



**Written Representation
for the
Royal Society for the Protection of Birds**

Submitted for Deadline 1

29 January 2025

Planning Act 2008 (as amended)

In the matter of:

**Application by Dogger Bank South (West) Limited and Dogger Bank South
(East) Limited for an Order**

**Granting Development Consent for the Dogger Bank South Offshore Wind
Farms**

Planning Inspectorate Ref: EN010125

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1. Introduction

The RSPB

- 1.1. The Royal Society for the Protection of Birds (the RSPB) was set up in 1889. It is a registered charity incorporated by Royal Charter and is Europe's largest wildlife conservation organisation, with a membership of over 1.1 million¹. The principal objective of the RSPB is the conservation of wild birds and their habitats. The RSPB therefore attaches great importance to all international, EU and national law, policy and guidance that assist in the attainment of this objective. It campaigns throughout the UK and internationally for the development, strengthening and enforcement of such law and policy. In so doing, it also plays an active role in the domestic processes by which development plans and proposals are scrutinised and considered, offering ornithological and other wider environmental expertise. This includes making representations to, and appearing at, public inquiries and hearings during the examination of applications for development consents.

The RSPB's interest in offshore wind development

- 1.2. Faced with the threats of climate change to the natural world the RSPB considers that a low-carbon energy revolution to reach net zero is essential to safeguard biodiversity. However, inappropriately designed and/or sited developments can also cause serious and irreparable harm to biodiversity and damage the public acceptability of the necessary low-carbon energy transition technologies.
- 1.3. The RSPB recognises the significant role that offshore wind will play in decarbonising our energy systems and the renewed urgency with which this must happen. Installing this technology at the scale and pace needed is no easy task: there are significant challenges rooted in the planning frameworks and the state of our seas which threaten both nature *and* our ability to reach net zero.
- 1.4. The UK is of outstanding international importance for its breeding seabirds, including Northern Gannet for which the UK supports over 50% of the world population and around 10% of the world populations of Kittiwake and Puffin. The UK is also of international importance for its non-breeding seabirds and waterbirds. As with all Annex I and regularly migratory species, the UK has particular responsibility under the Birds Directive² to secure the conservation of these birds. The latest review of the UK Birds of Conservation Concern³ highlights alarming recent declines in UK seabird populations meaning that ten seabirds are now red-listed.
- 1.5. The available evidence suggests that the main risks of offshore wind farms for birds are collision, disturbance/displacement, barriers to movement (e.g. migrating birds, or disruption of access between the breeding areas and feeding areas), and habitat change

¹ <https://www.rspb.org.uk/about-us/annual-report> Accessed 20 January 2025.

² Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds (codified version) (the Birds Directive).

³ <https://www.rspb.org.uk/whats-happening/news/alarming-declines-in-uk-seabird-species-sees-five-more-added-to-the-red-list> Accessed 14 October 2024.

particularly with associated changes in food availability and the cumulative and in-combination effects of these across multiple wind farms.

- 1.6. Such impacts are avoidable, and the RSPB has spent considerable time working with stakeholders in the UK offshore wind industry to ensure that decisions about deployment of renewable energy infrastructure take account of environmental constraints and seek to avoid or minimise impacts wherever possible. The RSPB therefore strongly advocates the use of rigorous, participative environmental assessments to inform the development of projects.

Scope of written submission

- 1.7. This Written Submission covers the following:

- The nature conservation importance of the seabirds affected by the Dogger Bank South Offshore wind farm scheme;
- Legislation and policy background;
- Offshore ornithology;
- Derogation case: the RSPB's approach to evaluating compensation measures under the Conservation of Habitats and Species Regulations 2017 (as amended); and
- RSPB detailed comments on the Applicant's specific compensation proposals

- 1.8. In compiling this Written Representation, the RSPB has considered the application documents, subsequent updates by the Applicant and other relevant documents, including the Applicant's response to the RSPB's Relevant Representation contained in PDA-013. With respect to submissions since the Application was submitted, we have considered the following in particular:

Section 4 (offshore ornithology)

- PDB-006: DBS Response to Natural England's Relevant Representations (Appendix G & H – offshore ornithology) (Revision 01);
- AS-058: Environmental Statement Chapter 12 – Offshore Ornithology (Revision 2) (Tracked);
- AS-059: 7.12.1 Environmental Statement Chapter 12 – Offshore Ornithology Figure 12-1 (Revision 1);
- AS-061: 7.12.12.3 Environmental Statement Appendix 12-3a-c Monthly Abundance - All, Sitting, Flying (Revision 2) (Tracked);
- AS-063: 7.12.12.4 Environmental Statement Appendix 12-4a-c - Monthly Densities - All, Sitting, Flying (Revision 2) (Tracked);
- AS-065: 7.12.12.5 Environmental Statement Appendix 12-5a-c - Seasonal Peak Abundance - All, Sitting, Flying (Revision 2) (Tracked);
- AS-067: 7.12.12.6 Environmental Statement Appendix 12-6a-c - Seasonal Peak Density - All, Sitting, Flying (Revision 2) (Tracked);
- AS-069: 7.12.12.7 Environmental Statement Appendix 12-7a-c - Survey Abundancies - All, Sitting, Flying (Revision 2) (Tracked); and
- AS-086: 6.1 Report to Inform Appropriate Assessment Habitats Regulations Assessment - Part 4 of 4 – Marine Ornithological Features (Revision 3) (Tracked)

Sections 5 and 6: Derogation case – compensatory measures

- PDB-003: Appendix 1 – Project Level Kittiwake Compensation Plan (Revision 2)(tracked);
- PDB-005: Appendix 2 – Guillemot [and Razorbill] Compensation Plan (Revision 2)(tracked);
- PDB-007: Project Level Kittiwake Artificial Nesting Structure (ANS) Site Selection Report;
- PDB-008: Guillemot and Razorbill Compensation Site Shortlist Refinement Report;
- AS-088: Appendix 1 – Project Level Kittiwake Compensation Plan (Revision 3)(tracked); and
- AS-090: Appendix 2 – Guillemot and Razorbill Compensation Plan (Revision 3)(tracked).

2. The nature conservation importance of the seabirds affected by the Dogger Bank South offshore wind farm schemes

Introduction

- 2.1. As set out in section 1, the UK is of outstanding international importance for its breeding seabirds. As with all Annex I and regularly occurring migratory species, the UK has particular responsibility under the Birds Directive⁴ to secure the conservation of these important seabird populations.
- 2.2. As set out in our Relevant Representation, the RSPB is particularly concerned regarding the impacts on the following designated sites:
 - Flamborough and Filey Coast SPA;
 - A series of English and Scottish SPAs where, due to methodological concerns, we are unable to reach conclusions as to the significance of in-combination impacts (see section 4 below).
- 2.3. Natural England has referred to the conservation advice for some designated sites listed above in Table 5.1 in their Relevant Representation RR-039 including providing weblinks to current Conservation Objectives and Supplementary Advice on Conservation Objectives.

Conservation Objectives

- 2.4. In England, the Conservation Objectives for SPAs generally follow the same format (it is formulated differently in Scotland but seeks to achieve similar objectives) i.e.:

“...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 Wild 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
 - The distribution of the qualifying features within the site.”

Supplementary Advice on Conservation Objectives

- 2.5. Natural England’s Supplementary Advice on the Conservation Objectives for the various SPAs identifies, for each SPA feature, key attributes and targets. Attributes are the ecological characteristics or requirements of the classified features within the SPA and deemed to best describe the site’s ecological integrity. If safeguarded this will enable achievement of the Conservation Objectives and favourable conservation status for all the designation features, including any assemblage feature.

⁴ Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds (codified version) (the Birds Directive).

- 2.6. For each qualifying feature, targets are typically set in respect of the following attributes (as appropriate):
- (Non-) Breeding population: abundance;
 - Connectivity with supporting habitats;
 - Disturbance caused by human activity;
 - Extent and distribution of supporting habitat for the (non-) breeding season; and
 - Food availability.
- 2.7. The RSPB considers these attributes and targets are particularly relevant to consideration of the Dogger Bank South Offshore Wind Farm as they respectively relate to:
- the population levels at which the features should be maintained or restored to;
 - the need to:
 - maintain or restore safe passage of birds moving between their nesting and/or feeding areas;
 - reduce/avoid disturbance to foraging, feeding, moulting and/or loafing birds;
 - maintain the extent, distribution and availability of suitable (non-) breeding habitat which supports the feature; and
 - maintain or restore the distribution, abundance and availability of key food and prey items.
- 2.8. The RSPB considers these attributes and targets are directly relevant to the consideration of whether an SPA's conservation objective to maintain or restore site integrity can be met and the SPA achieve favourable conservation status for all its features including, where appropriate, the seabird assemblage throughout the lifetime of the development and any subsequent period here its impacts continue to affect the SPA features.

Summary

- 2.9. It is vital to consider whether an SPA and its qualifying features meet the attributes and targets set by Natural England and/or NatureScot when considering whether the SPA's conservation objectives to maintain or restore site integrity can be met and the SPA achieve favourable conservation status throughout the lifetime of the development and any subsequent period where its impacts continue to affect the SPA features.

3. Legislation and policy background

Introduction

- 3.1. Below we summarise the RSPB’s understanding of the key nature conservation legislation and related policy background relevant to the RSPB’s concerns.

The Conservation of Habitats and Species Regulations 2017 and the Conservation of Offshore Marine Habitats and Species Regulations 2017

- 3.2. SACs and SPAs are protected as “European sites” in inshore waters (up to 12 nautical miles from the baselines) under provisions within the Conservation of Habitats and Species Regulations 2017 (Habitats Regulations)(as amended); and in offshore waters (i.e. from 12-200 nautical miles) under provisions within the Conservation of Offshore Marine Habitats and Species Regulations 2017 (Offshore Habitats Regulations)(as amended)⁵.
- 3.3. The Habitats & Offshore Habitats Regulations set out the sequence of steps to be taken by the competent authority (here the Secretary of State for Energy Security and Net Zero (DESNZ)) when considering authorisation for a project *likely to have an effect* on a European site and its species before deciding to authorise that project. These are as follows (with references to just the Habitats Regulations):
- Step 1: consider whether the project is directly connected with or necessary to the management of the SPA and its species (regulation 63 (1)). If not –
 - Step 2: consider, on a precautionary basis, whether the project is likely to have a significant effect on the SPA and its species, either alone or in combination with other plans or projects (the Likely Significance Test) (regulation 63 (1)).
 - Step 3: make an appropriate assessment of the implications for the SPA and its species in view of its conservation objectives with the aims and objectives of the requirements including the National Sites Network management objectives (reg 16A) to also be considered. There is no requirement or ability at this stage to consider extraneous (non-conservation e.g. economics, renewable targets, public safety etc) matters in the appropriate assessment (regulation 63 (1)).
 - Step 4: consider whether it can be ascertained that the project will not, alone or in combination with other plans or projects, adversely affect the integrity of the SPA and its species, having regard to the manner in which it is proposed to be carried out, and any conditions or restrictions subject to which that authorisation might be given (the Integrity Test) (regulation 63 (6)).
 - Step 5: In light of the conclusions of the assessment, the competent authority shall agree to the project only after having ascertained that it will not adversely affect the integrity of the SPA, alone or in combination with other plans or projects (regulation 63 (5)).
 - Step 6: only if the competent authority is satisfied that, there being no alternative solutions and the plan or project must be carried out for imperative reasons of

⁵ The Conservation of Habitats and Species Regulations 2017: <https://www.legislation.gov.uk/ukxi/2017/1012/contents>. The Conservation of Offshore Marine Habitats and Species Regulations 2017 are also relevant - <https://www.legislation.gov.uk/ukxi/2017/1013/contents>.

overriding public interest (which, subject to (regulation 64(2)), may be of a social or economic nature), they may agree to the plan or project notwithstanding a negative assessment of the implications for the European site (regulation 64 (1)).

- Step 7: in the event of the no alternative solutions and imperative reasons of overriding public interest tests being satisfied, the Secretary of State must secure that any and all necessary compensatory measures are taken to ensure that the overall coherence of the National Site Network is protected (regulation 68) taking account of the National Site Network management objectives (reg 16A, as set out below).

3.4. It is important to add that in addition to the requirements set out above, in relation to both the inshore marine area and the offshore marine area, any competent authority must exercise its functions so as to secure compliance with the requirements of the Habitats Directive and the Birds Directive as set out in regulations 9 and 10, Habitats Regulations; and in particular to take such steps as it considers appropriate to secure the preservation, maintenance and re-establishment of a sufficient diversity and area of habitat for wild birds⁶, having regard to the requirements of Article 2 of the Birds Directive.⁷ And for offshore SPAs and SACs regulation 26, Offshore Habitats Regulations requires competent authorities to exercise their functions (as far as possible) to secure steps to avoid the disturbance of species and the deterioration of habitats or habitats of species within those sites.

SPA and SAC Conservation Objectives

3.5. Under the Habitats Regulations, a site's Conservation Objectives are intrinsic to the Integrity Test when considering whether to grant consent for a plan or project – see Habitats Regulations 63(1).

3.6. In order to understand the Conservation Objectives and the Supplementary Advice in the context of Regulation 63(1) it is important to remind oneself of the role of SPAs within these legislative requirements. These protected sites are part of the requirement for special conservation measures in order to ensure that their contribution to national and international “conservation status” of the species⁸ is maximised, as set out in the headline words at the start of all Conservation Objectives:

“Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring...”⁹

3.7. The Conservation Objectives are to be an articulation of the contribution that it is appropriate for the SPA to make in an enduring way. It would be inconsistent with the

⁶ As required by Article 3, Birds Directive

⁷ See regulation 9(1) and 10(1)(2)(3) and (8) of the Habitats Regulations and regulation 6 of the Offshore Regulations. Article 2 Birds Directive imposes a requirement on Member States to maintain all wild bird populations at a level which corresponds in particular to ecological, scientific and cultural requirements, while taking account of economic and recreational requirements, or if necessary, to restore the population of these species to that level (Article 2).

⁸ Please see points below on the management objectives of the National Sites Network and the requirements for SPAs to ensure that the species are maintained and/or restored across their natural range.

