



Sheringham Shoal and Dudgeon Offshore Wind Farm Extension Projects

The Applicant's comments on Natural England's
Deadline 5 Submission

Revision A

Deadline 6

June 2023

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1 Introduction

1. This document presents the Applicant's comments on Natural England's Deadline 5 cover letter [REP5-089] and Appendix C3 - NE Further Response to Offshore Ornithology Compensation D5 [REP5-092]. The Applicant's response to Natural England's responses to the Examining Authority's Third Written Questions are provided within **The Applicant's Comments on Responses to the Examining Authority's Third Written Questions** [document reference 20.2].
2. With regard to the other Natural England Deadline 5 submissions listed below, the Applicant is intending to respond to these, or submit updates to documents to seek to address, as appropriate, the comments provided within, at Deadline 7:
 - Appendix A2 IPMP [REP5-090];
 - Appendix B1 Ornithology Position Paper [REP5-091]; and
 - Response to your Risk and Issues Log [REP5-093] (all topics).

Table 1 Applicant's responses to Natural England's Cover Letter

ID	Question	Applicant Response
1. Natural England's Deadline 5 Submissions		
1	<p>Natural England has screened the relevant documents submitted by the Applicant at Deadline 4. These documents are listed in Annex A below. Natural England is also submitting the following detailed responses, signposted from Annex A, within the following thematic appendices:</p> <ul style="list-style-type: none"> • EN010109 436963 SEP DEP Appendix A2 - Natural England's Further Response to 9.5 Offshore In Principle Monitoring Plan (Revision B) [REP4-014] Deadline 5 • EN010109 436963 SEP DEP Appendix B1 - Natural England's Offshore Ornithology Position at Deadline 5 • EN010109 436963 SEP DEP Appendix C3 - Natural England's Further Response to Offshore Ornithology Compensation at Deadline 5 • EN010109 436963 SEP DEP Appendix K3 - NE's Risk and Issues Log D5 Update • EN010109 436963 SEP DEP Appendix L3 – Natural England's Response to ExA Third Written Questions at Deadline 5 	Noted.
2. Issue Specific Hearing		
2	<p>Natural England notes the Rule 13 Notice of Issue Specific Hearings to be held on 21 and 22 June 2023. Due to the focus of the proposed agendas, coupled with significant offshore wind workload pressure and associated resource constraints, we advise it is not our intention to attend the June hearings. However, we would welcome the opportunity to respond to any specific written questions the ExA have for Natural England following the Hearings.</p>	Noted.
3. Examining Authority's Third Written Questions		
3	<p>Natural England's response to the Examining Authority's Third Written questions is presented in Appendix L3. Please note, due to unforeseen circumstances, a response to the question in relation to the proposed designation of Wensum Woods is deferred until Deadline 7 at the latest.</p>	Noted.

ID	Question	Applicant Response
4. Development Consent Order		
4	<p>Natural England notes that a new interpretation for Natural England has been secured within Article 2 of the Development Consent Order (DCO). We understand this has been included at the request of the Local Planning Authorities, however, no discussion with Natural England was undertaken prior to this change. Further, we do not agree with the change as this makes the drafting inconsistent when referring to the statutory nature conservation body, it also makes the drafting inconsistent with other similar DCOs and could lead to confusion. Our preference would be for the drafting to refer to the Statutory Nature Conservation Body throughout the DCO as this ensures clarity and future proofs the document against potential change.</p> <p>Natural England has updated our Risks and Issues log (Appendix K3, Sheet A) in response to the other changes within the DCO.</p>	<p>As noted by Natural England, this amendment was requested by the Local Planning Authorities. The Applicant will consider Natural England's comments and intends to respond further at Deadline 7.</p>
5. Offshore Ornithology and Compensation		
5	<p>We note the Applicant provided an updated Habitat Regulations Assessment HRA Integrity Matrices [REP4-102] at Deadline 4. We wish to remind the Examining Authority that this represents the Applicant's position in regards integrity assessments and therefore we do not intend to comment on this document. In Appendix B1, Natural England has provided a paper setting out our final positions on the potential for Adverse Effects on Integrity (AEoI) on key Special Protection Area (SPA) seabird features. The paper indicates those SPA features where relevant information is scheduled to arrive at Deadline 5 and therefore final positions are not yet provided.</p>	<p>Noted. The Applicant is intending to provide a response to Natural England's Appendix B1 or alternatively submit its own Ornithology Position Statement at Deadline 7.</p> <p>In addition, an update to Appendix B.2 of Appendix B - Supporting documents to the Applicant's Responses to the Examining Authority's Second Written Questions [REP3-103] i.e. the Applicant's and Natural England's joint position in relation to conclusions of AEoI and the requirement for HRA derogation and compensation will be provided before the close of Examination.</p>
6	<p>Following our advice, Natural England welcomes the inclusion of the Greater Wash Special Protection Area (SPA) Common Scoter screening assessment at Deadline 4 [REP4-010]. We agree with the Applicant's conclusion of no potential for likely significant effect (LSE) for this feature, alone or in-combination and therefore are satisfied that it can be screened out.</p>	<p>The Applicant welcomes this position and considers this matter closed.</p>
7	<p>In Appendix C3 Natural England has provided further comment to the Applicant's updated documents in relation to Ornithology compensation. Natural</p>	<p>The Applicant has submitted the HRA Derogation and Compensatory Measures Update Note (Revision C) [document reference 13.7] which</p>

