



THE PLANNING ACT 2008

THE INFRASTRUCTURE PLANNING (EXAMINATION PROCEDURE) RULES
2010

Outer Dowsing Offshore Wind Farm

Appendix F2 to the Natural England Deadline 3 Submission

**Natural England's Advice on Offshore and Intertidal Ornithology following
Acceptance of the Offshore Restricted Build Area (ORBA)**

For:

The construction and operation of Outer Dowsing Offshore Wind Farm located
approximately 54 km from the Lincolnshire Coast in the Southern North Sea.

Planning Inspectorate Reference EN010130

13th December 2024

Natural England's Advice on documentation submitted and updated related to Offshore and Intertidal Ornithology following acceptance of the Offshore Restricted Build Area (ORBA).

In formulating these comments, the following documents have been considered:

- [PD1-087] ORBA and Revision to the Offshore ECC Appendix E Offshore Ornithology Collision Risk Modelling
- [PD1-088] ORBA and Revision to the Offshore ECC Appendix F Offshore Ornithology Displacement Assessment
- [PD1-089] ORBA and Revision to the Offshore ECC Appendix G MRSea Modelling for Offshore Ornithology
- [PD1-091] Habitats Regulations Assessment for the ORBA and Revision to the Offshore ECC
- [PD1-092] Habitats Regulations Assessment for the ORBA and Revision to the Offshore ECC Appendix A Offshore and Intertidal Ornithology Apportioning

1) Summary of Advice

Updated offshore ornithology assessment in light of the changes resulting from the introduction and acceptance of the Offshore Restricted Build Area (ORBA)

As advised at Deadline 1, the Applicant has supplied documents describing the changes introduced by the Applicant in respect of the offshore restricted build area (ORBA) and revision to the offshore export cable corridor (ECC), including the impact of these changes on ornithological receptors. However, the Applicant has not provided an updated in-combination assessment, nor carried out updated population viability assessments (PVA) for project alone or cumulative/in-combination impacts, including for species where the introduction of the ORBA has resulted in an increase in mortality estimates.

As stated within our Deadline 1 submission Appendix F1 [REP1-061], Natural England maintain that it is important there is an accurate record of the project-alone impacts, which are required for in-combination assessments moving forward (including the in-combination assessments that other Round 4 projects will be undertaking). They are also required for those species where compensation is deemed necessary in order to calculate the appropriate compensation requirement.

We advised at Deadline 1 that an updated Environmental Statement (for Environmental Impact Assessment (EIA)) and Report to Inform the Appropriate Assessment (RIAA), including any relevant appendices, should be submitted into the examination, and so welcome the ExA decision to seek these updated documents. These should include updated PVA where necessary (i.e. where impacts are above the 1% increase in baseline mortality threshold), and updated cumulative/in-combination assessments, including for those species where impacts are considered negligible by the Applicant. We recommend that the Applicant refers to Table 1 below and the updated summary in Annex 1 showing outstanding disagreement between Natural England and the Applicant on assessment methodology when compiling the updated documents to ensure Natural England's approach is presented in full.

Notwithstanding the above, for some species the introduction of the ORBA has been shown to either decrease or result in no change to the project's impacts or resulted in an increase that is small enough to enable Natural England to make a judgement that the Applicant's conclusion of no significant adverse impact (EIA) or adverse effect on site integrity (HRA) for the project alone remain valid. Therefore, despite not having seen an updated PVA for these species for the relevant biogeographical populations or Special Protection Areas (SPAs), we are able to conclude that we agree with the conclusion of no significant adverse impact/ Adverse Effect on Integrity (AEOI) alone for these species.

For a number of these species, some level of uncertainty or disagreement between Natural England and the Applicant remains over the exact methodology/parameters employed to calculate the exact level of impact (see Table 1), but it is recognised that these will have only a minor influence on the final mortality value and therefore will likely not change the overall conclusions.

Project alone impacts at EIA

For the majority of species (**gannet, kittiwake, guillemot, razorbill, lesser black-backed gull, Sandwich tern and common scoter**), the Applicant has provided an EIA project alone assessment following Natural England's approach and using our recommended parameters. However, for **common tern** and **little gull**, we advised at Relevant Representation [RR-045] that the Nocturnal Activity Factor (NAF) used for collision risk modelling (CRM) was not that advised by Statutory Nature Conservation Bodies (SNCBs). As CRM was not rerun for these species following the introduction of the ORBA, we currently do not have agreed mortality estimates for these species.