⁹ The SPA generic Conservation Objectives <http://publications.naturalengland.org.uk/publication/5400434877399040>
Accessed 27 January 2025

purposes of the protection and the role of SPAs to have SPA Conservation Objectives (or the interpretation of them) aiming for lower populations particularly since so many sites were designated at a time when populations were not in favourable condition.

Appropriate assessment

- 3.8. As part of the assessment requirements, regulation 63, Habitats Regulations (regulation 28, Offshore Habitats Regulations) require the application of the precautionary principle. Meaning that if it cannot be excluded, on the basis of objective scientific information, that it is likely to have a significant effect on an SPA or SAC and its species an appropriate assessment will be required: see *Waddenzee*.¹⁰
- 3.9. Following that appropriate assessment, a project may only be granted consent if the competent authority is convinced that it will not have an adverse effect on the integrity of the European site(s) and their species of concern, having applied the precautionary principle and taken account of the conservation objectives for those European sites and their habitats and species. *Waddenzee* confirmed that where doubt remains as to the absence of adverse effects on the integrity of the European site, approval should be refused¹¹ (subject to the considerations of alternative solutions, imperative reasons of overriding public interest and the provision of compensatory measures as set out in regulations 64 and 68).
- 3.10. An appropriate assessment requires all aspects of the project which could affect the European site, its species and its conservation objectives to be identified in the light of the best scientific knowledge in the field.¹² The competent authority, “taking account of the conclusions of the appropriate assessment of the implications...for the site concerned, in the light of the conservation objectives, are to authorise such activity only if they have made certain that it will not adversely affect the integrity of the site. That is the case where no reasonable scientific doubt remains as to the absence of such effects”¹³.
- 3.11. Defra Circular 01/2005 states at page 20, that the ‘integrity of the site’ should be defined as ‘the coherence of the site’s ecological structure and function, across its whole area, or the habitats, complex of habitats and/or populations of species for which the site is or will be classified’.¹⁴ A European site can be described as having a high degree of integrity where the inherent potential for meeting site conservation objectives is realised, the capacity for self-repair and self-renewal under dynamic conditions is maintained, and a minimum of external management support is required. When looking at the ‘integrity of the site’, it is therefore important to take into account a range of factors, including the possibility of effects manifesting themselves in the short, medium and long-term”.¹⁵
- 3.12. As is clear from the requirements of the Habitats and Offshore Habitats Regulations, the assessment of integrity is to be considered by reference to the impact of the project alone

¹⁰ CJEU Case-127/02; [2004] ECR-7405 at [45].

¹¹ [56]-[57].

¹² [61].

¹³ [59].

¹⁴ Please note the Defra Circular 01/2005 is also titled ODPM Circular 6/2005.

¹⁵ See too the European Commission; Guidance document on wind energy developments and EU nature legislation, 2020, section 2.2.3.2, page 24.

and in-combination with other plans and projects, taking account of the European site(s) conservation objectives. As clearly set out in *Waddenzee*, para 61:

61 In view of the foregoing, the answer to the fourth question must be that, under Article 6(3) of the Habitats Directive, an appropriate assessment of the implications for the site concerned of the plan or project implies that, prior to its approval, all the aspects of the plan or project which can, by themselves or in combination with other plans or projects, affect the site's conservation objectives must be identified in the light of the best scientific knowledge in the field. The competent national authorities, taking account of the appropriate assessment of the implications of mechanical cockle fishing for the site concerned in the light of the site's conservation objectives, are to authorise such an activity only if they have made certain that it will not adversely affect the integrity of that site. That is the case where no reasonable scientific doubt remains as to the absence of such effects. (emphasis added)

In-combination effects and compensation for other schemes

- 3.13. Compensatory measures only enter the equation when it has been determined that there will be adverse effects on the integrity of the site (under regulation 63) or there is a lack of certainty as to the absence of adverse effects and the need for the competent authority to decide whether consent should be granted under regulation 64.
- 3.14. It therefore follows that if compensation measures have been required for a project then that project has been identified as giving rise to potential adverse impacts on the integrity of a protected site. Therefore, potential adverse effects from that project are also relevant when considering whether a later project is:
- likely to have a significant effect on a designated site, whether on its own or in combination with other plans and projects, and subsequently
 - whether the competent authority can be satisfied that there will not be adverse effects on the integrity of the European site whether taken alone or in combination with other projects.
- 3.15. While we note that the Applicant has presented both sets of figures in its in-combination assessment, we consider it is difficult to see on what basis the fact that compensation has been provided for potential adverse effects of the first scheme should mean that the effects of that scheme should be removed from the equation when carrying out the assessments required by regulation 63 for a later scheme, although it may well be relevant when considering whether consent should be granted under regulation 64 for the second scheme and/or what compensation measures should be required at that stage. There are two points we would stress in that context:

Firstly, the admonition of AG Sharpston in *Sweetman (No 1)* at AG47 (cited above). To exclude the adverse effects of scheme one when considering whether a later scheme would be likely to have significant effects / would not have an adverse effect on the integrity of a

protected site in combination with other projects would seem to risk perpetuating the “death by a thousand cuts” phenomenon discussed in that case;¹⁶ and

Secondly, the uncertainty as to the effectiveness of measures that are designed to compensate for (for example) loss of habitat rather than to mitigate the harm which might otherwise be *caused*: see C-164/17 *Grace v Sweetman* at 52-3.

- 3.16. Such an approach would also seem inconsistent with the clear ruling of the CJEU in C-164/17 *Grace v Sweetman* that *compensatory* measures should not be taken into account at the Article 6(3) stage when carrying out an appropriate assessment for a particular project. It is difficult to see why the compensatory measures associated with an earlier scheme could, therefore, be taken into account (by effectively removing the adverse effects of scheme 1 from consideration) where the competent authority is deciding on a later scheme whether it was likely to have significant effects or would / would not have adverse effects on the integrity of the site in combination with other projects. We set out the material passages from that decision out below for ease of reference:

“50 In that regard, the Court has previously ruled that the measures provided for in a project which are aimed at compensating for the negative effects of the project cannot be taken into account in the assessment of the implications of the project provided for in Article 6(3) of the Habitats Directive...¹⁷.

51 It is only when it is sufficiently certain that a measure will make an effective contribution to avoiding harm, guaranteeing beyond all reasonable doubt that the project will not adversely affect the integrity of the area, that such a measure may be taken into consideration when the appropriate assessment is carried out¹⁸.

52 As a general rule, any positive effects of the future creation of a new habitat, which is aimed at compensating for the loss of area and quality of that habitat type in a protected area, are highly difficult to forecast with any degree of certainty or will be visible only in the future¹⁹.

53 It is not the fact that the habitat concerned in the main proceedings is in constant flux and that that area requires ‘dynamic’ management that is the cause of uncertainty. In fact, such uncertainty is the result of the identification of adverse effects, certain or potential, on the integrity of the area concerned as a habitat and foraging area and, therefore, on one of the constitutive characteristics of that area, and of the inclusion in the assessment of the implications of future benefits to be derived from the adoption of measures which, at the time that assessment is made, are only potential, as the measures have not yet been implemented. Accordingly, and subject to verifications to be carried out by the referring court, it was not possible for those benefits to be foreseen with the requisite degree of certainty when the authorities approved the contested development.

54 The foregoing considerations are confirmed by the fact that Article 6(3) of the Habitats Directive integrates the precautionary principle and makes it possible to prevent in an

¹⁶ For the avoidance of doubt, we would stress that the starting point would always need to be the scheme itself – and there would need to be some effect from the scheme which when combined with effects from the earlier scheme could give rise to likely significant effects / outcome.

¹⁷ Judgments of 15 May 2014, *Briels and Others*, C-521/12, EU:C:2014:330, paragraph 29, and of 21 July 2016, *Orleans and Others*, C-387/15 and C-388/15, EU:C:2016:583, paragraph 48

¹⁸ See, to that effect, judgment of 26 April 2017, *Commission v Germany*, C-142/16, EU:C:2017:301, paragraph 38

¹⁹ See, to that effect, judgment of 21 July 2016, *Orleans and Others*, C-387/15 and C-388/15, EU:C:2016:583, paragraphs 52 and 56 and the case-law cited.

effective manner adverse effects on the integrity of protected areas as a result of the plans or projects being considered²⁰.”

Habitats Regulations General Duties

3.17. We would like to also highlight, in particular, the requirements in regulation 9(3)²¹:

9.— Duties relating to compliance with the Directives

(1) The appropriate authority, the nature conservation bodies and, in relation to the marine area, a competent authority must exercise their functions which are relevant to nature conservation, including marine conservation, so as to secure compliance with the requirements of the Directives.

...

(3) Without prejudice to the preceding provisions, a competent authority, in exercising any of its functions, must have regard to the requirements of the [Birds and Habitats] Directives so far as they may be affected by the exercise of those functions.²²

3.18. And the further duties in Regulation 10²³:

10.— Duties in relation to wild bird habitat

(1) Without prejudice to regulation 9(1), the appropriate authority, the nature conservation bodies and, in relation to the marine area, a competent authority must take such steps in the exercise of their functions as they consider appropriate to secure the objective in paragraph (3), so far as lies within their powers.

...

(3) The objective is the preservation, maintenance and re-establishment of a sufficient diversity and area of habitat for wild birds in the United Kingdom including by means of the upkeep, management and creation of such habitat, as appropriate), having regard to the requirements of Article 2 of the new Birds Directive (measures to maintain the population of bird species).

...

(7) In considering which measures may be appropriate for the purpose of securing or contributing to the objective in paragraph (3), appropriate account must be taken of economic and recreational requirements.

...

²⁰ See, to that effect, judgment of 15 May 2014, *Briels and Others*, C-521/12, EU:C:2014:330, paragraph 26 and the case-law cited.

²¹ <https://www.legislation.gov.uk/uksi/2017/1012/regulation/9>

²² The terms of regulation 9(3) are not amended by the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations although it needs to be read with the amended definitions of the relevant Directives and with the new regulation 9(4A) – regard must be had to any Secretary of State guidance – currently we do not believe this has been fully produced.

²³ <https://www.legislation.gov.uk/uksi/2017/1012/regulation/10>

(8) So far as lies within its powers, a competent authority in exercising any function in or in relation to the United Kingdom must use all reasonable endeavours to avoid any pollution or deterioration of habitats of wild birds”²⁴

- 3.19. As mentioned above, following the UK’s departure from the EU these regulations have been changed to include (amongst other changes) management objectives for the National Sites Network. Although these requirements already existed, it is helpful to have them clearly within our domestic legislation.
- 3.20. In summary regulation 16A²⁵, Habitats Regulations sets out the requirements for the Network jointly and separately recognising the differences between SPAs and SACs (as set out above).
- 3.21. Authorities with relevant responsibilities must manage the National Site Network with a view to contributing to the achievement of the management objectives of it, namely (focusing just on SPAs):
- 3.22. **For SPAs** to contribute, in their area of distribution, to ensuring the survival and reproduction of:
- the species of birds listed in Annex I to the new Wild Birds Directive;
 - regularly occurring migratory species of birds; and
 - to contribute, to securing compliance with regulation 9(1) (as set out above).
- 3.23. **Overall**, take account of:
- the importance of SACs and SPAs;
 - the importance of the sites for the coherence of National Site Network;
 - the threats of degradation or destruction (including deterioration and disturbance of protected features) to which the sites are exposed; and
 - in the case of migratory bird species, the importance of their breeding, moulting and wintering areas and staging points along their migration routes.
- 3.24. The RSPB believes it is essential both during the appropriate assessment and consideration of compensation measures stages for these management objectives to be taken into account.

Environmental Impact Assessment

- 3.25. The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (as amended)²⁶ state that development consent cannot be granted for Environmental Impact Assessment (EIA) development unless the decision-maker has taken into account environmental information including an environmental statement which describes the

²⁴ Again the terms of regulation 10 are not amended by the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations although it needs to be read with the amended definitions of the relevant Directives

²⁵ <https://www.legislation.gov.uk/uksi/2017/1012/regulation/16A>. Accessed 27 January 2025.

²⁶ The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017: <http://www.legislation.gov.uk/uksi/2017/572/contents/made>. Accessed 27 January 2025.

significant effects, including cumulative effects, of the development on the environment. This will include effects on all wild bird species whether SPA species or not.

- 3.26. Offshore wind farms have the potential to impact on birds through collision with rotating blades, direct habitat loss, disturbance from construction activities, displacement during the operational phase (resulting in loss of foraging/roosting area) and impact on bird flight lines (i.e. barrier effect) and associated increased energy use by birds for commuting flights between roosting and foraging areas. This is acknowledged in NPS EN-3²⁷. These potential impacts have been taken into account by the RSPB and its remaining concerns with the applications are set out below, in the context of the legislative provisions summarised above, in particular those relating to appropriate assessment.

Summary

- 3.27. There is a statutory duty to comply with the Conservation of Habitats and Species Regulations 2017 (the Habitats Regulations, as amended) which offer protection for protected sites (Ramsar, SPA, SAC) and the Conservation of Offshore Marine Habitats and Species Regulations 2017 (Offshore Regulations)(as amended). The Habitats and Offshore Regulations set out a sequence of steps to be taken by the competent authority (here the Secretary of State for Energy Security and Net Zero (DESNZ)) when considering authorisation for a project *likely to have an effect* on a European site and its species before deciding to authorise that project.
- 3.28. We set out a series of related matters to be considered in this context, including:
- SPA and SAC Conservation Objectives;
 - Appropriate assessment;
 - In-combination effects and compensation for other schemes;
 - Habitats Regulations General Duties; and
 - Environmental Impact Assessment.

²⁷ Paragraph 2.8.136; see paragraphs 2.8.136-146 generally. Effects on foraging areas outside a SPA are to be taken into account when assessing the effects on bird populations of the SPA: see *Hargreaves v Secretary of State for Communities and Local Government* [2011] EWHC 1999 (Admin), which concerned effects on pink-footed geese which commuted inland from their roosting sites in the SPA to feed on grain and winter cereal crops on fields adjacent to the proposed development site.

