Written Representation

for the

Royal Society for the Protection of Birds

Comments on selected Deadline 3 and Deadline 4 submissions

Submitted for Deadline 5

20 June 2022

Planning Act 2008 (as amended)

In the matter of:

Application by Hornsea Project Four Limited for an Order

Granting Development Consent for the Hornsea Project Four Offshore Wind Farm

Planning Inspectorate Ref: EN010098

RSPB Registration Identification Ref: 20029909

Contents

1. Introduction

Scope of submission

1.1. This submission sets out the RSPB's comments based, in particular, on the following documents submitted by the Applicant and Natural England at Deadlines 3 and 4:

- Offshore ornithology matters:
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  - REP4-047: G4.13 Comparative Gannet Assessment - Revision: 01
  - REP4-055: Natural England - Deadline 4 Submission - Appendix B4 – Comments on G2.10 MRSea Baseline Sensitivity Report (Gannet) Revision 2
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- Compensation Connectivity
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- Other documents
  - REP4-040: G4.6 Written Summary of the Applicant's Oral Case at Issue Specific Hearing 6 (ISH6) - Revision: 01 (non-offshore ornithology matters)
  - REP4-044: G4.10 Applicant's comments on other submissions received at Deadline 3 - Revision: 01

2. Offshore Ornithology

2.1. Below, the RSPB sets out its comments on the following documents submitted by the Applicant and Natural England at Deadlines 3 and 4:

- REP4-041: G4.7 Ornithological Assessment Sensitivity Report - Revision: 1;
- REP4-047: G4.13 Comparative Gannet Assessment - Revision: 01;
- REP4-055: Natural England - Deadline 4 Submission - Appendix B4 – Comments on G2.10 MRSea Baseline Sensitivity Report (Gannet) Revision 2;

2.2. In addition, we have also responded to relevant actions for the RSPB arising from Issue Specific Hearings 5 and 6.

REP4-041: G4.7 Ornithological Assessment Sensitivity Report - Revision: 1

2.3. The RSPB welcomes the approach laid out in the Assessment Sensitivity Report. Essentially the Applicant is detailing not only their preferred values to input in the various assessment calculations, but also those of Natural England. Given the large amount of uncertainty inherent in the assessment process, this approach allows the examiner to see the potential range of impacts that could arise from the development. In general, the RSPB is in agreement with the values presented in the Natural England position. The main difference is in the breeding season avoidance rate for gannet, and our position remains unaltered since that described in our Written Representations (see paragraphs 4.16-4.19, REP2-089). However, we note that the results of a Natural England review are pending, and may review our position once those are seen.

2.4. The RSPB disagrees that the 95% Confidence Intervals around generic flight heights are not appropriate for assessment. The utility in presenting these is to give an indication of the range of uncertainty arising from the scarcity of genuine measures of seabird flight height as opposed to estimates. The Applicant correctly highlights that these outer confidence limits may represent uncharacteristic flight behaviour, but it is likely that uncharacteristic flight behaviours are those that carry the greatest risk of collision. There have also been a number of site specific surveys that have reported mean and median flight heights outwith these confidence intervals, so they cannot be considered unrealistic

2.5. We also note that the Applicant remains of the position that the Counterfactual of Population Growth Rate is the only suitable output metric of Population Viability Analysis and will not present the Counterfactual of Population Size. This is against the advice of Natural England and the RSPB, and contradicts the results of two expert reviews into the applicability of these output metrics. In order to assist the inquiry, the RSPB asks that both metrics are presented as part of the revised PVA results due at Deadline 5.

REP4-047: G4.13 Comparative Gannet Assessment - Revision: 01

2.6. As described in our response to Deadline 4, the RSPB welcomes the re-run of the gannet model carried out under the guidance of CREEM. In particular we welcome the participation of CREEM in assisting the Applicant. However, we have a concern with the manner in which the model has been run. It has been run to predict abundance for each calendar month, in other words an average within each month from the two surveys. While this approach is

acceptable for collision impacts, it is contrary to SNCB advice on the assessment of displacement impacts[1], which recommends counts should be assessed as mean seasonal peaks, averaged over the years of survey.

2.7. As such, for displacement impacts, we request that the MRSea model is run in line with SNCB advice.

2.8. The RSPB will provide fuller consideration of the revised MRSea approach once the model outputs are given for the remaining key species.

REP4-055: Natural England - Deadline 4 Submission - Appendix B4 – Comments on G2.10 MRSea Baseline Sensitivity Report (Gannet) Revision 2

2.9. The Natural England report provides valuable contextual information on the MRSea modelling and it is welcomed by the RSPB. As described above, the RSPB agree that the approach taken is incompatible with current best practice for displacement modelling. Furthermore, the RSPB agree with the recommendations for a route to updated revisions of the baseline and impact calculations

Related actions in:

REP4-039: G4.5 Written Summary of the Applicant's Oral Case at Issue Specific Hearing 5 (ISH5) - Revision: 01

REP4-040: G4.6 Written Summary of the Applicant's Oral Case at Issue Specific Hearing 6 (ISH6) - Revision: 01

2.10. The RSPB notes that there are two actions for the RSPB arising from ISH5 and ISH6 which relate to the current situation regarding offshore ornithology. These are:

- **Action 13, ISH5**: provide a summary of current positions in relation to likely significant effects in Environmental Impact Assessment terms on seabirds both in respect of the project alone and cumulatively including an indication of whether this is likely to be their final position, or if this may change before the end of the Examination as a result of further work that is currently underway;
- **Action 10, ISH6**: Provide a summary of your current position regarding project alone and in combination HRA effects, including Adverse Effect on Integrity, whether a derogation case is robustly made, and if the necessary and without prejudice compensatory measures are sufficiently if the necessary and without prejudice compensatory measures are sufficiently robust scientifically, and capable of being secured and delivered, if required.