For **red-throated diver**, our advice at Deadline 2 [REP2-095] regarding the way in which impacts to red-throated diver are considered within the assessment still stands, which is that full consideration should be given to the impacts resulting from the permanent presence of the ORCP and ongoing vessel movements during the Operation & Maintenance phase.

Notwithstanding the above, Natural England are able to conclude that for all species, the impacts are at a level that would result in **no significant adverse impacts at the EIA scale from the Project alone.**

Cumulative Impacts at EIA

Natural England has already identified significant adverse impacts from North Sea OWF at the EIA scale to **gannet, kittiwake, great black-backed gull, guillemot, razorbill and red-throated diver**, irrespective of whether Outer Dowsing OWF ('ODOW') and other Round 4 projects are included in the cumulative totals. ODOW will be making an additional contribution to those totals.

With regards to species where we have not yet concluded significant adverse impact at EIA, an updated cumulative assessment is required in order to determine whether the additional impact from the Project and other Round 4 projects would warrant such a conclusion.

Project Alone Impacts at Habitat Regulations Assessment (HRA)

For some species at HRA, there remains outstanding uncertainty and/or disagreement over the assessment, particularly with regards to apportioning of impacts to the relevant Special Protection Areas (SPAs; see Table 1), and therefore the project alone mortality that should be taken through to an updated in-combination assessment following Natural England's approach. For the majority of these species however, Natural England are able to conclude that the impacts are likely sufficiently small, resulting in no Adverse Effect on Integrity (AEoI) from the Project alone. As noted above, this does not obviate the need to correct the assessments where needed, to ensure appropriate ODOW project alone values are used in in-combination assessments.

More detail is provided below for key species and SPAs.

Gannet, Flamborough and Filey Coast (FFC) SPA

The introduction of the ORBA has resulted in no change to estimated mortality due to collision, and decreased mortality caused by displacement, therefore there has been an overall decrease in mortality by 0.1 birds (from 5.4 to 5.3 adults per annum) at 70% displacement and 1% mortality. There remains a disagreement between Natural England and the Applicant regarding the value used to calculate the proportion of adults using Digital Aerial Survey (DAS) data, however this is unlikely to make a material difference to the resulting mortality estimate. Therefore, Natural England agrees that the Applicant's conclusion of no AEoI alone based on an increase to baseline mortality of 0.217% and a Counterfactual of Growth Rate (CGR) of 1.00, is likely to remain valid.

Guillemot, FFC SPA

The Applicant has presented an updated impact assessment following Natural England's advised approach for model-based population estimates only. Natural England continue to request an impact assessment based on design-based population estimates alongside model-based (see detailed comment 5 in Table 2 below). Notwithstanding this, the original PVA was carried out for an estimated adult mortality of 237.16 at 70% displacement and 2% mortality, which is very similar to that presented by the Applicant in their updated ORBA assessment using model-based estimates following Natural England's advised approach to apportioning (248.6 at 70% displacement and 2% mortality). The PVA carried out for guillemot based on this impact value of 237.16 showed a decrease in growth rate of 0.2%. Therefore, subject to full review of the Applicant's report on how model-based estimates were generated, and agreement on the mortality estimate of 248.6, Natural England agrees that the conclusion of no AEoI from the project alone is likely to remain valid.

Puffin, FFC SPA (part of the breeding seabird assemblage)

The ORBA has resulted in a decrease in the number of adult birds apportioned to the SPA from 84.1 to 79.4 per annum, when comparing the Applicant's approach to apportioning (which includes use of the stable age structure appPD1-082roach to adult proportions) in the Report to Inform Appropriate Assessment (RIAA) [AS1-096] and the updated ORBA documents. In their updated documents, the Applicant presented an updated mortality estimated based on Natural England's approach to apportioning, which results in 142.9 adult birds apportioned to the SPA and a predicted mortality estimate of 2.0 birds at 70% displacement and 2% mortality. This represents an increase in baseline mortality of 0.691%. Although the original PVA was based on the lower mortality estimate of 84.1, due to the increase to baseline mortality being below the 1% threshold requiring further consideration, Natural England agrees that the conclusion of no AEoI alone is likely to remain valid.

Sandwich Tern, North Norfolk Coast (NNC) SPA

The introduction of the ORBA has resulted in no change to the estimated annual adult mortality due to collision of 0.4 birds (as per Natural England's approach to apportioning) which represents an increase in baseline mortality of 0.03%. As this is well below the 1% threshold requiring further consideration, Natural England agree that the conclusion of no AEoI alone is likely to remain valid. We note that the assessment presented by the Applicant in the updated ORBA RIAA [PD1-091 and PD1-092] shows a mortality value of 0.2 (due to an adult proportion of 0.64 calculated using the stable age structure approach, see detailed comment 4 in Table 2).

