



Hornsea Project Four

Outline Guillemot and Razorbill Compensation Implementation and Monitoring Plan

Deadline 7, Date: 10 August 2022

Document reference: B2.8.7

Revision 03

Prepared GoBe Consultants Limited, August 2022
Checked Sarah Randall, Orsted, August 2022
Accepted Francesca De Vita Orsted, August 2022
Approved Julian Carolan, Orsted, August 2022

B2.8.7
Ver. C

Revision Summary

<i>Rev</i>	<i>Date</i>	<i>Prepared by</i>	<i>Checked by</i>	<i>Approved by</i>
01	28/09/2021	GoBe Consultants Ltd, September 2021	Dr Sarah Randall, Orsted, September 2021	Dr Julian Carolan, Orsted, September 2021
02	20/06/2022	GoBe Consultants Ltd, May 2022	Dr Sarah Randall, Orsted, June 2022	Dr Julian Carolan, Orsted, June 2022
03	10/07/2022	GoBe Consultants Ltd, August 2022	Dr Sarah Randall, Orsted, August 2022	Dr Julian Carolan, Orsted, August 2022

Revision Change Log

<i>Rev</i>	<i>Page</i>	<i>Section</i>	<i>Description</i>
01	-	-	First submission of document
02	Updated throughout	Updated throughout	Removal of gannet.
02	Updated throughout	Updated throughout	Addition of APP references.
02	Updated throughout	Updated throughout	Clarification of predator eradication.
02	Updated throughout	Updated throughout	GGRIMP updated to GRCIMP.
02	6 and 8	4 and 5	Update regarding strategic compensation and Marine Recovery Fund.
03	5	1	Correcting formatting issues.
03	6	4	Update regarding Secretary of State approval for the Marine Recovery Fund (or an equivalent fund).

Table of Contents

1	Introduction.....	5
2	Background.....	6
3	Consultation.....	6
4	Bycatch reduction measure.....	6
4.1	Scale and location of compensation.....	6
4.2	Design of bycatch reduction technique(s).....	6
4.3	Delivery mechanism.....	7
4.4	Monitoring and adaptive management.....	7
4.5	Reporting.....	7
4.6	Programme for implementation and delivery.....	7
4.7	Discharge of consent condition.....	7
5	Predator eradication.....	7
5.1	Scale and location of compensation.....	7
5.2	Design and delivery of the predation eradication programme.....	8
5.3	Delivery mechanism.....	8
5.4	Monitoring and adaptive management.....	8
5.5	Reporting.....	9
5.6	Programme for implementation and delivery.....	9
5.7	Discharge of consent condition.....	9
6	Fish Habitat Enhancement.....	9
6.1	Scale and location of resilience measure.....	9
6.2	Design of seagrass habitat restoration programme.....	9
6.3	Delivery mechanism.....	9
6.4	Monitoring and adaptive management.....	9
6.5	Reporting.....	10
6.6	Programme for implementation and delivery.....	10
6.7	Discharge of consent condition.....	10

Glossary

Term	Definition
DCO	Development Consent Order
FFC	Flamborough and Filey Coast
GRCIMP	Guillemot and Razorbill Compensation Implementation and Monitoring Plan
GRCP	Guillemot and Razorbill Compensation Plan
OOEG	Offshore Ornithology Engagement Group
MRF	Marine Recovery Fund
SPA	Special Protection Area

1 Introduction

1.1.1.1 This document sets out the outline for the Guillemot and Razorbill Compensation Implementation and Monitoring Plan (GRCIMP) that will be developed by the Applicant, in consultation with the proposed Offshore Ornithology Engagement Group (OOEG), should consent for Hornsea Four be granted and compensation for common guillemot *Uria aalge* (guillemot) and/or razorbill *Alca torda* be required. The GRCIMP will be developed in accordance with the Guillemot and Razorbill Compensation Plan (GRCP) which provides a detailed account of the strategy supporting the potential compensation measures for guillemot and razorbill. The GRCIMP will be submitted to the Secretary of State for approval.

1.1.1.2 The following sections of this document set out the proposed content of the GRCIMP. The GRCIMP will be structured as follows:

- **Section 2:** Background
- **Section 3:** Consultation
- **Section 4:** Bycatch Reduction Measure
 - **Section 4.1:** Scale and location of compensation
 - **Section 4.2:** Design of the bycatch reduction technique(s)
 - **Section 4.3:** Delivery mechanism
 - **Section 4.4:** Monitoring and adaptive management
 - **Section 4.5:** Reporting
 - **Section 4.6:** Programme for implementation and delivery
 - **Section 4.7:** Discharge of consent condition
- **Section 5:** Predator Eradication
 - **Section 5.1:** Scale and location of compensation
 - **Section 5.2:** Design and delivery of the predator eradication programme
 - **Section 5.3:** Delivery mechanism
 - **Section 5.4:** Monitoring and adaptive management
 - **Section 5.5:** Reporting
 - **Section 5.6:** Programme for implementation and delivery
 - **Section 5.7:** Discharge of consent condition
- **Section 6:** Fish Habitat Enhancement
 - **Section 5.6:** Scale and location of resilience measure
 - **Section 5.7:** Design of seagrass habitat restoration programme
 - **Section 6.3:** Delivery mechanism
 - **Section 6.4:** Monitoring and adaptive management
 - **Section 6.5:** Reporting
 - **Section 6.6:** Programme for implementation and delivery
 - **Section 6.7:** Discharge of consent condition

2 Background

2.1.1.1 This section will provide context to the GRCIMP, confirming the reason for its need, its aims and objectives, and the latest project status.

