cable corridor (offshore ECC) constitutes the Project's Offshore Development Area and has been developed through extensive site and route selection and evaluation work, taking into account environmental and engineering constraints (see **Volume 1, Chapter 5 Site Selection and Consideration of Alternatives**).
9. The Project's proposed Array Area falls within mean-max foraging range (MMFR) + 1 standard deviation (SD) for guillemot and razorbill (153.7km and 164.6km respectively; Woodward *et al.*, 2019) of the FFC SPA. However, while the FFC SPA is located 7km (at sea) from the offshore ECC, it is 207km from the DBD Array Area and therefore there is

no predicted connectivity between the Array Area and the FFC SPA during the breeding season. Further detail on Project impacts to the designated guillemot and razorbill features of the FFC SPA are presented in the **RIAA (document reference 5.3)**.

10. The RIAA (**document reference 5.3**) was able to rule out potential AEol for the Project alone and also considers there to be robust evidence to support the absence of AEol for in-combination impacts, however the Applicant notes previous decisions by the SoS on similar plans and projects in the North Sea have concluded AEol in-combination for these features. The Applicant has therefore been investigating and progressing compensation measures on 'without prejudice' basis, should the SoS disagree with the conclusions presented in the **RIAA (document reference 5.3)**.
11. The Applicant will seek, wherever possible, to minimise the predicted impact that the Project's activities will have on the designated razorbill and guillemot populations. This will be demonstrated through the application of the mitigation hierarchy to the final project design. The Applicant has therefore assessed a worst-case scenario (WCS) level of development. Further details on the application of the mitigation hierarchy and final Project impacts are covered in the **RIAA (document reference 5.3)**.
12. Department for Environment, Food and Rural Affairs (Defra) guidance on HRA implementation states that all necessary compensation measures should be taken to ensure that the overall coherence of the Marine Protected Area (MPA) network is secured. It asserts that developers with unavoidable impacts should consider the derogation route or the requirement to satisfy the appropriate authority that there is no adverse effect. This should be done early in the consenting or authorising process to ensure that developers can deliver compensatory measures within reasonable timeframes (Defra, 2021).
13. On the basis of the conclusions of the Project's RIAA, precedent demonstrated by the conclusions of the Crown Estate's Round 4 Plan Level RIAA and conclusions of The Crown Estate's CIP HRA (The Crown Estate, 2025), the Applicant intends to provide a derogation case to support the final DCO application (on a with and/or without prejudice basis, depending on the conclusions of the final RIAA) and this will supersede the conclusions of the CIP Plan Level HRA. The derogation case relates to the following features and designated sites:
 - Dogger Bank SAC - Sandbanks (habitat loss);
 - Flamborough and Filey Coast SPA – Kittiwake (collision risk during the O&M phase); and
 - Flamborough and Filey Coast SPA – Guillemot and razorbill (displacement during the O&M phase) (on a without prejudice basis).
14. To support this derogation case, from the outset of the Project, the Applicant has:

- Ensured the mitigation hierarchy is observed at the EIA and AA stages;
- Continued to ensure that all relevant alternative solutions (that meet the Project's objectives) have been considered and evaluated as the Project has progressed to ensure should any alternative solution that avoids the AEol outcome be identified it has been pursued wherever feasible; and
- Progressed options for compensatory measures in discussion with stakeholders via the EPP and additional meetings, with the aim of progressing compensation measures to a suitable mature stage prior to submission of the DCO application. Work undertaken to date on compensation measures and proposed next steps are set out in the following road map documents:
 - Benthic HRA Derogation Compensation - Roadmap & Evidence;
 - Kittiwake Compensation - Roadmap & Evidence; and
 - Guillemot and Razorbill Compensation - Roadmap & Evidence (without prejudice).

15. Alongside the final DCO application the Applicant will produce a derogation case document. Further details are provided in the **RIAA (document reference 5.3)**.
16. As part of the process of developing the HRA derogation case, the Applicant has developed a 'shortlist' of possible compensation options based on the existing Project proposal, recent DCO decisions which have been consented on the basis of protected sites derogation and compensation, the conclusions at the plan-level within The Crown Estate's CIP HRA (The Crown Estate, 2025) and stakeholder feedback received to date.

1.3 Purpose of this Document

17. This document introduces the 'without prejudice' compensation measures considered by the Applicant, to support the HRA derogation case in relation to predicted Project impacts on the FFC SPA. The derogation case relates to potential displacement and associated increase in baseline mortality rate in combination with other plans and projects within MMFR + 1 SD for guillemot and razorbill (153.780.5km and 164.675.9km respectively; Woodward *et al.*, 2019). It is important to note, the Project Array Area plus the 2km buffer is outside of guillemot and razorbill MMFR + 1 SD foraging range (153.7km and 164.6km respectively; Woodward *et al.*, 2019) from the FFC SPA. Therefore, no potential for connectivity has been concluded during the breeding season.
18. A longlisting and shortlisting process to identify potential compensation measures has been conducted in consultation with stakeholders as part of the Evidence Plan Process (EPP). The shortlisting process has concluded that two options could be suitable for the compensation for guillemot and razorbill. Further details and justifications on the longlisting and shortlisting process is presented in **Section 3.4** and details on the delivery of the measures are presented in **Section 4.1.1** and **Section 5.1.1**.

19. The measures that are being considered by the Applicant are:
 - Disturbance reduction; and
 - Predator control.
20. To secure the delivery of the preferred measure, the Applicant is considering several delivery mechanisms including via Project alone, in collaboration with other offshore wind projects (OWFs) and / or strategically through a contribution to the Marine Recovery Fund (MRF).
21. The purpose of this compensation roadmap is to present progress on proposed compensation measures, and gather stakeholder feedback on the proposed measures, and identify any additional factors requiring consideration ahead of a formal DCO submission to the Planning Inspectorate. This document also provides a roadmap for delivering potential compensation for guillemot and razorbill if required including a timeframe for delivery and consideration of adaptive management measures.

1.4 Consultation

22. Stakeholder engagement with Natural England, the Marine Management Organisation (MMO) and the Royal Society for the Protection of Bird (RSPB) has been established through the EPP to document pre-application engagement and has continued as the Project has progressed its Project compensation measures.
23. Compensatory measures considered by the Applicant have been presented to stakeholders during Expert Topic Group (ETG) meetings in line with the EPP (see **Volume 1, Chapter 6 Environmental Impact Assessment Methodology** and **Volume 1, Chapter 7 Consultation**). To date, the Applicant has engaged the following stakeholders on the dates listed in **Table 1-1**.

Table 1-1 Summary of Stakeholder Engagement

Date	Meeting Forum	Attendees
6 March 2023 18 December 2024	Meetings to introduce the Project and discuss potential compensation needs	The Wildlife Trust (TWT)
27 March 2025	Meeting to introduce the Project and discuss potential compensation needs	National Trust
July 2023 – present	Monthly Project meetings with Natural England (compensation matters discussed in addition to wider development topics)	Natural England

July 2023- present	Monthly meetings to discuss Project progress and matters relating to derogation and compensation	MMO
28 February 2024	Meetings to discuss Project progress	RSPB
28 May 2024	ETG 4 – Offshore Ornithology Compensation (Meeting 1)	Natural England, MMO, RSPB
6 November 2024	ETG 4 – Offshore Ornithology Compensation (Meeting 2)	Natural England, MMO, RSPB
15 February 2024 10 May 2024 29 August 2024 13 March 2025	Meetings to discuss Project progress and matters relating to derogation and compensation	Defra
13 November 2024	Project progress and matters relating to derogation and compensation discussed.	PINS

24. Engagement has also taken place with Defra and through the Offshore Wind Industry Council (OWIC) (via relevant Developer Group meetings) regarding progress of strategic compensation workstreams via Collaboration on Offshore Wind Strategic Compensation (COWSC) Implementation Groups. The Applicant has also responded to DESNZ call to industry on quantities of seabird strategic compensation in February 2025. A response was submitted to DESNZ on 19 February 2025, providing details of the anticipated impacts to relevant SPAs, based on project parameters current at the time of consultation.
25. The Applicant has also engaged with other offshore wind developers and OWIC regarding potential collaborative delivery of compensation measures. Further discussion on collaborative and strategic delivery of compensation is presented in **Section 3.2** and **3.3** below.
26. Key discussion points have informed the Applicant’s compensation approach, and the details presented in this Roadmap. Key discussion points on the delivery of compensation measures are presented in **Table 1-2**.

GUILLEMOT AND RAZORBILL COMPENSATION -ROADMAP & EVIDENCE

Table 1-2 Consultee Responses in Relation to Guillemot and Razorbill Compensation

Consultee	Comment	Applicant Response
Bycatch Reduction		
Comment made by Natural England at ETG 4 at Meeting 1 28 May 2024 & Comment made by Natural England and RSPB at ETG 4 at Meeting 2 6 November 2024	<u>Position on Bycatch Reduction</u> Natural England and the RSPB have both noted in the various consultation meetings that bycatch reduction as a compensation measure for auks is currently not supported. This is due to the insufficient evidence available regarding both the extent of the impact and the effectiveness of the proposed reduction measures.	The Applicant acknowledges the positions of Natural England and RSPB and will continue to monitor emerging evidence and precedent from projects such as Sheringham Shoal and Dudgeon Extension Projects (SEP&DEP), engaging with COWSC and exploring the feasibility of new techniques if appropriate – noting the currently selected measures, due to feasibility and supporting evidence, are disturbance reduction and predator eradication.
Disturbance Reduction		
Comment made by Natural England and RSPB at ETG 4 at Meeting 1 28 May 2024 & Natural England DAS Advice response to ETG 4 Meeting 1 on 28 May 2024 (DAS/477591) Received 12 June 2024	<u>Position on Disturbance Reduction</u> Natural England and RSPB have both noted the importance of understanding the impact of disturbance on auk colonies situated outside of the FFC SPA, with Natural England recommending the Applicant “ <i>does not rule out disturbance reduction as an option at this stage</i> ” and explores different options to reduce recreational disturbance beyond the FFC SPA.	The Applicant acknowledges the positions of Natural England and RSPB and are continuing to review options regarding disturbance reduction as a compensation measure beyond the FFC SPA, including the identification of suitable sites and collaboration / feasibility with other developers (as recommended by Natural England). Should suitable sites be identified then the Applicant will undertake surveys where required to gather evidence on disturbance reduction as a compensation measure in these locations. Further information on progress on this measure is provided in Section 5 .
Comment made by Natural England at ETG 4 at Meeting 2 6 November 2024	<u>Position on Disturbance Reduction Compensation Measures</u> Natural England have expressed concern with effectiveness of disturbance reduction compensation measures and scale of benefit they offer.	The Applicant acknowledges Natural England’s comments and are continuing to review disturbance reduction options and how uncertainties can be addressed, as set out in Section 5 below.
Predator Control		
Comment made by Natural England at ETG 4 at Meeting 1 28 May 2024 & Natural England DAS Advice response to ETG 4 Meeting 1 on 28 May 2024 (DAS/477591) Received 12 June 2024	<u>Guidance on Predator Control Measures</u> Natural England informed the Applicant that the suitable locations for predator control are likely situated in Scotland (outside of Natural England’s remit) and the Isles of Scilly. The RSPB advised the Applicant to review their submissions to the Hornsea 4 OWF examination, which detail comprehensive considerations for the identification of suitable predator eradication sites and the successful implementation of predator control measures. Natural England stated that the Project should present an evidence base demonstrating the pressure predators exert on target species and quantify the impact of proposed interventions on breeding populations and colony productivity. Natural England advised reviewing the Hornsea 4 predator eradication campaign and long-listing for further guidance.	The Applicant has reviewed availability of suitable locations, as set on Section 4 of this report, and has explored a wide geographical range to ensure the most effective sites are identified, while continuing to evaluate the feasibility of various locations. The Applicant acknowledges the advice received from Natural England on 12 June 2024 (DAS/477591) and has addressed the associated comments as far as possible at this stage in Section 4 of this report.