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	<p>England wishes to highlight our concerns with the level of progress with the Sandwich tern compensation proposals given the Examination is nearing its end. Whilst we continue to support the proposals at Loch Ryan in principle, the level of detail currently provided means there can only be limited confidence that appropriate compensatory measures can be secured. We recommend the Applicant bring forward further detail regarding the tenure, location, design and proposed operation of the inland pool for stakeholder comment as a matter of urgency.</p>	<p>provides an update on progress with respect to the Applicant's proposed Sandwich tern compensation measure at Loch Ryan. The Applicant is in consultation with Natural England to facilitate a meeting to discuss the proposals at Loch Ryan ahead of Deadline 7.</p>
6. Marine Mammals		
8	<p>The Applicant has updated their assessment of in-combination seasonal disturbance to the Southern North Sea Special Area of Conservation (SNS SAC) as requested. The updated assessment shows an increase in the maximum and average in-combination overlap with the summer and winter area, with all scenarios exceeding the threshold. Natural England maintains its previous concerns around the Site Integrity Plan (SIP) process and considers that the Applicant should commit to mitigation now in-principle in order to reduce impacts and therefore the potential for adverse effects in-combination.</p>	<p>The Applicant notes that the contribution of SEP and DEP to the in-combination effect on the SNS SAC is low with a maximum of 2.32% disturbance within the summer area, or 0.24% of the winter area on any one day, and 0.41% of the summer season or 0.07% of the winter season (REP3-115). The overall in-combination effect has increased because updated and more accurate worst-case scenario information from projects included in the assessment has been provided.</p>
9	<p>The even greater levels of disturbance predicted in the updated assessment of the SNS SAC raises further concerns on how this will be effectively mitigated. . Natural England considers it likely that measures will need to be implemented to reduce the noise levels of individual projects (e.g. through the use of noise abatement systems) and/or limit the number of projects undertaking noisy works in the relevant season and area of the SNS SAC. Indeed, the Applicant refers to a potential mitigation measure, namely to undertake piling outside the relevant season and area of the SNS SAC. Committing to a mitigation measure such as this now is strongly advised and would reduce the risk to the project compared to delaying consideration of mitigation much closer to construction. However, such a commitment would need to be secured through an appropriate condition or within outline mitigation documentation.</p>	<p>The Applicant maintains that it is not possible at this stage to determine which options would be needed, or which would be the most appropriate to implement, as it depends on the final pile design, the piling programme, the other noisy activities that may be happening at the same time, and whether options for either mitigation or management, or alternative installation techniques, become available at the time of finalisation that are not available now. Therefore, the Applicant considers that whilst it is currently possible to state the options that would be considered, it would not be appropriate to finalise and commit to mitigation and management options at this time, as it would not allow for future methods and knowledge to be incorporated.</p> <p>When the Applicant is considering the detailed design for piling, potential mitigation and management measures will be a key consideration during that process. It is not in the Applicant's interest to choose a piling design that has only limited mitigation options that could be implemented through the SIP. Having only limited options available could adversely impact on the wider project programme. For the</p>

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		<p>reasons set out above, the Applicant considers that retaining the flexibility that the SIP allows (compared to fixed mitigation now) is beneficial from both an ecological perspective and from a project delivery perspective.</p> <p>The Applicant will ensure that the final SIP for the Projects is based on the best available information at the time, e.g. by consulting with other developers constructing at the same time as SEP and DEP, and considers that the SIP provides an appropriate level of mitigation and management as required for the Projects. The final SIP will also be developed and finalised in consultation with Natural England.</p>
10	Natural England is still reviewing the updated population modelling provided by the Applicant, we will provide further comment on the outstanding issues at Deadline 6 on 20th June. Our Risks and Issues log (Appendix K3; Sheet D) has been updated to reflect the current position of all other Marine Mammal issues.	Noted. The Applicant is intending to respond to the Natural England Risk and Issues Log at Deadline 7 and / or 8.
7. Terrestrial Ecology		
11	Natural England has reviewed the Applicant's updates to the Outline Ecological management Plan, Landscape Management Plan and Code of Construction Practice [REP3-065, REP3-067, REP3-069, REP4-017. Our Risks and Issues log (Appendix K3; Sheet I) has been updated to reflect the current position of terrestrial ecology. issues.	<p>Noted. See The Applicant's Response to Natural England's Risk and Issues Log: Terrestrial Ecology [REP5-065]</p> <p>The Applicant is intending to respond to the Natural England Risk and Issues Log at Deadline 7 and / or 8.</p>
8. Natural England's Response to the Deadline 3 Submission from the Norfolk Coast AONB [REP3-149]		
12	As highlighted at Deadline 4, as the Government's statutory advisor for seascape and landscape, Natural England notes the response presented by the Norfolk Coast Area of Outstanding Natural Beauty (AONB) to the Examining Authority's Second Written Questions (WQ2) [REP30149]. Natural England believes that further clarity is required and intends to respond to this submission by the AONB at Deadline 6.	Noted.
9. Onshore Cable Construction Scenario		
13	Natural England remains concerned that a vital mitigation measure during the construction phase for both onshore ecology and the Norfolk Coast AONB is that, should both projects be approved, for the onshore cabling to be installed	The Applicant refers Natural England to the Scenarios Statement [APP-314] and the Supplementary Information to the Scenarios