Lesser black-backed gull, Alde-Ore Estuary SPA

The introduction of the ORBA has resulted in a slight increase in estimated annual adult mortality due to collision from 0.2 to 0.3 birds. There remains a disagreement between Natural England and the Applicant regarding the value used to calculate the proportion of adults using DAS data, however this is unlikely to make a material difference to the resulting mortality estimate. Therefore, Natural England agrees that the conclusion of no AEoI alone, which is based on an increase to baseline mortality of 0.06% is likely to remain valid.

Kittiwake, FFC SPA

The introduction of the ORBA has increased estimated annual adult mortality (based on mean abundance) by less than one (from 14.6 to 15.4). Natural England are awaiting further information from the Applicant regarding the method by which offshore breeders have been included in the apportioning calculations, and whether an apportioning rate of 61.3% or 64% or birds to FFC SPA has been used within the assessment. Nonetheless, we recognise that this is unlikely to make a material difference to the resulting mortality estimate. Natural England therefore agrees that the conclusion of no AoEI alone, which are based on an increase to baseline mortality of 0.11% and a CGR of 1.00, is likely to remain valid.

Razorbill at FFC SPA

The introduction of the ORBA has resulted in a decrease in estimated mortality, but Natural England has yet to see an assessment based on our advised apportioning approach for FFC SPA (see detailed comment 3 in Table 2 below). Therefore, we remain unable to make a judgement on the level of impact for this species at HRA for the project alone.

Red-throated diver at the Greater Wash SPA

Natural England’s advice at Deadline 2 [REP2-095] regarding the way in which impacts to red-throated diver feature of the SPA are considered within the assessment still stands, which is that full consideration should be given to the impacts resulting from the permanent presence of the Offshore Reactive Compensation Platform (ORCP) within the Greater Wash SPA, and also vessels transiting through the SPA during the Operation & Maintenance phase. Therefore, we remain unable to make a judgement on the level of impact for this species at HRA for the project alone.

Table 1: Species/SPAs where there remains outstanding disagreement and/or uncertainty around the updated project alone mortality that should be taken though to an updated in-combination assessment:

HRA Species and SPA	Disagreement/uncertainty
Gannet, Flamborough and Filey Coast SPA: displacement and collision	Adult apportioning rate calculated from DAS: Applicant – 86% NE – 90%
Kittiwake, Flamborough and Filey Coast SPA: collision	Method by which offshore breeders have been included in the apportioning calculations. Apportioning rate incorporating offshore breeders of 61.3% vs 64%
Guillemot, Flamborough and Filey Coast SPA: displacement	Appropriateness of model-based estimates
Razorbill, Flamborough and Filey Coast SPA: displacement	NE’s approach not presented in full (bespoke apportioning rate of 70.6% for the post-breeding season)
Lesser black-backed gull, Alde-Ore Estuary SPA: collision	Adult apportioning rate calculated from DAS:
Sandwich tern, North Norfolk Coast SPA: collision	NE’s apportioning approach not presented (100% apportioned as adults rather than the 61% calculated using the stable age structure approach preferred by the Applicant)
Red-throated diver, Greater Wash SPA: displacement	Full consideration of the impacts, particularly the permanent presence of the ORCPs within the GW SPA, and disturbance from vessels during the O&M phase

In-combination impact at HRA

At the end of the Examination for Sheringham Shoal and Dudgeon Extension Projects (SEP and DEP) Natural England could not rule out in-combination AEoI for the **kittiwake, guillemot, razorbill and breeding seabird assemblage features of FFC SPA [REP8-102]**. ODOW will likely be making substantial contribution to the impacts on these features, alongside other Round 4 projects. In that light, in all likelihood our advice is that we cannot rule out AEoI in-combination for these features.

We have also previously advised in-combination adverse effects cannot be ruled out for **lesser black-backed gull at Alde-Ore Estuary SPA** (Norfolk Vanguard, Norfolk Boreas, East Anglia One North, East Anglia Two) and **Sandwich tern at North Norfolk Coast SPA** (SEP and DEP). However, taking into account the likely rather limited prospect of connectivity between the ODOW array and the colonies in question, it is likely that Natural England will advise that the ODOW project alone impact for these species at these sites is sufficiently low to allow in-combination adverse effects to be excluded for these SPAs. Nonetheless, as outlined above, accurate Project alone mortality values are required for future in-combination assessments.