GUILLEMOT AND RAZORBILL COMPENSATION -ROADMAP & EVIDENCE

<p>Comment made by Natural England at ETG 4 at Meeting 2</p> <p>6 November 2024</p> <p>&</p> <p>Natural England DAS Advice response to ETG 4 Meeting 2 on 6 November 2024 (DAS/493520)</p> <p>Received 29 November 2024</p>	<p><u>Guidance on Predator Control Measures</u></p> <p>Natural England noted reservations regarding the sites identified (Sheep Island, St. Tudwals, Worms Head and Isles of Scilly) as potentially being suitable for predator control and suggested searching for suitable locations within a wider geographical range beyond those shortlisted by other offshore wind farm projects. Natural England also noted that a COWSC report assessing the suitability of eradication sites is expected by March 2025 (but could be subject to delays).</p> <p>Natural England expressed support for collaboration with other projects on a predator eradication scheme, suggesting this would be an appropriate approach if impacts on auk species are determined to be low for the Project. However, they also noted that the Project should continue to consider Project alone options as it is unclear whether collaborative approaches will be achievable.</p>	<p>The Applicant acknowledges Natural England’s comments. The COWSC report is not available to date. The Applicant has discussed the potential collaboration/feasibility of a predator control scheme as a compensation measure with other developers and looked further afield for potential sites but has been unable to identify any outside of Scotland, where the focus is compensation for projects progressing in Scottish waters.</p>
<p>Methods for Determining Scale of Compensation Required</p>		
<p>Natural England DAS Advice response to ETG 4 Meeting 2 on 6 November 2024 (DAS/493520)</p> <p>Received 29 November 2024</p>	<p><u>Advice on type and scale of compensation</u></p> <p>Following on from ETG 4 Meeting 2, Natural England noted in the DAS advice response that they are in the process of drafting a position statement to guide developers on how to calculate and scale compensation measures.</p> <p>Natural England emphasised that the most important factor is for projects to demonstrate that their compensation options are proportionate to their impacts, whether pursued in a project-led manner or collaboratively.</p>	<p>The Applicant welcomes the ongoing development of the position statement to guide developers on how to calculate and scale compensation measures.</p>
<p>Collaborative Engagement – Disturbance Reduction (Southwest England)</p>		
<p>Email exchanges between potential delivery partners, developers and OWIC</p> <p>&</p> <p>Meetings held between OWIC and developers</p> <p>07 February 2025 and 25 March 2025</p>	<p><u>Discussions with potential delivery partners, other developers and OWIC</u></p> <p>The Applicant is actively engaging with potential delivery partners, other developers, and OWIC to explore opportunities for collaboration in implementing disturbance reduction measures. These disturbance reduction interventions will potentially be applied to sites in Cornwall.</p> <p>Compensation at these sites will be managed either solely by the Applicant or through a collaborative/strategic approach. Ongoing discussions with delivery partners, relevant developers, and OWIC are focused on establishing an effective collaborative or strategic delivery mechanism.</p> <p>The Applicant is also in discussion with other developers to form a coordinated approach to disturbance reduction compensation surveys in southwest England, including the potential for a reciprocal data share following the surveys.</p>	<p>The Applicant is assessing the feasibility of undertaking complimentary survey work in southwest England to that being carried out by other developers, to help support a coherent approach to disturbance reduction and the associated evidence required. The Applicant will continue to engage with potential delivery partners, other developers and OWIC to explore collaborative/strategic opportunities for implementing disturbance reduction measures.</p>
<p>Email exchange between OWIC, other developers and DBD</p> <p>27 February – 10 March 2025</p>	<p><u>Letter of Comfort from the Cornwall Wildlife Trust (CWT) (Appendix 7-1)</u></p> <p>The Applicant has received a letter of comfort from the CWT confirming that the CWT is willing to collaborate and provide the necessary services to support the delivery of potential measures, if required by the Project projects.</p>	<p>The Applicant will continue to engage with OWIC regarding their coordination role and the interim workstream with the CWT.</p>
<p>Email exchange between the National Trust and DBD</p> <p>04 March 2025</p> <p>&</p> <p>Meeting with National Trust</p> <p>27 March 2025</p>	<p><u>Engagement with the National Trust</u></p> <p>The Applicant is keen to collaborate with the National Trust on site selection and potential surveys related to auk compensation. The Applicant is in discussions with other developers who are also engaged with National Trust on auk compensation and sees potential for sites to support compensation requirements across multiple projects.</p> <p>An introductory meeting between the Applicant and the National Trust took place to explore the potential for implementation of predator eradication/control or disturbance reduction schemes on land owned or managed by the National Trust. The National Trust agreed to consider the information presented and revert with and feedback they have on appropriate locations for predator eradication/control or disturbance reduction.</p>	<p>The Applicant will continue to engage with the National Trust regarding collaboration opportunities and any access required for surveys.</p>

GUILLEMOT AND RAZORBILL COMPENSATION -ROADMAP & EVIDENCE

Collaborative Engagement – Predator Reduction, Eradication or Control		
Email exchanges and calls between OWIC and DBD & Letter from OWIC to DBD Issued 13 March 2025	<p><u>Isles of Scilly Predator Reduction Strategic Compensation Scheme Update (Appendix 7-2)</u></p> <p>The Applicant has been engaging regularly with OWIC and their ongoing work with Defra, TWT, Natural England, RSPB, DESNZ and the associated progress of a working group exploring the delivery of a predator reduction strategic compensation scheme on Isles of Scilly. A letter was received from OWIC on 13th March 2025 providing an update on this scheme. It is understood by the Applicant that the Strategic Compensation Studies (SCS) Project will be implemented by OWIC over a four-year period (ending December 2027). This will be funded by The Crown Estate's Offshore Wind Evidence and Change Programme, along with contributions from offshore wind developers.</p> <p>As part of the SCS project “<i>The OWIC SCS team are working in partnership with key stakeholders, including The Wildlife Trusts and interested developers (including Dogger Bank D Wind Farm), to support a strategic approach to delivering a 30-year predator eradication project in the Isles of Scilly for the purpose of seabird compensation</i>”.</p> <p>Work plans include assessing feasibility of predator removal, maintenance of a predator-free status, community engagement, and monitoring and evidence.</p> <p>Defra is responsible for the MRF (expected to be operational by late 2025). The Applicant acknowledges the preferred MRF delivery of this scheme but welcomes the update from OWIC that “<i>the OWIC SCS team have procured legal services to explore the establishment of a functioning developer-led delivery mechanism which would provide the offshore wind industry with a route to collaborative compensation whilst the Government-led MRF is in development</i>”.</p>	The Applicant will continue to engage with OWIC regarding the progression of the Isles of Scilly opportunity.
Joint Statement from the Predator Eradication Task and Finish Group Issued 13 March 2025	<p><u>Joint Statement from the Predator Eradication Task and Finish Group (Appendix 7-3)</u></p> <p>A number of organisations, including Defra, DESNZ, Natural England, The Wildlife Trusts, OWIC, The Crown Estate, and RSPB, recently met to establish a Task and Finish Group to establish the mechanisms required to allow predator eradication to be delivered as a strategic compensation measure, noting the option for this to delivered by the MRF.</p> <p>All parties agree that predator eradication on the Isles of Scilly has great potential to provide compensation for the impacts of multiple OWF projects and would support its inclusion in project specific compensation plans.</p>	The Applicant will continue to engage with OWIC regarding the Isles of Scilly opportunity, and any progress made by the Predator Eradication Task and Finish Group.
Meeting with TWT 18 December 2024	<p><u>Introduction Meeting with TWT</u></p> <p>TWT and the Isles of Scilly Wildlife Trust expressed a clear preference for the predator eradication efforts on the Isles of Scilly to be implemented as a strategic compensation measure through the MRF.</p> <p>TWT stated that a community – benefit type fund that would be administered by an independent third party has not been considered and is not their preferred solution as the strategic delivery through the MRF appears the most appropriate. TWT also did not support this compensation measure being delivered in a Project alone capacity.</p>	The Applicant will continue to engage with TWT regarding predator eradication on the Isles of Scilly as an option to deliver auk compensation.
Memorandum of Understanding (MoU) between another developer and DBD 29 November 2024	<p><u>MoU</u></p> <p>The Applicant has signed an MoU with another developer to establish a framework for collaboration and coordination of compensation measures where possible, including predator reduction, eradication or control.</p>	The Applicant will continue engaging to explore collaborative opportunities to deliver auk compensation.
Strategic Delivery of Ornithology Compensation		
Email exchange between OWIC and DBD 06 January 2025	<p><u>OWIC Compensation Questionnaire</u></p>	The Applicant will continue engaging with OWIC to support the progression of strategic compensation.

GUILLEMOT AND RAZORBILL COMPENSATION -ROADMAP & EVIDENCE

	<p>The Applicant has responded to OWIC's request to complete the compensation questionnaire to support the advancement of work packages within the SCS Project. The information gathered from various OWF projects will help to address any gaps and enhance the value of work already completed, ensuring that the final outputs are beneficial to the industry.</p>	
<p>Email exchange between OWIC and DBD</p> <p>13 May 2025</p>	<p><u>Strategic compensation scheme at Isles of Scilly</u></p> <p>Update received on progress with strategic compensation at the Isles of Scilly and work currently underway to evaluate the viability of seabird habitats through comprehensive visual assessments with the goal of identifying and documenting both currently occupied and potential areas for seabird habitation, along with rat genetic testing to help determine potentially suitable eradication methods.</p>	<p>The Applicant will continue engaging with OWIC to support the progression of strategic compensation.</p>
<p>Defra Written Ministerial Statement (published 29 January 2025)</p> <p>&</p> <p>DESNZ MRF Interim Guidance (published 29 January 2025)</p>	<p><u>Statements from Defra Written Ministerial Statement</u></p> <p>Recent and upcoming milestones include:</p> <p><i>“consulting in spring 2025 on reforms to the environmental compensation requirements for offshore wind projects with the aim to bring in legislation by Autumn 2025.”</i></p> <p><i>“the launch of a Marine Recovery Fund in late 2025 to provide an optional mechanism for developers to fund delivery of strategic compensatory measures.”</i></p> <p><u>Statements from DESNZ guidance</u></p> <p><i>“Applicants wishing to use predator reduction as a compensation measure ahead of the MRF being operational will need to deliver the measure themselves or in collaboration with other projects.”</i></p> <p><i>“This provision does not guarantee that such measures, which form part of the MRF, will be available and the relevant SNCB will be consulted regarding any such provisions. Note that this formulation alone cannot be relied upon for consent at this time, and must be provided alongside project-specific ornithological compensation measures.”</i></p> <p><i>“This measure should be delivered strategically with developers working closely with Defra officials and SNCBs.”</i></p>	<p>The Applicant acknowledges the recently published Written Ministerial Statement (Defra, 29 January 2025) and recently published guidance <i>Strategic Compensation Measures for Offshore Wind Activities: Marine Recovery Fund Interim Guidance</i> (DESNZ, 29 January 2025). The Applicant also acknowledges the confirmation of plans to implement the MRF by the close of 2025.</p>
<p>DESNZ Call for Information on Quantities of Seabird Strategic Compensation</p> <p>Response issued 19 February 2025.</p>	<p>The Applicant, via the OWIC Developer Derogation Group, was asked to respond to the DESNZ call for information on quantities of seabird strategic compensation (completed questionnaire returned by the Applicant on 19 February 2025). The Applicant response provided details of the anticipated impacts to relevant SPAs based on project parameters current at the time of consultation.</p>	<p>The Applicant will continue engaging with DESNZ to support the progression of strategic compensation.</p>

2 Flamborough and Filey Coast Special Protection Area and Project Impact

2.1 Overview

27. FFC SPA is 7km (at sea) from the offshore ECC and 207km (at sea) from the DBD Array Area plus 2km buffer. Given the distance from the SPA, the Project does not directly overlap with the SPA boundary.
28. The FFC SPA site description is as follows (Natural England, 2018):
29. *“The Flamborough and Filey Coast SPA is located on the Yorkshire coast between Bridlington and Scarborough. It includes the RSPB reserve at Bempton Cliffs, the Yorkshire Wildlife Trust Flamborough Cliffs nature reserve and the East Riding of Yorkshire Council Flamborough Head local nature reserve. The cliffs of Flamborough head rise to 135 metres and are composed of chalk and other sedimentary rocks. These soft cliffs have been eroded into a series of bays, arches, pinnacles and gullies with an extensive system of caves at sea-level. The cliffs from Filey Brigg to Cunstone Nab comprise maritime grassland vegetation growing alongside species more typical of chalk grassland. The intertidal area below the cliffs is predominantly rocky and part of a series of reefs that extend into the subtidal area. The adjacent sea out to 2km off Flamborough Head as well as Filey Brigg to Cunstone Nab is characterised by reefs supporting kelp forest communities in the shallow subtidal and faunal turf communities below 2 m water depths. The southern side of Filey Brigg shelves off gently from the rocks to the sandy bottom of Filey Bay”.*
30. The FFC SPA supports internationally important breeding populations of guillemot and razorbill. At latest count, in 2022, the guillemot colony was 74,989 pairs and the razorbill colony was 30,763 pairs (Clarkson *et al.*, 2022).

2.2 Conservation Objectives

31. The conservation objectives for the FFC SPA site are to ensure that, subject to natural change, the integrity of the site is maintained or restored as appropriate, and that the site contributes to achieving the aims of the Birds Directive, by maintaining or restoring:
 - The extent and distribution of the habitats of the qualifying features;
 - The structure and function of the habitats of the qualifying features;
 - The supporting processes on which the habitats of the qualifying features rely;
 - The populations of each of the qualifying features; and
 - The distribution of qualifying features within the site.

