

**RWE Renewables UK Dogger Bank
South (West) Limited**

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South (East) Limited**

**Dogger Bank South Offshore
Wind Farms**

A Review of Benthic Compensation Requirements

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Acronyms

Acronym	Definition
AEol	Adverse Effect on Integrity
DB SAC	Dogger Bank Special Area of Conservation
DCO	Development Consent Order
DEFRA	Department for Environment, Food and Rural Affairs
DESNZ	Department for Energy and Net Zero
Eol	Expression of Interest
FID	Final Investment Decision
IMP	Implementation and Monitoring Plan
km	Kilometre
MarESA	Marine Evidence-based Sensitivity Assessment
MMO	Marine Management Organisation
MPA	Marine Protected Area
MRF	Marine Recovery Fund
MRFO	Marine Recovery Fund Operator
ODOW DCO	Outer Dowsing Offshore Wind Farm Order
O&M	Operation & Maintenance
RFI	Request for Information
RIAA	Report to Inform Appropriate Assessment
SAC	Special Area of Conservation
SCM	Strategic Compensation Measure
SNCB	Statutory Nature Conservation Body
SoS	Secretary of State

Acronym	Definition
UXO	Unexploded Ordnance
VAT	Value Added Tax

1 Introduction

1.1 Background

1. Throughout the course of Dogger Bank South East and West Offshore Wind Farms (hereafter referred to as 'the Projects') Examination, the Applicants have made a clear, evidence-based case that compensation should be based solely on the area of habitat to be lost as a result of the footprint of the above seabed infrastructure of the Projects. Despite this, a lack of agreement remains with Natural England in relation to the scale of compensation required. In addition, irrespective of which effects require compensation, the current quanta are based on worst-case scenarios, in line with the Rochdale Envelope approach, which may not be realised.
2. This is of significance due to the Projects' reliance on delivery of Marine Protected Area (MPA) designation and/or extension, a finite strategic compensatory option to be delivered via the Marine Recovery Fund (MRF). Due to the limited availability of this measure for offshore wind projects, and costs which are proportional to impacts, it is essential that in line with guidance (Department for Environment, Food and Rural Affairs (Defra), 2025) contributions to the MRF are reflective of realistic impacts and allow flexibility to account for the Projects' as built parameters. Furthermore, consideration to other marine industries should be given, a matter highlighted in a summary of responses to the public consultation on environmental compensatory measures reforms (Defra, 2025a). Responses expressed significant concerns about the cumulative spatial pressures from spatial squeeze, with fears that compensatory measures could further restrict access to traditional fishing grounds.
3. This report reiterates the Applicants' position on the quantum of compensation required and summarises previous evidence submitted on habitat disturbance and ecological halo effects (see Section 3.1 and Section 3.2 respectively). It examines the consequences of delivering strategic compensation for benthic effects through the MRF under a range of potential scenarios. These scenarios reflect the current position that it is not known which of the potential effects the Secretary of State (SoS) will determine must be compensated for, (i.e. which effects are determined to contribute to adverse effect on integrity (AEoI)). This report aims to assist the Secretary of State in determining the necessary and proportionate compensatory measures in accordance with relevant legal provisions and regulatory guidance. It is applicable to benthic compensation only and does not relate to offshore ornithological compensation.

1.2 Benthic Impacts

4. There is agreement between the Applicants and Natural England that the placement of infrastructure above the seabed (i.e. foundations, scour protection and cable protection) for the Projects will result in habitat loss of part of the Dogger Bank Special Area of Conservation (DB SAC) sandbank feature in the form of 'physical change to another seabed / sediment type'. The worst-case area for habitat loss within the DB SAC is calculated as a maximum of 1.6km² (see **Report to Inform Appropriate Assessment (RIAA) Habitats Regulations Assessment (HRA) Part 2 of 4 – Annex I Offshore Habitats and Annex II Migratory Fish (Revision 6)** [document reference 6.1]).
5. As outlined in the **RIAA HRA Part 2 of 4 (Revision 6)** [document reference 6.1] and **Project Level Dogger Bank Compensation Plan (Revision 5)** [document reference 6.2.3], the Applicants are committed to minimising the footprint of habitat loss where possible. Therefore, the final area of permanent habitat loss within the SAC is likely to be substantially lower than that estimated as a worst-case scenario.
6. While the Applicants and Natural England have agreed on the need to deliver compensatory measures for permanent habitat loss associated with foundations and cable protection, such a position has not been reached for impacts related to habitat disturbance ('abrasion / disturbance of the seabed'), or the 'ecological halo effect', for which the Applicants have not concluded AEoI. Evidence to support the Applicants' position is provided in **Review of Evidence on Recovery of Sandbank Habitat Following Habitat Damage (Revision 2)** [REP3-021] and **RIAA HRA Appendix E - Ecological Halo Effects Technical Note (Revision 2)** [REP7-127].
7. Additionally, agreement has not been reached between the Applicants and Natural England on the inclusion of unexploded ordnance (UXO) clearance¹ and jack-up operations in permanent habitat loss estimates, for which the Applicants maintain AEoI should not be concluded as this should be included within 'abrasion / disturbance of the seabed' and a temporary effect.
8. However, recognising these differences in professional opinion, the Applicants have presented multiple scenarios for effect footprints in Table 6-7 of the **RIAA HRA Part 2 of 4 (Revision 6)** [document reference 6.1] on a 'without prejudice' basis. This enables the Secretary of State (SoS) to quantify the compensation required, dependent upon which effects they conclude would result in AEoI.