Natural England consider it particularly important to have accurate alone and in-combination mortality estimates for **gannet at FFC SPA**, due to the fact that whilst it is likely we can rule out AEol for ODOW, the in-combination mortality total is reaching a level where additional projects beyond the 'Round 4' leasing may trigger an in-combination AEol.

For **guillemot, razorbill and kittiwake at FFC SPA**, accurate project alone mortality estimates are required for the calculation of the compensation requirement.

2) Detailed Comments

Natural England's detailed comments on the ORBA documentation in relation to offshore ornithology [PD1-091, PD1-088 and PD1-089] are presented in Table 2 below.

Table 2: Natural England’s Detailed Comments on offshore ornithology in relation to ORBA documentation [PD1-091, PD1-088 and PD1-089]

NE Ref	Section	Key Concern and/or Update	Natural England’s Advice to Resolve Issue
Document reviewed: Habitats Regulations Assessment for the ORBA and Revision to the Offshore ECC [PD1-091]			
1	Section 4.4.2	<p>The ‘SPA weighting (%)’ column in these tables is confusing. For all bioseasons where the Biologically Defined Minimum Population Scale (BDMPS) apportioning rates have been used, these correctly reflect the proportion of all birds recorded within the array and appropriate buffer that are apportioned as breeding adults to the relevant SPA per bioseason, as per the mean seasonal peak. However, for other bioseasons (i.e. the breeding season and any bioseasons where bespoke apportioning rates apply i.e. guillemot and razorbill at FFC SPA) this rate reflects only the proportion of adult birds that are apportioned to the relevant SPA i.e. is the rate applied after first calculating the proportion of all that are adults (as calculated using either the stable age structure or site-specific surveys).</p> <p>For example, for the assessment of guillemot at FFC using model-based population estimates (Table 4-11) for the ORBA assessment (Applicant) in the breeding season, this column shows an ‘SPA weighting’ value of 50%. In fact, as shown in Table 4.1 in PD1-092 shows that the Applicant’s approach is to assume 57% of all birds are adults (based on the stable age structure), and of these adults, 50% of them are attributed to FFC SPA. This results in the proportion of all birds that are apportioned as adults to the FFC SPA during the breeding season as per the Applicant’s approach as 28.5%. This aligns with a mean peak count in the breeding season of 11,364 resulting in 3238.8 adults apportioned to SPA ($11,364 \times 0.285 = 3238.8$) as laid out in Table 4.13.</p>	<p>Please address this in the updated documents. It would be helpful if the Applicant added a column in these tables to show the proportion of birds that have been aged as adults. Alternatively, a single column should show the overall proportion that have been apportioned as adults to the relevant SPA, so that it is clear how the number of adults apportioned to the SPA has been derived from the seasonal mean peak abundance.</p>
2	Table 4-13	Table 4.13 columns are not aligned properly for the breeding season rows.	Please address this formatting error in the updated documents.

3	Table 4-13	<p>At Relevant Representations [RR-045] Natural England (NE) advised a bespoke apportioning rate for razorbill during the post-breeding bioseason (August – October) of 70.6% and requested that this was included in the Applicant’s presentation of NE’s approach. At Deadline 1 [REP1=061], NE highlighted that Table 4.13 in the HRA for the ORBA [PD1-091] did not present the full NE approach with the advised post-breeding apportioning rate for razorbill, with the annual number of adults apportioned to the SPA as per NE’s approach stated as 3,455.2, which is summed from 3,159.0 adults during the breeding season (based on NE’s approach of 100% adults and 100% to FFC), 73.8 adults for the post-breeding season (based on the BDMPS rate of 3.4% and not the NE advised rate of 70.6%) and 48.8 adults and 173.5 adults for the non-breeding and pre-breeding seasons respectively (based on the BDMPS rates of 2.7% and 3.4% as per NE and Applicant approach). At Deadline 2, the Applicant responded [REP2-53] to state that they have utilised NE’s approach to apportioning of adult razorbill (70.6%) during the post-breeding season, but have not stated where this has been presented.</p>	<p>Please could the Applicant clearly outline where an assessment of impacts to razorbill using NE’s approach including the bespoke apportioning rate of 70.6% during the post-breeding season has been presented, if not within Table 4-13 of PD1-091. Ideally, Table 4-13 should be updated to present the full assessment for razorbill at FFC for the ORBA assessment as per Natural England’s approach.</p>
4	Table 4-34	<p>The Applicant has presented an assessment for Sandwich tern at North Norfolk Coast SPA using their preferred approach to apportioning only i.e. using an adult proportion calculated using the stable age structure approach of 0.61, which effectively halves the mortality estimate from 0.4 to 0.2.</p>	<p>Natural England have recalculated the resulting percentage increase in baseline mortality as 0.03% and agree that this does not change the conclusion of the RIAA. Nonetheless, we advise that the annual mortality estimate that should be taken through to an in-combination assessment following NE’s approach for Sandwich tern is 0.4 birds.</p>
5	Tables 4-10 and 4-11	<p>The Applicant has presented an assessment for guillemot at FFC based on the design-based population estimates following the Applicant’s approach to apportioning of birds to the SPA, and an assessment based on the model-based population estimates for both the Applicant’s and NE’s approach to apportioning of birds to SPA.</p>	<p>We reiterate our request within our Deadline 1 submission that the Applicant presents an assessment following NE’s advised apportioning approach using design-based population estimates. Please see also comments below on the Marine Renewable Strategic Environmental Assessment (MRSea) modelling report, including the request for further justification regarding why model-based</p>