32. Natural England (2023) has stated the target for guillemot is to maintain the size of the breeding population at a level which is above 41,607 breeding pairs, whilst avoiding deterioration from its current level as indicated by the latest mean peak count or equivalent.
33. Clarkson *et al.*, (2022) reported the population in the Flamborough and Bempton Cliffs part of the SPA (i.e. omitting Filey) was 56,713 pairs in 2017 and 70,907 pairs in 2022. The whole FFC SPA count in 2022 was 74,989 pairs. It is evident that this population is far in excess of the conservation target and achieving favourable status (i.e. approach double the citation size).
34. Natural England (2023) has stated the target for razorbill is to maintain the size of the breeding population at a level which is above 105,000 breeding pairs, whilst avoiding deterioration from its current level as indicated by the latest mean peak count or equivalent.
35. Clarkson *et al.*, (2022) reported the population in the Flamborough and Bempton Cliffs part of the SPA (i.e. omitting Filey) was 18,738 pairs in 2017 and 29,527 pairs in 2022. The whole FFC SPA count in 2022 was 30,673 pairs. It is evident that this population is far in excess of the conservation target and achieving favourable status (i.e. nearly three times the citation size).

2.3 Summary of Potential Impact

36. The **RIAA (document reference 5.3)** has considered the potential impact of increased mortality as a result of disturbance and displacement of the designated guillemot and razorbill populations of the FFC SPA. The Project Array Area plus 2km buffer is outside of guillemot and razorbill (MMFR) + 1 SD (153.7km and 164.6km respectively; Woodward *et al.*, 2019) from the FFC SPA. Therefore, no potential for connectivity has been concluded during the breeding season.

2.3.1 Guillemot

37. As set out in the **RIAA (document reference 5.3)** when considering the Applicant’s approach (50% displacement and 1% mortality), the predicted mortality in the nonbreeding season from the Project alone attributed to the FFC SPA is two (1.63) breeding adult guillemots per annum. When considering the Statutory Nature Conservation Body (SNCB) preferred approach (30-70% displacement combined with 1-10% mortality), the predicted mortality in the nonbreeding season from the Project alone attributed to FFC SPA is up to 23 (0.98 – 22.86) breeding adult guillemots per annum. The addition of between 1 and 23 predicted mortalities per annum would result in an increase to the baseline mortality rate of 0.011 to 0.250% against the latest population count.

38. These levels of impact from either the Applicant’s or SNCB approach would be indistinguishable from natural fluctuations in the populations. Therefore, the **RIAA (document reference 5.3)** has concluded that the potential for an AEoI to the conservation objectives of the guillemot feature of FFC SPA in relation to disturbance and displacement in the construction, operation and maintenance phases from the project alone can be confidently ruled out. Therefore, subject to natural change, the population of the guillemot feature will be maintained long term. This conclusion is also reached for the in-combination assessment presented in the RIAA. Therefore, this compensation roadmap is provided on a ‘without prejudice’ basis.

2.3.2 Razorbill

39. As set out in the **RIAA (document reference 5.3)** when considering the Applicant’s approach (50% displacement and 1% mortality), the predicted mortality across the nonbreeding seasons (autumn, winter and spring) from the Project alone attributed to the FFC SPA is less than one (0.38) breeding adult razorbill per annum. When considering the SNCB approach (30-70% displacement and 1-10% mortality), the predicted mortality across the combined nonbreeding seasons from the Project alone attributed to FFC SPA is less than one to six (0.23 – 5.25) breeding adult razorbills per annum. The addition of between one and six predicted mortalities per annum would result in an increase to the baseline mortality rate of 0.003% to 0.082%.

40. These levels of impact from either the Applicant’s or SNCB approach would be indistinguishable from natural fluctuations in the populations. Therefore, the **RIAA (document reference 5.3)** has concluded that the potential for an AEoI to the conservation objectives of the razorbill feature of FFC SPA in relation to disturbance and displacement in the construction, operation and maintenance phases from the project alone can be confidently ruled out. Therefore, subject to natural change, the population of the razorbill feature will be maintained in the long term. This conclusion is also the outcome of the in-combination assessment presented in the RIAA. Therefore, this compensation roadmap is provided on a ‘without prejudice’ basis.

2.4 Estimated Compensation Quantum

41. There is currently extensive discussion ongoing across all projects in examination or having recently concluded examination (e.g. Five Estuaries, North Falls, ODOW and Dogger Bank South (DBS)) on how compensation quanta should be calculated. The table provides estimates obtained using the Hornsea 4 method which Natural England has most recently advised current projects to apply. This can be summarised as a mortality multiplier of 4.42 for guillemot and 6.16 for razorbill¹. The below sets out a range of

quanta based on the various approaches being progressed by other projects. The position on how to calculate quanta continues to evolve but the WCS presented in **Table 2-1** below represents the scenario advocated by Natural England in their most recent feed in to current examinations. This approach may be revised to take into consideration information from other OWF projects that may become public as the Project progresses.

Table 2-1. Auk Mortality Estimates and Corresponding Compensation Quanta.

Summary of mortality calculation method	Mortality	Compensation quanta (using Hornsea 4 method and 1:1 ratio)
The magnitude of potential <u>guillemot</u> displacement mortality apportioned to the FFC SPA, calculated on the basis of there being no breeding season connectivity (Section 2.3.1), at displacement and mortality rates of 70% and 2% (respectively).	5.2 individuals per year	23 breeding pairs
The magnitude of potential <u>guillemot</u> displacement mortality apportioned to the FFC SPA, calculated on the basis of there being no breeding season connectivity (Section 2.3.1) but with separate post-breeding and non-breeding seasons (as per Natural England guidance on recent wind farm applications), applying displacement and mortality rates of 70% and 2% (respectively).	25 individuals per year	111 breeding pairs
The magnitude of potential <u>razorbill</u> displacement mortality apportioned to the FFC SPA, calculated on the basis of there being no breeding season connectivity (Section 2.3.2), at displacement and mortality rates of 70% and 2% (respectively).	1.1 individuals per year	7 breeding pairs
The magnitude of potential <u>razorbill</u> displacement mortality apportioned to the FFC SPA, calculated on the basis of there being no breeding season connectivity (Section 2.3.2) and with a revised post-breeding season apportioning rate (as per Natural England guidance on recent wind farm applications), applying displacement and mortality rates of 70% and 2% (respectively).	5 individuals per year	31 breeding pairs

42. The methods for quantifying compensation continue to progress via the Dogger Bank South examination and determination of the Outer Dowsing and Five Estuaries projects.

¹ <https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010125/EN010125-000879-Document%20No.%205.4.3>

The Applicant will continue to monitor developments in order to inform compensation quantum.

43. In recognition of the uncertainties (and hence precaution) associated with the impact estimation process and the effectiveness of the proposed compensation itself to deliver what is required, it is anticipated that the final compensation required for each species may be subject to an additional multiplier (e.g. x2, x3). Since the final ratio needs to reflect the specifics of the selected compensation measure(s), which are discussed below (**Section 4** and **Section 5**), further consideration of appropriate compensation ratios will be provided following agreement from Natural England on the selected measures for these species.

2.4.1 Guillemot and Razorbill Ecology

44. Guillemots are one of the most abundant seabirds in the cooler seas of the northern hemisphere. They are identified on the International Union for Conservation of Nature (IUCN) Red List as of “Least Concern” and the British Trust for Ornithology (BTO) birds of conservation concern (BOCC 2, 3, 4 and 5) all classified common guillemot as Amber. The most recent European population estimate is 2,350,000 to 3,060,000 mature individuals, of which the British and Irish population is around 1,449,588 (47-62% of the total; Burnell *et al.*, 2023).
45. The FFC SPA colony of guillemot is the largest in England and the most southerly large colony (>10,000 individuals) in the North Sea. The designated population is derived from population counts made between 2008 and 2011 when around 41,607 pairs were estimated to be present during the breeding season (Natural England, 2014) , equating to 83,214 breeding adults and representing 15.6% of biogeographic population of the southern *albionis* subspecies (African-Eurasian Waterbird Agreement (AEWA), 2012). The colony has grown at an average of 4% per year since the mid-1980s and the most recent count in 2022 recorded 111,925 individuals, which equates to approximately 74,989 pairs (Clarkson *et al.*, 2022).
46. The guillemot breeding season at the SPA is typically March to July. Nesting birds are distributed throughout the SPA with the exception of the coastal cliffs south of Flamborough Head, with concentrations found on the highest ledges at Bempton Cliffs and around Breil Newk. Guillemot do not construct a nest, instead laying a single egg directly on to a small ledge of the steep cliffs.
47. Razorbill are identified on the IUCN Red List as “Near threatened” and the BTO’s birds of conservation concern (BOCC 2, 3, 4 and 5) all classified razorbill as Amber. The most recent European population estimate is 517,258 to 1,077,620 mature individuals, of which the British and Irish population is around 258,629 (24-50% of the total; Burnell *et al.*, 2023).

48. The FFC SPA is the only site in England to support a colony of over 5,000 individuals, the only other colonies of this size being located in Scotland and is the southernmost colony of any size on the east coast. The designated population is derived from population counts made between 2008 and 2011 when around 10,570 pairs were estimated to be present during the breeding season (Natural England, 2014), which at that time represented 2.3% of the biogeographic population of the subspecies *Alca torda islandica* (African-Eurasian Waterbird Agreement (AEWA), 2012). The colony has grown at an average of 6% per year since the 1970s and the most recent count in 2022 recorded 45,780 individuals, which equates to approximately 30,673 pairs (Clarkson *et al.*, 2022).
49. Within the SPA, razorbill breed from Speeton to the tip of Flamborough Head but are not reported to breed from the tip of Flamborough Head to the South Landing on the southern border of the site. The breeding season is typically April to July. Razorbill do not construct a nest and lay a single egg directly on small ledges or in cracks on the steep cliffs.
50. Both species uses their wings to propel themselves underwater in pursuit of small fish, however guillemot dive deeper, to at least 100m while razorbill make shallower dives. The proportions of sandeel and sprat and the prey size also differ, with razorbill focussed more on smaller sandeel and guillemot taking more of a mixture and including larger prey. Guillemot tend to nest at high densities on exposed cliff ledges while razorbill tend to be found in pairs and nest in cavities or under boulders.
51. After breeding, both species disperse, with the males taking the chick to sea to find food. Guillemots from UK colonies mostly remain in UK waters, and generally not far from their breeding site, although a small proportion migrate to the Barents Sea to moult, returning to winter in UK waters. Razorbills typically move further from their colonies in the post-breeding period and nonbreeding seasons, with many UK birds over-wintering off Iberia and Denmark.

3 Compensation Approach

3.1 Guidance

52. The Applicant has considered, international, national and regional guidance in developing the compensation measures including guidance on managing Natura 2000 sites from the European commission for shortlisting measures (European Commission, 2018) and national guidance from Defra and Natural England to provide specific detail on the delivery of compensation. Defra's compensation hierarchy (Defra, 2021), outlined in their draft best practice guidance has been considered, alongside feedback from Natural England to define the draft compensation proposals set out in this report.
53. Natural England's checklist for compensatory measures (Natural England, 2021) was developed to help ensure that compensation plans meet legal and ecological standards. The checklist is intended to cover aspects of compensatory measures that need to be described in detail when developers are submitting or updating applications where impacts on MPAs are anticipated. Whilst not exhaustive, it lists key areas where sufficient detail is needed to provide the SoS with appropriate confidence that compensatory measures can be secured. This checklist has been considered in the development of compensation measures to ensure that all key aspects are being considered sufficiently. The Natural England checklist summarising compensation measures considered by the Applicant is presented in **Section 1**.

3.2 Delivery Approach

54. The Applicant has considered three forms of delivery mechanism for compensatory measures: project alone, collaborative and strategic delivery. All mechanisms have been evaluated to ensure that the chosen measure progresses in the most effective way and maximises the ecological benefit while reducing consenting risk.

Project Alone Measures: These are project alone compensation options tailored to address the ecological impacts of the Project specifically. They focus on offsetting the effects of the Project and are aimed at offsetting project alone impacts.

Collaborative Measures: These involve delivering compensation alongside other developers, to implement compensation strategies that benefit a broader ecological area or species. They aim to address cumulative impacts across multiple projects or regions, often through shared funding or joint efforts.

Strategic Measures: These are long-term, large-scale initiatives aimed at improving overall ecological resilience at a regional or national level and would be delivered by an organisation such as Defra, via the MRF. They are led by stakeholders such as government and industry bodies. They focus on delivering compensation as well as

achieving broader conservation goals that wouldn't or couldn't be deliverable by a single project and are often planned and implemented over extended periods, potentially beyond the life of a single OWF project.