4. Offshore ornithology

Introduction

- 4.1. We have significant concerns in respect of offshore ornithology impacts for the following reasons:
 - In some cases, as a result of scale of impacts; and
 - In other cases as a result of methodological concerns.
- 4.2. We have summarised our current position with respect to adverse effect on the integrity (AEOI) on different Special Protection Areas (SPAs). These conclusions are based on a worst-case scenario of both Dogger Bank South East and West being developed
- 4.3. The RSPB's key concerns with the impact assessment methodology relate to:
 - The application of a macro avoidance correction to Gannet collision risk modelling;
 - Approach to the apportioning of Gannets to the Forth Islands SPA;
 - Digital Aerial Survey;
 - an inadequate consideration of impacts compounded by Highly Pathogenic Avian Influenza; and
 - Approach to non-measurable "*de minimis*" impacts.
- 4.4. We have also identified other concerns:
 - Population Viability Analysis; and
 - The use of prejudicial language.
- 4.5. Where helpful, we have expanded on our Relevant Representation on these matters.

Conclusions on AEOI

- 4.6. We have significant concerns in respect of offshore ornithology impacts for the following reasons:
 - In some cases, as a result of scale of impacts; and
 - In other cases as a result of methodological concerns.
- 4.7. Below we summarise our current position with respect to adverse effect on the integrity (AEOI) on different Special Protection Areas (SPAs). These conclusions are based on a worst-case scenario of both Dogger Bank South East and West being developed.

Project alone – RSPB AEOI conclusions

- 4.8. We cannot rule out an adverse effect on site integrity on the following features of the Flamborough and Filey Coast SPA:
 - The impact of combined collision and displacement mortality on the Gannet population.

Project in combination with other plans and projects – RSPB AEOI conclusions

- 4.9. We consider there is an in-combination AEOI on the following features of the FFC SPA:
- The impact of collision mortality on the Kittiwake population (and therefore agree with the Applicant's conclusion in this respect);
 - The impact of displacement mortality on the Guillemot population (and therefore we welcome the Applicant's adopted position on this);
 - The impact of displacement mortality on the Razorbill population; and
- 4.10. We cannot rule out in-combination impacts on the following features of the Flamborough and Filey Coast SPA:
- The impact of combined collision and displacement mortality on the Gannet population; and
 - The impact of combined collision and displacement mortality on the seabird assemblage.
- 4.11. Due to the methodological concerns, in particular with the Applicant's approach to a *de minimis*, background mortality threshold, but also the application of a macro-avoidance correction factor to Gannet densities, as detailed below, we are unable to reach conclusions as to the significance of in-combination impacts on the following SPAs and listed features:
- Coquet Island SPA: Puffin (displacement mortality);
 - Farne Islands SPA: Kittiwake (collision mortality);
 - St. Abbs to Fast Castle SPA: Kittiwake (collision mortality), Guillemot (displacement mortality), Razorbill (displacement mortality);
 - Forth Islands SPA: Gannet (combined collision and displacement mortality), Kittiwake (collision mortality), Guillemot (displacement mortality), Razorbill (displacement mortality), Puffin (displacement mortality);
 - Fowlsheugh SPA: Kittiwake (collision mortality), Guillemot (displacement mortality), Razorbill (displacement mortality);
 - Buchan Ness to Collieston Coast SPA: Kittiwake (collision mortality), Guillemot (displacement mortality);
 - Troup, Pennan and Lion's Head SPA: Gannet (combined collision and displacement mortality), Kittiwake (collision mortality), Guillemot (displacement mortality), Razorbill (displacement mortality);
 - East Caithness Cliffs SPA: Kittiwake (collision mortality), Guillemot (displacement mortality), Razorbill (displacement mortality);
 - North Caithness Cliffs SPA: Kittiwake (collision mortality), Guillemot (displacement mortality), Razorbill (displacement mortality);
 - Copinsay SPA: Kittiwake (collision mortality), Guillemot (displacement mortality);
 - Hoy SPA: Kittiwake (collision mortality), Guillemot (displacement mortality), Puffin (displacement mortality);
 - Rousay SPA: Kittiwake (collision mortality), Guillemot (displacement mortality);
 - Calf of Eday SPA: Kittiwake (collision mortality), Guillemot (displacement mortality);

- Marwick Head SPA: Kittiwake (collision mortality), Guillemot (displacement mortality);
- West Westray SPA: Kittiwake (collision mortality), Guillemot (displacement mortality), Razorbill (displacement mortality);
- Fair Isle SPA: Gannet (combined collision and displacement mortality), Kittiwake (collision mortality), Guillemot (displacement mortality), Razorbill (displacement mortality), Puffin (displacement mortality);
- Sumburgh Head SPA: Kittiwake (collision mortality), Guillemot (displacement mortality);
- Noss SPA: Gannet (combined collision and displacement mortality), Kittiwake (collision mortality), Guillemot (displacement mortality);
- Foula SPA: Kittiwake (collision mortality); Guillemot (displacement mortality), Razorbill (displacement mortality), Puffin (displacement mortality);
- Hermaness, Saxa Vord and Valla Field SPA: Gannet (combined collision and displacement mortality), Kittiwake (collision mortality), Guillemot (displacement mortality), Puffin (displacement mortality).

Flamborough and Filey Coast SPA - impact assessment conclusions – project alone

- 4.12. We cannot rule out an adverse effect on site integrity on the following features of the Flamborough and Filey Coast SPA:
- The impact of combined collision and displacement mortality on the Gannet population. This is because the Applicant has applied a correction factor to gannet densities taken forward for assessment to account for macro-avoidance, The RSPB disagrees with this approach, for reasons given below, and are therefore unable to reach conclusions with regard to the significance of impacts.

Flamborough and Filey Coast SPA - impact assessment conclusions – project in-combination with other plans and projects

- 4.13. Within the range of likely mortalities derived using the methods advocated by Natural England and the RSPB, the impacts arising through collisions associated with Dogger Bank South East and West in combination with other offshore wind farms are predicted to result in the annual population growth rate of Kittiwake at the **Flamborough and Filey Coast SPA** declining, with a ratio of impacted to unimpacted population growth rate of between 0.9955 and 0.9961. This means that after a period of 30 years, the population size of the SPA is expected to be between **86.88 and 88.65%** of what it would have been in the absence of the development. Therefore, we consider there is an AEOI due to the impact of collision mortality on the Kittiwake population of the Flamborough and Filey Coast SPA. We therefore agree with the Applicant's conclusion in this respect.
- 4.14. Within the range of likely mortalities derived using the methods advocated by Natural England and the RSPB, the impacts arising through displacement and barrier effects associated with Dogger Bank South East and West in combination with other offshore wind farms are predicted to result in the annual population growth rate of Guillemot at the **Flamborough to Filey Coast SPA** declining, with a ratio of impacted to unimpacted

population growth rate of between 0.9931 and 0.9975. This means that after a period of 30 years, the population size of the SPA is expected to be between **80.6 and 92.58 %** of what it would have been in the absence of the development. Therefore, we consider there is an AEOI due to the impact of displacement mortality on the Guillemot population of the Flamborough and Filey Coast SPA. We therefore agree with the Applicant's conclusion in this respect.

- 4.15. Within the range of likely mortalities derived using the methods advocated by Natural England and the RSPB, the impacts arising through displacement and barrier effects associated with Dogger Bank South East and West in combination with other offshore wind farms are predicted to result in the annual population growth rate of Razorbill at the **Flamborough to Filey Coast SPA** declining, with a ratio of impacted to unimpacted population growth rate of between 0.9963 and 0.9987. This means that after a period of 30 years, the population size of the SPA is expected to be between **89.06 and 95.92 %** of what it would have been in the absence of the development. Therefore, we consider there is an AEOI due to the impact of displacement mortality on the Razorbill population of the Flamborough and Filey Coast SPA.

Impact assessment – methodological concerns

- 4.16. The RSPB's key concerns with the impact assessment relate to:
- the application of a macro avoidance correction to Gannet collision risk modelling;
 - Approach to the apportioning of Gannets to the Forth Islands SPA;
 - Digital Aerial Survey;
 - an inadequate consideration of impacts compounded by Highly Pathogenic Avian Influenza; and
 - Approach to non-measurable "de minimis" impacts.
- 4.17. In addition, we have noted other concerns in relation to:
- Population Viability Analysis; and
 - The use of prejudicial language.

The application of a macro avoidance correction to Gannet collision risk modelling

- 4.18. The Applicant has applied a reduction of 70% to the baseline densities inputted into the Gannet collision risk modelling in order to account for macro-avoidance. This approach follows suggestions in Cook (2021)²⁸ and Pavat et al., (2023)²⁹. However, while, Natural England support this approach, it is not accepted by all the Statutory Nature Conservation Organisations (JNCC et al, 2024)³⁰ and the RSPB disagree for reasons given below. The RSPB

²⁸ Cook (2021) Additional analysis to inform SNCB recommendations regarding collision risk modelling. BTO Research Report 739.

²⁹ Pavat, D., Harker, A. J., Humphries, G., Keogan, K., Webb, A., & Macleod, K. (2023). Consideration of avoidance behaviour of northern gannet (*Morus bassanus*) in collision risk modelling for offshore wind farm impact assessments. Report to Natural England by HiDef Aerial Surveying Limited.

³⁰ JNCC, Natural England, Natural Resources Wales, NatureScot. 2024. Joint advice note from the Statutory Nature Conservation Bodies (SNCBs) regarding bird collision risk modelling for offshore wind developments. JNCC, Peterborough.

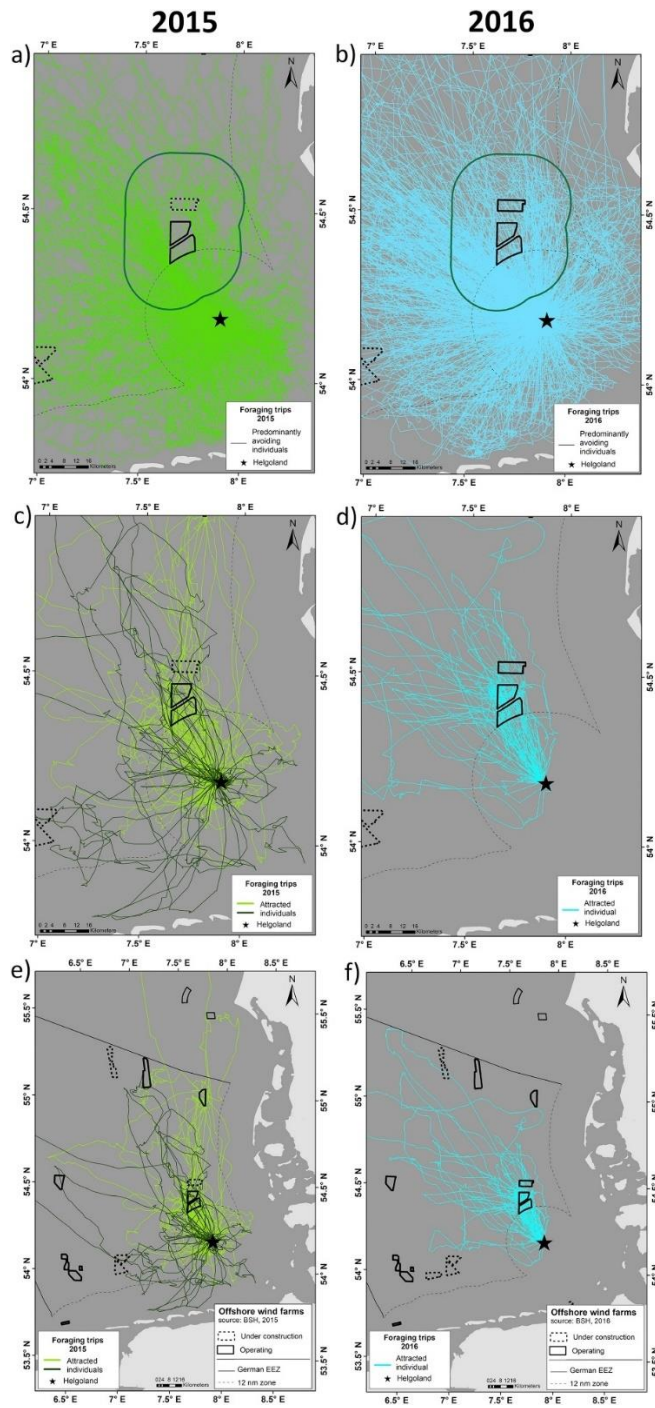
acknowledge that the Applicant has presented the results of Collision Risk Modelling without the application of macro-avoidance correction factor. However, these outputs are not taken forward to further assessment of the significance of impacts.

- 4.19. The current evidence of a strong macro avoidance of wind farms by gannets, established from observed behaviour, is almost entirely derived from non-breeding birds³¹. The evidence for macro avoidance during the breeding season is limited with the exception of a study of gannets breeding on Helgoland³² in the German North Sea. However, it is unclear from this study what the breeding status of the tracked birds was, or how their behaviour differed from what would have been expected pre-construction as two of the three wind farms were already operational during the first year of tracking. What the study does clearly show is that breeding gannets do fly through offshore wind farms, often showing no avoidance behaviour at all. Below we reproduce Figure 2 from this paper showing tracked Gannets' movements in respect to wind farms. While some show clear avoidance others do not and may even be attracted to the wind farm.
- 4.20. In the Cook (2021) report that suggests the application of macro avoidance to baseline densities, the suggestion is based on reviews that do not include this German tracking study, although it does acknowledge that it shows clear differences between individuals in relation to their response to wind farms. The previous Gannet recommended avoidance rate was based on 'all gulls' data because no Gannet data were available. The evidence of macro avoidance of gulls in response to wind farms is equivocal, so this rate was only calculated from 'within wind farm' avoidance. As Gannets can show macro avoidance it therefore was suggested that this was applied to the baseline densities, and then collision risk modelling was carried out using the 'all gull' avoidance rate, so effectively applying avoidance twice.

³¹ Dierschke, V., Furness, R. W., Garthe, S. 2016. Seabirds and offshore wind farms in European waters: Avoidance and attraction. *Biological Conservation*, 202, 59–68.

³² Peschko, V., Mendel, B., Merker, M., Dierschke, J., Garthe, S. 2021. Northern gannets (*Morus bassanus*) are strongly affected by operating offshore wind farms during the breeding season. *Journal of Environmental Management*. 279.