ID	Question	Applicant Response
	<p>simultaneously and not sequentially. If sequential installation is progressed then the first project must install the infrastructure for both projects. The importance of the AONB justifies the most effective mitigation being applied as is consistent with the approach agreed for East Anglia ONE North and East Anglia TWO offshore windfarms which cable through the Suffolk Coast and Heaths AONB.</p>	<p>Statement [REP3-074] for further information on the development scenarios.</p> <p>The Applicant notes Natural England concerns and recognises there is a preference from the local community and other statutory and non-statutory stakeholders for the two projects to be delivered concurrently. The Applicant's preference and ambition are entirely aligned with this view, however it has been made clear that it is not in a position to guarantee that outcome at this time for reasons already presented in the Scenarios Statement [APP-314] and into the examination.</p> <p>As detailed in the Scenarios Statement [APP-314], if the two projects are constructed sequentially, whichever project is constructed first will install the ducts for the second project.</p>

Table 2 Applicant's response to Appendix C3 - Natural England's Further Response to Offshore Ornithology Compensation [REP3-022, REP3-023, REP3-088, REP3-092 and REP3-096]

ID	Natural England Comment	Applicant Response
Introduction		
14	<p>Please find Table 1, Natural England's Comments on Sheringham Shoal Offshore Wind Farm Extension Project (SEP) and Dudgeon Offshore Wind Farm Extension Project (DEP) Offshore Ornithology Compensation matters. In forming our advice, the following documents have been considered:</p> <ul style="list-style-type: none"> • Sandwich Tern – Quantification of Productivity Benefits Technical Note (Revision B) [REP3-092] • Appendix 4 – Gannet, Guillemot and Razorbill Compensation Document (Revision B) [REP3-022] • Annex 4 – Auk Bycatch Reduction Feasibility Statement [REP3-023] • 13.7.1 Habitats Regulations Assessment Derogation and Compensatory Measures Update (Revision B) [REP3-096] 	Noted.

ID	Natural England Comment	Applicant Response
	<ul style="list-style-type: none"><li data-bbox="241 331 1225 392">• Gateshead Kittiwake Tower Modification – Quantification of Productivity Benefits Technical Note (Revision B) [REP3-088]	
15	Please note that Natural England has no further comments to the Gateshead Kittiwake Tower Modification – Quantification of Productivity Benefits Technical Note (Revision B) [REP3-088]. The updates to this document have largely satisfied Natural England's requests for additional information on kittiwake breeding performance on the Tyne and its implications for the proposed compensation.	Noted, the Applicant welcomes this position. It is proposed that as the design of the proposed tower modifications develops, and e.g. the number of ledges and nesting spaces is more accurately defined, the predicted number of breeding pairs and chicks can be updated. Although it should be noted that the numbers currently presented are not anticipated to reduce.

Table 3 Applicant's further response to Natural England's Advice on: Offshore Ornithology Compensation [REP3-022, REP3-023, REP3-088, REP3-092 and REP3- 096]

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Document Reviewed - EN010109-001508-13.7.1 Habitats Regulations Assessment Derogation and Compensatory Measures Update (Revision B) (Tracked) [REP3-096]						
1	4.2.1			<p><u>Improved breeding success at SPA sites other than NNC (the Farne Islands SPA)</u></p> <ul style="list-style-type: none"> Whilst the provision of 350 extra nest shelters, 400 nest boxes, 6 cameras and potentially bamboo canes are not in the draft NNR management plan, the key point here is that Natural England (and National Trust) do not see any meaningful additional benefits would arise from their use. As noted in our Relevant Representations [RR-063], <i>'Natural England remain concerned that the measures proposed are not truly additional, and in any event are likely to provide only minor benefits compared to an ongoing programme of vegetation and large gull management.'</i> (our emphasis). We highlight again that there is no evidence to suggest that sandwich tern will use nest boxes, as opposed to nest shelters, and that the colony managers do not support the use of bamboo canes on the Farne Islands. <p>Natural England note and support National Trust's observation in their letter dated 20th April 2023 that <i>'Available and suitable space for interventions on the Farne Islands is limited, as most of the area is keenly contested by breeding seabirds. The Sandwich tern nesting area is also very fragile due to puffin burrows.'</i> Even were the measure to have meaningful benefits, which is doubtful, the proposed level of provision seems unachievable without potentially negative consequences e.g.</p>	<p>Natural England re-affirms its position that the proposed measures at Farne Islands SPA will not provide meaningful compensatory benefits, even as a supporting or secondary measure.</p>	<p>The Applicant highlights its response to Q3.14.1.6 in The Applicant's response to the Examining Authority's Third Written Questions [REP5-049], regarding the development of an additional compensatory measure option at Blakeney involving predator eradication. The Applicant is working with National Trust and Natural England to develop a proposal which will be submitted before the end of Examination (along with updated DCO drafting).</p> <p>The Applicant acknowledges that Natural England has indicated that this measure could replace the Applicant's proposed measure at the Farne Islands SPA. However, at this stage, the Applicant is retaining both proposals whilst it waits for the updated Defra guidance on compensation (which is expected to clarify the position</p>