			population estimates can be considered more robust than the design-based estimates.
Document reviewed: ORBA and Revision to the Offshore ECC Appendix F Offshore Ornithology Displacement Assessment [PD1-088]			
6	Section 4, Tables 4-3 and 4-10	This section is titled ' <i>Displacement using MRSea Abundance and Density Estimates</i> ' but refers within the text to both model-based and design-based abundance and density estimates, as well as 'project (Furness, 2015) parameters' and 'Natural England parameters', which are in reference to the bioseasons used. It is not clear which is presented where, due to contradictions between the text and table descriptions. For example, Tables 4-3 and 4-10 are different but have the same descriptions, with both described as being 'Modelled mean peak bio-season counts for guillemot (using the Natural England parameters) within the array area minus the ORBA plus 2km buffer including upper and lower confidence intervals.' However, it appears Table 4-3 is showing model-based estimates for the Applicant's preferred bioseason (from Furness, 2015) s.	The Applicant should check the descriptions of all tables in this document, particularly within Section 4 and ensure they are referenced correctly with the text. This will avoid any confusion with regards to what values are being presented, and which are being taken through to the RIAA/ORBA HRA documents.
7	Section 4, Tables 4.4 to 4.9	Similarly, there appears to be an error in the descriptions for Tables 4-4 to 4-9 which state Modelled mean/upper 95% CI guillemot breeding/non-breeding/total displacement matrix (array area minus the ORBA plus 2km buffer) based on the design-based estimates... ' when these appear to be the model-based estimates for the Applicant's preferred bioseasons (from Furness, 2015).	As above.
Document reviewed: ORBA and Revision to the Offshore ECC Appendix G MRSea Modelling for Offshore Ornithology [PD1-089]			
8	Para 30	The Applicant states depth and distance to coast were dropped in the (final) model.	Natural England requests that the Applicant clarify whether the final model included any environmental covariates, and the Applicant also provide justification for why depth and distance to coast were not included in the final model. This will assist the Applicant in demonstrating that the model has been robustly constructed.

9	n/a	The report is lacking detail with regards to why the final model was selected.	The Applicant should submit a more detailed methodology fully describing the different aspects of the modelling and associated diagnostics in relation to performance and precision (CV), in order to clearly demonstrate why the final model was selected.
---	-----	--	---

Annex 1: Update of Summary of Disagreements for Offshore Ornithology Assessment Methodology (initially provided in response to ExA Q1 OR 1.2 [REP2-074])

Ref	Issue	NE's Position	Applicant's Position		Resolved at D2?	Resolved at D3?
			DCO Submission	19 Sept Procedural Decision submission incl. Response to RR		
Apportioning for HRA						
1	Use of theoretical generalised stable age structure (from Furness 2015) for adult apportioning.	Not appropriate. Natural England's (NE's) position is to assume 100% adults or calculate adult proportions from site-specific digital aerial survey (DAS) data.	Used stable age structure for guillemot, razorbill, puffin, lesser black-backed gull, Sandwich tern and common tern for apportioning of adults in the breeding season	The Offshore Restricted Build Area (ORBA) docs presents both Applicant's approach (stable age structure) and NE's, which is now corrected to not use Stable Age Structure (SAS) as outlined in the Applicant's Response to NE's Relevant Representations [PD1-071]	Yes, for offshore Restricted Build Area (ORBA) documents only.	Yes
2	Apportioning of Guillemot (GU) to Flamborough and Filey Coast (FFC)	100% in breeding season (March to July), bespoke chick rearing and moult (August & September) apportioning rate of 68.5% (please see Appendix 2 of our Relevant Representations [RR-045]), Biologically Defined Minimum Population Scales (BDMPS)	57% adults (stable age structure) and 50% to FFC in breeding season, 4.4% in non-breeding season	ORBA docs presents both Applicant's approach (stable age structure) and NE's as outlined in their Response to NE's Relevant Representations [PD1-071]	Yes, for ORBA documents only.	Yes