2.11. Given our comments above and in previous representations, the RSPB's position is currently unchanged from that set out in our main written representation (see section 4 in REP2-089.

[1] Joint SNCB1 Interim Displacement Advice Note Advice on how to present assessment information on the extent and potential consequences of seabird displacement from Offshore Wind Farm (OWF) developments January 2017 (updated January 2022 to include reference to the Joint SNCB Interim Advice on the Treatment of Displacement for Red-Throated Diver).

2.12. The RSPB will provide an updated response once we have been able to consider any updated material relating to the ornithology assessments including but not limited to Revised Ornithology Baseline G5.9 and Ornithology Technical Panel Meeting 16 MRSea Baseline Minutes G5.2, and subsequently updated impact assessments.

3. Compensation Connectivity

Introduction

3.1. This section sets out the RSPB's comments on the following documents submitted by the Applicant and Natural England at Deadlines 3 and 4 of the Examination:

- REP3-032: G3.4 Compensation measures for FFC SPA: Compensation Connectivity Note - Revision: 01 (Applicant)
- REP3-034: G3.4.1 Compensation measures for FFC SPA: Ecological Connectivity of Compensation Measures Annex 1 - Revision: 01 (Applicant)
- REP4-056: Natural England Deadline 4 Submission - Appendix C4 – Comments on G3.4 Compensation measures for Flamborough and Filey Coast (FFC) Special Protection Area (SPA) Compensation Connectivity Note Revision: 01

3.2. For clarity, we have divided our comments into three topics:

- Legal/policy issues
- Scientific evidence
- Monitoring

3.3. In order to assist the Examining Authority we have, as far as possible, indicated where we agree with Natural England's position set out in REP4-056.

3.4. The RSPB welcomes the Applicant's submissions on this important topic and their work to determine whether an evidence base exists on connectivity in respect of their proposed compensation measures. It goes to the heart of whether a proposed compensation measure will be effective in terms of meeting the legal tests to protect the coherence of the National Site Network. We consider the same evidence base requirements would apply to any SPA species or feature for which an adverse effect on site integrity cannot be ruled out i.e. not confined to guillemot and razorbill.

3.5. In addition to our concerns about sufficient certainty regarding the ecological effectiveness of the compensation measures, in the context of the Applicant's Deadline 3 submissions, we are considering whether the Applicant has provided sufficient evidence to justify its claim that its compensation measures will directly benefit the UK National Site Network populations (as set out in the Applicant's paragraph 5.1.1.4, REP3-032) i.e. there will be connectivity between the UK SPA networks for guillemot and razorbill in respect of:

- Predator eradication measures on Guernsey – dispersal of guillemots and razorbills fledged from Guernsey and eventual recruitment into the UK SPA network;
- Bycatch reduction somewhere in the English Channel (location currently unspecified) – increased survival of adult and immature guillemots and razorbills during the non-breeding season that will go on to breed within the respective UK SPA networks.

Legal/policy issues

3.6. We agree with the Applicant that the test with respect to the purpose of compensation measures is from Article 6(4) of the Habitats Directive and repeated in the Applicant's paragraph 2.1.1.4 of REP3-032. However we think it is more appropriate to reference our domestic legislation namely, regulation 36 of the Conservation of Offshore Marine Habitats

and Species Regulations 2017 (Offshore Habitats Regulations)(as amended) to save any confusion.

3.7. The purpose of compensation measures is to protect the overall coherence of the National Site Network in the United Kingdom. In this context that refers to the Network as a whole and the specific management objectives for the UK network of Special Protection Areas. It is important to note the differences as the management objectives for the Network (as set out in Regulation 18 of the Offshore Habitats Regulations) are separated out into SPA and SAC requirements (see paragraphs 3.22-3.27 of the RSPB's Written Representation REP2-089 for a description of these in reference to the equivalent regulation 16A in the Conservation of Habitats and Species Regulations 2017 (Habitats Regulations)(as amended)). In respect of the SPA network, the management objectives are:

- to contribute, in their area of distribution, to ensuring the survival and reproduction of:
  - the species of birds listed in Annex I, Birds Directive;
  - regularly occurring migratory species of birds; and
  - to contribute to securing compliance with regulation 6(1) of the Offshore Habitats Regulations
- 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.

3.8. We agree with the following comments by Natural England (REP4-056) on the Applicant's submission in how this should be interpreted and applied (emphasis added) (paragraph 1, page 2):

"The Applicant states that compensation does not necessarily have to be delivered at the site of impact, in this case Flamborough and Filey Coast Special Protection Area (FFC SPA). ***Natural England agrees that this is in accordance with the hierarchy approach*** *set out in Defra's draft guidance on compensation for Marine Protected Areas (Defra, 2021)."*

The RSPB notes that this hierarchical approach also accords with existing adopted guidance published by Defra[2] and the European Commission.[3] Whilst useful to reference the Defra 2021 guidance[4] it should be noted that it is a consultation draft and therefore not final.

The RSPB considers the following to be a critical clarification by Natural England:

[2] See Defra (February 2021) Test 3: https://www.gov.uk/guidance/habitats-regulations-assessments-protecting-a-european-site#derogation. Accessed June 2022.
[3] 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.
[4] https://consult.defra.gov.uk/marine-planning-licensing-team/mpa-compensation-guidance-consultation/supporting_documents/mpacompensatorymeasuresbestpracticeguidance.pdf

"As options to provide compensation with direct benefits to the site of impact (e.g. prey availability) and/or other sites within the National Site Network have not been submitted, ***consideration must be given to the implications for the current proposals in terms of the nature of the benefits to the National Site Network provided by the compensation and the level of compensation required."*** (paragraph 2, page 2)

"…the test for compensation delivery is to maintain the coherence of the National Site Network. In the context of these compensatory proposals, ***this means the network of SPAs classified for guillemot and razorbill – not the general populations of these species."*** (paragraph 3, page 2)

The purpose of compensation is to protect the coherence of the network for the **impacted** SPA or SAC features. In this context, that means the (UK) Network as a whole and the SPA networks for guillemot and razorbill, taking account of both the SPA's conservation objectives as well as the management objectives for the SPA network as part of the National Sites Network (see paragraphs 3.22-3.27 in the RSPB Written Representation REP2-089). Whilst acknowledging the wider bio-geographical range of these species, we continue to be concerned about how the National Site Network will be maintained and whether robust evidence can be provided to demonstrate how the proposed compensation measures will benefit that Network.