¹ Consent for UXO clearance will be sought through a separate Marine Licence post-consent and is not included within the Applicants' DCO application.

9. It is important to note that the extent of both habitat disturbance and ecological halo effects (if any) are directly related to the extent of infrastructure installed and the conditions within the Dogger Bank (e.g. whether ground conditions allow for cable burial with lower requirement for cable protection than currently estimated on a worst case basis). Therefore, it is also unlikely that the worst case scenario for other effects will be realised. However, as currently understood, the MRF makes no provision to account for any potential difference between as-built effects and the assessed worst case scenario, which has significant implications for the availability of this measure for other offshore wind projects, and costs which are proportional to impacts.

2 The Marine Recovery Fund

10. The Applicants' preferred compensation option for adverse effects on benthic receptors will be delivered via contribution to the MRF, to be managed by the Marine Recovery Fund Operator (MRFO), Defra. The MRFO is responsible for the delivery of a strategic MPA designation and/or extension to compensate for unavoidable adverse effects on benthic habitats from eligible offshore wind projects.
11. To access this strategic compensation measure (SCM) through the MRF, a charge of £63,131 per km² of benthic impact per year (plus VAT) has been confirmed (Defra, 2025), with prices subject to inflation review. Additionally, a 30% adaptive management charge will be applied to the total SMC cost (resulting in a cost of £82,070.30 per km²). A one-off administration fee of £230,000 is also required to secure the SCM. As a result of the pricing model (annual fee per km²) which exceeded anticipated costs, the benthic AEoI and associated quantum of compensation required as determined by the SoS, has significant implications for project costs.
12. It is understood that the process of designating/extending an MPA (or designating new protected features) will only be undertaken as a SCM once, and that access to the measure is finite. In 2024, on behalf of Defra, Department for Energy and Net Zero (DESNZ) ran a call to industry for data identifying which seabed habitats are likely to require compensation as a result of habitat loss or damage from offshore wind projects (Defra, 2025b). A worst-case estimation of the quantity of compensation required by projects was requested to feed into the options development process, informing the size of any new or extended MPA. Responses to the call to industry have formed the basis for the list of habitat types requiring compensation, and the scale of this SCM. Defra plan to consult on potential extended or new MPAs before the end of 2026. To date, no details regarding size, or location have been shared with the Applicants.
13. Prior to consent, offshore wind projects must request advice from the relevant Statutory Nature Conservation Body (SNCB) about the predicted level of adverse effect. This enables SNCBs to determine the suitability of the SCM on an individual project basis. Following appropriate consultation, projects must complete an 'expression of interest (EoI) – part A' form to reserve their preferred SCM. Current guidance (Defra, 2025c) states that applicants should only apply to the MRF to reserve the quantity of compensation that SNCBs advise. While this process prevents individual projects from reserving compensation beyond their immediate needs, it also introduces a potential obstacle given that applicants and SNCBs may not agree on benthic effects for which compensation is required, and/or the quantity of such effects. A summary of adverse effects on MPAs likely to be caused by the proposed offshore wind activity is also required within the EoI – part A form.

14. Following the submission of the EoI – part A form, the MRFO will respond to applicants within 60 calendar days to confirm eligibility for the SCM, following which an acceptance letter will be issued. This letter will include details on the SCM type and quantity, the reservation fee, an estimated quote for the total cost of using the MRF, an MRF conditional agreements and contract terms. Should applicants agree with the terms of the conditional agreement and MRF contract, they can reserve the SCM by signing the agreement, issuing a purchase order and paying a reservation fee. The reservation fee is based upon the MRFO's quote issued to the applicant for the SCM quantity. Upon payment, the MRFO will confirm reservation of the SCM, and an implementation and monitoring plan (IMP) will be shared where possible.
15. After consent, the 'expression of interest form – part B' must be completed to confirm compensation requirements. This should be submitted within 60 calendar days of receiving consent (except where the consent is subject to judicial review or legal challenge). EoI – part B requires prospective applicants to provide the quantity of benthic impact for which they are looking to compensate. The MRFO will then respond with a written letter confirming the type and quantity of SCM allocated, cost breakdown including the deposit amount and an MRF contract. Following the contract offer, applicants have 15 calendar days to confirm acceptance of conditions and enter into the MRF contract. The deposit fee must be paid within 30 days of receiving the invoice. This will be 10% of the SCM charge and is non-transferrable between offshore wind activities. The MRFO will determine total cost for the SCM, this will be set out within the MRF contract and will include the SCM charge, adaptive management charge and the administration fee.
16. Before applicants start works related to adverse effects, they must either:
 1. Pay the remaining outstanding balance in a single payment
 2. Pay the first instalment of an agreed payment plan
17. Whether applicants pay the remaining outstanding balance in a single payment or by instalments is at the discretion of the MRFO.
18. All Development Consent Order (DCO) projects must include draft DCO conditions with details relating to the SCM that will be provided through the MRF including the impact figures. This should be expressed in terms of the impact quantity (for example, 10km² habitat loss). Final DCO conditions will be assessed on a case-by-case basis and may be amended by the Secretary of State when making the final order.