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				<p>loss of sandwich tern nesting space, including those areas envisaged to be restored by the management plan, damage to puffin nesting habitat.</p> <ul style="list-style-type: none"> Whilst the general commitment to assisting the National Trust in restoring the sandwich tern is welcomed, there is no detail provided on what this might entail. Therefore, we consider that the ExA should place limited weight on this. 		<p>on additionality), and to provide resilience in the event that the predator eradication measure at Blakeney was unfeasible or unsuccessful.</p> <p>Regarding the Farnes specifically, the Applicant maintains that in light of possible upcoming changes to policy and best practice guidance with respect to additionality and the severity of the situation at the Farne Islands SPA, it is considered important that this measure remains within the Applicant's proposed package of compensatory measures for Sandwich tern. See the Applicant's response to Q3.14.1.4d in The Applicant's Comments on Responses to the Examining Authority's Third Written Questions [document reference 20.2] for further details.</p> <p>Regarding the credibility of the measures, the Applicant maintains its position that the measures proposed would make a meaningful difference to the Sandwich tern population on the Farne Islands for the reasons described in Section 4.2.1 of the</p>

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						HRA Derogation and Compensatory Measures Update Note (Revision C) [document reference 3.1] and that the measures would be additional to those proposed in the NNR management plan.
2	4.2.2			<p><u>Without Prejudice Bycatch Reduction Proposal for Auks</u></p> <ul style="list-style-type: none"> Please see our detailed comments on [REP3-022] 	n/a	Noted. The Applicant has provided a response to these points below.
3	4.3.1			<p><u>Sandwich Tern Nesting Habitat Improvements and Restoration of Lost Breeding Range at Scar Point, Loch Ryan – Inland Pool</u></p> <ul style="list-style-type: none"> Whilst we remain supportive in-principle of the proposed intervention, Natural England is concerned by the level of progress made regarding key issues at this stage in the Examination, in particular the lack of a confirmed location and any landowner agreement. We also note the delay in consulting on the concept designs (now planned for the end Q2 i.e. in the final stages of the Examination) and the statement that the engineering design will not be confirmed until Q3, which is likely to be after the Examination closes. This means that critical details regarding the tenure, location, design and operation of the proposed habitat creation are lacking at this stage. In this context, unless further information is promptly provided, Natural England foresees advising the ExA at the end of the Examination that there is insufficient 	We recommend the Applicant bring forward further detail regarding the tenure, location, design and proposed operation of the inland pool for stakeholder comment as a matter of urgency.	The Applicant has submitted the HRA Derogation and Compensatory Measures Update Note (Revision C) [document reference 13.7] at Deadline 6 which provides an update on the Loch Ryan proposals. The Applicant can confirm that landowner discussions are progressing positively with a letter of support received from a landowner in the preferred area of search to the north of Wig Bay (Appendix D of document reference 13.7). Negotiations on draft Heads of Terms (HoTs) provided to this party are ongoing and access has been granted to undertake non-intrusive surveys on this individual's land. Surveys are

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				confidence that compensatory measures can be secured for Sandwich tern.		<p>currently in progress and results are feeding into the development of the design of the inland pool proposals. Discussions with a further landowner within the preferred AoS have been progressing forward with negotiations to agree access for surveys in progress. The Applicant has also issued draft HoTs to this landowner. Several alternative sites within the wider AoS remain under consideration.</p> <p>The Applicant is seeking to arrange a meeting with Natural England to provide an update on the Loch Ryan proposals for June 2023. During this meeting, initial designs and proposed locations will be presented which demonstrate sufficient scale to provide high-quality nesting habitat.</p>
4	4.3.2			<p><u>Kittiwake Nest Site Improvements to Enhance Breeding Success – Gateshead</u></p> <ul style="list-style-type: none"> We welcome the confirmation of Gateshead Council's support for the proposed compensatory measures as both the landowner of the Gateshead Saltmeadows site and the local planning authority. This does increase confidence that the measures can be secured. We note that concept designs are scheduled to be consulted on 	We recommend that the Applicant submit the concept designs into the Examination as soon as they are available.	As noted in the HRA Derogation and Compensatory Measures Update (Revision C) [document reference 13.7] submitted at Deadline 6, since Deadline 3, the Applicant has consulted with the Council and Northumbria Ringing Group on initial designs. Feedback from both parties led to an

