

Written Representation for the

Royal Society for the Protection of Birds

Response to Calculation Methods of Hornsea Four's Proposed

Compensation Measures for Features of the FFC SPA

and

Hornsea Four comments on RSPB Written Representation

Submitted for Deadline 4 (10 May 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

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1. Introduction

- 1.1. Below we set out the scope of the RSPB's submissions at Deadline 4.
- 1.2. This submission sets out the RSPB's selective responses to the following documents:
 - REP 1-063: G1.41 Calculation Methods of Hornsea Four's Proposed Compensation
 Measures for Features of the FFC SPA (non-bycatch related)
 - REP3-031: G3.3 Applicant's comments on other submissions received at Deadline 2 Revision: 01, with specific reference to the Applicant's comments on the RSPB's various
 Written Representations made at Deadline 2. Lack of response to a comment by the
 Applicant should not be take as agreement or disagreement.
- 1.3. In a separate Deadline 4 submission, Annex A, the RSPB has set out its comments on the documents related to bycatch matters submitted at Deadlines 1 and 2:
 - REP1-064: Deadline 1 Submission G1.42 Compensation measures for Flamborough and Filey Coast (FFC) Special Protection Area (SPA): Gannet Bycatch Reduction: Ecological Evidence Revision: 1
 - REP1-063: Deadline 1 Submission G1.41 Calculation Methods of Hornsea Fours
 Proposed Compensation Measures for Features of the Flamborough and Filey Coast
 (FFC) Special Protection Area (SPA): bycatch methods only
 - REP2-011: Deadline 2 Submission B2.8.2 Volume B2, Annex 8.2: Compensation measures for Flamborough and Filey Coast (FFC) Special Protection Area (SPA): Guillemot and Razorbill Bycatch Reduction: Roadmap (Clean) -Revision 03

Submissions planned for Deadline 5

- 1.4. The RSPB is in the process of reviewing the following documents submitted by the Applicant and it is its intention to submit comments on them at Deadline 5:
 - REP3-032: G3.4 Compensation measures for FFC SPA: Compensation Connectivity Note -Revision: 01;
 - REP3-034: G3.4.1 Compensation measures for FFC SPA: Ecological Connectivity of Compensation Measures Annex 1 - Revision: 01.

- 2. RSPB comments on REP1-063 Calculation Methods of Hornsea Four's Proposed Compensation Measures for Features of the FFC SPA
- 2.1. The RSPB has reviewed the Applicant's submission on calculation methods for its proposed compensation measures for features of the Flamborough and Filey Coast SPA (REP1-063). Below we set out our comments on matters other than bycatch matters. Comments on the latter can be found in section 3 of Annex A of the RSPB's Deadline 4 submissions.
- 2.2. The RSPB notes that for all the species assessed the predicted levels of mortality taken forward to the calculation of the level of compensation required are based on the Applicants own preferred approach to assessment which differs from that preferred by Natural England and the RSPB. It is crucial that for these calculations that mortality levels underpinned by the correct recommended parameters and methods are used. Any deviation from these preferred by the Applicant should be presented alongside the recommended methods
- 2.3. Notwithstanding the above comment on the suitability of the mortality values used in the calculations, the RSPB does not agree that the somewhat simplistic approach taken is the most appropriate. While the values for demographic rates used in the calculation, derived from Horswill and Robinson (2015¹), are correct, the approach used takes no consideration of demographic stochasticity, and that these rates are likely to vary through the lifetime of the project. It also is more appropriate, where available, to use recent colony specific demographic data. For example, the kittiwake productivity of the Flamborough and Filey Coast SPA have declined in recent years, and this approach would not take this into consideration
- 2.4. A preferred approach would be to run Population Viability Analysis for each species, incorporating demographic stochasticity. Our preferred approach to this PVA analysis would be to run as a metapopulation analysis, in order to account for the recruitment to and from the novel colonies and impact on the existing SPA populations.

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¹ Horswill, C., & Robinson, R. A. (2015). Review of Seabird Demographic Rates and Density Dependence. JNCC Report no. 552.

3. RSPB response to the Applicant's comments on the RSPB's Written Representations

3.1. Below the RSPB has set out its response to selected comments by the Applicant on the RSPB's Written Representation documents submitted at Deadline 2 and contained in REP3-031: G3.3 Applicant's comments on other submissions received at Deadline 2 - Revision: 01.

Reference	RSPB Written Representation	Applicant's comments	RSPB response		
Written Rep	ritten Representations - RSPB comments on the revised Development Consent Order (DCO) and Deemed Marine Licences (DMLs) (REP2-082)				
	The RSPB suggested that future	The Applicant refers to its response to	The RSPB notes and welcomes the Applicant's response.		
	iterations of the draft DCO should	HRA.1.24.			
	include the full version of the draft	The Applicant has provided a standalone			
	Schedule on Ornithology	document containing the without prejudice			
	Compensation Measures.	compensatory measures drafting for all			
		species at G3.12 Without Prejudice			
		Derogation Draft Development Consent			
		Order Schedules of its deadline 3 submission.			
Responses to	the (RSPB Written Representation (W	Rs) (REP2-089)			
1.12-1.15	The RSPB also repeats its requests	The Applicant notes the RSPB concerns and	The RSPB notes the Applicant's response.		
	made at the Preliminary Meeting	has provided Examination Deliverables			
	that the Applicant provides a	summary (G1.43) at Deadline 1 [REP1-065]			
	timetable for when it proposes to	and Deadline 2 [REP2-036 and REP2-037]			
	update key application documents	setting out the documents that we intend to			
	related to offshore ornithology and	submit into examination. These are			
	compensation measures. This	categorised according to key issue areas (e.g.			
	combined with the information on	ornithology), with the content specific to			
	the scope of the new documents will	address and close out comments raised by			
	enable the RSPB to plan its work to	stakeholders (e.g RSPB) and to answer			
	be able to respond appropriately in	questions from the ExA.			
	order to assist the examination and	The Applicant is doing all it can to address the			
	Examining Authority. Therefore, the	comments and issues raised post-Application			
	RSPB has serious concerns over	by RSPB and others as swiftly as possible.			
	whether sufficient updated	However, the Applicant considers that there			
	information will be available in a	is sufficient quality and detailed information			
	timely manner for it to be able to	within the Hornsea Four DCO Application as			
	make constructive contributions to				

Reference	RSPB Written Representation	Applicant's comments	RSPB response
	ISH5 and ISH 6 at the end of April	supplemented by DL1 – DL3 submissions to	
	2022.	make constructive progress on issues at ISH.	
4.8	However, there are a number of concerns with how the Applicant has applied the methods and a lack of clarity as to how data has been treated or whether there has been consideration of model performance. We understand, through our participation in the Expert Topic Groups, that Natural England also have a number of related concerns	The Applicant notes the RSPB's position on AEoI. The Applicant also notes RSPB's general acknowledgement that MRSea is a robust method subject to correct and transparent application. The Applicant is progressing discussions with Natural England and CREEM on the technical and methodological concerns raised and has provided updates to Examination at Deadline 3 to which the RSPB	The RSPB responded to REP2-046 in its Deadline 3 submission (see paragraphs 2.13-2.14 of RSPB REP2-055). The RSPB welcomes the further analysis carried out by the Applicant to resolve the concerns raised by CREEM and Natural England with the original analysis. However we note that while this to some extent resolves some issues, discussions are still "progressing". It would have been preferable to have progressed these discussions prior to the examination. The further analysis is also only presented for a single species; full model re-runs should
	and anticipated that we would be involved in efforts to resolve them. However, there has been no further discussion with the RSPB around this issue. As this modelling is fundamental to the whole assessment, it is impossible to reach any conclusions with regard to significance of impacts on birds without reassurance that it has been done correctly. As such all the conclusions on AEOI given above can only be considered tentative.	can comment (see Appendix A in G2.10 : MRSea Baseline Sensitivity Report Gannet.	be carried out for the other species of interest. Furthermore, the RSPB is constrained in its ability to fully comment on the technical detail by not having seen the report on the Applicant's original modelling: Scott-Hayward, L.A.S. (2021). Statistical Review of Hornsea Project Four: Environmental Statement for Natural England. CREEM, University of St Andrews, as cited by the Applicant in G2.10 MRSea Baseline Sensitivity Report (Gannet) (revisions 1 (REP2-046) and 2 (REP3-029).
4.9-4.11	However, there are a number of concerns with how the Applicant has applied the above methods and a lack of clarity as to how data has been treated or consideration of model performance. Natural England also have a number of related concerns and have detailed them in their Relevant Reps (points 63-69, Appendix B, RR-029). These include:	The Applicant refers the RSPB to the updated G2.10 MRSea Baseline Sensitivity Report Gannet). Part 1 and Appendix A set out the methodology and model validation approach as agreed in consultation with Centre for Research into Ecological & Environmental Modelling (CREEM) and Natural England. Part 2 and 3 presents Confidence Intervals (CI) for model-based approaches (MRSea_v1 and	As stated above, the RSPB welcomes the re-run of the gannet model carried out under the guidance of CREEM. 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