“Figure 2”: from Peschko et al 2021³³ showing flight of tagged birds from Heligoland (indicated by a star) in the vicinity of wind farms (outlined in black). Original figure legend is: “Flight behaviours of gannets tagged in 2015 (n = 10) (a) and 2016 (n = 15) (b) that ‘predominantly avoided’ the OWFs (all individuals shown in the same colour). Gannets tagged in 2015 (n = 2) (c) and 2016 (n = 1) (d) that were classified as ‘attracted individuals’ (individuals shown in different colours). (e) & (f) Large-scale movements of individuals shown in (c) and (d). OWFs: dashed black = under construction, solid black = operating, dark green line = 15 km buffer applied for PPM analysis.”



³³ Peschko, V., Mendel, B., Merker, M., Dierschke, J., Garthe, S. 2021. Northern gannets (*Morus bassanus*) are strongly affected by operating offshore wind farms during the breeding season. *Journal of Environmental Management*. 279

- 4.21. The RSPB does not agree with the macro-avoidance correction factor for two reasons. Firstly, it does not take into account the likely seasonal variation in macro avoidance. During the breeding season, Gannets are constrained to act as central placed foragers meaning they return to the colony after feeding in order to maintain territories, incubate eggs and provide for chicks. Once chicks have fledged adult Gannets remain at sea and no longer visit the colony. Differences in behaviour between the breeding and non-breeding season are likely to result in changes in avoidance behaviour.
- 4.22. There is evidence that the foraging movements and behaviour of Gannets will vary in relation to stage of the breeding season in response to changes in the distribution and abundance of prey and changing constraints as they progress from pre-laying to chick-rearing³⁴. GPS tracking of Gannets breeding on the Bass Rock between 2010 and 2021 has shown variation in the two-dimensional foraging behaviour of birds across the breeding season (prior to chick-rearing and during chick-rearing), between sexes, and between years^{35,36,37}. Three-dimensional tracking of gannets during chick-rearing has also revealed that flight height and flight speed both vary according to behaviour, sex and wind conditions^{38,39,40} and similar patterns have been recorded in other seabirds⁴¹ Because any error in the use of flight height and flight speed as input parameters in the sCRM should be corrected for in the use of the Avoidance Rate, any seasonal variation in these parameters should also be reflected in variation in the Avoidance Rate, in the absence of any actual evidence from the breeding season.
- 4.23. The second reason why the RSPB disagree with this approach is that, as well as applying the macro-avoidance correction factor, it relies on a ‘within wind farm’ avoidance rate based on the ‘all gull’ rate, thereby assuming that Gannets will have the same ‘within wind farm’ reactive flight response as gulls. This assumption is very unlikely to be met, as Gannets have much lower flight manoeuvrability than gulls. This will result in a lesser ability to make rapid reactions and consequently have a greater risk of collision.

³⁴ Lane, J.V., Jeavons, R., Deakin, Z., Sherley, R.B., Pollock, C.J., Wanless, R.J., Hamer, K. C., 2020. Vulnerability of northern gannets to offshore wind farms; seasonal and sex specific collision risk and demographic consequences. *Marine Environmental Research*. 162.

³⁵ Cleasby, I.R., Wakefield, E.D., Bodey, T.W., Davies, R.D., Patrick, S.C., Newton, J., Votier, S.C., Bearhop, S., Hamer, K.C. 2015a. Sexual segregation in a wide-ranging marine predator is a consequence of habitat selection. *Marine Ecology Progress Series*, 518, 1-12.

³⁶ Lane, J.V., Jeavons, R., Deakin, Z., Sherley, R.B., Pollock, C.J., Wanless, R.J., Hamer, K. C., 2020. Vulnerability of northern gannets to offshore wind farms; seasonal and sex specific collision risk and demographic consequences. *Marine Environmental Research*. 162.

³⁷ Lane, J.V. and Hamer, K.C. 2021. Annual adult survival and foraging of gannets at Bass Rock, Scotland: Report to the Ornithology subgroup of the Forth and Tay Regional Advisory Group (FTRAG-O) – October 2021

³⁸ Cleasby, I.R., Wakefield, E.D., Bearhop, S., Bodey, T.W., Votier, S.C., Hamer, K.C., 2015b. Three-dimensional tracking of a wide-ranging marine predator: flight heights and vulnerability to offshore wind farms. *Journal of Applied Ecology*, 52, 1474–1482

³⁹ Lane, J.V., Spracklen, D.V., Hamer, K.C., 2019. Effects of windscape on three-dimensional foraging behaviour in a wide-ranging marine predator, the northern gannet. *Marine Ecology Progress Series*, 628, 183–193.

⁴⁰ Lane, J.V., Jeavons, R., Deakin, Z., Sherley, R.B., Pollock, C.J., Wanless, R.J., Hamer, K. C., 2020. Vulnerability of northern gannets to offshore wind farms; seasonal and sex specific collision risk and demographic consequences. *Marine Environmental Research*. 162.

⁴¹ Masden, E.A., Cook, A.S.C.P., McCluskie, A., Bouten, W., Burton, N.H.K, Thaxter, C. 2021. When speed matters: the importance of flight speed in an avian collision risk model. *Environmental Impact Assessment Review*, 90

- 4.24. Any evidence of macro avoidance should also be seen in the context of the recent work in Belgian offshore windfarms that has shown potential habituation to the presence of turbines. This effectively results in lower macro avoidance and so an elevated risk of collision. It is also important to acknowledge that corpses of Northern Gannets with injuries consistent with collisions with offshore wind farms have been recovered (Rothery et al., 2009⁴²), and the imperfect detection of these corpses indicate that there may be many more.

Approach to the apportioning of Gannets to the Forth Islands SPA.

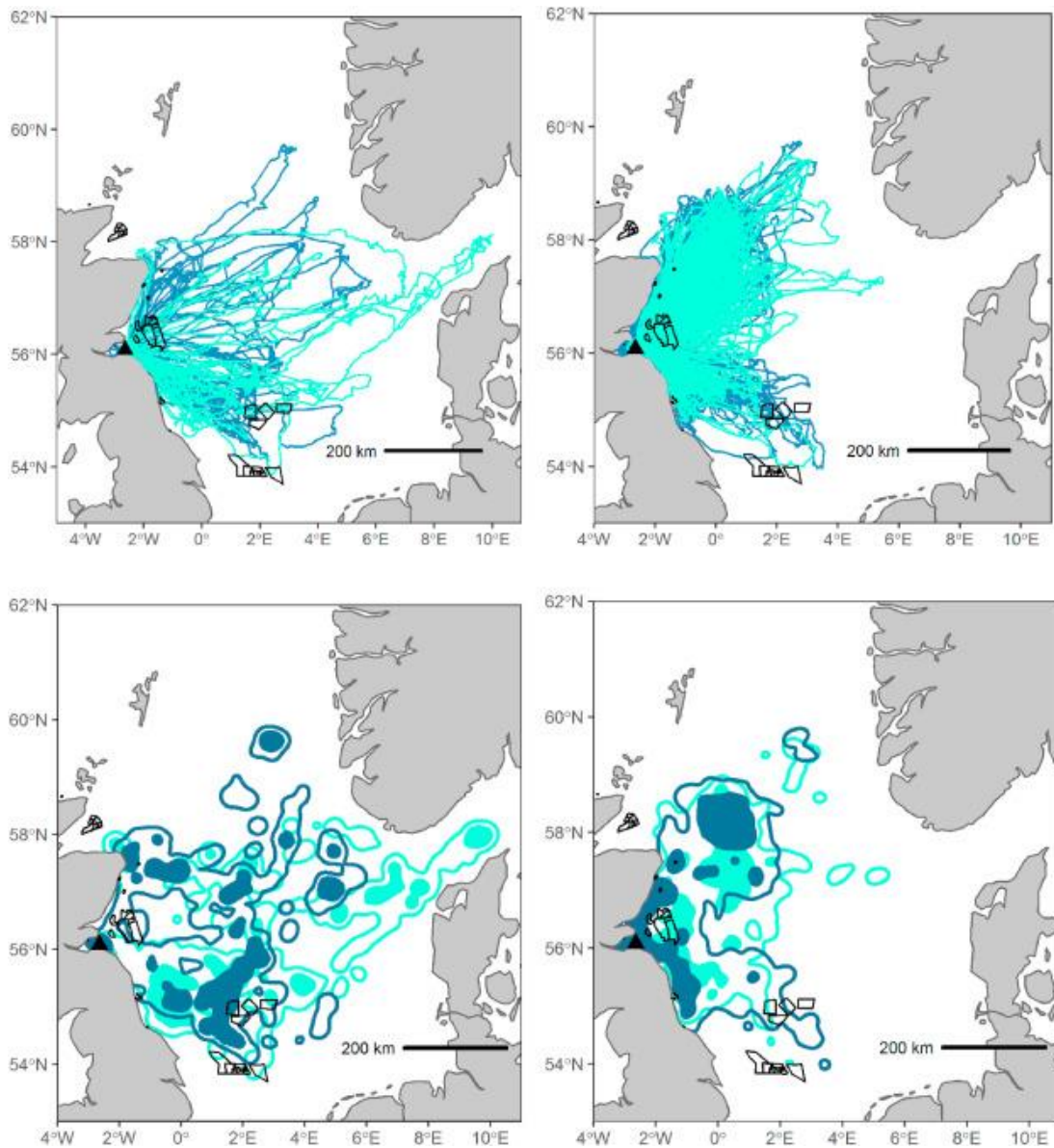
- 4.25. For the assessment of impacts on the Gannet population of the Forth Islands SPA in the RIAA (APP-048), the Applicant has excluded any impacts during the breeding season, arguing that 100% of the birds present will originate from the Flamborough and Filey Coast SPA. In support of this, the Applicant cites tagging studies included in Wakefield *et al.*, (2013)⁴³. However more recent studies have tagged Gannets from the Bass Rock, (e.g. Lane *et al.*, 2019⁴⁴) part of the Forth Islands SPA, and recorded Gannets breeding on the Bass Rock flying into the Application footprint. The maps presented in this study are shown below.

⁴² Rothery, P., Newton, I., & Little, B. (2009). Observations of seabirds at offshore wind turbines near Blyth in northeast England. *Bird Study*, 56(1), 1-14.

⁴³ Wakefield, E.D., Bodey, T.W., Bearhop, S., Blackburn, J., Colhoun, K., Davies, R., Dwyer, R.G., Green, J.A., Grémillet, D., Jackson, A.L. and Jessopp, M.J., 2013. Space partitioning without territoriality in gannets. *Science*, 341(6141), pp.68-70

⁴⁴ Lane, J. V., Jeavons, R., Deakin, Z., Sherley, R. B., Pollock, C. J., Wanless, R. J., & Hamer, K. C. (2020). Vulnerability of northern gannets to offshore wind farms; seasonal and sex-specific collision risk and demographic consequences. *Marine Environmental Research*, 162, 105196.

Fig. 1. From Lane et al 2019. Original legend reads “(Top) foraging tracks and (bottom) utilization distributions (UDs) of female (green) and male (blue) gannets tracked from Bass Rock (black triangle) (left) prior to chick hatching (pooled data for 2017–2019) and (right) during chick-rearing (pooled data for 2015–2019). UD are based on active foraging locations and shading denotes UD contours (filled, 50%; unfilled, 95%). Wind farm sites are outlined in black.”



- 4.26. Due to this exclusion, the RSPB are unable to reach conclusions as to the significance of impacts on the Gannet component of the Forth Islands SPA.

Digital Aerial Survey.

- 4.27. The RSPB are content that digital aerial surveys can provide useful data in order to provide baseline characterisation of an offshore wind farm footprint. This position is informed by the

recent review carried out by a sub-group of the NatureScot Scientific Advisory Committee⁴⁵ which made specific recommendations with regard to the presentation of results, including the full methodological detail that needs to be provided alongside the outputs. The details the Applicant has provided are scant. In particular, but not exclusively there is:

- insufficient consideration of potential biases in the survey and analysis methods. For example these could be biases arising from both the camera system, such as imperfect detection of smaller species, or from the imperfect identification by the surveyor of the digital images. Any biases such should have been carefully described;
- there is no consideration of potential response of birds to disturbance arising from the survey e.g. from aircraft shadow. This could be behavioural responses such as flight take off rate or diving rate, that would have implications for the accuracy of the assessment;
- there is insufficient detail provided as to how spatial autocorrelation has been evaluated and if necessary accounted for. Spatial autocorrelation in this instance is the correlation among values of a count variable strictly attributable to their relatively close locational positions, introducing a deviation from the assumption of independent observation. The assessment should explicitly demonstrate an analysis of the data showing whether spatial auto-correlation is present or not;
- there is no rationale provided as to why a grid rather than transect survey design has been used. Both survey designs are commonly used in the assessment of the impacts of offshore wind farms, and both have strengths and weaknesses. Detail is required as to why a grid design was used for this assessment;
- there is no detail given of any independent validation of identification and detection rates. While it is clear that this validation is carried out as part of the internal quality assurance procedures of the survey providers, no detail of any independent external quality assurance appears to have been carried out.
- No details of the timings of surveys has been provided. This detail is crucial in understanding whether the surveys have adequately captured any diel variation in bird activity.

Inadequate consideration of impacts compounded by Highly Pathogenic Avian Influenza

- 4.28. The current H5N1 strain of Highly Pathogenic Avian Influenza (HPAI) has affected UK wild bird populations on an unprecedented scale since it was first recorded in the country in Great Skuas in summer 2021, with seabirds and waterfowl particularly affected. The extent of reported mortalities attributed to HPAI in the UK and across Europe in 2022 demonstrated that HPAI had become one of the biggest immediate conservation threats faced by multiple seabird species, including some for which the UK population is of global importance. Many species impacted by HPAI are of conservation concern in the UK, and the outbreak comes on top of widespread declines reported by the latest seabird census

⁴⁵ <https://www.nature.scot/doc/offshore-wind-ornithological-impact-assessment-review-digital-aerial-survey-methods>

(Burnell et al, 2023)⁴⁶. RSPB conducted a repeat census in 2023 to determine the scale of impact of the outbreak on seabird populations, which for multiple species showed a decrease of >10% in overall counts across all UK sites that were surveyed in 2023. A further outbreak of HPAI in 2023, which largely occurred after the counts were undertaken, means that impacts of HPAI on the breeding populations of affected species is likely to be worse than indicated in the report. There remains the potential for ongoing impacts as the disease progresses.