3.9. As noted by the Applicant and Natural England, in describing the role of location in determining the benefits of compensation measures you must first consider possibilities to "compensate" the affected SPA to ensure coherence of the Network i.e. both:

a. Measures that replicate or benefit the same feature within the affected site[5].

b. Measures that replicate or benefit the same feature outside the affected site.

This approach is consistent with that set out in section 5.5.5 of the European Commission's guidance (Managing Natura 2000 sites[6]). As Natural England set out, the focus should be on the SPAs within the network for the species or feature for which an adverse effect on site integrity cannot be ruled out. In the context of the current submissions, that means the SPA networks for guillemot and razorbill respectively.

3.10. A sound understanding of the scientific evidence base is essential to determine whether there can be reasonable confidence in the ecological benefit claimed for any particular compensation measure to the relevant SPA network. We comment below on matters relating to the scientific evidence base submitted by the Applicant in respect of guillemot and razorbill.

Scientific evidence

3.11. The RSPB has reviewed the Applicant's submissions, in particular REP3-034, alongside Natural England's comments (REP4-056).

[5] Noting the Draft Defra Guidance is also clear "compensation must be additional to the normal practices required for the protection and management of the MP so that measures should provide additional benefit." (page 20). Again, this is consistent with EC (2018) Managing Natura 2000 sites (see section 5.4.1).
[6] 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.

Evidence of connectivity

3.12. The RSPB agrees with the following comments made by Natural England in its submission:

> *"Any increase in nesting guillemot and razorbill at the seabird colonies on the Channel Islands will make no contribution to the UK National Site Network. Therefore, benefits to the UK National Site Network would only accrue should these colonies in time produce birds that disperse from those colonies and occupy the sites in the network"* (paragraph 5, page 1)

> *"Given the test of the compensation measures relates to maintaining the coherence of the National Site Network of SPAs for these species, the question then is what level of dispersal to these National Site Network colonies is likely. The Applicant has demonstrated in REP3-034 that there is the potential for connectivity, however it is also fair to say that the level of ecological connectivity to the above sites is likely to be rather low, given i) the evidence available regarding philopatry of these species, ii) the high dispersal distances required between the Channel Islands and colonies such as FFC SPA and Farne Islands SPA and iii) the number of other guillemot/razorbill colonies to which dispersing birds could recruit, based on the dispersal distances cited by the Applicant in document REP3-034. We note that the at-sea distance from the Channel Islands to FFC SPA is approximately equivalent to the greatest dispersal distance recorded for guillemots in the Baltic Sea and is over double the mean dispersal distance from that study (Lyngs, 1993)."* (paragraph 2, page 2)

3.13. The Applicant claims that the proposed compensation measures for guillemots and razorbills will directly benefit their UK SPA network populations. As we have set out immediately above, the RSPB agrees with Natural England that the evidence for the Applicant's seemingly definitive statements is low. One of our key concerns is that the basic scientific evidence is missing that would provide the level of confidence claimed by the Applicant. This would require strong evidence of connectivity between the relevant UK SPA networks and:

- The non-breeding populations of guillemots and/or razorbills purported to benefit from bycatch reduction somewhere in the English Channel;
- Birds fledged from the Channel Islands.

3.14. The RSPB welcomes the review carried out by the Applicant of the connectivity of guillemot and razorbill from the Flamborough and Filey Coast SPA and the English Channel and Channel Islands (REP3-034, to support REP3-032). However, while we agree that there is likely to be some degree of connectivity, we are concerned that this review greatly overstates that evidence, and it may be that the extent of connectivity is very small. It is acknowledged within the review that there are challenges in establishing connectivity. The review draws largely on two pieces of evidence; the GLS tracking studies described in Buckingham *et al.*, (2022[7]) and the ringing data collected by the BTO.

3.15. The work reported in Buckingham *et al.*, (2022) is the first multi-colony scale study of wintering movements of guillemot and razorbill and represents an important piece of science. Unfortunately though, for logistical reasons, the authors were unable to tag birds from the Flamborough and Filey Coast SPA. This means that there is no direct evidence from it of connectivity of the SPA with the English Channel and Channel Islands. The Applicant

[7] Buckingham, L., Bogdanova, M.I., Green, J.A., Dunn, R.E., Wanless, S., Bennett, S., Bevan, R.M., Call, A., Canham, M., Corse, C.J. and Harris, M.P., 2022. Interspecific variation in non-breeding aggregation: a multi-colony tracking study of two sympatric seabirds. *Marine Ecology Progress Series*, *684*, pp.181-197.

instead cites the study as tracking data showing birds from the Farne Islands in the English Channel in winter, although they do not specify if these were guillemot or razorbill. For the paper itself, because of low sample size (one guillemot and four razorbill had tags recovered) the data from the Farne Islands is not analysed or presented, so it is unclear where the Applicant has received this information.

3.16. Furthermore, the Applicant claims birds from several colonies winter in the English Channel and this is again to overstate the evidence. Guillemot from Canna on the west coast of Scotland, and razorbill from Whinnyfold in Aberdeenshire were recorded in the English Channel. Guillemot from Treshnish islands, on the Scottish west coast, were present in the Celtic Sea in the winter. However, no guillemot from East coast colonies were recorded in the Channel Islands.