Reference	RSPB Written Representation	Applicant's comments	RSPB response
	 There is no justification of why model based approach has been used. Such justification should include a comparison with the outputs of a design based approach: There is insufficient detail in the methodology as to model validation It is unclear how population and density estimates were derived (seemingly using different approaches) from the modelled surfaces. There is insufficient detail as to how populations and densities were apportioned to different behaviours It is unclear how Confidence interval and Co-efficients of Variance (SD/mean or SE/mean) were estimated using model-based approaches for total populations, densities, apportioned behaviours and corrected apportioned 	MRSea_v2) and design-based totals, densities and behaviours.	impacts ² , which recommends counts should be assessed as mean seasonal peaks, averaged over the years of survey. As such, for displacement impacts, we request that the MRSea model is run in line with SNCB advice.
4.13	behaviours. The RSPB has outstanding issues with the manner in which the bio-seasons definitions from Furness (2015) have been defined for gannet and kittiwake, effectively excluding the	The Applicant's preferred method to assess gannet and kittiwake and the compilation of relevant bio-seasons for both species is supported from evidence from the site-specific survey data (APP-074). These data	While the RSPB agrees that there will be migrating adults passing through the array area outwith the migration-free breeding season, simply excluding these seasons from the assessment of breeding season mortality will result in an underestimate of mortality attributable to the Flamborough and Filey Coast SPA, as

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² 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)

Reference	RSPB Written Representation	Applicant's comments	RSPB response
	early and later months of the season. This is caused by using the "migration-free" seasonal definition as opposed to full breeding season. For example, the kittiwake breeding season is defined as May to July, when evidence from colony monitoring shows birds are present April at least to August. While in the latter part of the season all birds will have fledged, individual birds will still be present with both young and adult birds coming back to the cliff. These are still SPA birds, and those most likely to be affected by impacts from the development.	provide evidence that substantial proportions of birds outside of the migration-free breeding season pass through the Hornsea Four array area. The presence of migrating adults at the beginning of the breeding season and immature birds towards the end of the breeding season would lead to an overestimate of the mortality that would be attributable to the Flamborough and Filey Coast SPA. In relation to seasonal definitions please refer to G1.9 Applicant's comments on Relevant Representations (APDX:B-82, within RR-029) (REP1-038).	SPA birds are still present at the colony at this time, and still presumably using the array area with the associated risks
4.14	In order to assess the mortality that could arise from avian collision with turbine blades, the Applicant has used the stochastic version of the Band Collision Risk Model (sCRM) 47,48. This approach is welcomed by the RSPB. This method combines a series of parameters describing the turbine design and operation with estimates of a birds' size and behaviour to generate a predicted number of birds that would collide with a turbine over a given time period. The stochastic formulation was initially developed by Masden (2015) and then produced in an easier to use interface by McGregor et al, (2018).	Extensive consultation between the Applicant, the model developers (DMP Stats), Natural England and the RSPB was undertaken during the Evidence Plan (EP) process to resolve any concerns relating to the appropriateness of the sCRM, which resulted in agreement from all parties being reached on running the sCRM deterministically for use in assessing collision risk for Hornsea Four (OFF-ORN-2.21 & 2.26, as set out in Evidence Plan Logs which are appendices to the Hornsea Four Evidence Plan (B1.1.1: Evidence Plan (APP-130)). The rationale as to why the sCRM was not run stochastically related to there being no stochastic avoidance rates which SNCBs were confident in advocating for use within the model. The RSPB agreed with this conclusion	The RSPB is supportive of the sCRM, both using it in a stochastic or deterministic formulation. In our Written Representations we asked for an explanation to be put before the examination as to why the Applicant used the deterministic formulation, both to inform the Examining Authority and for clarity if precedent is established. The Applicant has now provided this explanation, and the RSPB remains content with the deterministic approach taken. However concerns remain that a full account of uncertainty and variability is not given by the deterministic approach.

Reference	RSPB Written Representation	Applicant's comments	RSPB response
	The stochastic version allows for some account of uncertainty and variability in parameters to be made. However, the Applicant has used the model in such a manner that only deterministic outputs are provided, in other words, while this formulation allows for uncertainty and variability to be accounted for, the Applicant has not made use of this functionality, and therefore has not given a full account of uncertainty and variability. An explanation is required as to why they have taken this approach.	and stated in EP#8 "the RSPB would be happy if the sCRM was run deterministically	
4.15-4.19	For these reasons the Avoidance Rate used by the Applicant for gannet in the breeding season is likely to be too high, resulting in an underestimate of collision mortality.	For collision risk assessments the Applicant has followed the Joint SNCB Position Note (2014) to select an appropriate avoidance rate for gannet.	The RSPB maintains its position with regard to a higher breeding season avoidance rate for gannet. We also note that the Applicant recommends a lower displacement rate for gannet during the breeding season in G2.9 Gannet Displacement and Mortality Evidence Review - Revision: 01 which contradicts their position on avoidance rates, as displacement is analogous to macro-avoidance
4.20-4.22	In their assessment of displacement, the Applicant appears to have only used birds on the water, rather than including those flight. The legend to Table 2 in Volume A5 Annex 5.2 Offshore Ornithology Displacement Analysis (page 12, APP-075) clearly states: "Bio-season mean peak abundance and density estimates of key bird species for Hornsea Four disturbance and displacement assessment (sitting birds)" and 1.6.1.3 makes clear "for guillemot, razorbill and puffin only sitting birds	The Applicant has revised its displacement assessment of auks (see Section 1.4 and Tables 2-27) to include all birds (flying and sitting) as recommended to account for any possible barrier effects. The results are presented in A.5.5.2 Volume A5, Annex 5.2: Offshore Ornithology Displacement Analysis (REP2-003).	See para 2.7 in the RSPB's REP3-055 (which commented on the tracked version, REP2-002).

Reference	RSPB Written Representation	Applicant's comments	RSPB response
	were included, given the species foraging behaviours". As such the assessment differs from standard methodology and is contrary to statutory advice. Without the full numbers of birds on the water and in flight put into the matrix, it is impossible to reach conclusions on the significance or otherwise of impacts arising from displacement and barrier effects		
4.23	Furthermore, in calculating displacement for guillemot, the Applicant has used weighted mean, rather than mean peak density of abundance during the non-breeding season. The Applicant claims this was agreed following consultation at the Evidence Plan meeting on 4th March 2021. The RSPB were unable to attend this meeting, but no detail is given in Table 5.4. "Consultation Responses" in Volume A2 Chapter 5 Offshore and Intertidal Ornithology (page 20, APP-017) of such an agreement and the statement is contrary to Natural England's Relevant Representations (RR-029), which state: "Natural England do not agree with the Applicant's approach to weighting the seasonal mean peak abundance estimate in the non-breeding season for guillemot."	In relation to assessment of guillemot in the non-breeding bio- season please refer to the Applicant's comments in response to Offshore Ornithology Relevant Representations (RR-029-APDX:B-50) and Section 1.4 of REP2-003.	The RSPB notes the Applicant's response in Offshore Ornithology Relevant Representations (RR-029-APDX:B-50) and Section 1.4 of REP2-003, but note that this does not specifically address the concerns raised by Natural England and the RSPB, particularly with regard to inadequate precaution in the weighted mean approach

Reference	RSPB Written Representation	Applicant's comments	RSPB response
	While the RSPB agree that the high		
	numbers of auks recorded in August		
	and September may require a		
	modified approach, the weighted		
	mean approach is not suitably		
	precautionary and is likely to		
	underestimate the total number of		
	impacted birds		
4.24	The RSPB has outstanding issues with	In relation to age structure and	The RSPB agrees with the Applicant's comments in REP1-038 with
	the manner in which apportioning of	apportionment please refer to the Applicant's	regards to allocating age classes to birds surveyed by Digital Aerial
	predicted mortalities to relevant	comments in response to Offshore	Survey, and that it can be preferable to derive age class from the
	SPAs has been carried out. As a basis	Ornithology Relevant Representations (RR-	stable age structure from population models. However, this
	for apportioning adults, the	029-APDX:B-44) (REP1-038).	approach does not use site specific data and such data can be
	Applicant has used theoretical		crucial in determining whether there is any local variation in
	generalised stable age structure		distribution of different age classes, for example different age
	derived from population models. The		classes of gannet can have different levels of risk due to difference
	RSPB would prefer that these are		in distribution ³ . As such, we would prefer that the site specific age
	presented alongside site specific data		classification is presented <i>alongside</i> that derived from stable age
	on the age of birds recorded during		structure models.
	survey. The Applicant has		
	acknowledged the importance of		
	these data in section 3.4.9 of Volume		
	A5 Annex 5.1 Offshore and Intertidal		
	Ornithology Baseline		
	Characterisation Report (page 21,		
	APP-074) as follows: "consideration		
	of whether any potential impact(s)		
	might occur to an adult bird that is		
	part of the breeding population of a		
	specific colony or designated site (an		
	SPA) or if it might occur to an		
	immature bird that is not associated		

³ Pollock, C. J., Lane, J. V., Buckingham, L., Garthe, S., Jeavons, R., Furness, R. W., & Hamer, K. C. (2021). Risks to different populations and age classes of gannets from impacts of offshore wind farms in the southern North Sea. *Marine Environmental Research*, *171*, 105457.