3.3 Strategic Compensation Delivery

55. Defra's (2021) definition of 'strategic compensatory measures: "that work across a wide area, joining up across projects and organisations to deliver an ecological benefit greater than the sum of its parts and / or measures that can only be delivered by Government (e.g., enhanced protection of MPAs)." The Applicant understands that Natural England regards strategic compensation as ecologically effective and could provide a solution to species or habitats impacted by multiple offshore windfarms.
56. A key challenge in delivering ecological compensation is ensuring that measures are secure and robust in the eyes of regulators and their advisors. To address this, since 2021, Defra has been developing a library of ecologically robust strategic compensation measures to support compensation cases for OWF projects in partnership with industry and SNCBs. The Applicant has been fully engaged with this consultation process through the OWIC P2G programme in supporting the development of the Library of Strategic Measures (LoSCM).
57. The British Energy Security Strategy (BESS) commits to both speeding up the deployment of offshore wind and to the measures proposed in the Offshore Wind Environmental Improvement Package (OWEIP) policy paper, including strategic compensatory measures and a centralised MRF to help facilitate delivery of these measures. The OWEIP is being developed by Government to help offshore wind project applicants address unavoidable impacts to MPAs at a strategic level, facilitated through one or more MRFs into which applicants can choose to pay to discharge environmental compensation obligations.
58. The Energy Act (2023), provides the legislative basis for offshore wind farm developers to be able to adopt strategic compensation measures, provided they have exhausted all options to mitigate any impacts of development through the application of the mitigation hierarchy. The Applicant notes that secondary legislation will also be required, to set up and operate the MRF. At present, the timeline of this secondary legislation is not yet available.
59. Further commitment and guidance on the MRF was provided via the publication of the Strategic Compensation Measures for Offshore Wind Activities: Marine Recovery Fund Interim Guidance (DESNZ, 2025). The purpose of this guidance is to set out how projects can refer to strategic compensation measures in the OWEIP LoSCM during the planning and application stages of a DCO application whilst the measures are still in development.

60. Once in place, the proposed MRF will provide a framework to allow developers to contribute towards strategic compensation measures in a coordinated way through contributions to the fund and discharge their requirements to the Habitats Regulations. The MRF would provide a mechanism for the delivery of strategic compensation measures, with appropriate input from regulators and SNCBs. This coordinated approach should enable ecological benefit to the national site networks to be maximised and delivered in a timely manner.
61. The Applicant has been engaging with the relevant government industry bodies including Renewable UK as strategic measures have developed. The Applicant notes that progress on strategic delivery is out of the Applicant's control and that there is not yet guarantee that strategic measures via the MRF will be available to the Applicant within the Projects consenting timeframe. Within the Strategic Compensation Measures for Offshore Wind Activities: Marine Recovery Fund Interim Guidance (DESNZ, 2025) states "*Applicants wishing to use predator reduction as a compensation measure ahead of the MRF being operational will need to deliver the measure themselves or in collaboration with other projects.*" The Applicant has been involved in discussions with OWIC and other developers on the strategic predator eradication scheme under development by TWT at the Isles of Scilly and, timescales depending, this may be suitable for delivery of compensation for the Project. The current status of this strategic measure is outlined in a letter received from OWIC and an email received from Defra (as provided in **Appendix 8.2 and 8.3**).
62. The Crown Estate's CIP plan level HRA (The Crown Estate, 2025) was published in March 2025, and supports strategic / Project alone compensation delivery. The Applicant has considered strategic delivery alongside Project alone and collaborative measures (see **Section 3.2**).

3.4 Developing and Refining Compensation Measures

3.4.1 Method

63. This roadmap sets out the current status of the longlisted and shortlisted options being considered by the Applicant.
64. The longlist was developed based on the current understanding of the Project's impacts and compensation requirement, understanding of offshore wind HRA derogation matters in the UK, precedent for other OWF projects and stakeholder feedback delivered through the ETG process. Following the establishment of a longlist, a shortlist of viable options was identified through the appraisal of advice and guidance on derogation matters, available supporting evidence, timescale of implementation and experience from other projects in the UK who have put compensation cases in support of an OWF DCO application. The longlist options were then assessed for suitability on the basis of the ability of options to deliver the required compensation, as well as ecological and

technical feasibility according to guidance outlined in **Section 3.1** as well as consultation feedback from key stakeholders shaped the appraisal of options these options. The shortlist options were further appraised and refined, as outlined in **Section 3.4.3**.

65. The longlist, and shortlist options are outlined in **Table 3-1** along with rationale for inclusion, or exclusion of each measure from the shortlist.

3.4.2 Longlist

66. The preliminary stages of the ornithology HRA derogation strategy involved the creation of a longlist of measures that might be considered appropriate to compensate for project impacts to common guillemot and razorbill features of the FFC SPA. The aim of the longlist was to put forward all foreseeable measures to deliver a HRA derogation case for stakeholder input during the pre-application engagement stage. The longlist was based on the Project proposal, experience with HRA within other OWFs in similar geographic regions and stakeholder feedback from ETG meetings.
67. To determine which longlist measures were going to be further developed and shortlisted, the Applicant originally proposed to use a ranking and scoring methodology based on the European Commission (2018) guidance. This methodology has also been used as the favoured approach by other OWFs. The longlist measures were presented at ETG 4 Meeting 1 on 28 May 2024. Following discussions, it was apparent that a limited number of measures were deemed viable to both the Applicant and the SNCBs. The Applicant has therefore combined publicly available information with project-specific stakeholder feedback to develop a narrative-based rationale for progressing compensation measures to the shortlist for further consideration. This is presented in **Table 3-1**.

3.4.3 Shortlist

68. Following a detailed appraisal of the longlist of measures identified by the Applicant, based upon evidence provided in **Table 3-1** the measures shortlisted for further investigation and consideration were:
 - Predator control; and
 - Disturbance reduction.
69. The progression from shortlisting to identifying a preferred measure for the Project is outlined in **Section 1** and **Section 5**.

Table 3-1: Longlist of Measures to Deliver Compensation for Guillemot and Razorbill

Measure	Delivery Mechanism	Summary	Rationale for Exclusion or Development of Measure
Closure of sandeel and sprat fisheries in UK waters	Strategic	Reduced pressure on forage fish stocks resulting from fishery closures should directly improve productivity (through elevated provisioning rates to chicks) and hence improve population resilience.	<p>UK sandeel fisheries in the North Sea are already closed following an announcement by Defra in early 2024 (albeit subject to a European Union (EU) legal challenge). Consequently, sandeel fisheries’ closure is not a securable compensation option at this stage.</p> <p>Closure of sprat fisheries could further improve seabird population resilience; however, this will require government led measures and is therefore beyond the control of the Applicant.</p>
Closure of sandeel and sprat fisheries in wintering areas	Strategic	Reduced pressure on forage fish stocks resulting from fishery closures should indirectly improve productivity (through improved adult body condition at the start of the breeding season) and over-winter survival rates and hence improve population resilience.	<p>Fisheries closures remain the most ecologically beneficial measure to offset impacts of offshore wind development, and this conclusion was supported in both the Round 4 and CIP plan level HRA (The Crown Estate, 2025).</p> <p>Currently sandeel fishery closures is not a securable compensation option as a Project alone at this stage however the Applicant continues to engage with Defra and government industry bodies on this measure.</p>
Predator control	Project Alone, Collaborative, Strategic	<p>Removal of predators such as rats can increase productivity among existing breeding birds through reduced levels of predation on chicks, and permit colony expansion to areas previously at high risk of rat predation (e.g. under boulders).</p> <p>Natural England has indicated their support for this measure, delivered by the Project alone, collaboratively or strategically.</p>	<p>Predator control has been clearly linked to increased breeding auk numbers in some cases (e.g. Lundy) while in others the response has been mixed (e.g. one species increases while another remains stable), indicating that other factors are also important (e.g. colony topography, food resource, etc.). Retained as a candidate measure with proviso that site selection is critical.</p> <p>The Crown Estate CIP Level Plan HRA (The Crown Estate, 2025) states it is uncertain whether mammalian predators are significantly affecting the razorbill population at FFC SPA and that predator control as a compensation measure is unlikely to be deliverable at the impacted SPAs due to existing management measures. However, the CIP Plan Level HRA does support predator eradication as a compensation measure at any other site within the UK National Site Network for these birds, where there is evidence that mammalian predators are limiting guillemot and razorbill population size.</p> <p>Following the ETG 4 Meeting 1, Natural England provided discretionary advice to reiterate their position on predator control (DAS/477591). Natural England explained that most options for managing predators to compensate for impacts to guillemot and razorbill are likely based on islands around the devolved administrations, particularly Scotland, and therefore fall outside of Natural England’s remit. Natural England further explained that the MRF may present opportunities for DBD to engage in predator eradicator schemes outside of England, but it is currently unknown whether the MRF will act as a UK-wide mechanism that facilitates cross-country collaboration, or whether each country will have its own fund. Natural England suggested the Applicant explore the feasibility of island sites surrounding England, including the Isles of Scilly, and contacting landowners of suitable sites directly.</p> <p>Following the ETG 4 Meeting 2, Natural England provided discretionary advice on the sites selected for predator eradication (as outlined in section 4.1.4) (DAS/493520). This advice included:</p> <ul style="list-style-type: none">• The sites suggested have previously been ruled out by the Hornsea Four Project and other projects;• Informal discussions between Natural Resource Wales and Natural England suggest that the proposed Welsh sites are unsuitable;• Headland sites such as St. Bees are unsuitable due to the sheer cliff nesting habitat that is likely inaccessible to rats, in addition to the challenges of eradicating on the mainland; and• The presence of predators or suitable auk nesting habitat is not confirmed on all sites. <p>Natural England further explained that a report by COWSC is expected to be made available in March 2025, which will set out potential sites suitable for predator eradication and suggested the Applicant search for sites within a wider geographical range, outside of sites already shortlisted by other OWF projects.</p>

GUILLEMOT AND RAZORBILL COMPENSATION -ROADMAP & EVIDENCE

Measure	Delivery Mechanism	Summary	Rationale for Exclusion or Development of Measure
			Feedback from stakeholders states that this measure should be retained. As such, this measure has been shortlisted and is discussed in detail under Section 1 .
Reduce oil spills	Project Alone, Strategic	Oil pollution, both major spill events and illegal small-scale discharging, causes seabird mortality. Reducing the presence of oil in the marine environment would benefit the entire ecosystem. Oil spill management relates to project-operated vessels during the construction, operation and decommissioning of the Project. Embedded mitigation measures, such as following developing an oil pollution emergency plan, can reduce the impacts on marine life should an oil spill occur. Oil spill management can be controlled under embedded mitigation measures.	Major spill events are rare. It is unclear how such events could be demonstrably reduced. There may be options to reduce chronic oil pollution through enhanced monitoring and enforcement of existing laws that prohibit illegal discharges, but these options are likely to require government level intervention and have limited measurable impact. As such, this measure has been excluded from progression to the shortlist by the Applicant.
Reduction of disturbance at breeding colonies	Project Alone, Collaborative, Strategic	Small colonies close to sources of tourism in readily accessible locations, either by land or water, may be subject to inadvertent disturbance by leisure activities (e.g. wildlife tours, dive vessels and climbing/coasteering). Disturbance may cause egg abandonment and elevated opportunistic predation (e.g. by large gulls).	Reducing the occurrence and / or magnitude of disturbance events during critical periods of the breeding season would improve colony productivity. This could be achieved through education via signage or wardening and voluntary agreements with local tour operators, equipment hire businesses, landowners and outdoor organisations. The feedback from stakeholders was that there is potential that this measure could be suitable (e.g. for smaller scale impact levels such as those currently calculated for the Project) although there is uncertainty about the scale of benefit (i.e. on affected colonies) and the options for resolving the uncertainties. The Crown Estate's CIP Plan Level HRA (The Crown Estate, 2025) states there may not be scope for delivery of this compensation measure at the FFC SPA, due to already implanted human disturbance mitigation in designated SPAs, but this compensation could be delivered at other sites within the UK National Site Network where disturbance is not currently managed. Natural England has advised the Project to investigate this measure, noting the uncertainties about how much of an existing problem disturbance is and the scope for reduction. Natural England also suggested the Applicant explore options for reducing recreational disturbance further afield from the FFC SPA (DAS/477591) The RSPB has emphasized the importance of data collection in order to demonstrate the efficacy of the measure (both potential and realised). As such, this measure has been shortlisted and is discussed in detail under Section 5 .
Reduction of fishery bycatch	Project Alone, Collaborative, Strategic	Some evidence for auk bycatch, particularly guillemot, in UK fisheries and this measure is being taken forward by the SEP&DEP OWF project.	While reducing bycatch would offer a means of directly compensating for adult mortality there is relatively limited evidence for the measure as a compensation option at this stage. Feedback from stakeholders is that while this measure may have ecological merit there is currently a lack of understanding of the scale of potential impact (on auks) and similarly of potential mitigation options. Therefore, there are currently considered to be more feasible measures for auks in the form of predator control and disturbance reduction. Following the ETG 4 Meeting 1, Natural England provided discretionary advice on bycatch (DAS/477591). Natural England noted that bycatch mitigation holds ecological merit, but there is a lack of information regarding the scale of bycatch impacts on guillemot and razorbill. Natural England supports the Applicant's decision to await emerging best available evidence and potential involvement through COWSC for strategic delivery. As such, this measure has been excluded from progression to the shortlist by the Applicant at this time but may be revisited if new evidence supports its inclusion.