19. While the MRF application provides a route to securing benthic SCM, at present the process does not allow applicants to account for elements of uncertainty associated with effects and quantum. Should applicants submit a DCO change request that affects the amount of compensation required, they may enter discussions with the MRFO to update the quantity agreed in the original contract. However, this process leaves the applicant with a lack of certainty concerning the timing and outcome of any change request decision, which may remain unresolved at the time that the Projects are hoping to go to Final Investment Decision (FID) and so may have implications for that process. Furthermore, this post-consent approach would result in considerable time and expense associated with a DCO change request and would require additional resource from stakeholders. This could be avoided if flexibility could be introduced to the DCO to provide a mechanism to secure the maximum compensation quantum but for it to be reduced to reflect the as built parameters of the Projects, without the need to make a formal change to the DCO.

3 Uncertainty in Quantum

20. The need to consider numerous scenarios under which compensation may be required has resulted in uncertainty surrounding the compensation quantum to be secured by the Applicants. As outlined in further detail in the **RIAA HRA Part 2 of 4 (Revision 6)** [document reference 6.1], the options for the consideration by the SoS for the five different scenarios that could lead to AEol are as follows:
1. Habitat loss from infrastructure alone (the Applicants conclusion);
 2. Habitat loss from infrastructure, UXO clearance activities and jack-up footprint;
 3. Habitat loss from halo effect (encompassing habitat loss from infrastructure, UXO clearance activities and jack-up footprint within this footprint);
 4. Habitat disturbance (encompassing habitat loss from infrastructure, UXO clearance activities and jack-up footprint within this footprint);
 5. Habitat loss from halo effect (encompassing habitat loss from infrastructure, UXO clearance activities and jack-up footprint within this footprint) plus habitat disturbance.
21. It is important to note that the footprint for disturbance, halo effects and area of temporary habitat disturbance would overlap and would therefore not be additive and that this has been taken into account within the Applicants' scenarios Table 6-7 of the **RIAA HRA Part 2 of 4 (Revision 6)** [document reference 6.1].
22. A summary of evidence that has informed the Applicants' position on the various impact scenarios is provided in sections 3.1 and 3.2.

3.1 Disturbance

23. The Applicants dispute the conclusion that disturbance (either during construction or Operation & Maintenance (O&M)) should contribute to AEol. The Applicants have always held this position given the high recoverability of the sandbank biotopes (as evidenced by their attributed Marine Evidence-based Sensitivity Assessment (MarESA) sensitivities), industry evidence of recovery and commissioned site-specific survey in the SAC to support the case. Evidence to support the Applicants' position is provided in **Review of Evidence on Recovery of Sandbank Habitat Following Habitat Damage (Revision 2)** [REP3-021]. The Applicants consider that disturbance is a temporary effect (with the dominant community fully recovered within 2 years based on MarESA) and would not contribute to AEol.

24. Natural England have repeatedly stated, without providing any empirical evidence and contradicting MarESA assessments (which their own guidance says to use), that recovery from disturbance will take 10-25 years and should effectively be seen as a permanent effect (even though on this timescale recovery would occur within the lifetime of the project). The Applicants requested Natural England to provide evidence for their position pre-application and during examination, and nothing specific or relevant was provided². In addition, although accepting that disturbance would not be a uniform effect and recovery would take place³ (see section 6.2 of the **Round 4 Dogger Bank Strategic Compensation Plan [APP-060]**), Natural England would not accept that compensation should be based on anything below 100% of the worst case footprint.
25. The Applicants highlight the previously submitted evidence in **Review of Evidence on Recovery of Sandbank Habitat Following Habitat Damage (Revision 2) [REP3-021]** but also highlight that disturbance has not been concluded to contribute to AEoI for the sandbank features for either of the recently consented Five Estuaries or Outer Dowsing projects (DESNZ, 2025, 2026). Indeed, the Outer Dowsing Appropriate Assessment (DESNZ, 2026) highlights use of the MarESA sensitivities for sandbank biotopes in coming to this conclusion. Whilst it is true that the underlying geology of the sandbank features in these cases are different, with the Dogger Bank generally being less dynamic, it is the superficial ecology that is relevant in terms of the Habitats Regulations. Therefore, evidence such as MarESA should be considered to hold the same weight across all of these projects.
26. Irrespective of whether disturbance is determined to contribute to AEoI, the extent of disturbance will be directly related to the footprint of infrastructure installed. Any compensation requirement needs therefore to account for a refined envelope and effects being less than the worst case.
27. A key component of the benthic monitoring programme proposed for the projects will be investigation of recovery of the sandbank feature (see **In-principle Monitoring Plan (Revision 7)** [document reference 8.23]).