Reference	RSPB Written Representation	Applicant's comments	RSPB response
4.25-4.27	with the breeding population of a particular colony or SPA". The Applicant then goes on to highlight that "a detailed breakdown of seabird age classification" is presented. It is therefore not clear why this detailed breakdown has not been used in the assessment 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 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	In relation to PVA modelling please refer to the Applicant's comments to G1.9 Applicant's comments on Relevant Representations (APDX:B-18, within RR-029) (REP1-038). The Applicant's is currently undertaking further analysis of the validity of the NE Seabird PVA tool (2019) and suitability of both outputs for assessment, the results of which will be shared at Deadline 4 and updated for Deadline 5 in the Ornithology Assessment Sensitivity Report.	The RSPB will welcome the presentation of the analysis of the suitability of the PVA output metrics, but note that these outputs have been independently assessed previously and found to be the most appropriate
4.30	uncertainty and the need for precaution.	With out organic in the input garage to	The DCDD wood averable the same insert assume that Average and
4.28	Furthermore, the RSPB has run one of the PVA scenarios for gannet and found inconsistencies in the model	Without examining the input parameters used by the RSPB in the running of their own PVA results, the Applicant is unable to	The RSPB used exactly the same input parameters as the Applicant for their analysis. While the differences in outputs may be due to stochasticity, the RSPB would prefer to have had direct discussion

Reference	RSPB Written Representation	Applicant's comments	RSPB response
	output reported by the Applicant (Table 3). Using the same Natural England PVA tool and following the PVA parameter log for Hornsea Four alone in the B2.2 Report to Inform Appropriate Assessment Part 11: Appendix H: Offshore Ornithology Flamborough and Filey Coast (FFC) Special Protection Area (SPA) Population Viability Analysis (Appendix C, Seabird PVA Tool Input Log; Hornsea Four alone gannet FFC SPA PVA log, page 53, APP-177) inconsistencies were found in both CPGR and the Reduction in Growth Rate. These inconsistencies are indicative of the impacts not having been adequately assessed by the applicant, either through such errors in the modelling process or by mispresenting the output metrics.	comment on any discrepancies between the Applicant's and RSPB's results. The Applicant would like to point out however that this is a stochastic model and therefore variability in the results is inevitable when trying to replicate the modelling. Considering the very minor discrepancies between the Applicant's and RSPB's results (as set out in RSPB Table 3) this could simply be caused by the inherent variability in a stochastic model. The difference in the values provided by the RSPB do not represent significant differences indicative of the impacts not having been adequately assessed by the Applicant. Therefore, such differences are not considered to provide inconsistencies or errors in the modelling process or mispresenting the output metrics.	and comparison with the Applicant around this issue. In relation to this, the RSPB notes that in its response to the RSPB's Relevant Representations on this same issue (see reference RR-033-H on page 614 of REP1-038) the Applicant stated: "The Applicant notes the RSPBs comment. The inability of RSPB to reproduce the Applicant's model outputs does not mean that the Applicant's model outputs are incorrect, nor does it follow that the impacts have not been adequately assessed. The Applicant shall seek clarification from the RSPB and provide any update to the PVA as deemed necessary." We note that, to date, the Applicant has not sought such clarification from the RSPB on this matter.
6.6	The Applicant has provided no evidence of a Northern Gannet colony establishing on an artificial structure, the evidence of such behaviour is limited to three case studies of Australasian gannets. Therefore, the RSPB considers the concept of artificial nesting structures is a wholly unproven compensation measure for Northern Gannets.	The Applicant has presented a detailed review of evidence, demonstrating the ecological efficacy of the compensation measures for Northern gannet within the ecological evidence report: B2.7.1 Compensation measures for FFC SPA: Offshore Artificial Nesting: Ecological Evidence (APP-187). The Applicant notes that within the RSPB's Relevant Representation response (RR-033-LL when referring to the initial response from the Applicant within their Comments on Relevant Representations and Deadline 1: G1.9) RSPB state: The RSPB accepts that there	 The Applicant has inadvertently conflated two different issues: Evidence of very limited Northern Gannets nesting or attempting to nest on artificial sites (which the RSPB acknowledged in its Relevant Representation); Evidence of a Northern Gannet colony becoming established on an artificial structure and maintained on a long-term basis, which the RSPB considers unproven and which is highly relevant to the question of whether this is suitable as a compensation measure. The difference between nesting attempts and colony establishment is significant and directly relevant to the evidence in support of artificial nesting structures as a compensation measure.

Reference	RSPB Written Representation	Applicant's comments	RSPB response
		are examples where northern gannets have nested or attempted to nest on artificial structures (see Table 5, and paragraphs 4.2.1.3 – 4.2.1.6 in B2.7.1 Compensation measures for FFC SPA Offshore Artificial Nesting Ecological Evidence). The Applicant would welcome clarification from RSPB on what appears to be a change in position.	Therefore the RSPB considers there is no need to clarify its position which is clear, internally consistent and has not changed.
6.13	RSPB make the following comments on its perceived uncertainties with artificial nesting structure compensation for kittiwake: • Whether the selected location will have access to a good food supply to help secure good productivity over time; • Whether nesting habitat is a limiting factor for the breeding population of kittiwakes in the southern North Sea; and therefore • Whether artificial nesting structures will be colonised and whether these will be additional breeding adults, as opposed to existing breeding adults	As presented within the Applicant's B2.7.1 Compensation measures for FFC SPA: Offshore Artificial Nesting: Ecological Evidence (APP-187), there is a large body of evidence which exists to support the measure. The Applicant would like to direct the RSPB to the updated Roadmaps (Revision 3 of B2.7.2: Compensation measures for Flamborough and Filey Coast (FFC) Special Protection Area (SPA): Kittiwake Offshore Artificial Nesting Roadmap (REP2-007) and B2.7.4: Compensation measures for Flamborough and Filey Coast (FFC) Special Protection Area (SPA): Kittiwake Onshore Artificial Nesting Roadmap (REP2-009)) regarding further updates on site selection for the compensation measures. The Applicant is confident that the required compensation population can be readily	The Applicant's response to the recommendation of a metapopulation analysis does not address the example of such an approach. The recommended approach was developed by Dr. Julie Miller in her PhD thesis (Miller 2020) ⁴ and presented in a paper to the Marine Alliance for Science and Technology Scotland Conference (Miller <i>et al</i> 2020) ⁵ . This approach is not, as the Applicant suggests, constrained by the need for mark/recapture data. In fact, the model does not require site-specific empirical estimates of count and key demographic rates for all colonies, rather it can be run by combining detailed study sites with other synoptic surveys, such as provided by the Seabird Monitoring Programme. The Applicant cites a separate paper by Miller <i>et al</i> (2019) ⁶ to argue against meta-population analysis because of uncertainty. However this paper ran PVAs on two single colonies, and while it followed classic metapopulation theory was not, in itself, a metapopulation analysis and made no comments with regard to the

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⁴ Miller, J.A.O. (2020) Regulation and risk: developing models to assess the dynamism of seabird populations and their risk from anthropogenic mortality. PhD thesis, University of Glasgow

⁵ Miller, J., Furness, R., Trinder, M & Matthiopoulos, J. 2020. - Estimating connectivity and vulnerability in a seabird metapopulation, Presentation to MASTS conference, 7th October 2020.

⁶ Miller, J. A., Furness, R. W., Trinder, M., & Matthiopoulos, J. (2019). The sensitivity of seabird populations to density-dependence, environmental stochasticity and anthropogenic mortality. *Journal of Applied Ecology*, 56(9), 2118-2130.

Reference	RSPB Written Representation	Applicant's comments	RSPB response
	choosing to redistribute	delivered at both a new or repurposed	
	themselves;	offshore structure with the use of optimal	Furthermore, the metapopulation approach has been specifically
	Whether and over what	kittiwake nesting habitat design and	recommended by the Offshore Wind Strategic Research and
	timescale any new colony will	measures (such as decoys and play back of	Monitoring Forum ⁷ as an achievable research objective, with the
	achieve the target population	kittiwake calls) to encourage colonisation and	advantage of there being an existing modelling framework (the
	and recruitment of breeding	recruitment, if required.	Miller model).
	adults into the Eastern Atlantic	The Applicant has proposed the provision of	
	biogeographic population and	additional artificial nesting opportunities for	
	thereby to provide benefit to the	kittiwakes within the specified search zones	
	kittiwake SPA network, including	to enhance productivity and therefore be	
	the FFC SPA;	effective as a compensatory measure to meet	
	Whether the selected location	Habitats Regulations requirements. The	
	will be exposed to additional	establishment of breeding colonies at the	
	pressures e.g. collision risk from	structure would produce young that would	
	current and planned offshore	become part of the wider biogeographic	
	wind farms.	population of kittiwake as part of the east	
		Atlantic breeding population of the species.	
	In order to address these	This population includes individuals from the	
	uncertainties, we recommend that a	Flamborough and Filey Coast SPA (Stroud et	
	meta-population analysis is carried	al., 2016), with the proposed compensation	
	out to clarify the dynamics between	measures to be undertaken within this	
	potential purpose-built artificial nest	populations breeding and migratory range.	
	sites and SPA and other colony	This approach was agreed by the SoS for the	
	populations. Due to immigration	recent decision for East Anglia One North and	
	from other colonies being required	East Anglia Two, where the implementation	
	for recruitment into the artificial	of artificial nest structures in each case were	
	colonies, conventional population	found to ensure the overall coherence of the	
	analysis, which are based on closed	national site network (i.e. at a wider	
	populations, are not suitable. A	biogeographic scale).	
	method for the theoretical	The suggested meta-population analysis relies	
	quantification of connectivity	on Bayesian state- space models fitted to	
	between colonies has been	population time series. The work of Miller	
	described by Miller (2020) and Miller	(2020) & Miller <i>et al</i> . (2019) may present a	