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				<p>in late Q2. As with the sandwich tern proposals at Loch Ryan above, we have concerns that this material will only be available towards the final stages of the Examination.</p> <ul style="list-style-type: none"> Plate 1 presents two initial design options for augmenting the existing Gateshead Saltmeadows site. We appreciate that these are illustrative, however we do have some concerns that the 'W' design could involve nesting kittiwakes facing each other, which has the potential to increase the level of aggression and territorial encounters, which could affect the breeding success of the existing kittiwakes as well as reducing occupancy/productivity of new recruits. It may well be that alternative designs that extend the existing north-west and north-east faces, or a less acute angle for the proposed 'arms' such as the other initial option shown, avoid or reduce this risk. <p>Natural England will advise further on this matter once the concept designs are submitted.</p>		<p>amendment to the tower designs originally presented (i.e. those in REP3-096), as concerns were raised with regards to access for monitoring using a cherry picker / mobile elevating work platform.</p> <p>As a result, the Applicant has provided an additional tower modification option for consideration (see HRA Derogation and Compensatory Measures Update (Revision C) [document reference 13.7]), which has been positively received by both the Council and the Ringing Group. The latest modification includes the positioning of new panels below the existing panels. This arrangement ensures that the current access provisions remain unchanged and thus does not present increased access challenges. This arrangement would also avoid the potential issues with the 'W' design highlighted by Natural England in relation to aggression and territorial encounters.</p> <p>The Applicant can confirm that the pre-app consultation was submitted to Gateshead Council on the 20th of</p>



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						June 2023. Next steps are to consult with Natural England, secure feedback on the proposals and in parallel, progress the concept design.
Document Reviewed: Sandwich Tern – Quantification of Productivity Benefits Technical Note (Revision B) [REP3-092]						
5			Table 1	Natural England advise that we do not generally consider it useful to 'comment on comments', however, in this case the Applicant's responses to our representations include some new information. therefore, we have provided advice on some key items.	n/a	Noted.

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6			Table 1 ID 4	<p>Natural England thanks the applicant for providing more detail in regards the productivity figure of 0.8 per chick per pair they have selected as appropriate (for sandwich terns not subject to predation or disturbance). This is a key metric, and while Natural England recognise that there will need to be assumptions made in regarding the appropriate range of productivity rates to model, it is important to provide this justification in order for there to be any confidence placed in the quantification of productivity benefits. Because of this, we suggest this response should be incorporated into the main body of the report rather than just the consultation table.</p> <p>The productivity rate of 0.8 chicks per pair seems to rely heavily on Short 2020 reporting on the Sands of Forvie, however the Applicant's response does not clarify if this is based on empirical data from Forvie or simply used to inform a rate. Natural England requests that this report is submitted into the examination. We further note that it may be appropriate to reference Sandwich Tern productivity rates at Cemlyn Lagoon, Wales, as this colony is geographically closer and in an 'ecologically coherent area' based on trends in abundance and productivity, (as described by Cook et al 2011). We further note that the applicant is assuming the lagoon will be mammalian predator and human disturbance free, which while being a key aim of the proposal, cannot be fully relied upon, particularly at this stage without detailed site and management plans for the Loch Ryan site.</p>	<p>Incorporate justification for the productivity figure into the main report.</p> <p>Submit Short 2020 into the Examination.</p>	<p>See point ref 3 above for an update on progress with Loch Ryan.</p> <p>The Applicant will seek to provide clarification on the Sandwich tern productivity rate used to inform the stress-testing in an update to REP3-092 at Deadline 7.</p> <p>Regarding, Short (2020), the Applicant notes that this is an unpublished report that was provided to the Applicant's HRA compensation advisor upon request, however it was not agreed that this could be published. Therefore, it is suggested that Natural England request this from NatureScot.</p> <p>It is agreed that consideration could be given to the Sandwich tern productivity rates recorded at the Cemlyn Bay colony but noting that details would be required on the associated management measures that have been put in place at this colony and how productivity has changed in response to any such measures. In particular, it is understood that this colony has been subject to high levels of mammalian predation in the recent past.</p>

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7			ID6	<p>Natural England notes that no additional stress testing has been provided to better explore whether the colony size is sufficient or how long the measure should be in place to account for mortality debt. Natural England does not agree that the information has been provided to establish that: <i>Although the stress-test undertaken is not explicit in accounting for the possibility of a mortality debt accruing, the available evidence suggests that such a situation is unlikely to arise</i></p> <p>It is reassuring to know that if a mortality debt were to arise then: <i>it could, if required, be accounted for by extending the duration over which active management was undertaken at the Loch Ryan site (i.e. potentially beyond the Projects' operational period) to ensure that sufficient levels of breeding success are maintained over a sufficient number of years to balance the mortality predicted to have occurred during the Projects' operational periods.</i></p> <p>It will be essential to ensure that the CIMP reflects this.</p> <p>Furthermore, Natural England does not accept that: <i>'scenarios for reasonable worse-case in terms of initial colony establishment size, colony growth rate, colony size and breeding productivity (e.g. which could arise due to climate change effects leading to higher frequency of colony inundation events) are essentially already encompassed by the stress-test exercise that has been undertaken'</i></p> <p>This is because the stress testing uses a static population and a fixed productivity rate – the worst case of which (50 pairs and 0.6 productivity) is only predicted to produce half the number of adults (6) as required at the 95% CI level. This underlines the need for a strong monitoring regime and a clear commitment to ensure that active management of the site persists</p>	<p>Ensure the CIMP commits to extending the duration of active management should that prove necessary.</p> <p>Ensure the CIMP includes a robust monitoring regime sufficient to trigger adaptive management should the colony under-perform with respect to the 95% CI level requirements.</p>	<p>The Applicant maintains that there is limited value in further stress-testing exercises beyond the details that are described within REP3-092, with any further refinement of the existing considerations likely to involve highly speculative assumptions. As stated previously (see point 6 in Table 1 of the Sandwich tern – Quantification Of Productivity Benefits Technical Note (Revision B) [REP3-092]), the Applicant considers that the existing stress-testing encompasses an adequate range of plausible scenarios. However, the Applicant has also been clear that it is willing to consider further stress testing if Natural England are able to provide greater detail on the scenarios they think merit more detailed investigations. As far as the Applicant is aware, Natural England have not yet provided any such greater detail. Given this, it is unsurprising that (as Natural England point out) no additional stress testing has been provided.</p> <p>On the point made by Natural England regarding the need for a</p>