3.17. Indeed, the data from guillemot show that the east coast birds tend to remain relatively close to and directly east of the source breeding colony during both the post-breeding moult and winter periods. This fits with evidence that, at some colonies, birds will continue to attend the colony in the winter (Harris and Wanless, 2016[8]). As such we would expect the majority of guillemot from the Flamborough and Filey Coast SPA to remain in the North Sea east of the colony rather than moving south, and this is borne out by the high density of birds seen in the moulting period in the Hornsea 4 footprint. Razorbill do not show this tendency for colony distinct winter distribution, instead aggregating in the middle of the North Sea.

3.18. To clarify these points we reproduce the maps of kernel densities from Buckingham *et al.,* (2022) below. These show the core distributions of birds from the colonies where tagging took place in the period of post breeding moult (Figure 2) and the winter (Figure 3). It should also be noted that during Issue Specific Hearing 6, the Applicant's consultant considered that this paper "is not considered to be a reliable source for assessment purposes for this project."

[8] Harris MP, Wanless S (2016) The use of webcams to monitor the prolonged autumn attendance of guillemots on the Isle of May in 2015. Scott Birds 36: 3–9.

Extracts from Buckingham et al (2022): Core distributions during the period of post-breeding moult (Figure 2) and winter (Figure 3)

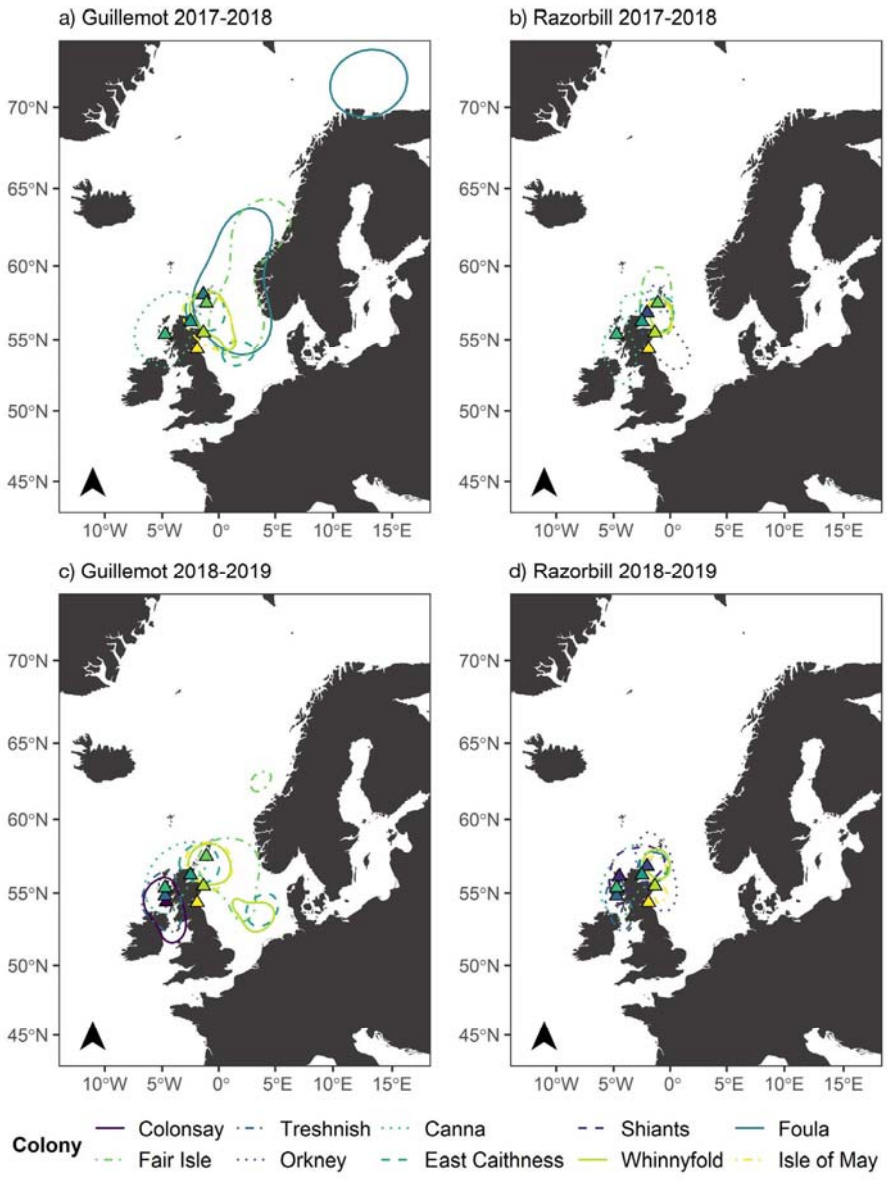

Fig. 2. Core colony distributions (50% kernel density contour outlines) of common guillemots and razorbills during post-breeding moult (16 August–15 September). Colony locations are depicted by triangles, with colours matching the distributions