⁷ https://hub.jncc.gov.uk/assets/c563bfa5-8177-4dc0-bcb3-4aeafef24b59

Reference	RSPB Written Representation	Applicant's comments	RSPB response
	et al (2020) for the Shetland meta-	theoretical approach to assess meta-	
	population of kittiwake, and a similar	population dynamics, however, these rely on	
	method for a regional	fitting models to existing data (e.g. long term	
	metapopulation of East Atlantic	mark-recapture datasets).	
	would elucidate the feasibility of the	Various parameters need to be accurately	
	establishment of the colonies.	known for the target population and a	
	Furthermore, it would investigate	number of assumptions need to be made to	
	the consequences of such colony	run these models. Miller et al. (2019) admit	
	establishment on the populations of	that there is a large uncertainty in these	
	other colonies, in particular that of	models and that "in the absence of empirical	
	the FFC SPA. There is additional	rates of connectivity, precaution remains with	
	complexity due to the number of	the assumption of a closed-system".	
	emerging proposals for artificial	Considering these uncertainties in the	
	nesting structures as compensation	connectivity rates between SPA colonies and	
	from other wind farm developers.	new artificial nesting structures, the Applicant	
		considers it unfeasible to undertake such	
		work in relation to the request posed by	
		RSPB.	
		The Applicant believes that the uncertainties	
		mentioned (e.g. whether nesting habitat is a	
		limiting factor for the breeding population;	
		whether artificial nesting structures will be	
		colonised and over what timescale any new	
		colony will achieve the target population)	
		cannot be robustly analysed using the	
		methods stated above.	
		The Applicant has already provided a	
		response to a number of the uncertainties	
		mentioned above in their responses in their	
		Relevant Representations at Deadline 1	
		(including RR-029-APDX:C-B, RR-029-APDX:C-	
		P).	
		The Applicant is cognisant of compensation	
		measures for kittiwake being delivered by	

Reference	RSPB Written Representation	Applicant's comments	RSPB response
		other projects. However, the Applicant notes	
		that not all other developers have secured	
		locations for their compensation.	
6.15	We refer the Examining Authority to	The Applicant has carefully considered the	The RSPB refers to its comments on this issue at paragraph 5.26-
	our generic comments in section 5	ecological evidence, technical delivery and	5.27 of its REP2-089.
	on both the lead-in times for	held discussions with Natural England in	
	compensation and the lifetime of	recognition of Natural England's concerns	
	compensation measures in relation	regarding the	
	to damage.	commitment to allow for one breeding	
		season prior to operation if there is an	
	Therefore, we do not accept the	existing colony or two years if there is no	
	Applicant's proposals of a nesting	existing colony.	
	structure being in place for a	The Applicant has considered Natural	
	minimum of 2 breeding seasons	England's comment regarding lead-in	
	(new structure) or 1 breeding season	timescales for artificial nesting and as set out	
	(repurposed structure) prior to	in Response RR-029-APDX:A-22 of the	
	operation of the wind farm.	Applicant's Comment on Relevant	
	Like Natural England, we consider	Representations at Deadline 1 (reference	
	these lead-in times are very short, do	G1.9) with the Applicant now making a	
	not recognise basic kittiwake	commitment to implement the nesting	
	breeding ecology (they do not breed	structure three breeding seasons ahead of	
	until they are 4+ years old), and fail	operation of the windfarm.	
	to acknowledge that it is highly	The Applicant would like to direct the RSPB to	
	unlikely that the compensation will	the updated Roadmaps submitted at	
	be delivering at the scale required	Deadlines 1 and 2 (for example Revision 3 of	
	before the impacts occur or during	B2.7.2 Volume B2, Annex 7.2: Compensation	
	any period of colony establishment.	measures for Flamborough and Filey Coast	
	In this respect, we further agree with	(FFC) Special Protection Area (SPA): Kittiwake	
	Natural England's comments on	Offshore Artificial Nesting Roadmap (REP2-	
	timing (page 9, Appendix C, RR-033)	007) and B2.7.4 Volume B2, Annex 7.4:	
	that implementation before impact	Compensation measures for Flamborough	
	is not the same as delivering of the	and Filey Coast (FFC) Special Protection Area	
	functional compensation before	(SPA): Kittiwake Onshore Artificial Nesting	
	impact (see Table 4 above).	Roadmap (REP2-009)).	
	Determining what comprises		

Reference	RSPB Written Representation	Applicant's comments	RSPB response
	functional compensation is related to	The updated Roadmaps present a high-level	
	agreement on detailed	programme (Table 1 of the document) which	
	compensation objectives and how	is applicable to the implementation and	
	success should be measured, which	delivery of the onshore/ offshore artificial	
	in turn will be related to relevant	nesting compensation measures (repurposed	
	breeding ecology metrics.	and new in relation to offshore).	
		The timing of implementation of an artificial	
		nesting structure is provisional as the	
		timeframe for Examination, consent award,	
		reaching final investment decision (FID) and	
		Contracts for Difference Allocation Round,	
		have not yet been set. The programme has	
		been carefully considered to ensure timely	
		delivery of the compensation measure with	
		the Applicant committing to the	
		implementation of a single structure at least	
		three kittiwake breeding seasons ahead of	
		operation.	
		The relevant documents (including the DCO)	
		have been updated accordingly to reflect this.	
		Please see Deadline 2 Submission - An	
		updated version of the draft Development	
		Consent Order (dDCO) (tracked) (REP2-060).	
6.19	The RSPB does not accept that	The updated Roadmaps submitted at	The RSPB refers to its comments on the updated roadmap which
	bycatch reduction can be described	Deadline 2 (e.g. Revision 3 of B2.8.2:	form part of its Deadline 4 submission (see the "RSPB's Comments
	as a compensation measure, primary	Compensation measures for Flamborough	on the Applicant's Bycatch reduction documents submitted at
	or otherwise, and considers this	and Filey Coast (FFC) Special Protection Area	Deadlines 1 and 2").
	proposal is experimental research.	(SPA): Guillemot and Razorbill Bycatch	
		Reduction: Roadmap (REP2-011)) set out the	The RSPB notes the Applicant's response in respect of its
		implementation studies and bycatch	preliminary findings. However, we consider it premature of the
		reduction selection phase which is being	Applicant to make any definitive statements (e.g. will reduce the
		undertaken to select the most appropriate	number mortalities) on the success or otherwise of the 2021/22
		bycatch reduction method.	trial, pending a full write-up and submission for review by
		Preliminary findings from the implementation	Interested Parties of detailed methods, findings and preliminary
		studies are promising, with an initial	conclusions. The Applicant admits that it is yet to fully analyse and

Reference	RSPB Written Representation	Applicant's comments	RSPB response
		reduction in bycatch of auks identified from	determine the significance of the trial and these are among the
		the bycatch reduction selection phase. The	first ever in-fishery trials of these devices – so there is not a body
		significance of the bycatch reduction will be	of previous scientific research upon which to base claims of
		fully analysed following completion of the	viability and efficacy.
		bycatch reduction selection phase.	
		Bycatch reduction as compensation will	Therefore, the RSPB does not accept at this stage that the
		reduce the number of mortalities of guillemot	Applicant has demonstrated "Bycatch reduction as compensation
		and razorbill within an active commercial	will reduce the number of mortalities of guillemot and razorbill
		fishery in a known bycatch hotspot.	within an active commercial fishery in a known bycatch hotspot."
		The Applicant has demonstrated through the	
		package of compensation measures that the	The RSPB's position on bycatch reduction as a form of
		compensation is viable, effective and can be	compensation is set out Annex B to the RSPB's Written
		readily secured and delivered.	Representations (REP2-092). Notwithstanding that, we seek to
			engage productively with the Applicant.
6.21	The Applicant is proposing gillnet	The Applicant has provided a full and detailed	During consultation with the Applicant the RSPB supported
	bycatch reduction measures, yet	response within RR-033-GG within the	research and trials based on what seemed promising at the time.
	there are currently no recommended	Relevant Representations at Deadline 1.	This indeed included LEB, which had not yet been tested in situ,
	technical measures for gillnet	The Applicant acknowledges the concerns	but also included other approaches such as gear-switching and
	bycatch mitigation. The measures	raised by RSPB regarding the uncertainties	spatio-temporal measures. It also included very general support for
	that are proposed and trialed are	around success of a bycatch reduction	the broad-brush locations of target fisheries indicated by the
	unproven and fail to meet the ACAP	technique.	Applicant at the May 2021 workshop (and other meetings) given
	Best Practice Seabird Bycatch		the limited evidence base available. Similarly, broad brush
	Mitigation Criteria and Definition.	To address these uncertainties, the Applicant	geographic areas only were described in the Applicant's August
		has begun the bycatch reduction selection	2021 pre-application consultation on its compensation measures
		phase (commenced in November 2021) to	(from the Thames round to Devon). Our response to that
		identify the success rate of the Looming Eyes	consultation reaffirms the limited evidence base on the nature,
		Buoy (LEB) within the same fisheries which	scale and location of bycatch affecting guillemots and razorbills in
		bycatch reduction has been evidenced to be	UK waters (see RSPB paragraph 3.17 on page 23 in APP-166).
		highest risk for guillemot and razorbill (within	However, the Applicant has yet to provide specific details on the
		the English Channel) (see bycatch risk	precise geographic locations of the fisheries where its trials are
		mapping in Section 7 of B2.8.1.	taking place. We await further details on this and the findings of its
		Compensation measures for FFC SPA:	trial when the Applicant submits its "Bycatch Reduction
		Bycatch Reduction: Ecological Evidence	Implementation Study 2021/2022 Summary" at Deadline 5.
		(APP-194)).	