² Note that in [REP 2-065] **Appendix C2.1 - Natural England's comments and updated advice on Benthic and Intertidal Ecology** Natural England provided a link to a supporting document from the 2019 Article 17 Habitats Directive reporting. This was generic covering all sandbanks, all marine industries and all potential effect pathways. Natural England has not provided any detailed evidence specifically on recovery from representative effects or locations.

³ Table 4.1 of the Plan states "*Damage, is agreed to represent a partial and differential alteration of the character of a habitat. Whereas the HRA assumed, simply, that habitat damage occurred uniformly and completely across a buffer zone around seabed works, in practice it is considered that the alteration arising from these works would be observed as a gradient of change from 100% close to the works and reducing to 0% at the extremity of the assumed buffer. Furthermore this change would not be permanent, with some recovery occurring over time.*"

3.2 Ecological Halo Effect in the Dogger Bank SAC

28. Natural England first raised ecological halo effects in their relevant representation [RR-039] despite significant pre-application engagement on the benthic topic area. These are effects which have *'the potential for changes to the physical and/or biological structure and function of Annex I sandbank beyond the footprint of the planned infrastructure'* which Natural England considers will cause significant change to the sandbank feature and result in AEoI. These would occur as a result of the physical presence of above seabed infrastructure altering the physical conditions of the seabed around them, or from colonising fauna from the infrastructure spreading beyond the infrastructure itself. Although such effects have long been discussed, they have never been raised in relation to offshore wind consenting prior to this point. It is notable that, if this is an emerging issue for Natural England, it was not raised at all in relation to the aforementioned Five Estuaries or Outer Dowsing projects which likewise have infrastructure within designated sandbank features.
29. The Applicants have provided the **Ecological Halo Effects Technical Note (Revision 2)** [REP7-127] as a comprehensive review of the evidence of halo effects and how these could relate to the Projects. The Applicants maintain their position that although there *may* be some change to communities as a result of the presence of infrastructure and subsequent colonisation, the evidence shows that this would be very limited spatially and would not represent a significant change that could be classed as habitat loss in conditions similar to those at the Dogger Bank (i.e. exposed, offshore, higher energy environments) sufficient to contribute to AEoI. A key component of the benthic monitoring programme proposed for the projects will be investigation of this effect (see **In-principle Monitoring Plan (Revision 7)** [document reference 8.23]).
30. At the request of Natural England, the Applicants provided estimates of potential footprints for halo effects [REP7-127] and these were used in the scenarios presented in Table 6-7 of the **RIAA HRA Part 2 of 4 (Revision 6)** [document reference 6.1]⁴. The Applicants do not consider that these estimates to be realistic and in particular consider that whilst it is plausible that detectable halo effects could result from foundations and scour protection, given the size of cable protection (at most 1.4m above the seabed) it is not plausible that detectable effects would occur.

⁴ Note that Natural England stated in [REP8-052] Appendix B8 - End of examination position on the applicant's assessment of marine physical environment & benthic and intertidal ecology "we acknowledge that halo effects around cable protection are likely to be lower and agree with the Applicant's concerns that 50m is likely over-precautionary. On that basis, we'd be happy to consider an alternative buffer for cable protection proposed by the Applicant" the Applicants therefore proposed 20m based upon Natural England's suggestion in [REP9-028] Cover Letter

31. Whilst any effects are entirely theoretical, it should be noted that the difference in contribution to the MRF would be significant. For example, based on the worst case for foundations only it is the difference between compensating for 0.63km² and 4.25km² (see Scenario 1 compared with Scenario 3 'Foundations' line in Table 6-7 of the **RIAA** [PID-002; document reference 6.1]).
32. If halo effects are determined to contribute to AEoI, the extent of the effects will be directly related to the footprint of infrastructure installed. Any compensation requirement needs therefore to account for a refined envelope and effects being less than the worst case.