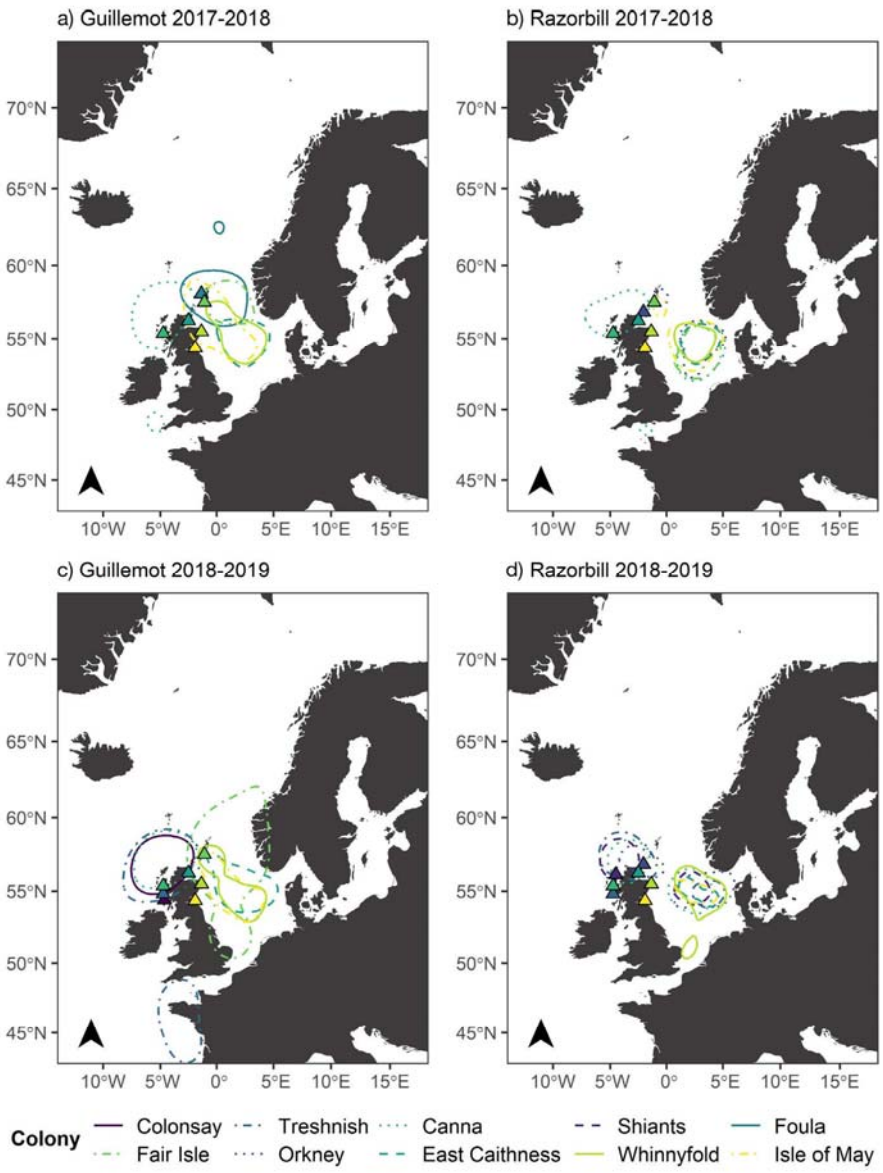

Fig. 3. Core colony distributions (50% kernel density contour outlines) of common guillemots and razorbills during mid-winter (6 December–5 January). Colony locations are depicted by triangles, with colours matching the distributions

3.19. The other source of information used to provide evidence of connectivity by the Applicant is ringing recoveries. Again, the Applicant overstates the evidence to support connectivity, particularly, as acknowledged, there are no data from the Flamborough and Filey Coast SPA. In addition, the Applicant fails to make the distinction between, and often conflates, ring recovery and recapture. Ring recovery is most commonly from bird carcasses, whereas recapture is of live birds, e.g. via mist netting. This distinction is particularly crucial for marine species, whose carcasses can be washed ashore huge distances from where they were tagged. Recovery at such a location therefore does not provide evidence that that is the location where mortality occurred. Ringing does provide valuable data, but it is wrong to

suggest that it demonstrates connectivity of the Flamborough and Filey Coast SPA with the English Channel and Channel Islands

3.20. In conclusion, while the evidence reviewed by the Applicant shows there is potential for connectivity between the Flamborough and Filey Coast SPA and the English Channel, there is no direct evidence either for the existence, or the extend of, such connectivity.

Connectivity and the quantum of compensation required

3.21. Understanding the strength of any connectivity between each compensation measure is essential to determining the scale of benefit to the relevant UK SPA network. Therefore, we agree with the following comments by Natural England in REP4-056:

> *"…for the compensation to deliver sufficient benefit to the National Site Network (i.e. commensurate to the level of impact at FFC SPA, a key site in the network for these species) it follows that an appropriately large number of fledglings needs to be produced, given that a substantial number of these will either recruit into the natal colony or disperse to non-National Site Network colonies"* (paragraph 3, page 2);

> *"…If an equivalent number of recruits into the National Site Network to those impacted at FFC SPA is not produced, it is hard to see how the National Site Network could be considered maintained"* (paragraph 3, page 2);

> *"…This then poses the challenge of identifying the level of compensation that will deliver sufficient recruits to the biogeographic population to achieve this. This is very difficult to quantify, but it seems clear that the proposed ratio of 2:1 is unlikely to achieve an appropriate level of reinforcement"* (paragraph 3, page 2).

3.22. For the reasons set out above, we do not support the Applicant's claim that there is a sufficient scientific evidence base to conclude the proposed compensation measures for guillemots and razorbills will directly benefit their UK SPA network populations, in particular that of the Flamborough and Filey Coast SPA. In many respects, there is simply no direct evidence currently available e.g.:

- There are no studies demonstrating that guillemots and razorbills reared in the Channel Islands definitively recruit into the respective UK SPA networks, rather than more locally; and conversely the extent to which the birds encountered in the English Channel will have connectivity with the UK SPA network, in particular the Flamborough and Filey Coast SPA;
- There is scant evidence demonstrating the location of the natal colonies of non-breeding birds in the English Channel in general, and more critically, the as yet unspecified locations where the Applicant proposes to implement its bycatch reduction measures. This is complex as it would need to distinguish between breeding adults and immature birds encountered in the English Channel as these would exhibit different behaviour during the breeding season. Based on Buckingham *et al.,* 2022 it would appear that breeding adult guillemot at individual colonies have distinct non-breeding season spatial strategies.

3.23. In the absence of this evidence, it is difficult to come to any conclusions as to what scale of compensation measures would be required to accomplish sufficient recruitment into the SPA populations. This is not only because of uncertainty around the degree of connectivity,

but also the still unresolved issues around baseline characterization and subsequent conclusions on AEOI.