Reference	RSPB Written Representation	Applicant's comments	RSPB response
		The Applicant notes previous agreement of	The RSPB has been supportive of the proposed approach to the
		the target fishery and location by Natural	technology selection phase but have also made it clear that data
		England and RSPB during Hornsea	transparency and peer-review is necessary for potential trials and
		Compensation Workshop (28th May 2021).	results to be considered by the scientific community. To date, and
		Technology for the bycatch reduction	in the absence of such actions, the measure is still unproven to
		technology selection phase was based on the	reduce bycatch. It is important to highlight that supporting this
		most readily available technology which has	approach and study is different from agreeing that the LEB can be
		been developed by the RSPB (see Rouxel et	considered as compensation. These are separate discussions.
		al., 2021). The RSPB during consultation with	
		the Applicant supported the use of LEB with	We consider the Applicant's interpretation, that ACAP guidance
		the Applicants technology selection phase.	relates to the deployment of a technology rather than the
		The Applicant is aware of the ACAP guidance	selection of technology, to be incorrect. The ACAP guidance is also
		mentioned by the RSPB (full reference; ACAP	about the <u>development</u> of potential bycatch reduction measures.
		(2014) Best Practice Seabird Bycatch	The process of how measures are developed is important in
		Mitigation Criteria and Definition. In: ACAP	determining whether they can be considered best practice or not.
		Eighth Meeting of the Advisory Committee.	For LEBs, or any proposed measures, to become best practice data
		AC8 Doc 12 Rev 1, Punta del Este, Uruguay).	needs to be transparently shared, so it can be analysed by the
		The guidance is in relation to the deployment	scientific community to meet ACAPs thresholds. This is not to say
		of a technology rather than the selection	that LEBs cannot be best practice, but only once the underpinning
		phase, which is the level the Applicant is	research is peer- reviewed and proven. To date LEBs are unproven.
		currently operating at. A number of the ACAP	
		best practice criteria have already been met	We consider the below necessary for the Applicant's development
		by the Applicant at this stage. For example,	of potential bycatch measures to be considered as ACAP best
		the Applicant has followed the correct design	practice:
		approach for the selection phase (such as	All methodology, results and analyses are made available for
		comparing the performance of candidate	peer review;
		mitigation technologies to a control of no	Trials are conducted over multiple years;
		deterrent, where possible or to status quo in	The trials are replicable.
		the fishery, yields definitive results) which	·
		provide a robust foundation for data	The referenced RSPB trials have taken place (and are continuing)
		collection.	over multiple years and the data will be made available for peer
		It is important to note that bycatch experts	review.
		employed the by the RSPBs sister	
		organisation BirdLife International and	
		Natural England have been supportive of the	

Reference	RSPB Written Representation	Applicant's comments	RSPB response
		proposed approach to the technology	The RSPB would like to clarify that we are not a sister organisation
		selection phase and in recent discussions	of Birdlife, we are BirdLife in the UK, and the BirdLife Marine
		supportive by the study design (such as	Programme is hosted by the RSPB.
		location, fisher acceptance and inclusion,	
		monitoring and paired net approach)	
		undertaken by the Applicant. Furthermore,	
		the RSPB is also currently trialling the same	
		technology (LEB) within an active commercial	
		fishery in the SW of England and has plans to	
		use the technology in a further project in	
		Iceland.	
		In summary, the Applicant has followed and	
		exceeded previous attempts by other	
		organisations of best practice in order to	
		provide stakeholder confidence to the	
		technology selected. More importantly, the	
		Applicant is ensuring as best as is possible	
		that the technology selection phase will	
		deliver a reduction technology which will	
		meet the ACAP criteria.	
6.24	If the proposed bycatch mitigation	The Applicant has provided detail previously	The Applicant states it would be interested to receive evidence,
	measures were proven effective per	within its Comments on Relevant	data and reports detailing the RSPB's considerable efforts in this
	se, based on our considerable	Representations at Deadline 1: G1.9 response	field. Below we provide a brief summary in addition to the
	experience in this field we are	RR-033-GG. The Applicant would be	information already provided in our Deadline 2 submissions.
	concerned about the achievability of	interested to receive from the RSPB evidence,	
	uptake and implementation over a	data and reports detailing their considerable	The RSPB has hosted and managed the BirdLife International
	period of more than 35 years. This	efforts in this field. For the avoidance of	Marine Programme (formerly the Global Seabird Programme) on
	places a significant burden of proof	doubt, we assume the term "field" means	behalf of the global Birdlife Partnership since 2004. We have
	on the Applicant to demonstrate	bycatch technology selection and	attended ACAP as an observer since the inception Meeting of the
	how such sustained uptake will be	implementation.	Parties in 2004 and formal members of the Seabird Bycatch
	achieved. This needs to be confirmed	Proof of uptake by fishers and	Working Group since its first meeting in 2007, supporting the
	and guaranteed before the end of	implementation within an active gillnet	development of best practice mitigation through our expertise.
	the examination so that it can	fishery will be provided by means of detailed	This has been underpinned by extensive involvement in testing and
	scrutinised by the Examining	monitoring, by using a duel camera system to	developing mitigation in commercial fisheries, primarily through
	Authority and interested parties.	record all bycatch during fishing trips. This is	

Reference	RSPB Written Representation	Applicant's comments	RSPB response
		in line with suggestions by the RSPB in their D2 submissions, Annex B – "The RSPB would recommend avoiding self-reporting in preference of Remote Electronic Monitoring with cameras or at least some form of automated/electronic monitoring". The Applicant has an excellent relationship with the fishing industry which as a result has led to all fishers included within the bycatch technology selection phase agreeing to have vessels installed with dual camera monitoring system. A concurrent trial is being undertaken by RSPB & BirdLife International which is also using the LEB and within the SW of England. The RSPB & BirdLife International are relying on a bycatch self-reporting system for this trial and therefore the Applicant's monitoring goes above and beyond current practice. The Applicant will continue to build on this already strong relationship with the fishers during the technology selection phase to ensure long-term implementation of the measure. It is important to note that the Applicant is also undertaking predator eradication to benefit both species (guillemot and razorbill) which will be delivered as a	the Albatross Task Force, including (note: the linked articles are examples only and not exhaustive): line weighting trials in pelagic longline fisheries ⁸ bird-scaring lines, night-setting and line weighting in demersal longline fisheries ⁹ bird-scaring line use in trawl fisheries ¹⁰ Hookpods ¹¹ Since 2014, the Programme has been at the forefront of trialling gillnet mitigation including: High-contrast panels & lights ¹² Looming-eyes buoys ¹³ Gear-switching & time-area closures ¹⁴ . As a UK-based conservation organisation, the RSPB is almost uniquely qualified to provide inputs on this issue. While we recognise the high value of the Applicant's methodology in their bycatch research project, the lack of transparency and data sharing with other stakeholders – including the RSPB - to assess the effectiveness of the measure in a peer-reviewed way, is problematic, as it is not open to appropriate scientific scrutiny. Long- term implementation The RSPB remains concerned about precisely how the Applicant will achieve the long-term implementation of the measures. Whilst

 $^{^8 \ \}underline{\text{https://www.sciencedirect.com/science/article/abs/pii/S0165783612002524, https://zslpublications.onlinelibrary.wiley.com/doi/full/10.1111/acv.12472)}$

 $^{^9}$ https://www.cambridge.org/core/journals/oryx/article/seabird-mortality-in-the-namibian-demersal-longline-fishery-and-recommendations-for-best-practice-mitigation-measures/AFB08753C43C575959323DBBCE247E43

¹⁰ https://link.springer.com/article/10.1007/s00300-015-1747-3; https://www.sadstia.co.za/assets/uploads/BLSA -Maree-et-al.-2014-Trawl-Paper.pdf

 $^{^{11}\,\}underline{\text{https://zslpublications.onlinelibrary.wiley.com/doi/full/10.1111/acv.12388}}$

¹² https://www.sciencedirect.com/science/article/pii/S2351989419300514

¹³ https://royalsocietypublishing.org/doi/10.1098/rsos.210225

¹⁴ https://www.tandfonline.com/doi/full/10.1080/23308249.2021.1988051

Reference	RSPB Written Representation	Applicant's comments	RSPB response
		suite of measures. Both measures are scalable and flexible which provides resilience to the Applicant's compensation package.	we acknowledge the positive steps to secure strong relationships with fishers, this has involved compensation being paid to participating fishers. To have confidence in implementation there needs to be further details on how any compensation will be funded, over what timescale and what happens if any compensation payments stop.
6.30	The RSPB recognises that predator eradication or island restoration (IR) offers some potential to benefit guillemots and razorbills. However, we consider it premature to describe IR as a primary compensation measure for these two auk species.	The Applicant confirms that we are proposing predator eradication and not island restoration, which is a term used only by RSPB. The Applicant brings this to the attention of the ExA as the two terms of not synonymous and to ensure the avoidance of doubt. The Applicant has presented a detailed review of evidence, demonstrating the ecological efficacy of the compensation measures and resilience measure for each seabird species with the ecological evidence report (B2.8.3 Compensation measures for FFC SPA: Predator Eradication: Ecological Evidence (APP-196)).	We note the Applicant's comment in relation to the terms "island restoration" and "predator eradication". While the RSPB expresses a preference for the term "island restoration" over "predator eradication", in the current context and that of our comments, we consider the two terms are synonymous and we have used them as such. This is based on what we consider are the essential components for a "predator eradication" scheme to act as a compensation measure. We have set this out in more detail in Annex C (REP2-093) of our main Written Representation. In that document section 3, in particular paragraph 3.7, identifies the prerequisites in more detail but they include a predator eradication programme based on the following: • A full-scale Feasibility Study conforming with the Manual of the UK Rodent Eradication Best Practice Toolkit; supported by • Detailed biosecurity and emergency response plans to manage the risk of reinvasion for the entire lifetime of the scheme. The underlying purpose of the Applicant's proposals is to deploy predator eradication measures to remove completely INNS predators from one or more selected islands such that the islands are placed in a condition suitable to allow populations of the named breeding seabirds i.e. guillemot and razorbill, to be restored. However, predator eradication alone is not enough to guarantee success. As we outline above, biosecurity and emergency response plans are essential to manage any ongoing risk of reinvasion in order to continue to provide the conditions for successful seabird breeding. The Applicant has acknowledged this in its latest iteration of its roadmap (REP2-012, version 3) where it states the following at paragraph 6.1.1.2:

Reference	RSPB Written Representation	Applicant's comments	RSPB response
			"Biosecurity measures will be in-line with the current RSPB Biosecurity for LIFE project which was initiated to safeguard the UK's internationally important seabird islands. The RSPB project aims to improve biosecurity measures across all of the UK's 41 seabird island SPAs and establish response plans when invasive species are reported at island SPAs (RSPB, 2019). The biosecurity measures will aim to replicate the RSPB Biosecurity for LIFE project in conjunction with the OOEG, including the RSPB who have significant experience in island biosecurity."
			Therefore, without further explanation from the Applicant we are uncertain what distinction it is attempting to draw between "island restoration" and "predator eradication" in this context. We would welcome clarification from the Applicant as to what it considers the difference is as this may point to critical issues that have not yet been set out to the Examining Authority and Interested Parties. An explanation may be forthcoming in the Applicant's promised "Predator Eradication Implementation Studies Update" at Deadline 5.
6.32	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). This will include but is	The Applicant is aware of the potential complexity associated with predator eradication and has undertaken a detailed review of predator eradication (presented within B2.8.3 Compensation measures for FFC SPA: Predator Eradication: Ecological Evidence (APP-196)). The Applicant has already undertaken site visits to the Isles of Scilly and Guernsey (including Herm and Sark) (August 2021) and is working with the Alderney Wildlife Trust to identify, at an early stage, potential issues	The RSPB commented on REP1-061 (Island Suitability Assessment) at Deadline 3 (see REP3-055). The RSPB will await full detail on the Feasibility Study promised for Deadline 5 as part of its promised "Predator Eradication Implementation Studies Update" before commenting further. The RSPB welcomes the Applicant's statement that it has employed international eradication experts to undertake this work and that they will follow the Manual of the UK Rodent Eradication Best Practice Toolkit.
	Toolkit (2018). This will include but is not limited to detailed assessments of the selected islands regarding:		

Reference	RSPB Written Representation	Applicant's comments	RSPB response
Reference	 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 reinvade; 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; 	The Applicant has furthermore employed international eradication experts to undertake a detailed implementation study (as described within Revision 3 of B2.8.4 Compensation measures for FFC SPA: Predator Eradication: Roadmap (REP2-013)) of Herm, The Humps, Jethou, Sark and the surrounding islands and islets. Due to the expertise and experience of the team undertaking the work, the approach set out within the Manual of the UK Rodent eradication Best Practice Toolkit (2018) will be followed. Further detail is provided by the Applicant in RR-033-BB of G1.9: Applicant's comments on Relevant Representations Revision (REP1-038) at Deadline 1.	RSFBTESPUISE

Reference	RSPB Written Representation	Applicant's comments	RSPB response
	Evidence that relevant legal		
	consents to carry out IR have		
	been obtained where required.		
6.42-6.50	6.42 In addition to the points made	The Applicant has produced a Connectivity	Whilst we appreciate the helpful updated roadmap helping to
	above the RSPB also wishes to	Note (Compensation measures for FFC SPA:	guide us to where the relevant documents are, concerns and
	highlight the additional concern	Compensation Connectivity Note G3.4 and	comments made within our Written Representations (paras 6.42-
	regarding some of the proposed	the Annex G3.4.1) for Deadline 3 which	50) remain.
	compensation measures being	demonstrates connectivity of non-UK sites	
	outside the UK as set out in the	with the national site network in detail .	Although the Applicant makes reference to other UK consenting
	Applicant's Hornsea Project Four:	Please also see the updates to the predator	bodies being required for aspect of OWF applications (specifically
	Derogation Information: Predator	eradication roadmap document, particularly	referring to the artificial nesting structures that required local
	Eradication: Roadmap (Volume B2,	in relation to the advancement of the	planning authority consent) with respect, we believe it has missed
	Annex 8.4: Compensation measures	Applicant's implementation study and	our concern – namely certainty that consent can and will be
	for FFC SPA: Predator Eradication:	updated DCO wording (Revision 3 of B2.8.4	granted and therefore confidence to be able to rely on it.
	Roadmap, APP-197).	Volume B2, Annex 8.4: Compensation	
	6.43. Also, we understand that more	measures for Flamborough and Filey Coast	We appreciate the importance of the SoS having a means by which
	information will be produced, the	(FFC) Special Protection Area (SPA): Predator	to take action and restrict the operations (as included within REP3-
	draft DCO provisions included within	Eradication: Roadmap (REP2-013) &	041 Without Prejudice Derogation Draft Development Consent
	the Predictor Eradication Roadmap	Deadline 2 Submission - An updated version	Order Schedules, Schedule 16) should the compensation not work,
	(APP-197) include (on pages 18 and	of the draft Development Consent Order	but where there has not been certainty (ecologically or legally)
	19):	(dDCO) (Tracked) (REP2-060).	recent delays and extended Examination processes have resulted.
			We therefore are strongly recommending that without the
	Gannet Guillemot and Razorbill	In relation to point (1) the Applicant has	certainty both in terms of ability to secure the land required and
	Compensation Measures based on	demonstrated the deliverability of these	any consents needed as well as the ecological effectiveness of the
	the strategy for gannet, guillemot	measures via the following documents:	compensation measures being proposed, the SoS cannot and
	and razorbill compensation set out in	B2.8: Flamborough and Filey Coast (FFC)	should not rely on these measures.
	the gannet guillemot and razorbill	Special Protection Area (SPA): Gannet,	
	compensation plan and to include:	Guillemot and Razorbill Compensation	In our view "a restriction on the operation of the wind turbine
	a) in the event that the undertaker	Plan (APP-193);	generators" is not enough for the Habitats Regulations to be
	must implement predator	Deadline 2 Submission - B2.8.2:	complied with as well as our concerns discussed above and below
	eradication and/or predator control	Compensation measures for	about the ecological effectiveness of the compensation measures
	measures	Flamborough and Filey Coast (FFC)	with again full details being delayed until after the DCO has been
	i. details of locatons [sic] where	Special Protection Area (SPA): Guillemot	granted, with the DCO still only committing the Applicant to
	compensation measures will be	and Razorbill Bycatch Reduction:	producing compensation plans before construction starts not the
	deployed;		implementation of actual measures. For kittiwakes we do

Reference	RSPB Written Representation	Applicant's comments	RSPB response
	ii. details of how any necessary	Roadmap (Clean) - Revision: 03 (REP2-	acknowledge (notwithstanding our concerns over the reduced
	access rights, licences and approvals	011); and	lead-in times compared to other OWFs) that Part 2, para 1(c) states
	have or will be obtained and any	 Deadline 2 Submission - B2.8.4: 	"an implementation timetable for delivery of the artificial nesting
	biosecurity measures will or have	Compensation measures for	structure, such timetable to ensure that the structure is in place to
	been secured;	Flamborough and Filey Coast (FFC)	allow for at least three full kittiwake breeding seasons prior to
	iii. an implementation timetable for	Special Protection Area (SPA): Predator	operation of any turbine forming part of the authorised
	delivery of the predator eradication	Eradication: Roadmap (Clean) - Revision:	development. For the purposes of this paragraph each breeding
	and/or predator control measure	03 (REP2-013).	season is assumed to have commenced on 1st April in each year
	that ensures that the measure has		and ended on 31st August;"
	been implemented two years prior to	In relation to point (2) it is important to note	
	operation of any turbine forming	that the Applicant is not seeking to obtain	And the same for gannet (Part 4, para 1(a)) with two breeding
	part of the authorised development;	planning consent or land rights to deliver the compensatory measures via the DCO. The	seasons for guillemot and razorbill (Part 5, para 1(a)).
	6.44. The Applicant (on page 20)	question of "jurisdiction" of the Secretary of	[As an aside, we welcome recognition in the draft schedule that
	explains following questions being	State or the MMO is not therefore relevant.	the kittiwake breeding season extends from 1 April to 31 August
	raised as to whether it is possible for	The draft provisions set out in the roadmap,	each year. However, we consider any such breeding seasons
	a Generator to secure compensation	which can be included in the Order made by	should be species specific. Therefore, it would be inappropriate to
	measures outside England and the	the Secretary of State if he cannot rule out	apply the same breeding season to gannet (Part 4, para 1(a)(iii)):
	UK Continental Shelf, that, "The	AEoI, contain a restriction on the operation of	instead this should be 1 March to 30 September each year.]
	latest draft DEFRA Guidance dated	the wind turbine generators (which are the	
	July 2021 does not preclude the	subject of the DCO application and within the	But for the fish habitat enhancement (Part 3) operations are only
	implementation of compensation	remit of the Secretary of State) until the	restricted until <i>arrangements</i> for the implementation have been
	measures outside of the affected	predator eradication measure has been	put in place not the measures themselves. Although we note there
	area, but states that in the case of	carried out. The fact that the predator	is a more robust restriction for the bycatch reduction measure with
	mobile species, connectivity	eradication measure may be carried out in a	it needing to be in place one year prior to operation (Part 4, para
	between populations should be	location outside of the UK (but with	1(b). Further discussion on the latter is required following
	considered (see Appendix A of B2.8.1	connectivity to the national site network) has	submission of the promised "Bycatch Reduction Implementation
	Compensation measures for FFC SPA:	no bearing on the ability of the Secretary of	Study 2021/2022 Summary" at Deadline 5, especially given
	Bycatch Reduction: Ecological	State to enforce this provision against the	concerns set out in our Written Representations and elsewhere in
	Evidence) for evidence of how	Applicant. It is not necessary for the Secretary	this document (e.g. see comments against references 6.19, 6.21
	guillemot and razorbill originating	of State (or the MMO) to also be responsible	and 6.24 above) with regard the current lack of evidence on level
	from North Sea colonies (i.e. in	for permitting or property rights over the	of bycatch of guillemot and razorbill and the efficacy of the
	proximity to FFC SPA) are likely to	area in which the compensation measures are	proposed bycatch reduction measure.
	migrate through or disperse to the	located. A parallel can be drawn with artificial	
	waters in the English Channel.	nest structures for kittiwake (accepted on five	