4 Predator Control

4.1 Overview

70. Eradication of invasive non-native mammal predators from seabird islands has been demonstrated globally (including in the UK), to be a highly effective method for restoring healthy populations of some seabird species. UK examples of good practice include Ailsa Craig, Canna, Lundy, the Shiant Islands and Ramsay Island. Evidence is strong that several seabird species in the UK are constrained in their use of breeding sites or are impacted by invasive non-native mammals, and that eradication can have strong beneficial effects on their populations very rapidly.
71. Eradication of rats from Lundy resulted in guillemot breeding numbers increasing from 2,348 to 6,198 individuals over a 15-year period with an increase in breeding distribution of this species on the island into areas that would have been more readily accessible to rats, so the expansion is attributed to the removal of the pressure of predation by rats (Booker *et al.*, 2019). However, Luxmoore *et al.*, (2019) found no evidence of any increase in guillemot breeding numbers at Canna as a consequence of eradication of rats from that island and suggested that guillemot breeding numbers there were probably constrained by some other factors. Thus, the Lundy case study provides strong evidence that eradication of rats can benefit guillemots, but the outcome may depend on the amount of boulder and cave nesting habitat available (rather than cliff ledges) and whether or not guillemot numbers can increase into such habitat or are constrained by other factors such as food availability.
72. As for guillemot, the eradication of rats from Lundy resulted in razorbill breeding numbers increasing from 950 to 1,735, and a similar spatial expansion was observed (Booker *et al.*, 2019). However, in contrast to the absence of a response in guillemot, when Canna was cleared of rats, razorbill abundance immediately increased (Luxmore *et al.*, 2019). It should be noted that after the initial expansion the razorbill population has again stabilised, which is considered likely to indicate that food may now be the limiting factor.

4.1.1 Delivery

73. The Applicant has considered delivery of the measure of predator control via three mechanisms:
 - A single Project alone predator control scheme developed by the Applicant;
 - Working alongside other developers to implement a predator control scheme collaboratively; or

- Provision of funding into an MRF to allow for a predator control scheme to be delivered strategically.

4.1.1.1 Delivery as a Project Alone Measure

74. The preferred outcome of a predator eradication scheme is to achieve complete removal of the target predator species from the site (island, headland, etc.) as this will completely remove the source of predation and also makes interpretation of post-eradication monitoring outcomes much simpler. Under some circumstances it may not be feasible to achieve complete eradication, and instead ongoing measures to reduce predation pressure (i.e. partial eradication) may be considered an appropriate alternative. Scaling predator control efforts to correspond closely to a specific compensation target (i.e. to meet the needs of compensation for a project's mortality estimate) is simplest to achieve by finding a population with the capacity to grow that matches or exceeds the predicted impact and then undertaking a complete eradication. However, identification of suitable sites for such an approach can be challenging, particularly for smaller scale impacts. In the latter case reducing predation pressure through an ongoing campaign of trapping (or similar methods) may offer an appropriate alternative. The Applicant has not undertaken a detailed site selection exercise since this has already been undertaken by recent projects and their results remain relevant. DBS OWF undertook a longlist to shortlist exercise which identified a small number of potential project alone sites. Those available to survey are being progressed by that developer and are not currently available for the Applicant or multi-parties to consider or contribute to the evidence gathering for those sites. The Applicant is continuing to investigate options and should any that are currently being pursued by other developers become available or there is further understanding of capacity to support multiple Projects, this situation will be reviewed. However, at present predator control is being progressed as a collaborative or strategic measure.

4.1.1.2 Delivery as a Collaborative Measure

75. As noted above, the suitability of any particular seabird breeding colony for providing predator eradication as compensation depends on its population size (current and projected) relative to the predicted impact. Larger sites therefore have potential to compensate for multiple projects. Work by the Applicant and other OWFs to date (for example DBS) has indicated that parts of the Isles of Scilly present an opportunity for delivery of a compensation scheme that could compensate for the impacts of multiple projects. The Applicant is working with other projects that have similar compensation requirements and OWIC to investigate if this could be delivered as a multi-developer scheme.
76. However, currently, TWTs have stated (via the DBS examination and direct engagement with DBD as set out in **Section 1.4**) that they do not support developer led schemes as they strongly favour a strategically delivered scheme taken forward via the MRF.

4.1.1.3 Delivery as a Strategic Measure

77. Primary legislation through the Energy Act 2023 is in place to allow offshore wind developers access to strategic compensation measures. However, for developers to access this strategic measure, secondary legislation, which is still forthcoming, will be required to allow for the creation and management of a MRF. Further information on the status of strategic compensation is detailed in the Strategic Compensation for Offshore Wind Activities: Marine Recovery Fund Interim Guidance (DESNZ, 2025). The Interim Guidance states:
78. *“Applicants wishing to use predator reduction as a compensation measure ahead of the MRF being operational will need to deliver the measure themselves or in collaboration with other projects.”*
79. Further to this, on the 7 March 2025 DBD received the following statement from OWIC:
80. *“The Offshore Wind Industry Council's (OWIC) Environment and Consents workstream are currently delivering a four-year Strategic Compensation Studies project (SCS), due to end December 2027, funded through The Crown Estate’s Offshore Wind Evidence and Change programme and contributions from offshore wind developers. As part of this project, the OWIC SCS team are working in partnership with key stakeholders, including The Wildlife Trusts and interested developers (including DBD), to support a strategic approach to delivering a 30-year predator eradication project in the Isles of Scilly for the purpose of seabird compensation. The development work includes the creation of an operational plan to remove predators from the islands, a long-term maintenance/biosecurity plan to ensure the islands remain predator free, a community engagement plan and a monitoring and evidence plan. It is expected the outputs of this work will be delivered by Spring 2027, with the delivery of the eradication programme to follow. It is envisaged that this will be one of the first fully developed and costed programmes to be established as a strategic compensation measure for offshore wind farm impacts on protected seabirds.*
81. *Currently, Defra is establishing the Marine Recovery Fund (MRF), to develop strategic compensation measures, which is anticipated to be fully operational by late 2025. The preferred delivery route for this scheme would be via the MRF, once established, or via collaborative delivery, if necessary, in line with the interim MRF guidance published by DESNZ on the 29th January. To that end, alongside the partnership work itself, the OWIC SCS team have procured legal services to explore the establishment of a functioning developer-led delivery mechanism which would provide the offshore wind industry with a route to collaborative compensation whilst the Government-led MRF is in development. The outputs of this work are due summer 2025.”*
82. And on the 12 March 2025 Defra issued the following statement:

83. *“The Isles of Scilly Seabird Recovery Partnership is developing a predator eradication project to recover seabird populations on the Isles of Scilly (IoS) as a strategic compensation measure in relation to offshore wind development. This partnership is led by Isles of Scilly Wildlife Trust, and closely involves the Duchy of Cornwall, RSPB, The Wildlife Trusts and a range of other local and national partners.*
84. *The partnership, with support from The Wildlife Trusts, is developing a predator eradication programme on the Isles of Scilly to cover a 30-year period. This programme will include an operational plan to remove predators from the islands, a long-term maintenance/biosecurity plan to ensure the islands remain predator free, a community engagement plan and a monitoring and evidence plan. It is expected the outputs of this work will be delivered Spring 2027, with the potential delivery of the eradication programme to follow. It is envisaged that this will be one of the first fully developed and costed programmes to be established as a strategic compensation measure for offshore wind farm impacts on protected seabirds.*
85. *Currently, Defra is establishing the Marine Recovery Fund (MRF), to develop strategic compensation measures, which is anticipated to be fully operational by late 2025. A number of organisations have recently met, including Defra, DESNZ, Natural England, The Wildlife Trusts, OWIC, The Crown Estate, and RSPB, to establish a Task and Finish Group to establish the mechanisms required to allow predator eradication to be delivered as a strategic compensation measure, noting the option for this to delivered by the Marine Recovery Fund.*
86. *All parties agree that predator eradication on the Isles of Scilly has great potential to provide compensation for the impacts of offshore wind projects and would support its inclusion in project alone compensation plans. Offshore wind projects currently seeking consent might wish to submit this statement to the examining authority to demonstrate progress with this scheme, if they seek to use it as strategic compensation for unavoidable impacts to protected species likely to be impacted by their projects.”*
87. While these two statements provide comfort that the MRF and compensation at the Isles of Scilly will be a realistic route for the Applicant within the Project’s timeline, there remains a degree of uncertainty. Whilst the Project is supportive of utilising the MRF as a method of delivery for compensation, until this becomes operational it is clear that the Applicant needs to consider project alone and collaborative delivery of this measure. Therefore, the Applicant are continuing to pursue this.

4.1.2 Measure of Success / Effectiveness

88. There are two criteria by which success would be measured: successful eradication (and prevention of reinvasion) and improved population status of the breeding auks. Monitoring of trap lines and / or trail cameras would be used to determine the success of the initial eradication campaign. Following an agreed period with no predator (such as

rat) signs this would lead to a conclusion that the eradication was successful. However, success in this matter would be contingent on ongoing monitoring to confirm the maintenance of predator-free status. With respect to the auk populations, success would depend on population recovery and / or expansion and improved productivity. These would likely be monitored on at least an annual basis and reported as a condition of the compensation.

4.1.3 Scale

89. Predator control can only be scaled with respect to the size of site and its' breeding capacity (i.e. suitable habitat for auk breeding). Thus, site selection is at least partly informed by the ability of any given location to provide sufficient compensation. The number of additional pairs or the level of improved productivity is also a function of the magnitude of impact, although the method for calculating the amount of compensation appropriate for a given level of impact is subject to ongoing discussions (several alternative approaches have been proposed to date and there is no clear consensus at present). At present there are several potential candidate sites under consideration by various projects, and these offer a range of possible compensation scales.

4.1.4 Site Selection

90. There are several factors involved in site selection, including the presence of predators (i.e. rats), the presence of breeding auks (or the potential for colonisation from a nearby source), suitability for eradication (i.e. topography, accessibility, risk of reinvasion, etc.), landowner agreement and stakeholder agreement.
91. The sites which have been considered by the Applicant are those identified on the DBS shortlist:
- Isles of Scilly: with respect to opportunities for predator (rat) eradication, over 30 small islands are under consideration as being potentially suitable. There is general consensus across stakeholders that this work would be beneficial for breeding seabirds, and there is scope for this to provide compensation for several wind farms. However, TWTs, which has oversight of strategic conservation efforts, has publicly stated that they consider this to be deliverable only through a strategic undertaking via the MRF.
 - Sheep Island (Northern Ireland): this is considered to be a suitably sized location for the Project, however at present neither the National Trust (the landowner) or Department of Agriculture, Environment and Rural Affairs of Northern Ireland support the use of this location for English OWF compensation. At present this location is therefore not considered available for the Project.
 - Middle Mouse (Anglesey): this is a small island that is being progressed by DBS and is therefore currently unavailable to the Project.

- St. Tudwals East and West (islands near the Llyn Peninsula): these islands appear to have potential as eradication sites. However, the owners have indicated they do not wish them to be considered, therefore these are not currently available; or
- Worms Head (Gower Peninsula): this site has been retained as an option by DBS and is being progressed as such. At present the scale of compensation this site could deliver is unclear, but it is foreseeable that DBS may require all of the compensation it offers. DBD continue to monitor developments with this site but it is not currently considered "available" for the Project.

92. Three other sites were included on the DBS shortlist, The Gobbins (Northern Ireland), St. Bees (Cumbria) and The Needles (Isle of Wight). These were all discounted by DBS as either unsuitable or unsupported by their landowners and therefore not considered any further here.
93. In addition to the sites outlined above in England, Wales and Northern Ireland the only other such scheme that the Applicant is aware of is the Orkney Nature Wildlife Project (ONWP). Factors to consider in this respect include the relative scales of compensation required by the Project and the predicted gains at the compensation site and how much of that is accounted for by other projects. However, it is currently unclear what level of support there is for the Project to participate in schemes located in Scotland (as the DBD project is located in England) and whether such involvement would be considered against compensation requirements. The Applicant continues to pursue this line of enquiry.
94. The Applicant is monitoring the progress of the sites retained by DBS as project alone options (Middle Mouse and Worms Head) and strategically (Isles of Scilly) and is in regular communication with relevant parties.

4.1.5 Monitoring and Adaptive Management

95. Monitoring is an important feature of any compensation. This is required to ensure rapid detection of reinvasion so that a quick response can be implemented. It is also essential to understand if and how the populations of auks recover. Both aspects of monitoring may also trigger adaptive management responses, although by its nature this can only be defined in high level terms at this point. As mentioned above, the primary requirement with respect to reinvasion events is rapid deployment of control measures in order to minimise the risk of complete failure of the scheme (i.e. total recovery of the rat population).
96. With respect to the recovery of the auk populations, adaptive measures would need to reflect the findings of studies into the reasons why population recovery has not been observed. Therefore, these cannot be stated until a site has been identified and scheme designed.