- 4.29. The impacts of HPAI and thus reductions in colony sizes may be manifested through the direct effects of mortality or the indirect effects arising through physiological constraints due to infection. These could arise for example, through impaired foraging ability or lower productivity. The severity and rate of recovery from these effects will determine the utilisation of space by seabird populations and consequently their interactions with wind farms. As well as changes to population numbers, HPAI infection is likely to cause variation in space use over time between individual birds and colonies, in part due to a likely decrease in competition, but also potentially related to physiological changes, such as in vision and fitness. This change in space use will be reflected in changes in the extent of interactions with wind farms, and in the lethal and sub-lethal consequences of those interactions. Recent research into the impact of the 2022 HPAI outbreak on Gannet movements and space use has revealed that surviving Gannets instigated unprecedented long-distance exploratory movements during the outbreak, likely as a short-term response to HPAI-related disturbance (Jeglinski et al. 2023⁴⁷). Breeding Gannets tracked several months following the outbreak showed a high degree of breeding colony fidelity and foraging time budgets that are characteristic for the species, but birds showed reduced foraging effort, that is foraging trips were shorter in duration, and in maximal and total distance travelled, compared to data from previous years, likely because of reduced competition (Gremillet et al. 2023⁴⁸).
- 4.30. As a consequence of these, the RSPB request that the following consequences of the HPAI outbreak are explicitly considered in the Applicant's subsequent submissions to the examination:
- Consideration of how the HPAI outbreak will influence the representativeness of the baseline characterisation. This should include the direct influence of population size and through changes in space use;
 - Alterations of the extent of interactions with wind farms, potentially related to physiological changes, and in the lethal and sub-lethal consequences of those interactions; and
 - Consequences in changes in the robustness of protected population to additional mortality arising through the presence of wind farms.

⁴⁶ Burnell, D., Perkins, A.J., Newton, S.F., Bolton, M, Tierney, T.D. & Dunn, T.D. 2023. Seabirds Count, A census of breeding seabirds in Britain and Ireland (2015–2021). Lynx Nature Books, Barcelona

⁴⁷ Jeglinski, J.W., Lane, J.V., Votier, S.C., Furness, R.W., Hamer, K.C., McCafferty, D.J., Nager, R.G., Sheddan, M., Wanless, S. and Matthiopoulos, J., 2024. HPAIV outbreak triggers short-term colony connectivity in a seabird metapopulation. *Scientific Reports*, 14(1), p.3126

⁴⁸ Grémillet, D., Ponchon, A., Provost, P., Gamble, A., Abed-Zahar, M., Bernard, A., Courbin, N., Delavaud, G., Deniau, A., Fort, J. and Hamer, K.C., 2023. Strong breeding colony fidelity in northern gannets following high pathogenicity avian influenza virus (HPAIV) outbreak. *Biological Conservation*, 286, p.110269.

- 4.31. It is currently unclear what the ultimate population scale impacts of the outbreak will be, but it is likely that they will be severe. This scale of impact means that seabird populations will be much less robust to any additional mortality arising from offshore wind farm developments. It also means that there may need to be a reassessment of whether SPA populations are in Favourable Conservation Status. With such uncertainty as to the future of these populations, there is the need for a high level of precaution to be included in examination of impacts arising from the proposed development. This caution must also be applied to claims on the potential success of proposed compensation measures.
- 4.32. The RSPB does not consider that these concerns have been adequately considered in the Assessment.

Approach to non-measurable “*de minimis*” impacts

- 4.33. The Applicant appears to be suggesting that, at the appropriate assessment stage, small scale negative impacts should be regarded as not measurable and therefore should be ignored in determining whether or not AEOI has been avoided due to in-combination impacts. To determine whether the impact is detectable, the Applicant uses the 1% of background adult mortality rate threshold recommended by Natural England for impacts considered large enough for further investigation. It is not a threshold for detectability and should not be used for this purpose. To do so is equivalent to “*de minimis*” arguments that have been put in other offshore windfarm applications and the RSPB disagrees with these.
- 4.34. To us it is clear that the ‘*de minimis*’ concept may be engaged when considering whether an appropriate assessment is required under regulation 63: it is part and parcel of the consideration of whether the project is likely to have “significant” effects on the designated site. What is less clear, however, is whether and, if so, how, any such concept may be brought into effect at the second stage of appropriate assessment. In this context, it is worth highlighting that the language used in the case-law generally is the need, under regulation 63 for the competent authority to be satisfied to the requisite degree of certainty as to the “absence” of adverse effects on the integrity of the site. We therefore question whether it is open to the competent authority to decide there would be some adverse effects on the integrity of a designated site, but because those effects were “*de minimis*” that consent could still be granted under regulation 63.
- 4.35. The Applicant incorrectly uses 1% as a threshold of detectability, whereby if an impact on a SPA population through the project alone is below 1% adult mortality rate, the impact is not to be considered in-combination with other projects. Irrespective of the *de minimis* point above, any threshold of scale of impact should be set against the total in-combination impact and Population Viability Analysis (PVA) carried out if this total impact is greater than the threshold. This is the approach the Applicant appears to advocate in paragraph 4 of the RIAA (APP-048), “Both forms of assessment (the 1% mortality test and PVA) have been conducted for Project alone, and in-combination effects”. This is not the case: the 1% mortality test has not been carried out for in-combination effects in the majority of cases.
- 4.36. The RSPB note that in the guidance given by NatureScot to support the assessment of offshore wind farm impacts in Scotland, the threshold for triggering a PVA is a 0.02 percentage point change in adult mortality rate, considerably lower than that advised by

Natural England, and demonstrating a higher degree of precaution. While we do not contest the thresholds set by Natural England, at the minimum, impacts on Scottish protected sites should be assessed using the recommendations of the appropriate statutory agency.

- 4.37. Due to these issues, for a number of species and SPAs, the RSPB does not consider a complete assessment has been carried out and therefore are unable to reach conclusions as to the significance of impacts.
- 4.38. The Applicant also fails to carry out PVA or in-combination assessment where the maximum value of the range of predicted impacts on background mortality exceeds the 1% threshold.

Other concerns

Population Viability Analysis

- 4.39. The Applicant repeatedly asserts that their preferred output of the Population Viability Analysis carried out in order to describe the potential population scale consequences of the impacts arising through the development is the Counterfactual of Population Growth Rate (CPGR) and critiques the use of the Counterfactual of Population Size (CPS). The RSPB prefers that the two metrics presented in combination, as this was a specific recommendation of a review of output metrics, following work by the RSPB⁴⁹, commissioned by Joint Nature Conservation Committee (JNCC) and carried out by the British Trust for Ornithology (BTO)⁵⁰. That review recommended the ratio of growth rates are presented to quantify the consequence of impacts at a population level and the ratio of population sizes to present these impacts in an easily understandable context. A further review was commissioned by Marine Scotland Science and carried out by the Centre for Ecology and Hydrology, and the conclusions as to utility of output metrics was similar⁵¹.
- 4.40. The ease of understanding of the CPS is crucial to its utility; the numbers given by the CPGR are less understandable outwith a population modelling context. To use the theoretical example quoted by the BTO, a CPS of 0.515 means the population size of a Breeding Colony is expected to be 51.5% (i.e. half) of what it would have been in the absence of the development after 25 years, which is easy to understand. Whereas the corresponding CPGR, 0.973, means that the annual population growth rate at the breeding colony declines from 0.994 to 0.967. The actual scale of the consequence of this is hard for a non-specialist to comprehend, that of the CPS is not.
- 4.41. As such, it is wrong to disassociate the two metrics; aside from the question of comprehension, they are very similar, the only key difference is that CPGR does not include the length of time that the wind farm will be operational. This is crucial as there is considerable uncertainty surrounding most of the aspects of an assessment of the potential impacts of an offshore wind farm. However, the length of time that the development is operational is one of the few aspects not subject to this uncertainty as it is legally fixed. It is

⁴⁹ Green, R. E., Langston, R. W., McCluskie, A., Sutherland, R., & Wilson, J. D. 2016. Lack of sound science in assessing wind farm impacts on seabirds. *Journal of Applied Ecology*, 53(6), 1635-1641.

⁵⁰ Cook A.S.C.P., and Robinson R.A. (2016) Testing sensitivity of metrics of seabird population response to offshore wind farm effects. JNCC report no. 553

⁵¹ Jitlal, M., Burthe, S., Freeman, S., Daunt, F. 2017. Testing and Validating Metrics of Change Produced by Population Viability Analysis (PVA). *Scottish Marine and Freshwater Science* Vol 8 No 23.

also a crucial consideration into the scale of impact. Therefore, the effect of using CPGR in isolation is to remove important contextual information, operational time, complicating the interpretation of impact, thereby increasing uncertainty and the need for precaution.

The use of prejudicial language

- 4.42. The RSPB is concerned with the prejudicial use of language throughout the assessment, whereby recommended methods and parameters are described as, for example, “overly precautionary”. This concern is also highlighted by Natural England in their Relevant Representation (RR-039). Where this language has been used, it is in cases that the assessment has been carried out using the SNCB recommended methods and parameters and these parameters are described as “worse case scenario”. These have been drawn up in consultation with leading experts and we consider it inappropriate to constantly undermine and challenge these recommendations while presenting the Applicant’s own preferred methods as the most accurate and as “evidence led”. The SNCB guidance is designed to be suitably precautionary, particularly in the context of the huge amount of uncertainty inherent in the assessment process; it is not set out to be overly precautionary and is revised considering any new evidence. The Applicant does not present any new evidence that has not been considered by the SNCBs.
- 4.43. As set out in Searle et al (2023a)⁵², assessing impacts of offshore windfarms and other renewables developments is inherently uncertain. This uncertainty is propagated throughout the impact assessments, as there are not only direct impacts, but ecosystem wide impacts that can change, for example, the abundance and availability of prey. Multiple data sources and modelling techniques are used to capture a simplified version of reality. They do not fully capture the complexity of seabird behavioural or demographic processes in an inherently dynamic marine environment.
- 4.44. It is therefore vital that the precautionary approach required by the Habitats Regulations is taken. This means if scientific data is incomplete or hard to get and it is not possible to complete a full evaluation of all possible or potential risks an activity/development may cause, account should be taken of all possible harm. Potential harm should not be dismissed due to the lack of scientific data.
- 4.45. Importantly, the precautionary principle requires the Applicant to demonstrate with scientific certainty that something would not be harmful. The concept of something being overly precautionary dismisses the inherent uncertainty in modelling and overlooks the simplistic version of reality that the modelling captures. Conversely, the use of prejudicial language acts to increase the overall uncertainty in the assessment, by creating “linguistic uncertainty” that is additive to the overall uncertainty in the assessment.
- 4.46. This prejudicial language is particularly apparent in the assessment of distributional responses (displacement and barrier effects). The Applicant has identified that a wide range of rates of displacement have been recommended for use in assessment, and also present

⁵² Searle, K. R., S. H. O'Brien, E. L. Jones, A. S. C. P. Cook, M. N. Trinder, R. M. McGregor, C. Donovan, A. McCluskie, F. Daunt, and A. Butler. "A framework for improving treatment of uncertainty in offshore wind assessments for protected marine birds." *ICES Journal of Marine Science* (2023): fsad025.

their own preferred rates. A range of values have been identified in studies and the variation in these may be due to a range of factors, but it is likely the main driver will be the inherent dynamism of the marine environment. As such, reliance on studies carried out at a single site, should be avoided. For example, Trinder *et al.*, (2024)⁵³ reported no displacement of auk species within a single site, Beatrice wind farm in the Moray Firth, whereas a recent peer reviewed study across 15 sites with auks present, reported that 65% of these studies detected an effect⁵⁴. This range of responses increases the uncertainty inherent in the assessment, and should be reflected in a proportionate degree of precaution applied to the conclusions.

- 4.47. The Applicant fails to mention that mortality rates used in the displacement assessment may be under precautionary. Mortality rate can be considered to be the number of birds subject to displacement or barrier effects that will die as a consequence of those effects. The metric is applicable only to fully sized individuals and as such, the method does not account for any effects of breeding success. For long lived, low fecundity species like seabirds, the most likely response to additional stressors during the breeding season is the abandonment of a breeding attempt, or chick death through poor attendance. As such, the omission of chick mortality can be seen as a major limitation of the Applicant's approach and demonstrates the need to take a precautionary approach in determining the range of mortalities that may arise through distributional responses the presence of a wind farm.
- 4.48. The presentation of a range of displacement and mortality rates, as advocated by Natural England, can be considered to be the most appropriate way to describe the uncertainty inherent in the assessment of distributional responses to offshore wind farms. As such, it is entirely wrong to characterise it as overly precautionary.

⁵³ Trinder, M., O'Brien, S. H., & Deimel, J. (2024). A new method for quantifying redistribution of seabirds within operational offshore wind farms finds no evidence of within-wind farm displacement. *Frontiers in Marine Science*, 11, 1235061.

⁵⁴ Lamb, J., Gulka, J., Adams, E., Cook, A., & Williams, K. A. (2024). A synthetic analysis of post-construction displacement and attraction of marine birds at offshore wind energy installations. *Environmental Impact Assessment Review*, 108, 107611.

5. Derogation case: the RSPB’s approach to evaluating compensation measures under the Conservation of Habitats and Species Regulations 2017 (as amended)

Introduction

5.1. This section sets out the RSPB’s approach to evaluating compensation measures. It includes our general approach to assessing compensation proposals and the level of detail we consider is required in order to evaluate compensation proposals as part of the Examination process, before drawing out some general issues raised by the Applicant’s proposals. We have set it out under the following headings:

- The RSPB’s approach to assessing compensation proposals;
- What level of detail is required on proposed compensation measures?
- Generic issues raised by the Applicant’s compensation proposals:
 - Lack of specific proposals and locations for compensation measures;
 - Scale of compensation;
 - Lead-in times for compensation; and
 - Lifetime of compensation in relation to damage.