4 Costs

33. The various cost scenarios calculated by the Applicants are presented in Error! Reference source not found. to illustrate the implications of paying to compensate for each of the worst-case scenarios. The scenarios reflect those in Table 6-7 of the **RIAA HRA Part 2 of 4 (Revision 6)** [document reference 6.1] and Table 5-1 of the **Project Level Dogger Bank Compensation Plan (Revision 5)** [document reference 6.2.3]. Further details as to how scenarios have been calculated are provided in the **RIAA HRA Part 2 of 4 (Revision 6)** [document reference 6.1]. The scenarios and associated costs have been shared and discussed with MMO, Natural England and Defra in advance of the Secretary of State Consultation 3 deadline.
34. The cost of the MRF per km² is significantly higher than expected, and much higher than the costs provided in the consultation (summer 2025) which informed the Projects' decision-making process regarding bid price for the Allocation Round 7 Contract for Difference auction. The adoption of the over-precautionary approach to assessment of AEoI advocated by Natural England, which has not been substantiated by any material evidence for either temporary disturbance or halo effects, would therefore have serious financial impacts on project finance and viability, as these costs were not possible to foresee prior to this important project milestone.

Table 4-1 Potential cost of the benthic MRF to the Projects

Scenario	km ²	Annual cost (including administration fee & adaptive management) (£)	Cost over lifetime (37 years) of the Projects (£)
1 - Habitat loss from surface infrastructure	1.61	140,000	5,120,000
2 - Habitat loss & jack up feet & UXO	2.94	250,000	9,160,000
3 - Habitat loss and halo effect	9.85	810,000	30,140,000
4 - Habitat loss & disturbance	25.01	2,060,000	76,180,000
5 - Habitat loss, disturbance & halo effect	30.07	2,470,000	91,540,000

35. All benthic compensation scenarios in **Project Level Dogger Bank Compensation Plan (Revision 5)** [PID-002; document reference 6.2.3] are based on the worst case scenario using the well-precedented and widely accepted Rochdale Envelope approach. The Rochdale Envelope approach is required in order to ensure sufficient flexibility to enable the Projects to be refined post-consent, based on more detailed survey data and to account for innovation and advances in technology and engineering. By its nature, the Rochdale Envelope approach results in the prediction of worst case impacts and effects which are unlikely to fully align with the actual impacts and effects of a project, taking account of its as built parameters.
36. For example, the worst-case number of foundations covering the largest total area has been assumed for assessment purposes. The as built parameters of the Projects are unlikely to align with these worst-case parameters and so any compensation requirements based on the worst-case parameters would be likely to result in over-compensation. Both disturbance and halo effects are directly proportional to the area of infrastructure, hence the worst case scenario approach results in a large inflation of these possible effects and the costs become disproportionate.
37. To illustrate the potential saving in MPA area and MRF costs that would result from the worst case scenario not being built, the following hypothetical scenario was applied (based on experience of other offshore wind farm projects under construction within the Dogger Bank SAC):
- 10% reduction in cable length in SAC compared to the worst case scenario;
 - 100% reduction in sand wave clearance activity in SAC compared to the worst case scenario;
 - 100% reduction in cable protection in SAC compared to the worst case scenario; and
 - 33% reduction in scour protection compared to the worst case scenario.
38. **Table 4-2** shows the results, which are illustrative only. This hypothetical scenario and associated costs have been shared and discussed with both Natural England and Defra.
39. For habitat loss, both the project implications of the high cost per km² of the measure and implications to the long-term operation of the MRF are less extensive because of the lower quantity of effect. However, when considering the quantum hugely inflated by temporary disturbance and ecological halo effect, costs become disproportionate if the compensation quantum requirement is not based on as built parameters.

Table 4-2 Influence of hypothetical reduction of worst case scenario footprint on compensation quantum scenarios

Example of potential saving on worst case scenario that could arise for as-built position	Current value in worst case scenario			Potential reduction in worst case scenario			Saving in MPA area (km ²)
	Length of cable / cable protection / area of sand wave clearance/ area of scour	Width/ radius of disturbed area/ halo effect	Total area (km ²)	Length of cable / cable protection / area of sand wave clearance/ area of scour	Width/ radius of disturbed area	Total area (km ²)	
10% reduction in cable length in SAC	918,420 m	20	18.37	826,578m	20	16.53	1.84
100% reduction in sand wave clearance activity in SAC	4,098,705 m ²	n/a	4.1	0	n/a	0	4.1
100% reduction in cable protection in SAC	755,038 m	20	4.44	0	20	0	4.44
33% reduction in scour protection	639,682 m ²	50	3.61	331,075m ²	50	3.05	0.56
Total saving in MPA							10.93km²
Total saving in MPA cost (over 37 years)							£33.13 million