4.1.6 Next Steps

97. There is considerable flux in auk compensation at present and the Applicant is actively monitoring this topic, since there are several English wind farms currently in the planning process that are exploring this option and are in discussion with landowners, stakeholders and government departments. The planning outcomes for these Nationally Significant Infrastructure Projects will have a direct bearing on the next steps taken by the Applicant, and options for collaboration with other projects and for inclusion in strategic endeavours are also being pursued.
98. However, it is also necessary for the Applicant to develop options for delivering this compensation alone, in order to minimise the risk that collaborative and strategic schemes are insufficiently progressed for the SoS to be satisfied that consent can be awarded on that basis. To this end the Applicant has reviewed the island and headland colonies identified to date (as noted above), is approaching landowners directly where appropriate and is considering how data gaps may be filled (e.g. through surveys).
99. As noted, the Applicant is also actively involved in discussions with other developers and strategic compensation working groups to ensure involvement in any joint initiatives. This will be maintained alongside the development of project alone options.
100. The most progressed site for a strategic approach is the Isles of Scilly. Alongside the progress being made for this through OWIC and TWT, the Project is also seeking to identify potential individual islands that could be suitable for Project alone scale compensation, in the event that other routes do not progress at the timescales required.

5 Disturbance Reduction

5.1 Overview

101. Guillemot and razorbill nest on cliff ledges and amongst boulders, with varying levels of exposure to potential human disturbance, primarily close approach of humans on foot (i.e. along the base of cliffs on paths or climbing) or by water (e.g. in seabird tour boats or kayaks, etc.). Typically, the response to the presence of people will escalate as the source gets closer, beginning at a distance of around 50m, moving from alarm calling and looking towards the source and culminating, once the distance has reduced to around 10 - 20m, in flushing from their position in the colony (Goodship and Furness, 2019). Depending on the circumstances, the birds may return within a few minutes, if the disturbance source has been removed, or could remain away longer term or even permanently if the event was sufficiently severe. If the flushed birds have eggs or chicks, there is a risk these will be predated, for example by large gulls, be exposed to inclement weather or experience reduced provisioning, increasing mortality risk to the immature birds. The adults will also have elevated energetic costs as a result of the flushing

movements. Even if individuals do not flush, they may still be at risk of negative effects, due to elevated stress responses. As a worst case, repeated and / or regular disturbance may result in partial or total colony abandonment.

102. Reduction or prevention of disturbance will improve colony productivity, through reduced egg and chick loss to predators and exposure, and potentially also have benefits for adult survival through reduced energetic costs, although the latter would be very challenging to quantify.

5.1.1 Delivery

103. The Applicant has considered delivery of the measure of predator control via three mechanisms:
 - A single Project alone disturbance reduction scheme developed by the Applicant;
 - Working alongside other developers to implement a disturbance reduction scheme collaboratively; or
 - Provision of funding into an MRF to allow for a seabird compensation scheme to be delivered strategically by centralised government.
104. Compensation delivery would be through collaboration with local businesses, tour operators, water sport equipment hirers, landowners, and interest groups as well as provision of interpretation boards for the general public and wardens. The aim would be to inform these stakeholders of the potential disturbance that may be inadvertently caused by their activities and to request they behave in a manner which reduces this risk during key sensitive periods of the breeding season. These would be managed through voluntary agreements and codes of practice drawn up collectively. It will be critical for successful uptake that these are based on local input and are neither imposed externally, nor perceived to be so. Examples of similar successful schemes developed to protect wildlife would need to be found (e.g. for nesting raptors and climbing groups, etc.) to inform the best practice for achieving the right balance. Once set up there will also be a need to ensure measures are maintained into the future, and again examples from similar long running schemes will be used as the framework for this.

5.1.1.1 Delivery as a Project Alone Measure

105. Disturbance reduction for the Project alone would be through the identification of one or more suitably sized breeding colonies which are currently subjected to anthropogenic disturbance which reduces productivity (and by extension colony size) and which the Applicant is able to demonstrate a tangible reduction in disturbance and corresponding improvement in productivity and colony growth. The colonies selected would need to be ones for which the predicted improvements would offset the Project impacts (subject to agreement on compensation quanta calculations with stakeholders). One feature of this compensation is that it lends itself to scaling, such that if the colony improvements are

not considered to have been in line with expectations (and no more disturbance reduction effort is considered feasible), then additional sites can be incorporated to meet the shortfall.

5.1.1.2 Delivery as a Collaborative Measure

106. Disturbance reduction delivered across more than one project would follow the same principles as for project alone, with the only difference being that the activities required to secure and implement the measure and the associated costs and benefits are shared. As for project alone, if the scale of benefit does not match that expected (or required) then it would be a matter of expanding the efforts to additional sites to meet the shortfall. A coordinated approach could lead to improved outcomes and greater benefit and would provide those projects with a route to compensation whilst the Government-led MRF is in development.

5.1.1.3 Delivery as a Strategic Measure

107. In general terms, **Section 4.1.1.3** sets out the legislative underpinning required for strategic measures. With specific reference to disturbance reductions, the Applicant is currently in discussion with four other projects to develop a collaborative approach to the proposed measures at auk breeding colonies in south-west England. While there is potential for collaborative work among these projects, the Applicant is of the opinion that coordinated, strategic delivery of reducing auk disturbance is the most appropriate route to take. The benefits of this would be a clear agreement on production of a priority list of sites, focussing on those with the most potential to gain (in terms of colony status) and the highest likelihood of effecting behavioural change in visitors, whether locals, tourists or both. A unified scheme, led by an appropriate independent organisation with the support of multiple projects (e.g. through the MRF) would ensure greater consistency of messaging (i.e. visitors would receive the same information at multiple sites) and clearer guidance on when and where critical activities should be avoided at any given location. This could therefore potentially deliver benefits beyond the focal sites through a general raising of awareness. A coordinated approach would also ensure that standard monitoring and data collection methods were employed, making comparisons much more straightforward and robust.

5.1.2 Measure of Success / Effectiveness

² [https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010115/EN010115-001314-Five%20Estuaries%20Offshore%20Wind%20Farm%20Ltd%20-%205.5%20Guillemot%20and%20Razorbill%20-%20Evidence,%20Site%20Selection%20and%20Roadmap%20-%20Revision%20C%20\(Clean\).pdf](https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010115/EN010115-001314-Five%20Estuaries%20Offshore%20Wind%20Farm%20Ltd%20-%205.5%20Guillemot%20and%20Razorbill%20-%20Evidence,%20Site%20Selection%20and%20Roadmap%20-%20Revision%20C%20(Clean).pdf)

³ <https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010119/EN010119-000757->

108. There are two criteria for measuring the compensation: successful reduction in disturbance events and improved population status of the breeding auks. Monitoring of the colonies from suitable vantage points, potentially supplemented with time lapse photography, would be used to record incidents of disturbance and to make comparisons with the baseline. It will be necessary to agree how disturbance events are quantified, since there will be different sources and they may approach from on the water or on land (e.g. boats of different size and speed/noise, human powered vessels such as kayaks and paddleboards and on land, climbers/coasteering). Group size (no. of people) and proximity to the birds will also be important factors.
109. Monitoring of the breeding birds would use a combination of standard methods for seabird colonies, with additional recording of responses to disturbance events should they occur. The primary population metrics would focus on productivity rates (of the whole colony, or observable subsets) and population size (no. of individuals) depend on population recovery and / or expansion and improved productivity. These would be monitored on at least an annual basis and reported as a condition of the compensation.

5.1.3 Scale

110. Variations in scale of compensation, as required, are most likely to be achieved through site selection as this will offer different size colonies and potentially different degrees of current disturbance and hence potential for reduction. Potentially disturbance reduction could be on a sliding scale, with increasing efforts to protect a colony from sources of disturbance with the ultimate level being an exclusion zone of an agreed distance (e.g. 1km) during the breeding season. However, in practice such an extreme measure is unlikely to be feasible or welcomed by the local community and may well prove to be unenforceable. Thus, a more appropriate and collaborative approach is to seek to work with key organisations, businesses and interest groups to reach voluntary agreements about disturbance reduction.

5.1.4 Site Selection

111. Several sites have already been identified by other wind farm applicants as being potentially suitable targets for disturbance reduction measures: Five Estuaries², North Falls³ and ODOW⁴. Each of these projects has conducted a similar exercise of compiling a long list derived from a desk study, collating auk colony population estimates and

7.2.5%20Appendix%205%20Guillemot%20and%20Razorbill%20Compensation%20Document%20(R%20Rev%201)%20(Clean).pdf

⁴ <https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010130/EN010130-001827->

7.7.6%20Without%20Prejudice%20Additional%20Measures%20for%20Compensation%20of%20Guillemot%20and%20Razorbill.pdf

reviewing and scoring potential sources of disturbance to arrive at a short list of sites for which further data gathering is required.

112. The Applicant has initiated a review of the above noted documents to determine if there are any sites that did not make those projects' short-lists but for which there could still be merit in undertaking surveys (i.e. to address any remaining knowledge gaps) to further contribute to the measure in the south-west. The initial conclusion of this review is that there may be a small number (c. eight) of sites worth conducting surveys (of breeding success and source of disturbance) which would complement the sites identified by other projects. Alongside this the Applicant is in discussion with other projects with the intention of agreeing on a coordinated approach to conducting site surveys and potential for sharing data during the 2025 breeding season.

5.1.5 Monitoring and Adaptive Management

113. Monitoring is a critical feature of any compensation. In this case this will enable an understanding of if, and how, the populations of auks respond to the reduction in disturbance. It will also be important to determine if the agreed measures are being observed, and the breeding colonies are experiencing reduced levels of disturbance. Both aspects of monitoring may also trigger adaptive management responses, although by its nature this can only be defined in high level terms at this point. For the disturbance reduction this could take the form of enlarged buffer zones, for example if activities appear to be continuing to cause disturbance despite them taking place beyond initially agreed distances or to cover an extended period of the breeding season if the initial period is considered to be too short. Frequency of tour vessel visits may also need to be reduced, again if the lowered levels still appear to be causing unacceptably high levels of disturbance.
114. If the birds appear to be undisturbed following the start of measures, but productivity remains low and / or the population size does not stabilise or recover then monitoring in the first instance may need to try and identify if there are other constraints on growth and then develop adaptive measures intended to address these.

5.1.6 Next Steps

115. The Project alone and collaborative efforts discussed above notwithstanding, as noted in **Section 5.1.1**, the Applicant considers that a strategic approach is the most appropriate means for delivering disturbance reduction measures. To this end the Applicant, along with other wind farm projects (Five Estuaries, North Falls, ODOW, Rampion 2), has been engaged in discussions with the CWT, in conjunction with OWIC, to agree a strategic partnership for this compensation. On the 3 March 2025 CWT issued a letter of comfort (**Appendix 8-1**) which concluded:

116. *"The purpose of this letter is to confirm to the projects listed above, and relevant authorities, that provided the relevant strategic coordination and funding provisions are sufficient, CWT can provide the necessary services that would be required to deliver the potential measures (as set out in Annexe A), should they be required. CWT are therefore willing to enter into an appropriate commercial agreement with the above projects, subject to adequate resourcing from the Developers, where OWIC acts as an intermediary, should compensation be deemed necessary by the DESNZ SoS."*

117. With several English wind farms currently in the planning process, exploring auk compensation options, it is clear that this is an area undergoing rapid development hence the Applicant is actively monitoring this topic. The planning outcomes for these Nationally Significant Infrastructure Projects will have a direct bearing on the next steps taken by the Applicant, and as discussed, options for collaboration with other projects and for inclusion in strategic endeavours are also being pursued.

118. However, it is also necessary for the Applicant to develop options for delivering this compensation alone, in order to minimise the risk that collaborative and strategic schemes are insufficiently progressed for the SoS to be satisfied that consent can be awarded on that basis. To this end the Applicant has reviewed the colonies identified to date and is considering appropriate means for addressing any remaining data gaps (e.g. through desk and field surveys).

6 Conclusion

119. The process for developing an HRA ‘without prejudice’ derogation case for the Project’s potential impacts to the guillemot and razorbill features of the FFC SPA has identified that there are currently only two compensation measures supported by all parties. These are predator control/eradication and disturbance reduction. Both could be delivered as project alone, collaborative or strategic measures. Based on feedback from stakeholders as part of the EPP, while there is consensus that strategic delivery is the preferred ecological and logistical option, it is necessary for the Applicant to be able to demonstrate the ability to deliver any agreed scheme alone. Nonetheless, the Applicant is actively engaged in developing collaborative approaches with other OWF developers and in wider industry efforts to support the creation of the necessary frameworks to enable strategic compensation to become a reality via the MRF.
120. **Table 6-1:** Natural England's Checklist for Compensation Measures presents a summary of where the Applicant is at on delivering its proposed compensation measures against Natural England’s checklist. Considering the current early stage of S.42 PEIR consultation, the uncertainty around when the MRF will become active, and that implementation is out of the projects control it has not been possible to fully complete the table. The Applicant will continue to iteratively update this table as new information becomes available and as the Project moves through the application process.