5.2. Section 6 following sets out the RSPB’s detailed comments on the Applicant’s specific compensation proposals.

The RSPB’s approach to assessing compensation proposals

5.3. The RSPB has reviewed both the EC⁵⁵ and Defra⁵⁶ guidance on compensatory measures. Both are in broad alignment as to the principles to adopt when considering compensatory measures. This review also draws on the RSPB’s over 20 years experience evaluating and negotiating compensation proposals under the Habitats Regulations by developers across various sectors. As the EC Guidance is fuller, we have used that as our primary reference, while drawing out any additional points made in the Defra guidance since it is UK focused.

5.4. We have specifically not referred to the consultation draft document from Defra entitled “Best practice guidance for developing compensation measures in relation to Marine Protected Areas” published in July 2021 due to it still being a draft produced for consultation and yet to be finalised.

5.5. In Table 1, we summarise the EC’s criteria for designing compensatory measures and annotate them with additional commentary based on the RSPB’s experience of the principles that should be applied when assessing compensatory measures. We will use the combination of the EC guidance and the RSPB’s experience in this field to assess compensatory measures put forward by scheme proponents.

⁵⁵ [EC \(2018\) Managing Natura 2000 sites](#) – The provisions of Article 6 of the ‘Habitats’ Directive 92/43/EEC (21/11/18) C(2018) 7621 final. Due to the further details this EU guidance provides, we believe it is important to also consider along with the Defra guidance

⁵⁶ Defra (2021) <https://www.gov.uk/guidance/habitats-regulations-assessments-protecting-a-european-site>. Accessed January 2025.

Table 1: Criteria for designing compensatory measures

| EC criteria | EC guidance summary (emphasis added) | RSPB additional commentary |
|------------------|---|--|
| Targeted | <p>Measures should be the most appropriate to the impact predicted and focused on objectives and targets addressing the Natura 2000 elements affected.</p> <p>Must refer to structural and functional aspects of site integrity and habitats/species affected.</p> <p>Must consist of ecological measures: payments to individuals/funds are not appropriate.</p> | <p>Clear objectives and success criteria must be established for the compensation measures.</p> <p>Must address the ecological functions and processes required by impacted species/habitat. Requires shared understanding and agreement on what the impacts are i.e. need to agree nature, magnitude including that they will continue for as long as the project's impacts. This includes the time likely to be required for the SAC/SPA to recover from those impacts in the case of proposals that are in place for a specified time period.</p> <p>This is in order to define objectives for compensation measures and to set out the success criteria to determine whether those objectives have been/are being achieved.</p> |
| Effective | <p>Based on best scientific knowledge available alongside specific investigations for the location where the measures will be implemented.</p> <p>Must be feasible and operational in reinstating the conditions needed to ensure the overall coherence of the Natura 2000 network.</p> <p>Measures where no reasonable guarantee of success should not be considered. The likely success of the compensation scheme should influence final approval of the plan or project in line with the prevention principle.</p> <p>The most effective option, with the greatest chance of success, must be chosen.</p> <p>Detailed monitoring required to ensure long-term effectiveness with remediation provisions if shown to be less effective.</p> | <p>Scientific evaluation of proposed measures must be carried out before consent is granted to avoid agreeing to measures that is/are not effective or technically feasible. This should include appropriate baseline survey and assessment.</p> <p>Compensation must address the impacted SPA/SAC (or Ramsar site) feature to ensure overall coherence of the network for that feature is maintained. Substitution is not acceptable.</p> <p>Must be clearly defined timescales for delivery and measuring success (See success criteria under Targeted above).</p> <p>Monitoring must directly relate to the target species or habitat and the relevant ecological functions and processes.</p> <p>The compensation measures should be provided in perpetuity in line with obligations to ensure the overall coherence of the National Site Network is maintained.</p> |

| EC criteria | EC guidance summary (emphasis added) | RSPB additional commentary |
|------------------------------|---|--|
| | | Where it is not possible to devise compensatory measures to offset the adverse effects on site integrity, the project should not proceed. |
| Technical feasibility | Design must follow scientific criteria and evaluation in line with best scientific knowledge and take into account the specific requirements of the ecological features to be reinstated. | See Effective above. |
| Extent | Extent required directly related to: <ul style="list-style-type: none"> - the quantitative and qualitative aspects inherent to the elements of integrity likely to be impaired - estimated effectiveness of the measure(s) <p>Therefore, ratios best set on a case-by-case basis. Ratios should generally be well above 1:1. Ratios of 1:1 or below only considered when shown measures will be fully effective in reinstating structure and functionality in a short period of time.</p> | Based on an assessment of the necessary ecological requirements to restore species' populations and the related habitat structure and functions identified in the compensation objectives. Determining the minimum appropriate quantity will require an understanding of the quality of the compensation measures and how effective they will be in reinstating the required structures and functions. Any identified uncertainty in success should be factored in to increased ratios. Ratios need to be used where they make ecological sense and will help secure a successful outcome by providing more of something. Simply multiplying capacity to address uncertainty risks giving a false level of confidence. If there is no reasonable guarantee of success that measure should not be considered (see Effective under EC criteria). |
| Location | Located in areas where they will be most effective in maintaining overall coherence of the Natura 2000 network. Pre-conditions to be met include: <ul style="list-style-type: none"> - must be within same range/ migration route/wintering areas for bird species and provide functions comparable those justifying selection of original site esp. geographical distribution; - must have/be able to develop the ecological structure and functions required by the relevant species (or habitat) - must not jeopardise integrity of any other Natura 2000 site. <p>Spatial search hierarchy starting as close as possible to the impacted Natura 2000 site and working out from there.</p> | While the preference is for compensation measures as geographically close to the location of the damage, it is important to consider whether or not the compensation measures will be subject to pressures impacting their efficacy in that location e.g. prey availability, disturbance, and/or other impacts from the same or similar developments such as collision risk or displacement due to offshore wind farms. Therefore, compensation measures should be located so as to maximise proximity while minimising external pressures that may reduce likelihood of success. |

| EC criteria | EC guidance summary (emphasis added) | RSPB additional commentary |
|---------------------------------|---|--|
| | | Compensation measures proposed to benefit one SPA/SAC/Ramsar site feature must not result in damage to the integrity of any other SPA/SAC/Ramsar site and their features. |
| Timing | <p>Case by case approach but must provide continuity in the ecological processes essential to maintain the structure and functions that contribute to the Natura 2000 network coherence.</p> <p>Requires tight co-ordination between implementation of the plan or project and the compensation measures.</p> <p>Factors to consider include:</p> <ul style="list-style-type: none"> - no irreversible damage to the site before compensation in place - compensation operational at the time damage occurs. If not possible, over-compensation required - time lags only admissible if will not compromise objective of “no net loss” to coherence of Natura 2000 network; - May be possible to scale down in time depending on whether the negative effects are expected to arise in short, medium or long term. <p>All technical, legal or financial provisions must be completed before plan or project implementation starts to prevent unforeseen delays that compromise effective compensation measures.</p> | <p>Compensation measures should be fully functional before any damage occurs to ensure the overall coherence of the National Site Network is protected. This requires careful alignment of the timelines for implementing the plan or project and the compensation measures.</p> <p>Suggested time lags in delivering fully functional compensation will need to be carefully considered and can only be accepted where this will not compromise the continuity of essential ecological processes,</p> <p>Any effect of delay should be factored into the design and additional compensation measures provided (see also Extent above).</p> |
| Long-term implementation | Legal and financial security required for long-term implementation and for protection, monitoring and maintenance of sites to be secured before impacts occur. | <p>Legal rights to secure and implement the compensation measures must be in place prior to consent being granted.</p> <p>And robust financial guarantees are required to fund implementation, monitoring and any necessary remediation measures.</p> <p>In line with Government policy, the Government should commit to including compensation measures, once delivered, within the National Site Network.</p> |

5.6. The current Defra guidance (aimed at competent authorities) reinforces some of the points above:

- Must be confident the measures will fully compensate for negative effects;
- The measure is technically feasible based on scientific evidence and previous examples;
- Whether the compensation measure is financially feasible;
- Compensation should be no more than is needed (to protect the coherence of the National Site Network);
- How the compensation will be carried out, including how it will be managed and monitored over time, and how it has been secured;
- How long the compensation measure will take to reach the required quality;
- Should make sure the compensation measures will remain in place all the time they are needed;
- Must put in place all necessary legal, technical, financial and monitoring arrangements;
- Compensation measures should usually be in place and effective before the negative effect is allowed to occur.

5.7. Overall, this can be expressed in another way to help identify ecologically effective compensation and the options to deliver it:

- **Understanding and defining what is ecologically effective compensation for a given feature** i.e. what is needed to address the ecological functions affected by the predicted impact(s) e.g. improvements in breeding productivity of an impacted seabird species;
- **Identifying the potential options** to provide ecologically effective compensation in principle and agreeing the scale of compensation required to protect the overall coherence of the National Site Network for the impacted feature taking account of the management objectives for that Network. This should consider factors affecting the likely success of the compensation measure in order to identify appropriate search criteria. In the case of seabirds, this might include avoiding proximity to current and planned offshore wind farms while ensuring access to areas with good food supply etc;
- **Applying a hierarchical search for suitable locations** to carry out those options to determine where they might be feasible. This should follow the following spatial hierarchy based on where the benefit of the compensation will accrue:
 - Provides benefit to the impacted SPA/SAC where that is appropriate given the risk factors considered above. Note: this is not the same as being located inside the MPA, which in UK MPA terms is unlikely to be feasible given the constrained boundaries usually applied i.e. all areas within the boundary are integral to its functioning already;
 - Provides benefit to a different SPA/SAC for the impacted feature;
 - A “de nouveau” site that provides benefit to the feature itself and can be added into the relevant site network once it has met its compensation objectives.

- **Detailed assessment of the feasibility of successfully delivering the chosen option** in the selected location(s). It is important to separate out the type of measure (and its ecological effectiveness as compensation) and the likelihood of it succeeding in practice at a particular location to meet the required compensation objectives. Certainty of success of a specific measure per se is not the same as whether it will be ecologically effective as compensation. However, it needs to be deemed potentially ecologically effective as compensation first before detailed options are drawn up and assessed. If it is not potentially ecologically effective as compensation, then it should not be considered further (in line with existing Defra guidance).

Additionality

5.8. The EC guidance (section 5.4.1) makes the general, overarching point that:

“Compensatory measures should be additional to the actions that are normal practice under the Habitats and Birds Directives or obligations laid down in EU law”

5.9. In practical and legal terms, this means compensatory measures must be additional to:

- Measures necessary to site management of the affected SPA or SAC e.g. to restore a designated feature to favourable status;
- Measures designed to meet other obligations e.g. achievement of Good Environmental Status (GES) under the Marine Strategy Regulations 2010.⁵⁷

What level of detail is required on proposed compensation measures?

5.10. As set out in our relevant representation, the RSPB considers that detail about the location, design, implementation, monitoring and review of any proposed compensatory measures is needed to: inform the application and examination process and enable proper public scrutiny. This should provide the Secretary of State with the necessary confidence as to whether those measures can be secured and implemented with a reasonable guarantee of success, thereby protecting the coherence of the National Site Network.

5.11. We note that these details should be settled before DCO consent is decided, and be available as part of the application documentation. This enables potential interested parties the opportunity to fully review and assess the adequacy of the compensation measures before deciding whether to formally register as an interested party and submit a relevant representation. The details include:

- Nature/magnitude of compensation: sufficient detail to enable agreement on the scale of compensation required in relation to the predicted impacts, including the detailed compensation objectives, associated success criteria and timeline;
- Location: legal securing of proposed compensation site(s) with ability to scrutinise design, potential impacts, evidence of relevant consents and relevant legal agreements to secure land;

⁵⁷ [Marine Strategy Regulations 2010. No. 1627. http://www.legislation.gov.uk/uksi/2010/1627/contents/made](http://www.legislation.gov.uk/uksi/2010/1627/contents/made) Accessed 27 January 2025.

- Monitoring and review: detailed monitoring and review packages agreed in advance including terms of reference and ways of working for any “regulators group” to oversee implementation of measure;
 - Compliance and enforcement: details and evidence of how the proposed compensation measures will be reviewed by the relevant regulator and the legal mechanisms available to those regulators to review and enforce any approved compensation plans.
- 5.12. By providing these details it should ensure these and related issues are properly addressed before the Secretary of State is required to make a decision on whether to grant DCO consent. Based on experience, we consider it important that work to agree detailed compensation objectives informs draft wording of any DCO Schedules in order to avoid subsequent ambiguity post-consent.
- 5.13. We consider it is unsafe to assume an outline compensation measure can be translated in to a detailed, workable and ecologically effective measure “on the ground” at a later date and all the necessary consents and agreements successfully secured.
- 5.14. At Annex H1 of Appendix H to its relevant representation (RR-039) Natural England has included a checklist it has developed for compensatory measure submissions. We fully support Natural England’s advice especially the approach and level of detail considered to be required as part of the application documentation. It flows from the criteria and other factors we have described above and provides a robust basis for the evidence on each proposed compensation measure that should be submitted as part of any application.
- 5.15. The criteria, guidance and associated requirements set out above will guide how the RSPB assesses the Dogger Bank South compensation measure proposals.

Generic issues raised by the Applicant’s compensation proposals

Lack of specific proposals and locations for compensation measures

- 5.16. As set out in our relevant representation (RR-049), the RSPB’s overarching comment is that the Applicant has failed to put forward detailed and location specific compensation measures for any impacted species. We note and welcome in section 6 below the work to narrow down Areas of Search for potential offshore Artificial Nesting Structure locations for Kittiwake compensation. We also note the ongoing refinement of potential locations for predator eradication schemes for Guillemot and Razorbill. However, at this stage, we lack detailed, location specific measures for any of these species, and therefore nor have any been secured.
- 5.17. It is therefore not possible at this stage for the RSPB to assess any of the compensation measures properly and provide advice to the Examining Authority on whether each has a reasonable guarantee of success in meeting specific, agreed compensation objectives.
- 5.18. However, we have, as far as is practicable, provided more detailed comments in section 6 on each of the broad compensation measures.

Scale of compensation

- 5.19. The RSPB consider it would, as far as practicable, be sensible to agree the range of predicted mortalities (using the preferred outputs of the Applicant, Natural England and the RSPB) and apply these to an agreed approach to calculating the scale of compensation that may be required.
- 5.20. In addition to agreeing the range of impacts and resulting compensation requirements, we consider it should be possible to agree success criteria for each compensation measure during the examination (subject to resolving detailed concerns with each measure).