5 Proposed Alternative

40. In light of the above, the Applicants have been in ongoing discussions with Defra as MRFO, to understand more about how the MRF will operate in practice. As part of those discussions, Defra have confirmed that the MRF contract will be based on the wording within the Applicants' DCO. As a result, the Applicants want to ensure that the DCO wording is fit for purpose and does not result in a requirement for the Applicants to over-compensate, particularly as the effects of any over-compensation would have serious financial implications for the Projects. This approach is aligned with the Habitats Regulations assessments: protecting a European site guidance (Defra, Natural England, Welsh Government and Natural Resources Wales, February 2021), which states that competent authorities "*do not need to consider more compensation than is needed.*"
41. The Applicants have therefore suggested amended DCO drafting to Part 1 of Schedule 18 (at **Appendix B**
42. of this document) to ensure that compensation requirements are based upon the Projects' as built parameters rather than those which form the worst case scenario.
43. Regulation 68 of the Habitats Regulations requires a competent authority to "**secure** that any **necessary** compensatory measures are taken to ensure that the overall coherence of Natura 2000 is protected".
44. The Applicants submit that the proposed DCO wording would **secure** the maximum quantum for compensatory measures (as it includes "up to" the maximum footprint) that could be needed based on the worst case scenario parameters of the project. However, the effect of the 'as built' provision would define what is **necessary**, to reflect the actual impacts of the project. If the quantum was fixed based on the worst case scenario and the as built parameters resulted in a smaller permanent footprint, the project would be providing compensatory measures beyond those that are **necessary**.
45. This revised wording would prevent the Projects from funding the maintenance of a larger area of MPA extension than is necessary to compensate for impacts and enable better facilitation of the measure to deliver for offshore industries, whilst also ensuring that any new designation is no bigger than it needs to be, reducing its potential to unnecessarily affect other marine activities such as fishing, or other future developments. This aligns with the Defra response to the consultation on the MRF (Defra, 2025a), where the concerns raised by fishing industry representatives about cumulative spatial pressures from offshore wind and other marine activities was acknowledged. Defra also recognised that accelerating development of marine activities, and environmental protection and restoration measures, such as designating new MPAs, is intensifying spatial tensions.

46. Ensuring that the Projects are not over-compensating should enable other future projects to utilise any new/extended MPA under the MRF, noting that the designation is a one-time measure. This would help facilitate other future renewable energy developments required to contribute to the Government’s low carbon generation and energy security ambitions.
47. Further drafting amendments have also been made to align with the wording used by the Secretary of State in the recently granted Outer Dowsing Offshore Wind Farm Order 2026 (“ODOW DCO”).
48. Natural England, Defra and the Marine Management Organisation (MMO) have all been consulted on this wording prior to this request for information (RFI) consultation submission. Natural England confirmed that they would respond to the wording in their submission to Secretary of State’s at this (RFI3) deadline. Defra have provided a letter to the Applicants outlining their response to the wording (**Appendix B**), in this they have stated that Defra can only provide information on the MRF policy / process, and that the quantum of compensation required will be determined by the Secretary of State’s final DCO compensatory conditions. The MMO’s only comment was to request a provision requiring the Applicants to notify them 1) when they enter into the MRF contract and/or pay the deposit, and 2) when the full payment or first payment has been made under the agreed payment plan. Wording to address this has been included in the updated draft DCO.
49.)
50. The updates made to Part 1 Schedule 18 are described and explained in **Table 5-1**.

Table 5-1 Summary of suggested amendments to Part 1 of Schedule 18 of the draft DCO

Paragraph	Description of change	Explanation
1	The MRF-related definitions have been updated to align with the wording used on the ODOW DCO.	To align with the wording adopted by the Secretary of State in the ODOW DCO.
1	A definition of “permanent loss of habitat” has been added.	This has been added to ensure understanding of what the impact entails.
2	This has been amended to align with the wording used in the ODOW DCO, with the exception that “up to” has been added before the area of impact.	To align with the wording adopted by the Secretary of State in the ODOW DCO. The “up to” wording has been added to reflect that the figures included represent a worst case based on the Projects’ Rochdale envelope. It is noted that there is a requirement for an implementation and monitoring plan (“IMP”) to be submitted to and approved by the Secretary of State. For