Reference	RSPB Written Representation	Applicant's comments	RSPB response
	Depending on how mobile a species	DCOs to date). The Secretary of State is not	However, it is vital that Applicants ensure full details are provided
	is, this may need to be considered in	responsible for permitting the structures (this	since NSIP Examinations are supposed to be front loaded to avoid
	discussions with the Devolved	will be the local planning authority onshore or	delays being caused post Examination and pre determination. Yet
	Administrations. The Applicant has	the MMO offshore). Property rights are	again we find ourselves considering an application that did not
	engaged with the Northern Irish	granted by private landowners or The Crown	contain crucial information when made with some new (but not
	government and with the State of	Estate. Responsibility for permitting or	all) information coming after the deadline for written
	Guernsey. The Applicant considers	granting land rights has no bearing on the	representations, meaning we were not able to comment in full and
	their continued support to be key to	ability of the Secretary of State to secure the	in our view frustrating the process and making consideration
	the delivery of the compensation	compensatory measures, and if it were ever	harder for the Examiners.
	measures."	necessary, to enforce the provisions of the	
	6.45 The Applicant also seems to be	DCO against the relevant undertaker.	Although the requirement for "adaptive management" (with more
	relying on sites chosen e.g. at		measures needed should current compensation proposals prove to
	Alderney and Herm, being protected		be ineffective several years after operation has been allowed to
	(page 20, paragraph 11.1.1.2, APP-		commence) is welcomed, we do query whether anything more can
	197):		be put in place if compensation measures prove ineffective, for
	"under the Convention on		example the shutting down of the turbines.
	Wetlands of International		
	Importance ("the Ramsar		We will have to respond further in light of the new information
	Convention"). These sites are located		provided at Deadline 3 (REP3-032 and REP3-034) by Deadline 5 i.e.
	outside of the national site network.		20 June 2022 due to limited resources to be able to review and
	Nonetheless these sites are afforded		comment properly on the substantive new information submitted.
	the protection of Ramsar status. The		
	National Planning Policy Framework		In addition we request a response to the following point made in
	in England affords Ramsar Sites and		para 6.48, the RSPB's Written reps, namely
	Proposed Ramsar Sites the same		
	protection as European Sites. This is		"6.48it is not entirely clear whether the provision of
	a policy position in England that		compensation outside the UK could properly be made a
	cannot be reflected in Guernsey as		requirement of the DCO or deemed marine licence condition since
	they are a Crown Dependency and		outside the Secretary of State and/or the MMO's jurisdiction. More
	have never been subject to EU Law.		critically, perhaps, is how any failure to fulfil DCO requirements
	The relevant applicable Ramsar		could be enforced"
	policy is the 2020 Strategy for		
	Nature. The Applicant has engaged		Again, we appreciate the phasing of requirements with a focus
	with the State of Guernsey and has		being on compensation plans to be finalised, consulted on and
	confidence that despite formal		then approved (or not) by the SoS. However, we are not sure a

Reference	RSPB Written Representation	Applicant's comments	RSPB response
	designation as an SPA not being		response to the key point of compensation measures being outside
	possible, the 2020 Strategy for		the UK and how any failure to fulfil those requirements could be
	Nature envisages a proportionate		enforced has been provided by the Applicant.
	level of protection. Further		
	engagement with the State of		
	Guernsey will continue to ensure the		
	measure can be successfully		
	implemented and monitored for the		
	operational lifetime of Hornsea		
	Four."		
	6.46. Although we appreciate both		
	the Ramsar site protections and the		
	relevant Guernsey policy, these in		
	our view are not sufficient on their		
	own to overcome concerns with		
	these measures being fully secured		
	and if necessary subject to		
	enforcement measures. We also		
	appreciate that the use of Grampian		
	conditions - i.e. conditions requiring		
	something to be done outside of the		
	boundaries of the application site -		
	are well precedented for planning		
	permissions and therefore we may		
	not have an issue, in principle.		
	6.47. However we believe there are		
	two key points which would need to		
	be considered:		
	(1) whether the Examiner and the		
	Secretary of State can be satisfied		
	that these compensation measures		
	would/could be delivered and		
	(2) how the requirements would be		
	enforced if not delivered or		
	effective?		

Reference	RSPB Written Representation	Applicant's comments	RSPB response
	6.48. In respect of point (2) above, it		
	is not entirely clear whether the		
	provision of compensation outside		
	the UK could properly be made a		
	requirement of the DCO or deemed		
	marine licence condition since		
	outside the Secretary of State and/or		
	the MMO's jurisdiction. More		
	critically, perhaps, is how any failure		
	to fulfil DCO requirements could be		
	enforced. It may be possible that		
	enforcement measures included the		
	operation of the application (not just		
	commencement of use) be stopped		
	until measures were put in place		
	and/or effective, since the		
	commencement and the operation		
	of application is within UK		
	jurisdiction.		
	6.49. In respect of point (1),		
	assuming that the matters raised		
	above can be satisfactorily		
	addressed, the question remains as		
	to certainty of delivery and enabling		
	the Examiners and the Secretary of		
	State to have confidence in the		
	measures proposed. The Applicant		
	must demonstrate their ability to		
	secure the necessary interest or		
	rights in the land likely to be		
	required for the compensation,		
	provide detail on what consents		
	might be required in order to carry		
	out the measures and provide		
	evidence that those consents would		

Reference	RSPB Written Representation	Applicant's comments	RSPB response
	be forthcoming – in order for		
	confidence to be had in these		
	measures.		
	6.50. Currently the only information		
	made available is lacking in these		
	details and therefore as matters		
	currently stand we do not believe		
	confidence can be had in these, not		
	matter what enforcement action		
	may be included within the draft		
	DCO.		
Section 7		The Applicant has created a separate	The RSPB notes and welcomes the Applicant's response.
		document for the Schedules relating to	
		compensation (G3.12 Without Prejudice	
		Derogation Draft Development Consent	
		Order Schedules) submitted at Deadline 3, as	
		requested at Issue Specific Hearing 1. The	
		Applicant refers to the responses 6.13, 6.32	
		and 6.42 – 6.50. regarding further details and	
		deliverability of the compensation measures.	
	1	ing Authority's First Written Questions (ExQ1)	T
HRA 1.10	Offshore ornithology modelling	Following additional consultation on the use	See responses to references 4.8 and 4.9-4.11 above.
		of MRSea for Hornsea Four with Natural	
		England and the developer of the model	
		(Lindesay Scott-Haywood) the Applicant	
		provided an update at Deadline 2 on the	
		comments received on the modelling (G2.10	
		MRSea Baseline Sensitivity Report (Gannet)	
		(REP-046)). A further, more detailed testing	
		of the MRSea model and subsequent re-run	
		of the model following receipt of additional guidance on the use of MRSea is contained	
		within Part 2 and 3 and Appendix A of G2.10	
		within Fart 2 and 5 and Appendix A Of G2.10	

Reference	RSPB Written Representation	Applicant's comments	RSPB response
		MRSea Baseline Sensitivity Report Gannet	
		(REP2-046), submitted at Deadline 3.	
		Following consultation on the revised MRSea	
		(MRSea_v2) Report, the Applicant will seek	
		agreement on the most appropriate data set	
		to use to inform any revised assessments for	
		Hornsea Four following consultation with	
		Natural England ahead of Issue Specific	
		Hearing (ISH) 3. Any updates to the	
		assessments will be presented to Examination	
		at Deadline 4 in the Ornithology Assessment	
		Sensitivity Report. The Applicant also intends	
		to provide updated PVA (Applicant and SNCB	
		positions) for those species concerned, once	
		the final data set is agreed as appropriate to	
		inform any revised assessments (at Deadline	
		4 and updated for Deadline 5 in the	
		Ornithology Assessment Sensitivity Report).	
HRA 1.15	Comparison with Sula Sgeir gannet	The Applicant reviewed the PVA report on the	The RSPB will respond to this point when the further PVA analysis
	colony	Sula Sgeir gannet population (Trinder, 2016)	by the Applicant has been presented (see 4.25-4.27 above)
		in order to understand the effects of chick	
		harvesting rates on the population level of	
		gannets at Sula Sgeir, off the Scottish	
		coastline. Between 2004 – 2014 the gannetry	
		at Sula Sgeir increased by an average rate of	
		2.2% per annum despite an annual harvest of	
		up to 2,000 chicks. This is 0.7% lower than the	
		national average Scottish gannet population	
		annual growth rate, as to be expected when	
		considering the harvesting occurring. For	
		reference the recent annual average growth	
		rate of the FFC SPA calculated from the	
		period of 2008 – 2017 is over 8%, significantly	
		higher than that of Sula Sgeir and Scottish	
		national average, suggesting the overall	