Lead-in times for compensation

- 5.21. Any implementation timetable must ensure that the compensation measure is in place and ecologically functional before the damage occurs. Factors that need to be taken in to account in developing the required timeline include:
- The breeding ecology of the impacts species and timescales likely to be required for the agreed compensation measure to be ecologically effective;
 - The point at which the adverse effect is predicted to occur. This will depend on the nature of the impact e.g.:
 - For collision: it would be at the point the wind farm becomes operational;
 - For displacement: it would be at an agreed point relating to when the physical presence of the wind farm infrastructure (operational or not) is deemed to be giving rise to displacement that is impacting on the relevant seabird species' population.
 - That it is highly unlikely that the compensation will be delivering at the scale required before the impacts occur or during any period of colony establishment.
- 5.22. As currently drafted (AS-131, version 4, Schedule 18), the DCO does not include a specific requirement for the number of full breeding seasons each compensation measure must be in place before any impact occurs: we consider it should do so in line with the approach we have described above. The lack of these requirements creates considerable uncertainty in respect of the lead-in times that will be required. Instead, the DCO refers to:
- An number of breeding seasons to be specified in the approved plan for Kittiwake (Schedule 18, Part 2, paragraph 5); and
 - In relation to Guillemot and Razorbill, the DCO refers only to an implementation timetable to be set out in the post-consent Compensation Implementation and Monitoring Plan which will set out the minimum period prior to installation of any tower (Schedule 18, Part 3, paragraph 5(iv)).

Lifetime of compensation in relation to damage

- 5.23. It is the RSPB's view that compensation measures should remain in place for as long as the project's adverse impacts on the SAC/SPA/Ramsar site continue. Typically, this has been "in perpetuity" as impacts have been permanent. We recognise this is not automatically the case when dealing with offshore wind farms. This is in line with our advice to the Secretary

of State regarding the Hornsea Project Three compensation. As noted in paragraph 2.18 of that response (November 2020)⁵⁸:

“The length of time the compensation measures should be secured for must be based on the combination of the lifetime of the development plus the time it will take the affected seabird population to recover from the impacts.”

- 5.24. In respect of the Kittiwake compensation measures, we welcome the Applicant’s inclusion of paragraph 7 in Schedule 18, Part 2 (AS-131):

“The artificial nesting measure must not be decommissioned without written approval of the Secretary of State in consultation with relevant statutory nature conservation body.”

- 5.25. However, we request that the following wording (as included in the Hornsea Four DCO) be added to ensure clarity and consistency:

“The artificial nest structures shall be maintained beyond the operational lifetime of the authorised development if they are colonised, and routine and adaptive management measures and monitoring must continue whilst the artificial nesting structures are in place.”

- 5.26. In respect of the Guillemot and Razorbill compensation measures, Schedule 18, Part 3 of the DCO (AS-131) contains no equivalent text. This means there is no safeguard in respect of how long the compensation measures will be maintained. Therefore, we request that equivalent wording is drafted by the Applicant to ensure that, for project-led predator eradication measures, the relevant measures (biosecurity response plans, adaptive management etc) are sustained beyond the operational lifetime of the authorised development until the affected seabird populations are deemed to have recovered.

Summary

- 5.27. This section sets out the RSPB’s approach to evaluating compensation measures. It includes our general approach to assessing compensation proposals and the level of detail we consider is required in order to evaluate compensation proposals as part of the examination process, before drawing out some general issues raised by the Applicant’s proposals.
- 5.28. The RSPB has reviewed both the EC⁵⁹ and Defra⁶⁰ guidance on compensatory measures. This review also draws on the RSPB’s over 20 years experience evaluating and negotiating compensation proposals under the Habitats Regulations by developers across various sectors. As the EC Guidance is fuller, we have used that as our primary reference, while drawing out any additional points made in the Defra guidance since it is UK focused.

⁵⁸ <https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010080/EN010080-003259-RSPB.pdf> Accessed 27 January 2025

⁵⁹ EC (2018) Managing Natura 2000 sites – The provisions of Article 6 of the ‘Habitats’ Directive 92/43/EEC (21/11/18) C(2018) 7621 final.

⁶⁰ Defra (2021) <https://www.gov.uk/guidance/habitats-regulations-assessments-protecting-a-european-site>. Accessed January 2025.

5.29. The RSPB will use the EC's criteria and its experience to evaluate the various compensation measures:

- Targeted;
- Effective;
- Technical feasibility;
- Extent;
- Location;
- Timing;
- Long-term implementation;
- Additionality.

5.30. In addition, we have set out the level of detail we consider is required in any proposed compensation measures, and have gone on to identify generic issues raised by the Applicant's proposals:

- Lack of specific proposals and locations for compensation measures;
- Scale of compensation;
- Lead-in times for compensation;
- Lifetime of compensation in relation to damage.

6. RSPB detailed comments on the Applicant's specific compensation proposals

Introduction

6.1. Below we set out the RSPB's views on the following compensation measures put forward by the Applicant:

- Offshore and onshore artificial nesting structures (Kittiwake);
- Predator eradication (Guillemot and Razorbill);
- Potential adaptive management measures for Guillemot and Razorbill.

Offshore and onshore artificial nesting structures (Kittiwake)

6.2. The RSPB's comments are based on an assessment of the Applicant's documents, with particular reference to:

- APP-052: Project Level Kittiwake Compensation Plan (version 1);
- APP-055: Collaborative Delivery of Kittiwake Compensation: Letter of Intent;
- APP-053: Kittiwake Strategic Compensation Plan;
- PDB-003: Project Level Kittiwake Compensation Plan (version 2, tracked);
- PDB-007: Project Level Kittiwake Artificial Nesting Structure Site Selection Report; and
- AS-088: Project Level Kittiwake Compensation Plan (version 3, tracked).

6.3. The RSPB thanks the Applicant for its feedback on our relevant representation set out in PDA-013. We refer where necessary to our various procedural submissions, in particular letters dated 29 October 2024 (PDB-012) and 16 December 2024 (AS-128). We have updated the comments in our Relevant Representation to reflect the position set out in AS-128.

6.4. This application is unusual in that it, along with the Outer Dowsing scheme, is the first to come forward with an explicit lease requirement to adhere to a strategic compensation plan for Kittiwakes developed by The Crown Estate and associated steering group (APP-053).

6.5. Based on our reading of the above documents, we understand the Applicant is considering the following possible compensation measures:

- Offshore Artificial Nesting Structure (oANS): the primary measure under consideration in line with the KSCP;
- Onshore Artificial Nesting Structure (ANS): an existing structure at Gateshead is proposed as a potential supporting or adaptive management measure should it be appropriate in the future.

6.6. Artificial nesting structures (onshore or offshore) are yet to be proven as an effective compensation measure. The preponderance of onshore ANS compensation measures at various locations on the east coast of England has taken place against a lack of evidence of there being a sufficient pool of nest-limited Kittiwake recruits. Therefore, of the options available at the current time the RSPB's preference is for oANS.

6.7. These comments are restricted to the oANS measure.

6.8. Based on our review, it is our current understanding that:

- The Applicant has assumed a worst-case scenario that both Dogger Bank South East and West will be developed, and also noted that construction of the projects could be either sequential or concurrent. This will be relevant to the timing of compensation implementation and some of the RSPB's initial questions below;
- The Applicant sets out three possible delivery mechanisms (APP-052, paragraph 140): collaboratively, project-led or strategically (e.g. via a future Marine Recovery Fund (MRF) as and when that is implemented by the Government). The Applicant's preference is for a collaborative approach with other OWF developers;
- Since submission of the DCO, the Applicant has progress worked on oANS site selection. The Applicant concluded that the constraints present within shortlisted AoS in the Kittiwake Strategic Compensation Plan (APP-053) left few viable options and there may have been further opportunities within the wider search area that were not identified in the plan-level work. It therefore carried out further site selection work and appraised newly identified sites alongside selected sites previously identified in the APP-053;
- The Applicant states that it will select 1-2 Areas of Search for site investigation surveys as part of refining its site selection process (PDB-003, page 63). If the Application is consented, these would be secured through the DCO and deemed Marine Licence. There is no current certainty on the final location of any eventual oANS;
- The Applicant has confirmed that offshore wind developers will be responsible for licensing, design, commissioning, construction and installation of any oANS (RR-049: 13, PDA-013);
- The Applicant had indicated the oANS should be implemented three or four years before operation of the Projects to allow sufficient time for the recruitment of juveniles to the adult population (APP-052, paragraph 169). For the avoidance of doubt, the RSPB's view is that oANS for Kittiwake compensation should be implemented to allow for 4 full breeding seasons before first operation of a turbine. The rationale for requiring four breeding seasons is based on the breeding ecology of the seabird species concerned i.e. Kittiwake. Four years is the accepted typical period of first breeding and an acknowledgement that, assuming successful colonisation in Year 1, first breeding from fledged young will be four years later. It is an acknowledgement of the need to mitigate some of the risk arising from the predicted adverse impact occurring immediately upon first operation and of there being both an inherent delay in the compensation working, and the risk of it not working or not working successfully.

6.9. In its response to the RSPB's relevant representation, the Applicant has confirmed the RSPB's understanding that the oANS will be bespoke offshore structures requiring similar engineering solutions as for offshore wind turbines (RR-049: 13, PDA-013).

- 6.10. In our relevant representation (RR-049), to help understand the implications of this for securing installation of an oANS we identified the following initial questions it would be helpful for the Applicant to provide responses to:
- Based on its expert knowledge, its initial assessment of the Areas of Search and ongoing evaluation work, what does it consider are the likely engineering and manufacturing requirements of such a structure?
 - What will these requirements mean in terms of the supply chain and logistics pathways e.g. access to specialist installation vessels, and how might this be affected by each of the sequential and concurrent wind farm construction scenarios?
 - How might this translate into lead-in times for the installation of bespoke oANS, and how does this relate to the Applicant's Sequential and Concurrent development scenarios?
 - What is the Applicant's understanding of when the organisation responsible for commissioning and construction of an oANS under the KSIMP process will be identified and how might this affect the lead-in times?
 - What is the Applicant's understanding of how these lead times will be affected by the different implementation routes it has identified e.g. via the TCE Kittiwake Strategic Implementation and Monitoring Plan (KSIMP), the MRF or by the project alone?
- 6.11. We also asked the following questions in relation to The Crown Estate's role in relation to the KSIMP to be developed under the KSCP (APP-053).
- What steps has The Crown Estate taken to secure a marine licence for an oANS in the alternative Areas of Search?
 - Assuming no steps have been taken as no decision has yet been taken on the preferred Area of Search for any oANS under the KSIMP, what is the Applicant's and The Crown Estate's view on the implications of this for the implementation timeline for any such oANS?
- 6.12. In its response to the RSPB's relevant representation (RR-049: 13, PDA-013), the Applicant provided the following feedback:
- The Applicant is evaluating supply chain and installation vessels options for both fabrication and installation and has produced a design, fabrication and installation programme which aligns to the installation required for the anticipated number of breeding seasons required prior to first generation.
 - oANS fabrication & installation is decoupled from the offshore wind farm foundation programme, as it is anticipated that oANS installation will be needed earlier than wind turbine foundation installation and will likely require different installation vessel due to differing loading and pile diameter requirements;
 - The Applicants are not aware that The Crown Estate has taken any steps to secure a Marine Licence for an oANS (although this is a matter for The Crown Estate), hence the Applicants intent to develop two oANS in collaboration with another developer.

- 6.13. The RSPB welcomes the Applicant's feedback.
- 6.14. The RSPB has noted Hornsea Four's change in approach to delivery of its Kittiwake compensation – switching from offshore ANS to onshore ANS - due to “...increasing risks to Orsted H4 regarding supply chain constraints and escalating costs for offshore construction...”⁶¹ (AS-128). In light of this, the RSPB would welcome the Applicant's expert evaluation of the key, foreseeable risks to meeting its fabrication and installation programme and what measures it plans to put in place to mitigate those risks. This is in order to reduce the risk of significant time delays in the implementation of oANS.

Predator eradication (Guillemot and Razorbill)

- 6.15. The RSPB's comments are based on an assessment of the Applicant's documents, with particular reference to:
- APP-056 (Guillemot [and Razorbill] Compensation Plan);
 - APP-058 (Guillemot [and Razorbill] Compensation Predator Eradication/Control Site Longlist);
 - PDB-005: Guillemot [and Razorbill] Compensation Plan, version 2 (tracked);
 - PDB-008: Guillemot and Razorbill Compensation Site Shortlist Refinement Report;
 - AS-090: Guillemot [and Razorbill] Compensation Plan, version 3 (tracked).
- 6.16. The RSPB thanks the Applicant for its feedback on our relevant representation set out in PDA-013. We refer where necessary to our various procedural submissions, in particular letters dated 29 October 2024 (PDB-012) and 16 December 2024 (AS-128). We have updated the comments in our Relevant Representation to reflect the position set out in AS-128.
- 6.17. Below we have set out our comments as follows:
- General comments;
 - General approach to predator eradication (or island restoration) proposals;
 - Site specific comments; and
 - Potential adaptive management measures for Guillemot and Razorbill.

General comments

- 6.18. Potential adaptive management measures are suggested should the primary measure prove less effective than the Applicant anticipates. It is acknowledged by the Applicant that the two measures put forward (Artificial Nesting Structures and Bycatch Reduction) lack any current evidence that they would be effective. We comment specifically on bycatch reduction below.
- 6.19. As noted earlier in this representation, we consider it important to agree the range of predicted mortalities (using the preferred outputs of the Applicant, Natural England and the RSPB) and apply these to an agreed approach to calculating the scale of compensation required. The wide range of predicted impacts for Guillemot and Razorbill mean it will be important to agree this relatively early in order to inform discussions on the proportionate

⁶¹ Paragraph 2.1.1.5 in: https://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/projects/EN010098/EN010098-002394-Hornsea%20Four%20KCIMP%20Updated_Redacted.pdf

compensation response required for each level of impact. This will assist in assessing potential locations.