Monitoring

3.24. The RSPB agrees with Natural England that it is the Applicant's responsibility to monitor the success or otherwise of any required compensation measures i.e.:

- *"it appears to suggest that Natural England will be responsible for monitoring the success of compensation delivery in relation to FFC SPA. We do not consider it appropriate to rely on SNCBs to monitor the impact of a development or the effectiveness of compensatory measures. We highlight that our role in "assessing the effectiveness of interventions" relates specifically to management measures. It is for the Applicant to demonstrate through their monitoring of the measure that the compensation delivery has been successful in its purpose of maintaining the coherence of the National Site Network. This aspect of the proposals therefore needs clarification."* (paragraph 3, page 3).

4. Comments on other documents

4.1. In this section we comment on the following documents submitted at Deadline 4:

- REP4-040: G4.6 Written Summary of the Applicant's Oral Case at Issue Specific Hearing 6 (ISH6) - Revision: 01 (non-offshore ornithology matters)
- REP4-044: G4.10 Applicant's comments on other submissions received at Deadline 3 - Revision: 01.

REP4-040: G4.6 Written Summary of the Applicant's Oral Case at Issue Specific Hearing 6 (ISH6) - Revision: 01

4.2. We have reviewed the Applicant's written summary of its oral case at Issue Specific Hearing 6 insofar as it relates to matters of interest to the RSPB. Below we set out our comments on relevant matters. In order to assist the Examining Authority we have grouped them by topic and provided the Applicant's reference numbers.

Predator eradication (references: 4.2, 4.4, 4.5 and 4.8)

4.3. The RSPB has noted the Applicant's responses to the Examining Authority's oral questions at the hearing. The Examining Authority will be aware that the RSPB has stated that a full Feasibility Study in accordance with agreed standards is required in order that Interested Parties can assess the Applicant's predator eradication proposals before the end of the examination (see REP2-089, paragraph 6.37 and REP2-093, Annex C, e.g. sections 3, 5 and 6). We had understood that this was being prepared and would be submitted to the Examination at Deadline 5. However, we are now uncertain this will be the case. Based on the Applicant's written summary responses we have serious concerns that:

- only "preliminary results" will be provided at Deadline 5 (reference 4.2); and that:
- The full study will not be completed until after August i.e. after the close of the examination (reference 4.5);
- That the final location will not be confirmed until after the implementation study has been completed (reference 4.4).

4.4. Pending further information that may be submitted at Deadline 5, we will need to reserve our position on the likely efficacy of the Applicant's proposals.

4.5. While we will carry out a full review of any information submitted to the Examination at Deadline 5, we have reservations that there will be sufficient information to allow the RSPB to provide the Examining Authority with meaningful advice on the Applicant's proposed measures. This is because, based on the Applicant's own statements, that information will not be a full Feasibility Study and is likely to lack critical information with regard to the surveys carried out and final location to be selected. All of these are essential in developing a proper understanding as to the feasibility of the any measures proposed.

4.6. The RSPB maintains its position as set out in its representations to date namely that the Applicant should submit a full Feasibility Study to the Examination on a timescale that enables Interested Parties to review and provide appropriate advice to the Examining Authority, including its selected location to carry out predator eradication. Lack of such

detailed information will make it difficult to evaluate the likely success of the proposed measures.

Compensation "breaking new ground" (reference: 4.5)

4.7. The RSPB notes the Examining Authority's question to the Applicant as to whether the Hornsea Four project was breaking new ground with regard to submitting draft compensation measures at the start of the examination. We note that the Applicant agreed in that it had included compensation proposals at the point of application, rather than introduce them during examination or in post-examination.

4.8. The RSPB agrees this is the case in respect of offshore wind farm projects that have been subject to the NSIP examination process and the many Secretary of State instigated post-examination consultations on such matters, for example Hornsea Project Three and Norfolk Vanguard.

4.9. However, in our view this it is not "breaking new ground" in respect of the history of the treatment of Habitats Regulations compensatory measures for major infrastructure projects in the UK. The RSPB was closely involved in compensation measures for several major container ports during the 2000s and witnessed the significant shift in the approach of the UK container port industry to how compensation measures were brought forward and secured.

4.10. This followed collective learning from the Dibden Bay Container Terminal case where the applicant rejected arguments from nature conservation bodies that the proposal would cause an adverse effect on integrity of the adjacent SPA/Ramsar site and resisted arguments for adequate compensation measures. These disagreements and discussions over what would represent suitable compensation measures were played out in a lengthy public inquiry. While this was happening, the wider container port industry and nature conservation bodies (including the Dibden Bay applicant) adopted a new, more constructive approach in terms of acknowledging likely harm in advance of applications being submitted and working with stakeholders to agree the location and key requirements of compensation measures to, wherever possible include them within the application and, certainly, before any consent decisions.

4.11. Below, we draw out some salient points from that historic experience that we consider pertinent to the current discussions. While none of these are "perfect", a commonality is that details and at times agreement was reached on the precise location of compensation measures before consent was issued by the relevant Secretary of State with appropriate steps having been taken to secure the land:

- **London Gateway Harbour Empowerment Order, near Stanford-le-Hope, Essex:** reached agreement on location of suitable compensation sites in advance of application being submitted. Exercised compulsory purchase powers available as part of Harbour Empowerment Orders to secure control of compensation sites and relevant access. Detailed legal agreement relating to compensation measures negotiated before end of public inquiry.
- **Bristol Deep Sea Container Terminal, near Bristol:** agreed nature and scale of adverse effect with nature conservation bodies, identified suitable location for compensation

measures and secured options with relevant landowners. Detailed agreement on phasing of the compensation in relation to the point of adverse effect. No public inquiry required.

- **Bathside Bay Container Terminal, near Harwich:** similar to Bristol with compensation site agreed and options secured, alongside detailed legal agreement before end of public inquiry.