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				until the compensation requirements are met.		<p>strong monitoring regime, the Applicant emphasises that the proposed monitoring is considered to be robust and will act to demonstrate the efficacy of the proposed compensatory measure.</p> <p>The Applicant is updating Appendix 2 Sandwich Tern Compensation Document [APP-069] and Annex 2a Outline Sandwich Tern CIMP [APP-070] to include the additional predator eradication measure at Blakeney and will ensure the potential requirement to extend the duration of active management is also included.</p> <p>In addition, Schedule 17 of the Draft DCO (Revision I) [document reference 3.1] includes provision for determination of the factors used to trigger adaptive management measures, if required, following ongoing monitoring and reporting of the effectiveness of the measures. An additional condition to secure this was added to Schedule 17 of the Draft DCO (Revision H) [REP5-005] at Deadline 5.</p>

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						<p>It should also be noted that the measure to restore a breeding site at Loch Ryan, would not only provide compensation by increasing breeding numbers but would also have the very strong qualitative merit of restoring the former breeding range of this species in Britain and Ireland which has been lost and which should give added weight to the measure, beyond the quantitative benefit that would also be provided.</p> <p>The Applicant also highlights the precautionary nature of the CRM assessments and the basing of the compensation requirement on the upper 95% confidence limit as described in Section 4 of REP3-092. The worst-case stress testing scenario within Table 1 is therefore not considered to represent a realistic scenario and has been provided for illustrative purposes in order to seek to address the Natural England request.</p>
8			13 and Table 2	Natural England notes the assumption that all birds from Loch Ryan will recruit into the SPA network (as nearly all Sandwich terns in the UK breed at SPAs) and hence that all chicks produced at Loch Ryan can be considered part of the compensation.	Ensure plans provide sufficient high quality habitat that allows space for the	As above, the Applicant is updating Appendix 2 Sandwich Tern Compensation Document [APP-069] and Annex 2a Outline

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				<p>The compensatory benefits of Loch Ryan relate to both the provision of recruits into the National Site Network (NSN) and the restoration of lost range for Sandwich tern at a site which would be incorporated into the NSN in due course. On that basis and acknowledging that there should also be additional supporting measures within the package for Sandwich tern compensation (though see point above re: Farne Islands), this is an acceptable working assumption.</p> <p>However, there is some uncertainty around the colonisation timing, rate and number of birds that will be attracted, as well as the likely destinations of Sandwich tern produced by the colony (noting that the colony will need its own recruits to sustain itself). This puts an increased emphasis on the need to provide high-quality habitat for Sandwich tern that comfortably provides sufficient space for the calculated number of nesting pairs as well as additional space for expansion beyond that point.</p>	<p>calculated number of pairs and potential expansion beyond that point.</p> <p>Progress alternative supporting proposals.</p>	<p>Sandwich Tern CIMP [APP-070] to include the additional predator eradication measure at Blakeney and will ensure the potential requirement to extend the duration of active management is also included.</p> <p>See point ref 3 above, the Applicant is seeking to arrange a meeting with Natural England to provide an update on the Loch Ryan proposals for June 2023. During this meeting, initial designs and proposed locations will be presented which demonstrate sufficient scale to provide high-quality habitat.</p>
<p>Document Reviewed: Appendix 4 - Gannet, Guillemot and Razorbill Compensation Document (Revision B) [REP3-022]</p>						