Table 6-1: Natural England's Checklist for Compensation Measures

Natural England Compensation Checklist		Predator Control	Disturbance Reduction
a	What, where, when: clear and detailed statements regarding the location and design of the proposal.	<p>What: some combination of lethal control (poison), rat proof fencing, biosecurity measures and long-term monitoring, dependent on location.</p> <p>Where: focus is currently on English, Welsh or Northern Irish auk breeding sites. At present it is the Applicant’s understanding that there are no suitable sites for project alone delivery (due to combinations of site features, landowner reticence, colony size, etc.). The most promising site appears to be the Isles of Scilly, with multiple islands under consideration, and this site could deliver sufficient compensation for several wind farms. However, there is a keenness from TWT that this is delivered as a coordinated strategic operation, resourced via the MRF.</p> <p>When: timing dependent on site, landowner and SNCB discussions etc. Intention would be to commence works as soon as relevant permissions obtained, and in advance of wind farm operation</p>	<p>What: reduction in activities close to auk breeding sites that may cause disturbance to birds resulting in reduced productivity. The activities which may be included in this aim are wildlife tour boats making close approaches to colonies, watersport activities (e.g. kayaking, paddleboards, etc.), coasteering and climbing. Once sites have been identified as potentially suitable (i.e. subject to disturbance at present) local businesses (e.g. those which operate tour vessels, water-sport equipment hire, coasteering and climbing guiding etc.) will be contacted to discuss their existing activities and how these could be conducted in a more sensitive manner during sensitive periods.</p> <p>Where: a number of possible sites have been listed by other projects in south-west England (Cornwall, Devon, Dorset), with some preliminary surveys conducted at the most promising locations. These have indicated there is potential for reducing disturbance for the benefit of the breeding auks. The Applicant t is considering the feasibility of collecting additional survey data in 2025 to build the knowledge base for this measure. Wider efforts are also in development through OWIC and the CWT for this to be expanded as a strategic measure, subject to the creation of necessary frameworks for provision of funds.</p> <p>When: discussions with local stakeholders and businesses can commence as soon as agreement on sites has been reached with Natural England. To demonstrate the benefits, it may be necessary to conduct a period (e.g. one breeding season) of monitoring prior to instigation of the compensation to provide the baseline for future comparisons.</p>
b	Why and how: ecological evidence to demonstrate compensation for the impacted site feature is deliverable in the proposed locations	<p>Why: widespread evidence that predator control benefits seabirds generally and from certain locations this has included auks (Booker <i>et al.</i>, 2019). Outcome would be expected to be improved productivity for existing pairs and / or an increase in the space available for pairs to nest. This improved productivity would feed additional birds into the biogeographic population from which impacted colonies draw recruits, thereby increasing reliance in the wider population.</p> <p>How: Predator eradication can be achieved using poison baits and lethal traps, often in combination to ensure blanket coverage is achieved as it is critical that eradication is 100%. Depending on location, fencing may be required (e.g. headland) following initial control to prevent reinvasion. This would be combined with regular monitoring of permanent traps (and / or chew blocks as indicators). Feasibility work would be the first step, to determine site suitability and best methods to use.</p>	<p>Why: the presence of people near breeding seabirds can cause a range of negative behaviors from heightened vigilance to flushing. These all increase the risk of breeding failure, due to eggs or chicks being exposed to inclement weather or being inadvertently dislodged from their nest location, reduced chick provisioning or predation of eggs and chicks left unattended. These responses are related to the number of people (i.e. group size) and their proximity (Beale and Monaghan 2004). Reducing this source of disturbance would be expected to improve productivity.</p> <p>How: the first step would be to establish a baseline for existing productivity and disturbance levels, through surveys conducted during the breeding season, recording both seabirds (i.e. productivity and disturbance responses) and disturbance events, defined by type, group size, proximity and duration. Following collection of the baseline, a plan to reduce the magnitude of disturbance by targeting one or more of the factors above would be implemented and the monitoring repeated. This would permit quantification of the measure.</p>
c	For measures on land, demonstrate that on ground construction deliverability is secured and not just the requirement to deliver in the DCO e.g., landowner agreement is in place. For measures at sea, demonstrate that measures have been secured e.g. agreements with other sea or seabed users	Landowner discussions are at a preliminary stage since short-listing and final site selection has not been conducted. This aspect is a key part of the site selection phase.	Landowner agreements would only be expected to cover access for surveying, and potentially for the installation of interpretation signboards to inform the public. No other access rights are expected to be required.

GUILLEMOT AND RAZORBILL COMPENSATION -ROADMAP & EVIDENCE

Natural England Compensation Checklist		Predator Control	Disturbance Reduction
d	Policy/legislative mechanism for delivering the compensation (where needed).	Relevant licenses to conduct predator eradication would be sought from licensing bodies (e.g. Natural England, Local Authority).	No policy or legal mechanisms are expected to be required. Disturbance reduction would be sought through voluntary agreements and codes of conduct.
e	Agreed DCO/dML conditions.	To be confirmed – current proposal is on a without prejudice basis.	To be confirmed – current proposal is on a without prejudice basis.
f	Clear aims and objectives of the compensation.	The aim of predator control on an offshore island or mainland headland would be to safeguard and improve the conservation status of breeding auks (and other species) by preventing predation of eggs and chicks by rats. This would improve colony productivity of existing pairs and potentially permit population expansion into previously suitable habitat subject to high levels of rat presence. Thus, the objective is an increase in colony productivity rates and populations size.	The aim of disturbance reduction at a breeding colony would be to improve productivity by reducing the risk of egg and chick loss (e.g. by predation) caused when adults are flushed from their nests. The additional birds fledged from the colony would be available to join the regional population and recruit into other colonies (e.g. SPAs) and thereby contribute to the health of the regional population.
g	Mechanism for further commitments if the original compensation objectives are not met – i.e., adaptive management	Adaptive management is inherently reactive to the situation, so it is not feasible to identify measures in advance of them being specific compensation having been identified. Nonetheless, high level options may include repeat eradication effort (if reinvasion has occurred or if eradication was incomplete), review of other potential constraints (e.g. forage fish availability) on population growth that could be addressed (e.g. through fishery no-take zones, seabed habitat restoration), etc.	Adaptive management is inherently reactive to the situation, so it is not feasible to identify measures in advance of specific compensation having been identified. Nonetheless, high level options may include a review of other potential constraints (e.g. forage fish availability) on population growth that could be addressed (e.g. through fishery no-take zones, seabed habitat restoration), etc.
h	Clear governance proposals for the post-consent phase – we do not consider simply proposing a steering group is sufficient	To be confirmed – current proposal is on a ‘without prejudice’ basis.	To be confirmed – current proposal is on a ‘without prejudice’ basis.
i	Ensure development of compensatory measures is open and transparent as a matter of public interest, including how information on the compensation would be publicly available.	To be confirmed – current proposal is on a ‘without prejudice’ basis.	To be confirmed – current proposal is on a ‘without prejudice’ basis.
j	Timescales for implementation especially where compensation is part of a strategic project, including how timescales relate to the ecological impacts from the development.	Efforts would be made to progress the initial stages (e.g. landowner agreements, feasibility study, etc.). As soon as such agreements have been obtained from stakeholders, eradication campaigns will need to be initiated during the non-breeding season, which would impose a degree of constraint on implementation. Logistical considerations will also play a key part in determining how quickly a campaign could be undertaken.	Efforts would be made to progress the initial stages (e.g. identification of sites, seeking permission to undertake surveys from landowners, planning of monitoring phase, etc.) as soon as agreement has been obtained from stakeholders. Monitoring will need to be conducted throughout the breeding season, to ensure that any impacts that may cause early abandonment are captured. It is anticipated that at least one year of monitoring will be required to determine the baseline against which future years can be compared. The baseline will be for both breeding performance and disturbance levels. A review of the survey effort and results will be conducted each year to identify opportunities to refine the monitoring to ensure efficient use of time so that key colony data are obtained and important events recorded, while minimising extraneous visits. This may also indicate the point at which it is only necessary to record colony performance and not disturbance levels to ensure the ongoing delivery of compensation.

GUILLEMOT AND RAZORBILL COMPENSATION -ROADMAP & EVIDENCE

Natural England Compensation Checklist		Predator Control	Disturbance Reduction
k	Commitments to ongoing monitoring of measure performance against specified success criteria.	Monitoring is an essential component of any compensation proposal. In the case of an eradication scheme this would be two-fold: monitoring to determine the success of the initial eradication effort and ongoing to ensure rapid detection of re-invasion events; monitoring the target species to record metrics expected to reflect improved status (or otherwise). These would include population size, areas of the colony in use, productivity of either the whole colony or subsets (depending on colony size, visibility and accessibility). Ringing of chicks, both BTO metal rings and colour rings, may also be feasible for some parts of the colony and this would permit longer term monitoring of the fate of individuals, including survival rates and movement. The latter would inform on the degree to which birds hatched in the selected site recruit to other colonies, thereby delivering the intended compensation.	Monitoring is an essential component of any compensation proposal. In the case of a disturbance reduction scheme this would be two-fold: monitoring the target species to record metrics expected to reflect improved breeding status (or otherwise) and monitoring of human activity to determine the success of the efforts made within the local community to reduce disturbance. The former would include measuring the population size, areas of the colony in use, productivity of either the whole colony or subsets (depending on colony size, visibility and accessibility). The latter would require regular periods of watches from suitable vantage points to record the presence of tour boats, water sports enthusiasts, climbers etc. The frequency and duration of watches would need to be sufficient to provide representative information for the key periods, for which a stratified approach would be expected to be the most efficient (i.e. focused on periods of expected higher human activity such as evenings, weekends and holidays and also of the periods of the season when disturbance may have the greatest impact). The level of monitoring would be kept under review as the scheme progressed, to ensure efficient data gathering of key information. This may take the form of a focus on colony performance, with only opportunistic monitoring of disturbance levels (or sub-sampling using remote monitoring equipment).
l	Proposals for ongoing ‘sign off’ procedure for implementing compensation measures throughout the lifetime of the project, including implementing feedback loops from monitoring.	To be confirmed – current proposal is on a without prejudice basis.	To be confirmed – current proposal is on a without prejudice basis.
m	Continued annual management of the compensation area including to ensure other factors are not hindering the success of the compensation e.g., changes in habitat, increased disturbance as a result of subsequent plans/projects”	If the monitoring indicates that predator control has been successful, but the seabird populations are not responding as hoped, (e.g. populations increasing and / or productivity improving) it will be necessary to conduct studies to attempt to determine what other constraints may be operating. The results of this would need to be discussed with the steering group and any other relevant stakeholders and options for addressing identified constraints agreed.	If the monitoring indicates that disturbance events have been reduced but the seabird populations do not appear to be responding as hoped, (e.g. productivity improving and / or populations increasing) it will be necessary to conduct studies to attempt to determine what other constraints may be operating. The results of this would need to be discussed with the steering group and any other relevant stakeholders and options for addressing the identified constraints agreed.

References

AEWA. (2012). Report on the Conservation Status of Migratory Waterbirds in the Agreement Area. Fifth Edition. African-Eurasian Waterbird Agreement (AEWA).

Beale, C. M., & Monaghan, P. (2004). Human Disturbance: people as predation-free predators? *Journal of Applied Ecology*, 41, 335-343.

Booker, H., Slader, P., Frayling, T., Williams, T., & Bolton, M. (2019). Seabird recovery on Lundy population change in Manx shearwaters and other seabirds in response to the eradications of rats. *British Birds*, 112, 217-230.

Burnell, D., Perkins, A. J., Newton, S. F., Bolton, M., Tierney, T. D., & Dunn, T. E. (2023). *Seabirds Count: A census of breeding seabirds in Britain and Ireland (2015 – 2021)*. Barcelona: Lynx Nature Books .

Clarkson, K., Aitken, D., Cope, R., & O'Hara, D. (2022). *Flamborough and Filey Coast SPA Seabird Colony Count 2022*. Bedfordshire: RSPB.

Defra. (2021). Best practice guidance for developing compensatory measures in relation to Marine Protected Areas. Defra.

Defra. (2025). *Marine Environment Statement made on 29 January 2025 (Statement UIN HCWS394)*. DESNZ. (2025). *Strategic compensation measures for offshore wind activities: Marine Recovery Fund interim guidance*. Retrieved 02 06, 2025, from <https://www.gov.uk/government/publications/strategic-compensation-measures-for-offshore-wind-activities-marine-recovery-fund-interim-guidance/strategic-compensation-measures-for-offshore-wind-activities-marine-recovery-fund-interim-guidance>

European Commission. (2018). Managing Natura 2000 sites. The provisions of Article 6 of the Habitats Directive 92/43/EEC. Commission notice C (2018) 7621.

Natural England. (2014). Departmental Brief: Proposed extension to Flamborough Head and Bempton Cliffs Special Protection Area and renaming as Flamborough and Filey Coast potential Special Protection Area (pSPA) (SPA EU code: UK9006101). Natural England.