4.12. We consider this relevant to the current discussions. While the issues at times may appear novel to the offshore wind farm sector, they are not novel or ground breaking in terms of experience within the UK. Lessons can be learned and applied which can help avoid delays in decision-making post-examination as well as post-consent implementation due to problems relating to securing land tenure, consents etc. In addition, the possibility of compensation measures being needed is not new and although we appreciate discussion over the amount, extent and for which species is not always agreed, certainly awareness of the potential need has existed for several years now.

4.13. Agreement of critical issues on compensation measures in advance of applications (and certainly consent decisions) is one of the key lessons the RSPB has drawn from its experience with the container port sector. Reducing uncertainty in terms of specifying the precise measure, its location and demonstrating it has been secured increases confidence in each measure. Potential barriers to implementation can be anticipated and potential solutions agreed. Failing to do this raises fundamental questions as to whether the relevant measure can be secured. This is why the RSPB has emphasised these issues in its Written Representations here (see REP2-089) and in consultations on earlier offshore wind farm projects.

4.14. Reducing such uncertainty and the delays that inevitably arise is why this has been identified as a strategic issue to be resolved as proposed within the Energy Security Strategy and soon to be laid Energy Bill.

Enforcement outside the UK (reference 4.6)

4.15. The RSPB notes the exchanges between the Examining Authority and the Applicant on matters relating to the enforcement of compensation measures in Guernsey, and other matters that arose at the hearing and subsequently including: the lifetime of compensation measures and the role of OSPAR in respect of any offshore structures. We take each of these in turn.

Issues relating to enforcement of compensation measures in Guernsey

4.16. The Applicant makes two points:

- The agreement of a Memorandum of Understanding (MoU) with Guernsey authorities at an unspecified point in time (before or after the end of the examination) with the intention of securing a formal agreement after the close of the examination (and presumably if the DCO is granted consent) if compensation measures are required; and
- The Applicant's expectation that Ramsar sites in Guernsey would receive comparable protection to those in the UK.

4.17. We address each of these points in turn.

4.18. We are concerned that the securing of such important issues is merely through an MoU at this late stage. Whilst we appreciate the helpfulness of such documents, it is our understanding that they are not enforceable and one party could easily be change its position. We are also concerned that even the offered MoU is not before the Examination nor any details of what the terms of any formal agreement with the Guernsey authorities may be. For the Examining Authority and Secretary of State to have confidence and be able to rely on the measures we would strongly suggest more information is needed with better legal protection before such reliance can be had.

4.19. With regard to the comparable protection of Ramsar sites, the RSPB does not consider this can be assumed and certainly should not be without further information being provided, for example the domestic legislation and policy providing such protection, preferably with some previous examples of how that protection has been practically achieved. In comparing protection regimes for Ramsar sites between England and Guernsey, it is important to remember that the UK Government affords Ramsar sites in England the same high level of protection as SPAs and SACs, derived from the Habitats Regulations and, in turn, from the original EU Directives. Guernsey is not a member of the European Union and therefore its protection of Ramsar sites will not be based on the same foundation.

4.20. Therefore, in order to verify that comparable protection is available for Ramsar sites in Guernsey, it would be necessary to:

- Confirm with the Guernsey authorities that they have ratified and implemented the Ramsar Convention requirements and request a description of their legal and policy framework for the protection of Ramsar sites; and
- Set out how that legal and policy protection framework is comparable to that provided to Ramsar sites in England.

Lifetime of compensation measures

4.21. In answer to the Examining Authority's question about the Applicant's proposals for retaining management of the compensation measures beyond the close of the wind farm and decommissioning, the Applicant stated:

"…the predator eradication and bycatch reduction measures will be implemented and maintained throughout the operational lifetime of Hornsea Four. The artificial nest structures would be implemented and maintained throughout the operational lifetime of Hornsea Four, and thereafter only decommissioned with the approval of the Secretary of State."

4.22. The Applicant appears to be drawing a distinction between the different compensation measures but provides no explanation as to why: predator eradication and bycatch measures are proposed to be maintained only for the operational lifetime of the Hornsea Four project, with the artificial nest structures being subject to the standard the Secretary of State has set elsewhere i.e. maintained beyond the operational lifetime of the development and only decommissioned with the Secretary of State's approval. We see no reason for two of the three measures being subject to a lower standard.

4.23. The RSPB has set out its arguments in respect of the lifetime of compensation measures for offshore windfarms in section 5 of its main Written Representation (REP2-089), summarised at paragraph 5.28:

"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."

4.24. This links to the achievement of the site conservation objectives of the Flamborough and Filey Coast SPA. This is because it affects the ability to meet the SPA's conservation objectives to maintain or restore site integrity and the SPA achieving favourable conservation status for all its features throughout the lifetime of the development and any subsequent period where the impacts of the development continue to affect the SPA's features (see paragraph 2.11 in RSPB REP2-089).

4.25. Therefore, we consider all such compensation measures should be subject to a requirement to be maintained beyond the operational lifetime of the Hornsea Four project based on the combination of the lifetime of the development plus the time it will take the affected seabird population at the Flamborough and Filey Coast SPA to recover from the impacts.

The role of OSPAR in respect of offshore artificial nesting structures

4.26. In a post-hearing clarification the Applicant stated:

"Mr McGovern confirmed that the Applicant's understanding was that its proposals [regarding the lifetime of compensation measures in relation to the operational life of the wind farm] *are broadly aligned with those of other similar proposed compensatory measures for offshore windfarms.* ***Post-hearing clarification:*** *The Applicant has given further consideration to this answer following the hearing and acknowledges that the proposed wording in the draft DCO does not include a presumption that the structures will remain in situ if colonised as found in other DCO's including Hornsea Project Three, however in the context of structures that will be located offshore the Applicant is subject to OSPAR, so a presumption in favour of the structure remaining in situ is not appropriate, rather the colonisation of the structure will be taken into account as a factor regarding the timing of decommissioning in agreement with the Secretary of State as stated by Dr Randall. For consistency the proposed wording requiring the agreement of the Secretary of State also applies to onshore structures."*

4.27. Notwithstanding the RSPB's ongoing concern that there remains no information on the precise location of where an offshore nesting structure will be located and evidence that it can be implemented, we wish to comment on the statement that "the Applicant is subject to OSPAR".