Ref	Issue	NE's Position	Applicant's Position		Resolved at D2?	Resolved at D3?
			DCO Submission	19 Sept Procedural Decision submission incl. Response to RR		
		approach (4.41%) for non-breeding season (Oct to Feb)				
3	Apportioning of Razorbill (RA) to FFC	100% in breeding season (April to July), bespoke post-breeding migration (August to October) apportioning rate of 70.6% (please see Appendix 2 of our Relevant Representaitons [RR-045]), BDMPS approach (3.4%) for pre-breeding migration (January to March), BDMPS approach (2.7%) for non-breeding season (Nov-Dec)	57% adults (stable age structure) and 100% to FFC in breeding season, 3.4% in pre-breeding and post-breeding migration, 0.91% in non-breeding/winter	ORBA documents present the Applicant's approach (stable age structure, 100% to FFC in breeding season) but does not present NE's full approach (BDMPS apportioning rate during the non-breeding season has been corrected from 0.91% to 2.74%, but the bespoke post-breeding migration rate of 70.6% to FFC has not been incorporated), despite the Applicant's response to our Relevant Representations [PD1-071], comment F36 and the statement within the Habitat Regulations Assessment (HRA) ORBA [PD1-091] para 65 that <i>"The approach to non-breeding season apportioning is identical [for the Applicant and</i>	No	No

Ref	Issue	NE's Position	Applicant's Position		Resolved at D2?	Resolved at D3?
			DCO Submission	19 Sept Procedural Decision submission incl. Response to RR		
				<i>Natural England] with the exception of guillemot".</i>		
4	Exact method of calculating adult proportions using DAS data (applicable to Gannet (GA), Kittiwake (KI) & Lesser black-backed gull (LBBG)).	Submitted at Deadline 1 (see F1.2 in Table 1 of Appendix F1 to NE's Deadline 1 submission [REP1-061]). Follow Morgan method of calculating proportion of adults from DAS data. This would produce adult apportioning rates of 90% for GA, 91% for KI and 66% for LBBG.	Method not described by Applicant. Rates of 91% for KI and 93% for GA, rate of 60% for LBBG based on stable age structure (Furness 2015)	ORBA documents describe how adult proportions have been calculated from DAS data (using a method we do not think is valid – see NE's response at Deadline 1, Appendix F1 [REP1-061],comment F1.2 in Table 1),and presents rates for GA (86%), KI (90%) and LBBG (50%)	No – Examiners Questions have requested the Applicant to provide an updated assessment using proportions submitted by NE at Deadline 1 (see NE's position column)	No
5	Inclusion of offshore breeders for Kittiwake (KI) - unclear what apportioning rate has been used (61.3% or 64%) and how it has been calculated.	Agree with inclusion of offshore breeders in apportioning calculations using NatureScot method, but would like the Applicant to confirm rate used and how it has been derived.	Table 11 of the Report to Inform Appropriate Assessment (RIAA) Annex 1 (Apportioning) [AS1-099] shows 61.3%	The ORBA documents show conflicting rate. Table 8.1 in HRA ORBA Appendix A (Apportioning) [PD1-092] shows 61.3% (as per Table 11 of the RIAA) [AS1-099] however Table 6.2 and para 80 suggest a rate of 0.64.	No. However the differences in rates are unlikely to make a material difference to the overall predicted impact and	No. change. Awaiting submission by the Applicant of an updated apportionin

Ref	Issue	NE's Position	Applicant's Position		Resolved at D2?	Resolved at D3?
			DCO Submission	19 Sept Procedural Decision submission incl. Response to RR		
				This discrepancy may be due to the exclusion/inclusion of the Filey 2 colony (excluded in Table 11 of the RIAA but included in Table 6.2 of the HRA ORBA)	conclusions of the assessment.	g Annex at Deadline 3.
PVA						
6	Burn in for PVA	Submitted at Relevant Representations (see F25 in Table 2 of Appendix F to NE's Relevant Representations [RR-045]) Burn in of 5 years for all species	Burn in for all species except LBBG	The Applicant states that they had ran preliminary PVA with and without burn in and found no difference and therefore do not feel it necessary to update their PVA.	No - PVA has not been rerun. Whilst this may not make a substantial difference to the PVA outputs, this nonetheless represents a departure from Natural England's best practice advice.	No change.
Red-throated diver & common scoter						
7	Not assessing vessel impacts on red-throated diver and common scoter during the Operations and Maintenance (O&M) phase	Submitted at Relevant Representations (see F31 in Table 2 of Appendix F to NE's Relevant Representations [RR-045]) that full	RIAA Table 7.1 (LSE) [AS1-096] did not include direct disturbance and displacement within the Export Cable Corridor (ECC) as a result of vessel	No further detail provided within ORBA documents with regards to the potential for vessel movements during the O&M phase to cause disturbance and displacement to red-	No	No