Reference	RSPB Written Representation	Applicant's comments	RSPB response
		health and stability of the colony is	
		significantly greater than Sula Sgeir and it is	
		therefore logical to assume the FFC SPA	
		would have greater resilience to any impacts.	
		Using the national average survival rates for	
		gannet, as used within the compensation	
		calculations, the likelihood of gannet	
		surviving to adulthood is roughly ~26%. These	
		survival rates also match that used within the	
		PVA modelling by Trinder (2016).	
		Trinder (2016) modelled additional harvesting	
		rates of up to an additional 2,000 chicks per	
		annum (this is on top of the current	
		harvesting rate of 2,000 chicks per annum),	
		which when considering the likelihood of a	
		chick reaching adulthood is ~26% equates to	
		an effective harvesting rate of up to 1,040	
		breeding adults per annum. The results of the	
		modelling predicted that population growth	
		rate remained positive when considering a	
		harvesting rate of between 2,000 (current	
		rate; ~520 breeding adults) to 3,000 chicks	
		(~780 breeding adults). At harvest levels	
		above 3,500 (~910 breeding adults and	
		above), the majority of simulations still	
		predicted positive growth for the colony.	
		These results provide evidence of the	
		resilience of gannetries and strong evidence	
		that when considering the combined in-	
		combination impacts of collision risk and	
		displacement predicted for the FFC SPA of	
		~480 breeding adults (when considering a	
		80% displacement rate and 1% mortality for	
		all projects), this predicted impacted would	

Reference	RSPB Written Representation	Applicant's comments	RSPB response
		not lead to an AEoI for the gannet feature of	
		the FFC SPA.	
RSPB Deadli	ne 2 Submission - Annex B Derogation	case: Bycatch reduction (REP2-092)	
N/A	N/A	The Applicant has undertaken a significant	Whilst we welcome the Applicant's research and experimental
		amount of work to advance the industry and	trials, without access to the full results there is no option available
		scientific understanding of gillnet bycatch and	for peer review. Without peer review there can be little
		reduction methods. The Applicant's bycatch	advancement of any scientific understanding of gillnet bycatch and
		reduction technology selection phase is the	reduction methods.
		most advanced study undertaken to date to	
		understand potential bycatch reduction	We welcome the positive relationship the Applicant has developed
		method by using the most advanced	with the fishing industry and look forward to seeing the species
		technology (LEB and SeaScope dual camera	bycatch records from the continuous dual camera system. We
		monitoring system) and developing an	would like clarification from the Applicant on how long the fishers
		impeccable relationship with the fishing	have agreed to have dual cameras on board, and what technical
		industry (which has resulted in all vessels	and financial support is expected: for example who is going to
		agreeing to having a continuous dual camera	review the camera footage, will this form the monitoring system?
		system installed on their vessel).	
			See our response to REP1-064 and REP2-011 in our separate
		The RSPB did not consider the Applicant's	Deadline 4 submission (see the "RSPB's Comments on the
		Deadline 1 submissions (G1.42: Gannet	Applicant's Bycatch reduction documents submitted at Deadlines 1
		Bycatch Reduction & Evidence Review (REP1-	and 2").
		064) and B2.8.2: Compensation measures for	
		Flamborough and Filey Coast (FFC) Special	Whilst we support a better understanding of the nature and scale
		Protection Area (SPA): Guillemot and	of gannet bycatch. The Applicant draws on anecdotes from fishers
		Razorbill Bycatch Reduction: Roadmap (REP2-	as evidence for establishing the bycatch risk to gannet. Whilst we
		011)) within their Annex B submission which	recognize the importance of engaging with the fishing industry this
		provide an update and clarity to a number of	form of evidence cannot be relied upon as a robust data source.
		points. Both documents highlight the	Indeed, any anecdotal findings should be independently checked.
		significant advancement which has been	
		made on the gannet derogation case where	
		the Applicant is actively consulting fishers and	
		the wider fishing industry to understand the	
		scale of gannet bycatch. Additionally, the	
		Applicant has organised and held numerous	
		meetings with Birdlife International bycatch	

Reference	RSPB Written Representation	Applicant's comments	RSPB response
	·	experts and RSPB to discuss bycatch	
		generally, with a particular focus on gannet to	
		increase their understanding based on the	
		experience held by BirdLife International.	
		Furthermore, the Roadmap (B2.8.2:	
		Compensation measures for Flamborough	
		and Filey Coast (FFC) Special Protection Area	
		(SPA): Guillemot and Razorbill Bycatch	
		Reduction: Roadmap (REP2-011)) provides an	
		update on all aspects of the bycatch	
		reduction compensation measure.	
		A number of the points raised by the RSPB	
		within 'Annex B' have been responded to	
		elsewhere within this Deadline 3 response by	
		the Applicant. For example, the Applicant's	
		Response 6.21 highlights how the Applicant is	
		already meeting best practice criteria	
		relevant to the current phase of the	
		implementation of a bycatch reduction	
		method.	
		Annex B of RSPB's response draws on	
		perceived errors in location and timing.	
		However, the Applicant notes previous	
		agreement of the target fishery, location and	
		timing by Natural England and RSPB during	
		Hornsea Compensation Workshop (28th May	
		2021). This was further supported by Natural	
		England during its most recent response	
		(EN010098-001251-Natural-England –	
		Responses to comments on RRs) where it was	
		stated "Natural England agree with the	
		reasoning for the identified locations for	
		auks". The Applicant has followed best	
		practice (i.e. that set out within Bradbury et	
		al., 2017) in order to determine bycatch	

Reference	RSPB Written Representation	Applicant's comments	RSPB response
		locations and has consulted with regional	
		IFCA's and academia to obtain a current	
		understanding on fishing practices in the	
		North East (in proximity to Flamborough and	
		Filey Coast SPA) and other coastal areas of	
		England. This information has been	
		incorporated into the Applicant's submission.	
		It is worth noting that the core document	
		(B2.8.1 Volume B2, Annex 8.1: Compensation	
		measures for Flamborough and Filey Coast	
		(FFC) Special Protection Area (SPA): Bycatch	
		Reduction: Ecological Evidence (APP-194))	
		which forms the basis of the RSPB Annex B	
		response was extremely well received by	
		Natural England who provided supportive	
		feedback during compensation workshops	
		(such as the workshop held 14//02/2022) and	
		within written feedback (such as Natural	
		England's response to the Hornsea Four	
		Compensation Workshop 3 (18/06/2021)).	
		case: Predator eradication (REP2-093)	
N/A	N/A	The RSPB did not consider the Applicant's	The RSPB submitted its comments on REP1-061 (Island Suitability
		Deadline 1 submissions (G1.33: Predator	Assessment) at Deadline 3 (see REP3-055). The RSPB will review
		Eradication Island Suitability Assessment:	the Feasibility Study report when it is submitted at Deadline 5 at
		Bailiwick of Guernsey (REP1-061) and	which point we will consider the evidence presented, including in
		B2.8.4:Compensation measures for	relation to habitats used by guillemot and razorbill, historic
		Flamborough and Filey Coast (FFC) Special	evidence in relation to the current and former presence of
		Protection Area (SPA): Predator Eradication:	guillemot and razorbill on each island, and the evidence for the
		Roadmap (REP2-013) within their Annex C	presence or otherwise of black and brown rat on each island.
		RSPB submission which provide an update	
		and clarity to a number of points. Both	
		documents highlight the significant	The RSPB thanks the Applicant for pointing it to REP3-032 and
		advancement which has been made in	REP3-034 Compensation measures for FFC SPA: Compensation
		relation to progressing predator eradication	Connectivity Note. The RSPB is reviewing this document and will
			=

Reference	RSPB Written Representation	Applicant's comments	RSPB response
		guillemot and razorbill. The Applicant also	
		suggests the following G3.4 Connectivity	The RSPB has replied to the Applicant's Response 6.32 above.
		Note: Compensation measures for FFC SPA:	
		Compensation Connectivity Note (which will	
		be submitted by the Applicant at Deadline 3)	
		is read alongside the other updated	
		submissions listed above.	
		A number of the points raised by the RSPB	
		within 'Annex C' have been responded to	
		elsewhere within this response at Deadline 3	
		For example, the Applicant's Response 6.32	
		within the Deadline 3 submission highlights	
		how the Applicant has employed	
		international eradication experts to	
		undertake a detailed implementation study of	
		Herm, The Humps, Jethou, Sark and the	
		surrounding islands and islets, which will	
		follow the approach set out within the	
		Manual of the UK Rodent eradication Best	
		Practice Toolkit (2018) (as described within	
		Revision 3 of B2.8.4 Compensation measures	
		for FFC SPA: Predator Eradication: Roadmap	
		(REP2-013) and was also detailed within	
		Revision 2 submitted at Deadline 1). The	
		Applicant is also working closely with	
		Alderney Wildlife Trust to develop a detailed	
		understanding of the scale of rat presence	
		across the islands and islets of Alderney.	
		It is worth noting that the work undertaken to	
		date in relation to the Applicant's	
		implementation study has been welcomed	
		and supported by Natural England during its	
		most recent response (EN010098-001251-	
		Natural-England – Responses to comments on	

Reference	RSPB Written Representation	Applicant's comments	RSPB response
		RRs) where it was stated "Natural England	
		welcomes that evidence on the abundance	
		and species of predators present at potential	
		sites is being collected (RR-029-APDX:C-84)".	
		The Applicant is pleased to see that the RSPB	
		agree rats (both brown rat and black rat) are	
		identified as a risk to the population of	
		guillemot and razorbill. However, the	
		Applicant would like to point out that due to	
		the low lying and high accessible nesting	
		habitat used by guillemot across the Channel	
		Islands (in the absence of large amounts of	
		inaccessible cliff habitat), the species is likely	
		to have the same vulnerability to rat	
		predation as razorbill. It is important to note	
		that all locations being considered by the	
		Applicant support both black or brown rat,	
		and current or historic populations of	
		guillemot and razorbill.	
		Additionally, all landowners and managers for	
		the locations being considered have provided	
		letters of comfort (i.e. the Alderney Wildlife	
		Trust and the States of Guernsey) in support	
		of a predator eradication as compensation for	
		Hornsea Four.	