4.28. OSPAR is an international convention and therefore, technically, it is the UK Government that is subject to OSPAR rather than private companies. To assist Interested Parties and the Examining Authority, we would welcome further clarification from the Applicant on:

- how it envisages it will be subject to OSPAR in respect of an offshore nesting structure;

- how the relevant regulators view the proposal to extend the lifetime of a structure due to be decommissioned; and
- the implications of this in respect of the lifetime of the offshore nesting structure compensation measure.

4.29. These are key considerations in assessing both the ability to secure the proposed measure in the first place and the long-term effectiveness and viability of an offshore nesting structure as a compensation measure.

4.30. Again it is useful to consider other compensation measures including those agreed necessary for ports applications. Certainly for new areas created, part of the objective was for those sites to ultimately become SPAs and therefore receive future protection. Whilst we appreciate those compensation measures were due to the permanent removal of part of an SPA, further consideration must be had now as to how long the affected SPA population may need to recover. We strongly recommend this is not left entirely to the decommissioning consent consideration stage.

REP4-044: G4.10 Applicant's comments on other submissions received at Deadline 3 - Revision: 01

Bycatch reduction

4.31. We have reviewed the Applicant's Comments on Natural England submissions (REP3-053 and REP3-054) received at Deadline 3 and below set out our comments on bycatch matters.

Reference C26

4.32. Natural England state (RR-029 Appendix C Summary table: target fishery) they are,

"concerned that the Applicant is not clearly committing to a second year of trials for the LEB (REP1-021). We consider that the LEB remains unproven in a fishery setting or for the species of concern, and its effectiveness must be proven through a robust trial. A single year (in fact, only a winter 'season') of data collection is not sufficient as interannual variation cannot be considered. Further, the raw data must be available in order for us to fully review such a trial, and we understand that only proportional reductions in bycatch will be reported."

4.33. In response to this, under comment C26 (page 12, REP4-044) the Applicant states they are,

"*confident that the Looming Eye Buoy (LEB) is a viable compensation measure and the preliminary results of the bycatch reduction technology phase using the LEB are promising, with similar bycatch reduction as identified in Rouxel et al., (2021). We are therefore confident in the LEB technology and therefore do not consider a trial will be necessary."*

4.34. As outlined in various RSPB submissions to the examination (see REP2-092 RSPB Deadline 2 Submission - Annex B Derogation case: Bycatch reduction and again in REP4-058 RSPB Deadline 4 Submission - Annex A Comments on the Applicant's Bycatch reduction documents submitted at Deadlines 1 and 2): the lead author Yann Rouxel, RSPB Bycatch Project Manager confirmed that, since no nets were involved, there was no bycatch component in the trials described in Rouxel et al., (2021).

4.35. No trials to date have proven LEBs to be effective in an active fishery (with proven bycatch rate reduction). The only proven results so far are about reduction in presence of one single species (long tailed ducks), and not the mentioned guillemots and razorbills which have very different foraging behaviour. As a result, we consider it is neither appropriate nor reliable to apply the Rouxel et al (2021) conclusions to any bycatch reduction measures involving gillnets in the UK with auks as proposed by the Applicant.

4.36. We support Natural England's comments and again refer the Applicant to our comments in REP2-092 and REP4-058 on the need for multi-year trials, transparency of data and peer review to deem any potential measures as proven bycatch reduction methods capable of being used as compensation.

Reference C29

4.37. We also strongly agree with Natural England's comments in RR-029 (Appendix C 61, 81) regarding the unreliability of anecdotal evidence from fishers and the need for access to the raw data. Anecdotal data from questionnaires, unless backed by independent data collection (on-board observers or Remote Electronic Monitoring with cameras), is very likely to lead to underestimating the issue. Work in other fisheries (e.g. Icelandic Lumpfish), has shown large differences between self-reported bycatch rates compared to those reported by independent observers (up to 5 times higher)[9]. While this information is welcomed and useful, it is not enough to use as a base for such calculation. See also our comments on the need for transparent data in REP2-092 and REP4-058.

Reference C38

4.38. We echo Natural England's concerns that reducing gannet bycatch is not currently a viable compensatory measure (RR-029 Appendix C 79). The Applicant's response to this (C38) references conversations with the RSPB and their bycatch experts (at BirdLife International) to discuss gannet bycatch. We wish to clarify that the RSPB and their bycatch experts at Birdlife International are the same people.[10]

4.39. The Applicant also references Hookpods as a method available to reduce gannet bycatch. We refer the Applicant to our comments in paragraph 2.15 of REP4-058 on Hookpods and the need for a greater understanding of the nature and scale of gannet bycatch. Hookpods are mostly of interest for "high value" target fish, such as Tuna, caught using pelagic longlines. On lesser value target fish (e.g. Hake or Ling), the economic viability is less certain and the potential increased operational impact could limit uptake (those vessels can set ~10,000 hooks a day, and would require one hookpod for each hook). We would welcome trials to research potential bycatch mitigation measures in the floated demersal longline fleet as outlined in our recent research[1], but are doubtful that fishers will willingly deploy devices like hookpods unless proven practical or economically beneficial in some serious way. Therefore, we consider it unproven as a compensation measure.

[9] Marine and Freshwater Institute, 2018, Bycatch of Seabirds and Marine Mammals in Lumpsucker Gillnets 2014-2017

[10] See previous submissions e.g. REP2-092, paragraph 2.2 and our response to references 6.21 and 6.24 in REP4-057.