Paragraph	Description of change	Explanation
		the avoidance of doubt, this is the strategic IMP that will be prepared by the MRFO.
3	A new paragraph 3 has been added to align with the wording used in the ODOW DCO, with the exception of making this paragraph subject to the new paragraph 4 (explained below).	To align with the wording adopted by the Secretary of State in the ODOW DCO. The "subject to" wording added by the Applicants is to ensure that compliance with the MRF contract is subject to being able to amend the terms of that contract in line with the provisions of the DCO.
4	A new paragraph 4 has been added to require the as built parameters of the infrastructure within the Dogger Bank SAC to be submitted post-construction to the Secretary of State. Provisions have been added to enable the undertaker to agree an amendment to the MRF contract and related payments to ensure that ongoing payments reflect the as built parameters of the Projects.	This provision is required to ensure that the Projects are not over-compensating for their impacts, contributing to any new designations that might be larger than they need to be, and/or unnecessarily using up compensation that could otherwise be available to future projects. The MRF contract will need to be entered into prior to construction, at a time when the Projects' final parameters are not fully known. The maximum quantum included in paragraph 2 is based on the Projects' maximum development parameters using the Rochdale Envelope approach – for example, the worst-case number of foundations covering the largest total area has been assumed. The as built parameters of the Projects are unlikely to align with these worst-case parameters and so any compensation requirements based on the worst-case parameters would be likely to result in over-compensation. Without an ability to amend the MRF contract to reflect the Projects' as built parameters, the Projects would be paying for and using a larger area of the newly-designated MPA (being provided through the MRF) than is necessary to compensate for their impacts for the lifetime of the Projects, and removing

Paragraph	Description of change	Explanation
		<p>this area from use by future projects. Once the Projects' as built parameters have been confirmed, and agreement has been reached with the MRFO, the MRFO will be able to release any area of the new MPA no longer required by the Projects so that it is available to other developers, and any remaining payments under the MRF contract will be able to be reduced accordingly, to reflect a lesser area of impact.</p>

6 Conclusions

51. For reasons explained extensively throughout examination and summarised in this document, the Applicants do not agree with Natural England that either disturbance or halo effects would contribute to an AEoI of the Dogger Bank SAC. The Applicants accept that habitat loss equating to the permanent footprint of the above seabed infrastructure is likely to result in an AEoI but submit that the DCO should provide a mechanism for any compensation quantum to reflect the as built parameters of the Projects.
52. The Habitats Regulations do not require projects to over-compensate and rather require the competent authority to ensure that they have secured any necessary compensation. The Applicants submit that the determination of what is necessary should be capable of being based on a Projects' as built parameters and have suggested DCO wording to facilitate that approach.
53. The consequences of the Projects over-compensating for benthic impacts could be significant. The designation of a new or extended MPA through the MRF is intended to be a finite compensation measure and the Applicants would be utilising an excessive area, beyond that needed to compensate for the Projects' impacts, which would then be unavailable to other future projects. Adopting a proportionate approach should also help ensure that the MPA is not larger than necessary and therefore does not place undue constraints on other marine uses such as fishing.
54. Now that the costs payable under the MRF are known, the Applicants have also sought to demonstrate the significant differences in costs that could arise depending not only on the Secretary of State's conclusions on AEoI but also on whether there is an ability to adjust the compensation quantum once the Projects' as built parameters are known. Both of these decisions could have serious financial implications for the Projects.

References

Defra (2025), Offshore wind development: library of strategic compensatory measures (guidance): Strategic compensatory measures available to offshore wind developers. <https://www.gov.uk/guidance/offshore-wind-development-library-of-strategic-compensatory-measures> [Accessed March 2026].

Defra (2025a), Summary of responses and government response (consultation outcome). [Summary of responses and government response - GOV.UK](#) [Accessed March 2026].

Defra (2025b), Principles for identifying and selecting compensatory marine protected areas (MPAs) (policy paper). [Principles for identifying and selecting compensatory marine protected areas \(MPAs\) - GOV.UK](#) [Accessed March 2026].

Defra (2025c), Marine Recovery Fund: how to apply (guidance): <https://www.gov.uk/guidance/marine-recovery-fund-how-to-apply#completing-expression-of-interest-form--part-a> [Accessed March 2026].

DESNZ (2025), Habitats Regulations Assessment for an Application Under the Planning Act 2008 Five Estuaries Offshore Wind Farm: [EN010115-002033-HRA report from SoS.pdf](#) [Accessed March 2026].

DESNZ (2026), Habitats Regulations Assessment for an Application Under the Planning Act 2008 Outer Dowsing Offshore Wind Farm: [Outer Dowsing OWF - DESNZ HRA](#) [Accessed March 2026].

Appendix A

SCHEDULE 18

Article 49

Compensation Measures

PART 1

Dogger Bank Special Area of Conservation: Delivery of measures to compensate for sandbank loss

1. In this Part—

“Defra” means the Department for Environment, Food and Rural Affairs;

~~“Dogger Bank SAC” means the site designated as the Dogger Bank Special Area of Conservation;~~

~~“Dogger Bank compensatory measureMarine Recovery Fund Payment” means the payment of a contribution to the Marine Recovery Fund towards the strategic compensation measure to compensate for impacts on 1.61 square kilometres of sandbanks within protected features of the Dogger Bank SAC as a result of the authorised development, the sum of such payment which will to be agreed with the MRFO;~~

~~“Dogger Bank SAC” means the site designated as the Dogger Bank Special Area of Conservation;~~