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9	6.2			<p>The Applicant proposes using 95% upper Confidence Interval (CI) of 50% and 1% displacement to base the compensatory requirements on (6 guillemot and 3 razorbill adult mortalities per annum). As noted throughout the Examination, Natural England takes a range-based approach to displacement effects and in any event does not consider the available evidence supports the use of 50% displacement and 1% mortality. Recognising the need to establish a specific value to measure the performance of the compensatory measures against, we advise that the compensatory requirements should reflect the 70% displacement and 2% mortality 95% upper CI, which would be 16 guillemot and 7 razorbill adult mortalities.</p> <p>The calculations of the compensatory requirements should also reflect the need to 'save' adult auks that form part of the NSN network, rather than simply adult auks from the biogeographic population in general. The Applicant has proposed this for the kittiwake and Sandwich tern compensation, and we consider that they should take this approach for auks as well.</p>	<p>Establish compensatory requirements that reflect the 95% CI for 70% displacement and 2% mortality, and also the need to maintain the coherence of the NSN for razorbill and guillemot rather than the biogeographic population in general.</p>	<p>The Applicant's position is that compensatory requirements for auks should be based on the upper 95% confidence limit (noting that this is precautionary) and 50% displacement and 1% mortality i.e. up to 6 guillemot and 3 razorbill.</p> <p>Consideration of the need for adult auks 'saved' by the bycatch reduction measures, to recruit into the NSN population will be provided in an update to REP3-022 at Deadline 7.</p>
10	6.2.1. and 6.2.2			<p>Note comments from Natural England provided at deadline 3 to update guillemot and razorbill in-combination figures with H4 estimates that reflect the Natural England (standard and bespoke) methodology.</p>	<p>Provide the requested updates at Deadline 5.</p>	<p>This will be provided in an update to REP3-022 at Deadline 7 and will be based on the values already provided in the Apportioning and HRA Updates Technical Note (Revision C) [REP5-043]</p>

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11	9.2		206	Natural England note that bycatch reduction is now being focused on the SW England. Whilst it is broadly agreed that auk bycatch occurs at more substantial levels in this area, it is more remote from the impacted colony, and therefore there is likely to be a lower level of connectivity.	Please see comments above and below regarding the need to protect the coherence of the NSN rather than the biogeographic population in general.	Noted. As above, consideration of the need for adult auks 'saved' by the bycatch reduction measures, to recruit into the NSN population will be provided in an update to REP3-022 at Deadline 7.
12			212	Natural England note the commitment (if the Secretary of State deems compensation necessary) to implement baseline monitoring of bycatch of guillemot and razorbill in the relevant gill net fishery and note the suggestion to collaborate and/or align with existing trials underway for Hornsea 4. Both these elements are appropriate, though at this stage do not really address Natural England's concerns regarding the likely effectiveness of the measure.	Ensure these commitments are reflected in the IMP for these species, noting that this does not in itself address Natural England's concerns regarding whether Looming-Eye Buoys (LEB) will provide effective compensation.	Noted – should compensation for guillemot and razorbill be required, the Guillemot and Razorbill CIMP will be produced post-consent, as secured by the DCO, and will set out the detailed delivery proposals for the agreed compensatory measures, based on those set out in Appendix 4 Guillemot and Razorbill Compensation Document. Thus, baseline monitoring and potential collaboration with Hornsea 4 monitoring programme is secured through that document and the wording in Schedule 17 of the Draft DCO.

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13	9.23		217 - 220 table 9.1	<p>Natural England considers that the justification provided here does not address our concerns regarding the effectiveness of LEB. We do recognise that SEP and DEP are likely to have rather smaller compensatory requirements than Hornsea 4, and therefore the level of risk is reduced, however, the compensatory requirements of SEP and DEP need to be appraised as <u>in addition</u> to those of Hornsea 4. However, we do welcome the proposed collection of data regarding the effectiveness of LEB and the level of bycatch on an ongoing basis Natural England consider our comments provided in our relevant representations [RR-063] are still wholly pertinent:</p> <p><i>'Natural England currently consider the Looming Eye Buoys (LEB) to remain an unproven technology with respect to reducing bycatch of auks and has significant reservations regarding the conclusions drawn on the trial carried out by Hornsea 4 OWF. Please see Natural England's advice during the Hornsea Project Four Examination available at: EN010098-001970-Natural England - Comments on any submissions received at Deadline 6 1.pdf (planninginspectorate.gov.uk)'</i></p> <p>In particular, please note the comments as regards the data presented from the Orsted by-catch trials in the above referenced Natural England submission on Hornsea 4:</p>	<p>Ensure the ongoing collection of data regarding LEB effectiveness and bycatch levels are reflected in the IMP, noting that this does not in itself address NE's concerns regarding whether LEB will provide effective compensation.</p> <p>Ensure the data collection plan within the IMP takes full account of Natural England and RSPB's methodological/ analytical concerns regarding the Hornsea 4 LEB trial.</p>	<p>Noted. The Applicant maintains its responses to the Natural England and RSPB concerns documented in Table 9-1 of REP3-022, including that the implementation of LEBs / above water deterrents (AWD) is the best available option for offshore wind farm developers with small numbers of auk mortalities to deliver project-led compensation (see Annex 4B Auk Bycatch Reduction Feasibility Statement [REP3-023]).</p> <p>If compensation for auks is required, as noted in Table 9-1 of REP3-022, the Applicant will seek to ensure that the data collection plan takes account of Natural England's and RSPB's methodological / analytical concerns.</p>