Natural England. (2018). *Flamborough and Filey Coast SPA Citation*. Retrieved January 2025, from <https://designatedsites.naturalengland.org.uk/Marine/MarineSiteDetail.aspx?SiteCode=UK9006101&SiteName=flamborough&SiteNameDisplay=Flamborough%20and%20Filey%20Coast%20SPA&countyCode=&responsiblePerson=&SeaArea=&IFCAArea=&NumMarineSeasonality=4&HasCA=1>

Natural England. (2021, November). Planning Inspectorate Examination for the Norfolk Vanguard Offshore Windfarm - Secretary of State Additional Information Request. Retrieved

from Planning Inspectorate : <https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010079/EN010079-004441-EN010079%20374820%20Norfolk%20Vanguard%20Annex%205%20NE%20overview%20of%20appraisal%20of%20compensation%20measures.pdf>

Natural England. (2023, October). Natural England Conservation Advice for Marine Protected Areas Flamborough and Filey Coast SPA - Supplementary Advice on Conservation Objectives. Retrieved January 2025, from Natural England Designated Sites View: <https://designatedsites.naturalengland.org.uk/Marine/MarineSiteDetail.aspx?SiteCode=UK9006101&SiteName=Flamborough&SiteNameDisplay=Flamborough%20and%20Filey%20Coast%20SPA&countyCode=&responsiblePerson=&SeaArea=&IFCAArea=&NumMarineSeasonality=4&HasCA=1>

UK Government. (2023). *Energy Act*. Retrieved 02 2025, 05, from <https://www.legislation.gov.uk/ukpga/2023/52/enacted>

Woodward, I., Thaxter, C. B., Owen, E., & Cook, A. S. (2019). *Desk-based revision of seabird foraging ranges used for HRA screening*. British Trust for Ornithology.

List of Tables

Table 1-1 Summary of Stakeholder Engagement.....6

Table 1-2 Consultee Responses in Relation to Guillemot and Razorbill Compensation7

Table 2-1. Auk Mortality Estimates and Corresponding Compensation Quanta..... 12

Table 3-1: Longlist of Measures to Deliver Compensation for Guillemot and Razorbill 16

Table 6-1: Natural England's Checklist for Compensation Measures.....25

7 Appendices

7.1 'Potential Compensation Measures: First phase for Recreational disturbance reduction project at auk colonies in Cornwall' from Cornwall Wildlife Trust



3rd March 2025

Dear Sir/Madam,

Potential Compensation Measures: First phase for Recreational disturbance reduction project at auk colonies in Cornwall

Cornwall Wildlife Trust (CWT) understand that the Offshore Wind Developers listed below (**the Developers**) either are currently, or will shortly, be promoting Development Consent Orders (DCOs) in relation to the offshore wind projects listed below. CWT understand that in the event that potential Adverse Effects on Integrity (AEoI) are identified by the Secretary of State (SoS) in relation to the guillemot or razorbill features of a site within the National Site Network the Developers will need to demonstrate that appropriate compensatory measures can be secured to ensure that overall network coherence is protected. As a result, the Developers are proposing, within their respective DCO applications¹, to work collaboratively on further research into the reduction of anthropogenic disturbance to auk colonies in southwest England, to improve understanding of the pressures on the relevant colonies and to deliver required compensation measure(s). The first phase would then be reviewed after two years, with the identification and delivery of any required adaptive management measures to ensure the future effectiveness of the compensation measure if necessary.

The developers are:

- GT R4 Limited (trading as Outer Dowsing Offshore Wind)
- Five Estuaries Offshore Wind Farm Limited
- Rampion 2 Offshore Wind Farm
- North Falls
- Doggerbank Offshore Wind Farm Project 4 Projco Limited (Dogger Bank D Wind Farm)

CWT has put forward a range of workstreams designed to understand disturbance at the auk colonies, trial on-water and land-based interventions to reduce disturbance, with the aim of improving colony productivity. These workstreams will be appropriately monitored, and their

success will be measured through collaboration with ornithologists at the University of Exeter overseen by the Developers Guillemot and Razorbill Compensation Steering Group(s).

The measures would be delivered with multiple partner organisations in a phased approach. The Offshore Wind Industry Council (OWIC) has agreed to act as an intermediary between CWT and the Developers and will help coordinate the delivery of the initial two-year project and support the establishment of a mechanism to allow continued strategic delivery of the measures in the longer-term, through the Marine Recovery Fund, or other appropriate mechanisms. The programme of research and delivery of interventions will continue beyond the initial two years, recognising that while useful information to inform measures will be gathered in the first two years, a longer period of research and delivery will yield more robust and reliable results and more effective interventions.

After an initial two-year first phase to gather evidence, test and implement disturbance reduction methods, a review of the recreational activity disturbance and effectiveness of the initial interventions would be undertaken. This would allow consideration of any modification or adaptive management required, as appropriate, to inform and enable the continued progress of the measure and/or consideration of alternative methods. This approach would be subject to the relevant requirements of the draft DCOs of the relevant projects. Whether these measures are considered to be appropriate for the impacts of each project, whether alone or as part of a package of wider measures, is a matter for the Secretary of State to determine. Further detail of the proposal will be provided once available.

CWT, OWIC and the relevant offshore wind developers will seek a further Memorandum of Understanding/contract which will be agreed as soon as possible.

The purpose of this letter is to confirm to the projects listed above, and relevant authorities, that provided the relevant strategic coordination and funding provisions are sufficient, CWT can provide the necessary services that would be required to deliver the potential measures (as set out in Annexe A), should they be required. CWT are therefore willing to enter into an appropriate commercial agreement with the above projects, subject to adequate resourcing from the Developers, where OWIC acts as an intermediary, should compensation be deemed necessary by the DESNZ SoS.

Yours sincerely,



Name: [Redacted]
 Title: Director of Nature and People
 Tel: [Redacted]
 Email: [Redacted]@cornwallwildlifetrust.org.uk

7.2 ‘Isles of Scilly Predator Reduction Strategic Compensation Scheme Update’ Letter from OWIC



FAO: [redacted], Dogger Bank D Wind Farm (via email)

Dear [redacted]

Isles of Scilly Predator Reduction Strategic Compensation Scheme Update

The Offshore Wind Industry Council's (OWIC) Environment and Consents workstream is currently delivering a four-year Strategic Compensation Studies project ([SCS](#)), due to end December 2027, funded through The Crown Estate's Offshore Wind Evidence and Change programme and contributions from offshore wind developers. As part of this project, the OWIC SCS team are working in partnership with key stakeholders, including The Wildlife Trusts and interested developers (including Dogger Bank D Wind Farm), to support a strategic approach to delivering a 30-year predator eradication project in the Isles of Scilly for the purpose of seabird compensation. The development work includes the creation of an operational plan to remove predators from the islands, a long-term maintenance and biosecurity plan to ensure the islands remain predator free, a community engagement plan and a monitoring and evidence plan. It is expected the outputs of this work will be delivered by Spring 2027, with the delivery of the eradication programme to follow. It is envisaged that this will be one of the first fully developed and costed programmes to be established as a strategic compensation measure for offshore wind farm impacts on protected seabirds.

Currently, Defra is establishing the Marine Recovery Fund (MRF), to develop strategic compensation measures, which is anticipated to be fully operational by late 2025. The preferred delivery route for this scheme would be via the MRF, once established, or via collaborative delivery, if necessary, in line with the [interim MRF guidance](#) published by Department for Energy Security and Net Zero on the 29th January. To that end, alongside the partnership work itself, the OWIC SCS team have procured legal services to explore the establishment of a functioning developer-led delivery mechanism which would provide the offshore wind industry with a route to collaborative compensation whilst the Government-led MRF is in development. The outputs of this work are due summer 2025.

Yours sincerely,

[redacted signature]

[redacted name]

Environment & Consents Programme Manager

OWIC Sector Deal Delivery Company Ltd.
Registered Office as above | Registered in England No. 12088631

7.3 'Joint Statement from the Predator Eradication Task and Finish Group' email from Defra

From: [REDACTED]@defra.gov.uk>
Sent on: Thursday, March 13, 2025 1:11:15 PM
To: [REDACTED]@sse.com>
CC: [REDACTED]
Subject: [EXTERNAL] Joint Statement from the Predator Eradication Task and Finish Group

Follow up: Follow up
Start date: Thursday, March 13, 2025 12:00:00 AM
Due date: Thursday, March 13, 2025 12:00:00 AM

Hi [REDACTED]

The following statement has been jointly agreed by Defra, Desnz, Natural England, The Wildlife Trust, RSPB, The Crown Estate and OWIC. OWIC have requested that I send the following statement to you.

The Isles of Scilly Seabird Recovery Partnership is developing a predator eradication project to recover seabird populations on the Isles of Scilly (IoS) as a strategic compensation measure in relation to offshore wind development. This partnership is led by Isles of Scilly Wildlife Trust, and closely involves the Duchy of Cornwall, RSPB, The Wildlife Trusts and a range of other local and national partners.

The partnership, with support from The Wildlife Trusts, is developing a predator eradication programme on the Isles of Scilly to cover a 30 year period. This programme will include an operational plan to remove predators from the islands, a long-term maintenance/biosecurity plan to ensure the islands remain predator free, a community engagement plan and a monitoring and evidence plan. It is expected the outputs of this work will be delivered Spring 2027, with the potential delivery of the eradication programme to follow. It is envisaged that this will be one of the first fully developed and costed programmes to be established as a strategic compensation measure for offshore wind farm impacts on protected seabirds.

Currently, Defra is establishing the Marine Recovery Fund (MRF), to develop strategic compensation measures, which is anticipated to be fully operational by late 2025. A number of organisations have recently met, including Defra, DESNZ, Natural England, The Wildlife Trusts, OWIC, The Crown Estate, and RSPB, to establish a Task and Finish Group to establish the mechanisms required to allow predator eradication to be delivered as a strategic compensation measure, noting the option for this to be delivered by the Marine Recovery Fund.

All parties agree that predator eradication on the Isles of Scilly has great potential to provide compensation for the impacts of offshore wind projects and would support its inclusion in project specific compensation plans. Offshore wind projects currently seeking consent might wish to submit this statement to the examining authority to demonstrate progress with this scheme, if they seek to use it as strategic compensation for unavoidable impacts to protected species likely to be impacted by their projects.

Please do let me know if you have any questions.

Best wishes,

[REDACTED]

Department for Environment, Food and Rural Affairs (Defra) This email and any attachments is intended for the named recipient only. If you have received it in error you have no authority to use, disclose, store or copy any of its contents and you should destroy it and inform the sender. Whilst this email and associated attachments will have been checked for known viruses whilst within Defra systems we can accept no responsibility once it has left our systems. Communications on Defra's computer systems may be monitored and/or recorded to secure the effective operation of the system and for other lawful purposes.

List of Acronyms

Acronym	Definition
AA	Appropriate Assessment
AEol	Adverse Effect on Integrity
BESS	British Energy Security Strategy
BTO	British Trust for Ornithology
CA	Competent Authority
COWSC	Collaboration on Offshore Wind Strategic Compensation
DBA	Dogger Bank A
DBB	Dogger Bank B
DBC	Dogger Bank C
DBD	Dogger Bank D
DBS	Dogger Bank South
DCO	Development Consent Order
Defra	Department for Environment, Food and Rural Affairs
dML	deemed Marine Licence
DESNZ	Department for Energy Security & Net Zero
EIA	Environmental Impact Assessment
EPP	Evidence Plan Process
ES	Environmental Statement
EU	European Union
ETG	Expert Topic Group
FFC	Flamborough and Filey Coast
GW	Gigawatts
HRA	Habitat Regulations Assessment

IROPI	Imperative Reasons of Overriding Public Interest
IUCN	International Union for Conservation of Nature
km	Kilometre
LoSCM	Library of Strategic Compensation Measures
m	Metre
MMFR	Mean-Max Foraging Range
MMO	Marine Management Organisation
MoU	Memorandum of Understanding
MPA	Marine Protected Area
MRF	Marine Recovery Fund
MW	Megawatts
ODOW	Outer Dowsing Offshore Wind
Offshore ECC	Offshore Export Cable Corridor
ONWP	Orkney Native Wildlife Project
OWEIP	Offshore Wind Environmental Improvement Package
OWIC	Offshore Wind Industry Council
OWF	Offshore Wind Farm
PEIR	Preliminary Environmental Impact Report
RIAA	Report to Inform Appropriate Assessment
RSPB	Royal Society for the Protection of Bird
SCS	Strategic Compensation Studies
SD	Standard Deviation
SEP&DEP	Sheringham Shoal and Dudgeon Extension Projects
SNCB	Statutory Nature Conservation Body
SPA	Special Protection Area

SoS	Secretary of State
TCE	The Crown Estate
TWT	The Wildlife Trust
UK	United Kingdom
WCS	Worst-Case Scenario