~~“Marine Recovery Fund” means a marine recoverythe fund operatedestablished by the MRFO pursuant to the Marine Recovery Funds Regulations 2025, and operated pursuant to section 292 of the Energy Act 2023 or any subordinate legislation made pursuant thereto, for the implementation of strategic compensation or any equivalent strategic compensation fund established by a Government body for that purpose;~~

~~“the MRFO” means Defra or other organisation responsible for the operation of the Marine Recovery Fund Operator, which is Defra; and~~

~~“permanent loss of habitat” means impacts that result in an adverse effect on the integrity of the sandbank feature of the Dogger Bank SAC represented by the area within the Dogger Bank SAC where the infrastructure forming the authorised development will be permanently located;~~

~~“the strategic compensation measure” means the marine protected area designation and/or extension to be delivered by the MRFO pursuant to the Marine Recovery Fund Regulations 2025.~~

2. (1) Work Nos. 1A to 5A and 1B to 5B and further associated development in connection with those Works (but excluding any pre-construction surveys) within the Dogger Bank SAC must not be commenced until:

~~(a) the undertaker has received confirmation from the MRFO that suitable measures are available to provide the compensation quantum, as determined by the Secretary of State, of up to 1.61 square kilometres for permanent loss of habitat;~~

~~(b) the Marine Recovery Fund Payment has been quantified and the undertaker has entered into a contract to make a Marine Recovery Fund Payment;~~

~~(c) an implementation and monitoring plan has been submitted to and approved by the Secretary of State; and~~

~~(a)(d) the full payment or the first payment in a series of instalments in accordance with the contract under sub-paragraph (b) has been made by the undertaker and the Secretary of State has confirmed in writing that such payment fulfils the requirement for compensation measures under this Part of this Schedule.~~

(2) The undertaker must provide written notification to the MMO within seven days following:

~~(a) the date of entry into the contract to make a Marine Recovery Fund Payment referred to in sub-paragraph (1)(b); and~~

~~(b) the date of full payment or the first payment in a series of instalments in accordance with the contract under sub-paragraph (1)(b).~~

3. Following receipt of the approvals under paragraph 2 the undertaker shall not be required to implement any further compensation measures for the impacts to the Dogger Bank SAC pursuant to this Part of this Schedule but, subject to paragraph 4 of this Part of this Schedule, this does not obviate the undertaker from its obligation to continue to comply with any payment schedule or any other conditions that form part of the contract by the undertaker under paragraph 2(b).

- ~~(b) The undertaker has provided evidence in writing to the Secretary of State of payment to the MRFO of either:
 - ~~(i) the full final payment of the Dogger Bank compensatory measure; or~~
 - ~~(ii) the first payment of an agreed payment plan for the Dogger Bank compensatory measure;~~~~
- ~~(c) the undertaker has provided to the Secretary of State a copy of the implementation and monitoring plan for the strategic compensation measure produced by the MRFO; and~~

4. the Secretary of State has confirmed in writing that the Dogger Bank compensatory measure has fulfilled the compensation requirement to compensate for the impacts of the authorised development on the Dogger Bank SAC. (1) Within four months of the completion of construction of the offshore works within the Dogger Bank SAC the undertaker must submit to the Secretary of State a report confirming the date of completion of construction which must include the following details—

- (a) the final number of installed foundations for all wind turbine generators, offshore converter platform(s) and offshore accommodation platform(s);
- (b) the installed foundation parameters;
- (c) as built plans;
- (d) latitude and longitude coordinates of the centre point of the location for each wind turbine generator, offshore converter platform and offshore accommodation platform, provided as Geographical Information System data referenced to WGS84 datum;
- (e) latitude and longitude coordinates of the array cables, export cables and inter-platform cables within the Dogger Bank SAC, provided as Geographical Information System data referenced to WGS84 datum; and
- (f) the location, area and volume of any scour protection and cable protection within the Dogger Bank SAC.

(2) Following provision of the report referred to in sub-paragraph (1) above the undertaker will be entitled to agree with the MRFO a reduction to any remaining payments of the Marine Recovery Fund Payment to reflect the as built parameters of the authorised development.

Appendix B



Department
for Environment
Food & Rural Affairs

The Marine Recovery Fund
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HRA Consents Manager
Dogger Bank South Projects

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6th March 2026

Dogger Bank South Revised DCO Wording

De [REDACTED]

Thank you for taking us through your proposed DCO amendments which are the subject of a consent application with DESNZ. As discussed in the meeting on 25th February 2026, from a Defra perspective we can only provide information on the MRF policy / process. The policy and process is detailed in the [MRF guidance](#) which may be updated from time to time. The quantum of compensation required will be determined by the final DCO compensatory conditions.

In addition, we shared the draft contract between MRFO/developer with you to inform your application.

Defra will formally respond to DESNZ should they wish to consult us publicly via PINS at the determination stage.

Kind regards,

[REDACTED]
(via email)

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