3 Consultation

3.1.1.1 This section will summarise all relevant consultation that has taken place through the OOEG in the development of the GRCIMP. Where relevant any outstanding issues under discussion (with clarity as to the steps necessary to resolve any such matters) will be included. Ongoing engagement, for example to provide updates on monitoring, (post-discharge of the GRCIMP) will be outlined here.

4 Bycatch reduction measure

4.1 Scale and location of compensation

4.1.1.1 This section will identify the scale of compensation proposed to be provided and how this relates to the consent decision made by the Secretary of State. This section will then also detail the specific location(s) at which the compensation will be delivered, and those fisheries that will be of relevance to the measure. The evidence base included in support of the GRCP will help inform these aspects. The results of any monitoring of guillemot and razorbill bycatch carried out pre-implementation of bycatch reduction technique(s) will also be detailed here as this may influence the location(s) and/or relevant fisheries.

4.1.1.2 If the Applicant has elected to pay a contribution to the Marine Recovery Fund ("MRF") or equivalent fund then this section shall include the sum of the contribution as agreed between the Applicant and Defra in consultation with the OOEG and approved by the Secretary of State. If the contribution is in substitution for the bycatch reduction compensation measure then the relevant sections in this GRIMP will not be completed as they will no longer be required. For the avoidance of doubt, the Applicant's obligations to deliver compensation measures shall either be discharged through the delivery of strategic compensation through the contribution to the MRF or equivalent fund, or through the delivery of compensation measures as currently set out, within the GRIMP.

4.1.1.3 Alternatively, if the contribution to the MRF or equivalent fund is an adaptive management measure then the relevant [Section 4.4](#) shall include details as to the trigger for payment of the contribution.

4.2 Design of bycatch reduction technique(s)

4.2.1.1 This section will identify the design of the bycatch reduction technique(s) proposed to be provided, including any updates to the evidence base ([B2.8.1 Compensation measures for FFC SPA Bycatch Reduction: Ecological Evidence \(APP-194\)](#)) to demonstrate the confidence that the compensation measure will be able to deliver the required level of bycatch reduction of the target species. The evidence base provided in support of the GRCP ([B2.8.1 Compensation measures for FFC SPA: Bycatch Reduction: Ecological Evidence](#)

(APP-194) and engagement with the OOEG and relevant parties of the fishing industry will be important in informing the specific design aspects of the bycatch reduction technique(s).

4.3 Delivery mechanism

4.3.1.1 This section will describe the mechanisms by which Hornsea Four will ensure the bycatch reduction measure can be implemented across the relevant fishery.

4.4 Monitoring and adaptive management

4.4.1.1 This section will identify the monitoring and adaptive management principles and processes that have been discussed with the OOEG, including the scenarios under which adaptive management measures are required. It will be developed in line with evidence base that has been provided in support of the GRCP. Following discharge of the GRCIMP, the OOEG will be consulted in relation to the implementation of any required adaptive management as outlined in the Consultation [Section 3](#) above. Specific topics of discussion for inclusion within the OOEG, and therefore the purpose of the group, will be regarding site selection, project/study design, monitoring, adaptive management options. The focus of the OOEG will be specifically to deliver the compensation for Hornsea Four and therefore other topics beyond this will be out of scope.

4.4.1.2 At this initial stage it is assumed that some level of pre-implementation monitoring of bycatch (prior to the deployment of the bycatch reduction measure), followed by a longer-term monitoring of the uptake and success of the measure will be undertaken. This might be in collaboration with, or undertaken by, relevant established monitoring schemes (such as the UK BMP database).

4.5 Reporting

4.5.1.1 This section will set out the reporting requirements associated with the monitoring and adaptive management. In doing so, it will confirm the necessary objectives and timescales for the reporting.

4.6 Programme for implementation and delivery

4.6.1.1 This section will confirm the programme for the implementation and long-term delivery of the compensation.

4.7 Discharge of consent condition

4.7.1.1 This section will signpost how, based on the content of this report, the Secretary of State can approve this document with reference to the relevant paragraphs in the DCO.

5 Predator eradication

5.1 Scale and location of compensation

5.1.1.1 This section will identify the scale of compensation proposed to be provided and how this relates to the consent decision made by the Secretary of State. This section will then also detail the specific location(s) at which the compensation will be delivered and how the necessary land rights to those locations have been/ will be secured. The evidence base included in support of the GRCP will help inform these aspects. The results of any monitoring

of guillemot and razorbill colonies carried out pre-eradication will also be detailed here as this may influence the location(s).