			<p><i>'The Applicant has calculated a relative 25% reduction in bycatch of guillemot by comparison of the percentage of LEB treated nets (42.9%) versus control nets (57.1%) that caught one or more guillemot. Natural England consider this calculation to be methodologically inappropriate and of no value in assessing the efficacy of the LEB.</i></p> <p>And</p> <p><i>'Natural England maintain that it is not possible to assess the potential scale of the measure without a proven implementation method with fully quantified and independently ratified success rates, and a quantified assessment of actual bycatch rates at the target fishery with consideration given to variation across vessels and other co-variates (e.g., gear specifics, environmental conditions).</i></p> <p>And further noting that the conclusion provided by Natural England in regards the by-catch reduction compensation proposal and associated trials for Hornsea 4 is also valid for SEP and DEP:</p> <p><i>'In summary, we do not consider the LEB trial and subsequent data analysis to be sufficiently transparent or robust at the current time to draw any conclusion on the technologies ability to significantly reduce bycatch. A multi-year trial and subsequent appropriate statistical analysis of the data will be required. Further, Natural England will need to be able to undertake a sufficient audit of that data and analysis or be suitably assured that an independent third party has reviewed and approved the findings of the trial. Noting that several years are available between consent and operation of the windfarm, Natural England do remain fully supportive of the ongoing LEB trial and hopeful that it will ultimately be capable of delivering quantifiable reductions in bycatch of auks and other marine birds. However, auk bycatch reduction is not currently demonstrated as being a viable compensation measure.'</i></p> <p>We would also like to draw attention to the comments made by RSPB (in response to the Hornsea 4 by-catch trials), found here: EN010098-001917-Royal Society for the Protection of Birds - Comments on any other submissions received at Deadline 5a 2.pdf (planninginspectorate.gov.uk)</p>		
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14			222	Natural England note that in addition to the use of AWD the proposal is to use high-visibility corline and train fishers to remove entangled birds alive. Natural England broadly supports the inclusion of these measures in the compensation proposals, although highlights the comments provided in our relevant representations (refer to Detailed comments 33, 34, 35 and 37). These do not overcome the uncertainty regarding the effectiveness of LEB, which is currently the primary compensation mechanism.	Ensure these commitments are reflected in the IMP for these species, noting that this does not in itself address NE's concerns regarding whether LEB will provide effective compensation.	Noted – should compensation for guillemot and razorbill be required, the Guillemot and Razorbill CIMP will be produced post-consent, as secured by the DCO, and will set out the detailed delivery proposals for the agreed compensatory measures, based on those set out in Appendix 4 Guillemot and Razorbill Compensation Document. Thus, these measures will be secured through that document and the wording in Schedule 17 of the Draft DCO.
15	9.2.5		223 - 226	Natural England note that the compensation levels (whether at 50% and 1% or 70% and 2% or some other figure) are expressed in terms of FFC SPA adults and that a correction has been applied to account for non-adults caught as by-catch. However, there is also a requirement to identify the proportion of guillemot and razorbill that are likely to be part of the UK SPA network. This is likely to alter throughout the year, and Furness (2015) should give an indication of the proportion of non-UK SPA birds present in different sea areas per season.	Establish compensatory requirements that reflect the need to maintain the coherence of the NSN for razorbill rather than the biogeographic population in general.	Noted. As above, consideration of the need for adult auks 'saved' by the bycatch reduction measures, to recruit into the NSN population will be provided in an update to REP3-022 at Deadline 7.
16			224	It is unclear whether the questionnaires targeted the SW fishers.	Provide clarification.	Noted. The Applicant will seek to address this in the update to the document at Deadline 7.

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17			Table 9.3	Natural England note that the CIMP for guillemot and razorbill is not planned to be submitted until post consent in 2025. We highlight that the baseline monitoring is planned to commence before then, which would mean it begins prior to consultation on the CIMP. It is important that agreement is achieved regarding the baseline monitoring as establishing a robust baseline is critical to evaluating the success of the measures.	We advise that the CIMP should be submitted before baseline monitoring commences.	Noted, the Applicant will seek to address this when the document is updated at Deadline 7.
Document Reviewed: Annex 4 - Auk Bycatch Reduction Feasibility Statement [REP3-023]						
18	General comment			Natural England has reviewed this document and note that no substantive new material to address the concerns raised by Natural England in our relevant representations has been provided, and therefore our reservations regarding the likely effectiveness of the proposed compensatory measures remain.	n/a	Noted.
19	2.1			We note that Cleasby <i>et al</i> (2022) found that the southwest (Cornwall) was a potential hotspot for shag (not guillemot and razorbill).	Amend report to accurately reflect Cleasby <i>et al</i> conclusions.	Noted. This correction will be provided in an update to the document at Deadline 7.

References

Cleasby, I.R., Wilson, L.J., Crawford, R., Owen, E., Rouxel, Y. and Bolton, M. 2022. Assessing bycatch risk from gillnet fisheries for three species of diving seabird in the UK. Marine Ecology Progress Series 684: 157-179.

Cook ASCP, Parsons M, Mitchell I, Robinson RA (2011) Reconciling policy with ecological requirements in biodiversity monitoring. Mar Ecol Prog Ser 434:267-277

Short, D. 2020. Breeding of four species of tern and black-headed gull at Forvie National Nature Reserve, 2019. Scottish Natural Heritage, Edinburgh.