Ref	Issue	NE's Position	Applicant's Position		Resolved at D2?	Resolved at D3?
			DCO Submission	19 Sept Procedural Decision submission incl. Response to RR		
		consideration should be given to the potential for displacement and disturbance to red-throated diver and common scoter within the Greater Wash(GW) Special Protection Area (SPA) during the O&M phase as a result of vessel movements.	movements during the O&M phase for the Greater Wash SPA red-throated diver and common scoter features	throated diver and common scoter.		
8	Not assessing presence of Offshore Reactive Compensation Platform (ORCP) within Greater Wash SPA during the O&M phase for red-throated diver (RTD) and common scoter	Submitted at Relevant Representations (see F31 in Table 2 of Appendix F to NE's Relevant Representations [RR-045]) that full consideration should be given to the potential for displacement and disturbance to red-throated diver within the Greater Wash SPA due to the permanent presence	RIAA Table 7.1 (LSE) [AS1-096] did not include direct disturbance and displacement within the ECC as a result of the presence of the ORCP within the Greater Wash SPA during the O&M phase for the red-throated diver and common scoter features	Further detail provided within the ORBA documents that consider the potential for the ORCPs to cause displacement to red-throated diver and common scoter, including comparison with static structures within the Outer Thames Estuary (OTE).	This is no longer a disagreement regarding the assessment methodology as such, but rather the specific conclusions of that assessment, particularly that the ORCPs will be located in areas of low density of red-throated diver, and that a direct comparison can	No change.

Ref	Issue	NE's Position	Applicant's Position		Resolved at D2?	Resolved at D3?
			DCO Submission	19 Sept Procedural Decision submission incl. Response to RR		
		of the ORCPs within the SPA. Alternative locations for the ORCP outside the SPA should be considered.			be made between the ORCPs and the static structures within the OTE referenced in the ORBA documents. Our remaining concerns are for impacts to red-throated diver; Natural England are satisfied that impacts to common scoter are likely to be minimal. We understand that the Applicant will be submitting further information on this matter in due course.	

Ref	Issue	NE's Position	Applicant's Position		Resolved at D2?	Resolved at D3?
			DCO Submission	19 Sept Procedural Decision submission incl. Response to RR		
9	Only calculating impact to the red-throated diver feature of the GW SPA in terms of mortality not also area affected in both km and % of the SPA	Submitted at Deadline 1 (see F1.9 in Table 1 of Appendix F1 to NE's D1 submission [REP1-061]). Assessment of the potential for the ORCP's to cause displacement to RTD should consider both the estimated mortality, and the area (km2) and the proportion of the SPA where RTDs have the potential to be displaced from by such a structure.	N/A. ORCP not scoped in (see item 9).	Further detail provided within ORBA documents that consider the potential for the ORCPs to cause displacement to red-throated diver and common scoter, including comparison with static structures within the Outer Thames Estuary. This does not include an estimate of displacement mortality, or the area of the SPA from which red-throated divers are displaced.	No. Awaiting response/further documents from the Applicant following request at Deadline 1.	No.
Bioseasons						
10	Incorrect breeding seasons for Sandwich Tern (ST) and gannet (full breeding season not used)	Full breeding seasons should be used as set out in Furness 2015. For gannet this is March to September, for Sandwich tern this is April to August.	Table 12.7 within the Applicant's Environmental Statement (ES) presents a 'breeding' season of May to August for Sandwich tern. For gannet, only a 'migration-free breeding' season of	Applicant confirms within their response to our Relevant Representations that the full breeding season was used for gannet within the ES and RIAA, and that the ORBA documents present an assessment for Sandwich tern using the full breeding season.	Yes, for ORBA documents only (in the case of Sandwich tern)	Yes