- 6.20. We welcome confirmation of the Applicant's reduced short list of potential predator eradication locations. We note that the Applicant proposes either a strategic measure (Isles of Scilly) or project-led measure (either Worms Head or Middle Mouse).
- 6.21. Before commenting on the specific measures referred to above, for the purposes of this Written Representation, we wish to draw attention to the following overarching issues, as mentioned in AS-128.

[Risk factor – availability of Second Generation Anti-Coagulant Rodenticides \(SGARs\)](#)

- 6.22. We draw attention to a potentially significant risk factor that would apply to all three remaining potential locations where rat eradication and/or control are being considered. Depending on how this issue develops, it could pose a significant risk to any eradication or control proposal.
- Following a change in the legal uses of SGARs, their use in open areas (essential for any non-native mammal eradication/control measure and associated biosecurity measures) will become illegal in the UK as of 1 January 2025, except where a Critical Situation Permit is issued by the Health and Safety Executive.
 - The RSPB is aware of ongoing discussions to find a solution to enable their future use for conservation predator eradication/control and biosecurity schemes, however, this is still expected to be via the issuing of a Critical Situation Permit. Currently permits can only be issued for the management of Brown Rats (not Black Rats nor mice). As there is no guarantee that a permit will be issued for any given site, nor an understanding of how it might apply to compensation measures, we consider this a risk factor which needs to be explored at the examination. We recommend advice is sought by the Applicant and submitted to the Examination as soon as practicable, once the Examination commences. This will enable the implications of this risk to be explored fully.

[Site survey reports availability and contents](#)

- 6.23. An overarching requirement remains the need for a clear timetable on when in 2025 the promised site survey reports for Worms Head and Middle Mouse will be made available for detailed review by the Examining Authority and Interested Parties. In this context, we request that the Applicant provide confirmation on what level of detailed, site specific eradication planning work will be presented to the examination, and when.
- 6.24. Consequently, we remain very concerned that the relevant information may not be provided within the examination period in sufficient time for review by both the Examining Authority and Interested Parties.
- 6.25. Immediately below we make some high-level comments and go on to make specific comments on each location later in this section.
- Evidence of predation on breeding seabirds: this will be essential to determine whether there is a predation issue that needs to be solved. We would be grateful if

the Applicant could update the Examination on which precise methods it will use to detect evidence of predation on breeding seabirds which has occurred during the breeding season (see paragraph 164 in AS-090);

- Monitoring: we consider it will be important to agree more specific monitoring requirements, linked to agreed success criteria. Among other things, this should include as core requirements breeding population, breeding productivity and, as far as practicable, recruitment into the National Site Network for each species;
- Evidence of public support for predator eradication/control measures: we welcome the Applicant's recognition of the need for this information (paragraph 121, APP-056). It is a key tenet of predator eradication and control that public support is critical to the success or failure of such measures. Resistance to such measures by relevant parts of the public can result in reduced success or complete failure. We would welcome further information on the form and level of detail of the stakeholder and community consultation that will be carried out and when it will be made available to the Examination.

[Timescale for identification of preferred location](#)

- 6.26. Versions 2 (PDB-005) and 3 (AS-090) of the Guillemot [and Razorbill] Compensation Plan differ on this point. Version 2 states a location will be secured prior to the end of the examination process (p52, para 129) while version 3 states that by the end of the examination it is anticipated a location will "substantially progressed" or a strategic approach agreed in principle (p65, para 154). Clarification on the Applicant's timings for securing its project-led options needs to be submitted to the Examination so that the Examining Authority and Interested Parties have a fuller understanding on this important issue and enable information on the selected location to be assessed against the best practice criteria (see paras 6.27-6.34 below).

[General approach to predator eradication \(or island restoration\) proposals](#)

- 6.27. In our Relevant Representation, we summarised the evidence and information needed to have confidence any predator management (eradication or control) measure would work. Below, we set out in more detail the information required in respect of predator eradication.
- 6.28. To succeed, IR needs the effective targeting of 100% of the Invasive Non-Native Species (INNS) to achieve eradication, supported by comprehensive measures to keep the risk of reinvasion low and ongoing capacity to respond effectively to any biosecurity breach. Therefore, it requires the feasibility of removing the INNS from each island to be restored to be firmly established, rather than assumed, combined with ongoing commitment among key stakeholders. This is to ensure successful eradication is sustained through implementation of biosecurity and (48-hour) emergency response plans and securing the resources necessary to implement these measures in perpetuity.
- 6.29. The level of detailed information and assessment described below is critical to bottom out before deciding whether an IR scheme is feasible to proceed to implementation. In the context of determining whether a compensation measure is feasible and therefore DCO consent should be granted, this is particularly important.

- 6.30. To have confidence IR will succeed in restoring the seabird species it is intended to benefit requires a good understanding of the vulnerability of the beneficiary seabird species to the INNS to be targeted for removal, and an understanding of the risk of reinvasion by the target INNS (assuming they have been successfully eradicated).
- 6.31. The RSPB recognises that predator eradication or island restoration (IR) offers some potential to benefit Guillemots and Razorbills. However, given the lack of practical compensation experience in this area, we consider there remains considerable uncertainty as to its potential as a compensation measure for these two auk species.
- 6.32. IR is a complex and highly specialised conservation measure. The RSPB considers the following elements are essential before a proposal to deploy IR as a compensation measure for specific seabird species can be properly assessed to determine if it will have a “reasonable guarantee of success” in line with Defra and EC guidance on compensation.
- 6.33. A full-scale Feasibility Study carried out by a suitable eradication expert contractor to international best practice standards in order to firmly establish that the removal of Invasive Non-Native Species (INNS) for each island to be restored is feasible. This must be assessed against the 7 feasibility criteria set out in Table 1 on page 18 of the Manual of the UK Rodent Eradication Best Practice Toolkit (2018).⁶² This will include but is not limited to detailed assessments of the selected islands regarding:
- the presence/absence of the beneficiary seabird species and its historic and current population status;
 - Habitat suitability survey to determine the extent of unoccupied but suitable habitat available to the beneficiary seabird species;
 - Up to date survey to establish the presence of INNS of concern, on both target islands and areas from where they could invade;
 - A good understanding of the vulnerability of the beneficiary seabird species to the INNS to be targeted for removal on the selected islands and evidence to show how they will benefit from the IR proposal;
 - Detailed biosecurity and emergency response plans, based on a proper understanding of the risk of reinvasion by the target INNS and to be funded in perpetuity;
 - Evidence that full community support for the IR scheme (eradication, biosecurity and emergency response) has been obtained;
 - Evidence that relevant landowner/occupier consents have been obtained;
 - Evidence that relevant legal consents to carry out IR have been obtained where required.
- 6.34. In summary (and in general terms):
- Razorbills are thought to be more vulnerable than Guillemots to predation by black and/or brown rat and risk of local extinction due to the accessibility of their nesting habitat;

⁶² See: [GB Non-native Species Secretariat](#) Accessed 27 January 2025.

- Black rat is likely to be a greater threat than brown rat to either Guillemot or Razorbill due to its greater agility and potential ability to access their nesting habitat.

Site specific comments

6.35. As set out by the Applicant, the above information is not currently before the Examination for the current list of locations, so it is not yet possible to make any meaningful assessment of the Applicant's predator eradication compensation measures for Guillemot and Razorbill. Therefore, we are only able to provide high level comments at this stage, pending submission of the Applicant's more details survey and feasibility work later in the examination. At this stage, there is insufficient information to assess any of these measures against the criteria set out in section 5 above.

6.36. Below we set out our current views of the issues raised by the Applicant's most recent updates in relation to strategic (Isles of Scilly) and project-led (Worms Head and Middle Mouse) predator eradication measures.

[Isles of Scilly \(strategic\)](#)

6.37. The RSPB notes and agrees with the position of The Wildlife Trusts (TWT) on auk compensation and the Isles of Scilly, specifically its view that its role is as a strategic compensation measure only. We welcome the feasibility work being undertaken by the Isles of Scilly Wildlife Trust (IoSWT) and others to develop a fully costed predator eradication programme, including assessment of its potential value to Guillemots and Razorbills. It would be helpful to know when this work might become available to inform deliberations at the Dogger Bank South examination.

6.38. The Applicant's most recent documents have acknowledged the TWT position and, among other things, the vital role of community buy-in to any eradication programme. The RSPB reiterates the critical importance of getting community engagement consultation right and would defer to the IoSWT and their partners in the project in how this is carried out to secure community buy-in. This is likely to have implications for the timing of delivery of any predator eradication programme.

6.39. The Applicant discusses the possible role of a Marine Recovery Fund (MRF) and/or interim measures. This raises a number of issues which we consider require clarification from Defra/DESNZ in respect of establishment of an MRF, appointment of an MRF Operator (MRFO), and the role of COWSC to inform discussions at the Dogger Bank South examination. We have set these out below.

6.40. In respect of improving collective understanding of a MRF, it is important for the Examination to have clarification from Defra/DESNZ on:

- The role of COWSC and the role of any future MRF Operator in respect of: developing implementation plans, as well as the implementation and delivery of specific measures;

- Who will be responsible for deciding whether it is appropriate for a developer to deliver some or all of its compensation requirements via the MRF and the process by which a developer would discharge its compensation requirements;
- The timetable for the MRF becoming operational (or at least when they will set out the timetable);
- The timetable for the COWSC Implementation and Monitoring Plan for Predator Eradication to become publicly available, if this is to be relied on as part of a strategic compensation approach by the Applicant.

6.41. We note the Applicant will also explore the possibility of an interim mechanism pending clarification of MRF timescales. The timings of updates to the examination on progress with and the substance of such discussions should be set out by the Applicant.

6.42. Given the strategic function of any proposed predator eradication on the Scillies, we consider information on the availability of TWTs costed programme, along with more definitive information relating to any proposed interim approach and, from Defra/DESNZ, on the timing and mechanisms related to an MRF as important to help determine whether sufficient information will be available to the examination.

[Worms Head \(project-led\)](#)

6.43. To advise on this location as a possible compensation location, it will be critical to establish the ecological need for, and benefit of, any proposed control to the impacted seabirds. Establishing whether or not rats predate breeding seabirds and whether that is detrimental is essential. The Applicant refers to a survey in “Spring 2025”, indicating Q2 2025. More precise details are needed on scope, timing and report availability to inform the possibility of full discussion and progress within an examination timetable. As currently worded, we have serious concerns that this critical information may not be available before the end of the examination. An early update to the examination on the programme envisaged between the Applicant and the National Trust is essential.

6.44. As part of the required discussion at the examination, a key issue will be whether or not it is practicable to control (rather than eradicate) rats at this mainland location while not impeding public access. This will rely on the view of the National Trust being available to the Interested Parties following submission of the survey report.

6.45. At this stage, without clarification on the availability and scope of the survey reports, we cannot be confident the relevant information will be available to the examination in sufficient time for review and detailed discussion.

[Middle Mouse \(project-led\)](#)

6.46. We agree with the Applicant that there is no definitive information on whether rats are present or not. Our knowledge of seabird populations on Middle Mouse is that they are increasing, including recent colonisation by Gannets. This indicates rats may not be present and this is a critical issue requiring clarification at the earliest opportunity during the examination.

- 6.47. Therefore, to advise on this location as a possible compensation location, it will be critical to establish the ecological need for, and benefit of, any proposed eradication to the impacted seabirds. Critically, a comprehensive assessment of rat presence is required and evidence of detrimental predation of seabirds established. The Applicant refers to a survey in “early 2025”. More precise details are needed on scope, timing and report availability to inform the possibility of full discussion and progress within the examination timetable.
- 6.48. At this stage, without clarification on the availability and scope of the survey reports, we cannot be confident the relevant information will be available to the examination in sufficient time for review and detailed discussion.

Current assessment of the Applicant’s predator eradication proposals

- 6.49. At present, the Applicant has not provided any information on the precise location it intends to carry out any IR scheme. Nor is there a detailed feasibility study and associated implementation and biosecurity plans which can be used to assess whether or not any selected location is both suited to IR and which provides evidence that either Guillemot and/or Razorbill will benefit.
- 6.50. Therefore, at present, the RSPB does not have confidence that the predator eradication measure would benefit either Guillemot or Razorbill and so provide compensation. To determine whether an IR scheme will, rather than might, benefit either species in a selected location requires detailed scrutiny of a feasibility study and associated work as part of the examination process.

Potential adaptive management measures for Guillemot and Razorbill

- 6.51. As noted above, the Applicant has identified two potential adaptive management measures (Artificial Nesting Structures and Bycatch Reduction). The RSPB agrees with the Applicant that each lacks any current evidence that they would be ecologically effective, including as an adaptive management measure. Therefore, at this time, we will not make detailed comments on either, except to summarise below our current understanding regarding bycatch reduction measures for Guillemot and Razorbill to assist the Examining Authority.

Bycatch mitigation as a potential adaptive management measure

- 6.52. The RSPB’s position is set out in its relevant representation (RR-049) and based on trials undertaken by the RSPB and partners as well as detailed review of the evidence published by Hornsea Four offshore wind farm which trialled a device known as the Looming Eyes Buoy (LEB). In the absence of scientifically peer-reviewed evidence from Hornsea Four or other offshore wind farm developers, our results seriously question any reliance being placed on LEBs as a compensation measure. The RSPB remains of the expert view that there is no evidence in the public domain at this time, peer-reviewed or otherwise, that supports the use of the LEB as an effective measure to reduce bycatch in Common Guillemots and Razorbills.

Summary

- 6.53. Section 6 sets out the RSPB's views on the following compensation measures put forward by the Applicant:
- Offshore and onshore artificial nesting structures (Kittiwake);
 - Predator eradication (Guillemot and Razorbill);
 - Potential adaptive management measures for Guillemot and Razorbill.
- 6.54. The RSPB's overarching comment is that the Applicant has failed to put forward detailed and location specific compensation measures for any impacted species. We note the work to narrow down Areas of Search for potential offshore Artificial Nesting Structure locations for Kittiwake compensation. We also note the ongoing refinement of potential locations for predator eradication schemes for Guillemot and Razorbill. However, at this stage, we lack detailed, location specific measures for any of these species, and therefore nor have any been secured.
- 6.55. It is therefore not possible at this stage for the RSPB to assess any of the compensation measures properly and provide detailed advice to the Examining Authority on whether each has a reasonable guarantee of success in meeting specific, agreed compensation objectives.