- 5.1.1.2 If the Applicant has elected to pay a contribution to the Marine Recovery Fund ("MRF") or equivalent fund then this section shall include the sum of the contribution as agreed between the Applicant and Defra in consultation with the OOEG and approved by the Secretary of State. If the contribution is in substitution for the predator eradication compensation measure then the relevant sections in this GRIMP will not be completed as they will no longer be required. For the avoidance of doubt, the Applicant's obligations to deliver compensation measures shall either be discharged through the delivery of strategic compensation through the contribution to the MRF or equivalent fund, or through the delivery of compensation measures as currently set out, within the GRIMP.
- 5.1.1.3 Alternatively, if the contribution to the MRF (or equivalent fund) is an adaptive management measure then the relevant [Section 5.4](#) shall include details as to the trigger for payment of the contribution.

5.2 Design and delivery of the predation eradication programme

- 5.2.1.1 This section will identify the design and delivery for the predator eradication and/ or control programme proposed to be provided, including any updates to the evidence base to demonstrate the confidence that the compensation measure will be able to deliver the required increase in target species productivity. The evidence base provided in support of the GRCP ([B2.8.3 Compensation measures for FFC SPA: Predator Eradication: Ecological Evidence \(APP-196\)](#)) and engagement with the OOEG will be important in informing the specific design aspects of the predator eradication programme.

5.3 Delivery mechanism

- 5.3.1.1 This section will confirm the nature and status of any consents, land access agreements, and any other relevant approvals that were necessary to secure the implementation of the compensation measures and include a programme for delivery of any outstanding approvals.

5.4 Monitoring and adaptive management

- 5.4.1.1 This section will identify the monitoring and adaptive management principles and processes that have been discussed with the OOEG, including the scenarios under which adaptive management measures are required. It will be developed in line with evidence base that has been provided in support of the GRCP. Following discharge of the GRCIMP, the OOEG will be engaged in relation to implementing adaptive management as outlined in the Consultation section above. Specific topics of discussion for inclusion within the OOEG, and therefore the purpose of the group, will be regarding site selection, project/ study design, monitoring, adaptive management options. The focus of the OOEG will be specifically to

deliver the compensation for Hornsea Four and therefore other topics beyond this will be out of scope.

5.5 Reporting

5.5.1.1 This section will set out the reporting requirements associated with the monitoring and adaptive management. In doing so, it will confirm the necessary objectives and timescales for the reporting.

5.6 Programme for implementation and delivery

5.6.1.1 This section will confirm the programme for the implementation and long-term delivery of the compensation.

5.7 Discharge of consent condition

5.7.1.1 This section will signpost how, based on the content of this report, the Secretary of State can approve this document with reference to the relevant paragraphs in the DCO.

6 Fish Habitat Enhancement

6.1 Scale and location of resilience measure

6.1.1.1 This section will identify the scale of the resilience measure proposed to be provided and how this relates to the consent decision made by the Secretary of State. This section will then also detail the specific location(s) at which the resilience measure will be delivered, and those forage fish species that will be of relevance to the measure. The evidence base included in support of the GRCP will help inform these aspects. The results of any monitoring of prey fish species carried out pre-implementation of seagrass restoration, such as fish nursery assessment and Stable Isotope Analysis in order to explore connectivity of seagrass to offshore seabird foraging areas, will also be detailed here.

6.2 Design of seagrass habitat restoration programme

6.2.1.1 This section will identify the design of the seagrass restoration programme(s) proposed to be provided as part of the suite of compensation measures. The OOEG will be informed of the site selection process and will be consulted on throughout the delivery programme.

6.3 Delivery mechanism

6.3.1.1 This section will confirm the nature and status of any consents, land access agreements, and any other relevant approvals that were necessary to secure the implementation of the resilience measure and include a programme for delivery of any outstanding approvals. Noting locations for the seagrass restoration resilience measure will be informed through feasibility studies and research surveys in order to maximise successful delivery of measures.

6.4 Monitoring and adaptive management

6.4.1.1 This section will identify the monitoring and adaptive management principles and processes that have been discussed with the OOEG, including the scenarios under which adaptive management measures are required. It will be developed in line with evidence base that has been provided in support of the GRCP. Following discharge of the GRCIMP, the OOEG will be engaged in order to inform the adaptive management measures and monitoring efforts for site specific seagrass restoration, as outlined in the Consultation section above. Specific

topics of discussion for inclusion within the OOEG, and therefore the purpose of the group, will be regarding delivery, monitoring and adaptive management options. The focus of the OOEG will be specifically to deliver the compensation for Hornsea Four and therefore other topics beyond this will be out of scope.

6.5 Reporting

6.5.1.1 This section will set out the reporting requirements associated with the monitoring and adaptive management. In doing so, it will confirm the necessary objectives and timescales for the reporting.

6.6 Programme for implementation and delivery

6.6.1.1 This section will confirm the programme for the implementation and long-term delivery of the resilience measure and any ongoing monitoring or management in relation to seagrass restoration.

6.7 Discharge of consent condition

6.7.1.1 This section will signpost how, based on the content of this report, the Secretary of State can approve this document with reference to the relevant paragraphs in the DCO.