Ref	Issue	NE's Position	Applicant's Position		Resolved at D2?	Resolved at D3?
			DCO Submission	19 Sept Procedural Decision submission incl. Response to RR		
			April to Augustis is presented.			
Nocturnal Activity Factor (NAF)						
11	Incorrect NAFs used for little gull, Sandwich tern and common tern	Use NAFs set out in Garthe and Huppopp (2004) and Joint Statutory Conservation Body (SNCB) guidance (JNCC et al 2024) for Collision Risk Modelling (CRM), or present empirical evidence to inform an alternative rate	NAF of zero for little gull, sandwich tern and common tern	ORBA documents present updated CRM using the NAFs advised by NE for Sandwich tern but migratory CRM for common tern and little gull has not been rerun.	No, the ORBA documents use the correct NAF for Sandwich tern, but CRM has not been rerun for common tern and little gull as these were considered within the migratory CRM which has not be rerun.	Yes for Sandwich tern, no for common tern and little gull.
Cumulative/in-combination						
12	Screening things out of the in-combination assessment due to the assessment 'alone' concluding a 'trivial and inconsequential level of effect', including Lesser black-backed gull at Alde-Ore Estuary SPA and	Where there is a prospect of a contribution to an in-combination adverse effects, small impacts need to be carried through to an in-combination assessment.	Lesser black-backed gull at Alde-Ore Estuary SPA screened out. ST at NNC SPA screened in but assessment not presented.	Applicant confirms within their response to our Relevant Representations that they do not consider it necessary to update the cumulative/in-combination assessment, and confirms that Sandwich tern has not been assessed for in-combination impacts (see F41 in the Applicant's	No	No

Ref	Issue	NE's Position	Applicant's Position		Resolved at D2?	Resolved at D3?
			DCO Submission	19 Sept Procedural Decision submission incl. Response to RR		
	Sandwich tern at North Norfolk Coast (NCC) SPA.			Response to Relevant Representations - Natural England [PD1-071]).		
Presentation of displacement impacts						
13	Displacement matrices for mean abundance estimates only	Natural England considers it best practice that matrices are also presented of the upper and lower confidence intervals for each species, so that the full range of impact scenarios can be understood.	Displacement matrices only presented for the mean abundance estimate values for all species	The ORBA documents present displacement matrices for the mean and upper and lower confidence intervals of the abundance estimates for all species	Yes, for ORBA documents only.	Yes
14	Displacement matrices for Applicant's approach to apportioning of GU and RA to FFC SPA only.	Displacement matrices for guillemot and razorbill based on Natural England's preferred apportioning approach should be included in order to allow us to assess the predicted impacts using a	Displacement matrices only presented for the Applicant's approach to apportioning for GU and RA	The ORBA documents present displacement matrices for GU according to NE's preferred approach to apportioning, however these are based on the model-based abundance estimates (see item 15). No displacement matrices have been presented for the design-based population	No	No

Ref	Issue	NE's Position	Applicant's Position		Resolved at D2?	Resolved at D3?
			DCO Submission	19 Sept Procedural Decision submission incl. Response to RR		
		range-based approach.		estimates using NE's preferred approach to apportioning of GU to FFC SPA.		
15	Displacement matrices for model-based estimates for GU and RA only.	Submitted at Deadline 1 (see F1.4 in Table 1 of Appendix F1 to NE's D1 submission [REP1-061]). Natural England requests that the Applicant presents an assessment for guillemot using both design-based and model-based estimates and presents displacement matrices for both.	N/A.	The ORBA documents present displacement matrices for GU at FFC SPA using NE's preferred approach to apportioning (see item 14), however this is for model-based estimates only. Displacement matrices not presented for design-based estimates.	No	No
Highly Pathogenic Avian Influenza (HPAI)						
16	Limited consideration of HPAI within the HRA	There should be some consideration within the HRA process as to the potential for long-term implications of	The Applicant discussed the recent outbreaks of HPAI within the Environmental Statement Offshore	No further consideration of HPAI within the ORBA HRA. Applicant confirms in their response to our Relevant Representations [PD1-071] that they do not	No	No

Ref	Issue	NE's Position	Applicant's Position		Resolved at D2?	Resolved at D3?
			DCO Submission	19 Sept Procedural Decision submission incl. Response to RR		
		HPAI to reduce the resiliency of populations. See F7 within Table 1 and Appendix 1 of our Relevant Representations [RR-045], in addition to our answer to Ex Q1 HRA 1.1 [REP2-074].	and Intertidal Ornithology Chapter [AS1-041] under Section 12.4.4 Future Baseline, with a general statement that <i>“the impact assessment will be carried out in a context of declining baseline population for a number of species”</i> . Nonetheless, the Applicant has not set out how this has been done for individual species and colonies within the RIAA.	propose to update the RIAA to include this.		