



THE PLANNING ACT 2008

THE INFRASTRUCTURE PLANNING (EXAMINATION PROCEDURE) RULES

2010

Natural England review of the Development Consent Order and Deemed Marine License

For:

The construction and operation of Hornsea Project Four Offshore Wind Farm, located approximately 69 km from the East Riding of Yorkshire in the Southern North Sea, covering an area of approximately 468 km².

Planning Inspectorate Reference EN010098

4th July 2022

Natural England provide comments and updated positions below on changes made to the draft DCO up to Deadline 4. This will be included in the Risk and Issues log, and updated with any changes made at Deadline 5, for submission at Deadline 6.

Point	Section	Natural England's Relevant Representations Comment [RR-029]	RAG	Consultations, actions, progressions	RAG
Document Used: C1.1 Draft DCO including Draft DML					
1	Part 1 Article 2	Natural England does not agree with the definition of Environmental Statement (ES) as it does not allow for any additional evidence to be submitted later and be considered part of this statement. This is important as decisions will take into account not just evidence supplied during the application, but further evidence supplied during the examination. This subsequent information will likely be the information that the Examining Authority (ExA) makes their recommendation on and the Secretary of State makes their determination on. Therefore, when looking at items such as maximum extents, volumes etc these later documents may be the correct ones to use for certain conditions/plans and thus should be reflected in the interpretations. The interpretation should be updated.		Natural England notes the Applicant's response [REP1-038]. Our position remains unchanged, we note that the recent Boston Alternative Energy project DCO has included an updated definition of Environmental Statement that allows for documents submitted after application to be included. If this is not addressed in the DCO, updated ES chapters would need to be provided accounting for any new information provided during Examination.	
2	Part 1 Article 2	The definition of maintain does not link to an Outline Operations and Maintenance (O&M) plan. The definition and interpretation of what is permitted under maintain is linked to the ES. We acknowledge that Tables 4.43-4.45 in Volume A4, Chapter 4 Project Description are excellent and do give detailed information on what maintenance is expected, however we consider that the standard approach of using an O&M plan to detail what is licenced and may be undertaken without permission, what needs further permission and what is not licenced and will need further consent		Natural England welcomes the submission of the Outline Operations and Maintenance Plan (OOMP) at Deadline 2. Our request to have the definition of maintain link to the OOMP remains, however, we note the inclusion of the definition of the OOMP within the deemed Marine License schedules and support the inclusion.	

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		significantly reduces the risks of misunderstanding during operation and is an essential point of reference for approvals and consenting during the lifetime of the project. We suggest that the tables used in the Project Description could be turned into the outline O&M plan, or the interpretation could be amended to refer to these tables for offshore to avoid ambiguity (subject to our concerns regarding cable protection over the lifetime of the project, see Point 34). Updates should be reflected in both the interpretations and the deemed Marine License (dML) conditions.			
3	Schedule 1 Part 3 Requirements	The maximum volumes of dredge works, such as sandwave clearance, are not provided here. We note that they are given in Schedule 1 Part 1, however, as this section details the maximum design parameters and as dredging is a significant impact and an important parameter to enforce, we would have expected it to be provided here. As the figures are provided in the DMLs and the maximums would be enforced by the MMO we do not think this is a major issue in and of itself.		No further comment	
4	Schedule 1 Part 3 Requirement 2(2)(c)	This requirement gives the minimum blade distance to sea as 42.43m. However, this is based on LAT (lowest astronomical tide). We note that it is normally given as HAT (highest astronomical tide). Using LAT implies a much higher distance between turbine blade and the sea. While in theory neither is incorrect, we consider it important to note that simply changing the metric would not provide any enhanced mitigation. We request that the value		The Applicant has provided the requested information [REP1-038]. We have no further comment to make at this juncture.	

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		in HAT is provided to allow comparison with the gap for other developments.			
5	Schedule 1 Part 3 Requirement 2(6)	This requirement gives the maximum footprint for all turbines. However, there is no limitation on the maximum scope per individual foundation. We would note the same issue with regard to the substation foundations at requirement 3(11) and (12). This issue is repeated in the Deemed Marine licences. We request that the maximum footprint for individual turbine foundations and other marine structures is provided within the DCO and the dMLs.		No change.	
6	Schedule 1 Part 3 Requirement 24	The relevant SNCB should be consulted upon any decommissioning plan and that consultation should be secured within this requirement. We request this requirement is updated to reflect this.		Natural England notes the Applicant's response [REP1-038]. Our position remains unchanged, however, we note the SoS may make a determination on the drafting.	
7	Schedule 11 Part 2 Condition 4	As noted in Point 34 below (project description), Natural England have concerns regarding the granting of a licence for cable protection deployment across the lifetime of the development.		The Applicant proposes limiting the cable repair deployment licensed under the DCO to 15 years and has updated the DCO accordingly. This is in line with the approach agreed between the SNCBs and MMO.	
8	Schedule 11 Part 2 Condition 13(1)(j)	This condition secures the use of a Site Integrity Plan so that in combination projects and the project alone do not have an adverse effect on the integrity of the Southern North Sea Special Area of Conservation (SNS SAC). However, recent decisions have reduced our certainty that this condition will adequately address the issues of in combination impacts. This condition is linked to condition 14 which requires the document to be produced no later than 4 months prior to		Following further consideration and experience with regard to a Site Integrity Plan sign off process Natural England's position has changed slightly. We note that the condition as currently drafted also allows for the plan to be submitted far in advance which could lead to issues if the details of construction are not fully available. Therefore, we consider that the condition should state the plans should be submitted no sooner than 9 months and no later than 6 months prior to works.	

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		commencement. However, we consider that it should also be restricted to a requirement of no sooner than 6 months prior to commencement.		We note that whilst the Applicant has included this timeframe within the Outline SNS SAC SIP, they do not consider the timing requirement should be included in the DCO. Natural England maintains that the timeframe of the SIP needs to be secured in the DCO.	
9	Schedule 11 Part 2 Condition 13 (5) and (6)	<p>These conditions allow for simultaneous piling of 2 piles to occur, either within the same licensed area or across the array (Schedule 11) and HVAC booster station (Schedule 12) areas. However, there is no restriction on the of number of piles that can be installed in a day. We further note that the Applicant refers to concurrent piling (defined as "two separate foundation locations per 24 hours"; B2.2 RIAA Part 1, 10.3.3.37) in two locations in their RIAA.</p> <p>We are concerned that whilst these conditions restrict the level of simultaneous piling (i.e. no more than 2 piles at the same time), there are no restrictions on the number of piles that can be installed in a day and no restrictions on conducting simultaneous <u>and</u> concurrent piling. This could allow up to 4 piling locations in a 24-hour period which would exceed the maximum design scenario. We request that these conditions are amended to restrict all activities to within a calendar day and that condition 6 is also amended to allow only simultaneous <u>or</u> concurrent piling of 2 piles to occur.</p>		Natural England notes the changes and welcomes that the Applicant has made it clear that only 2 piles may be piled in a 24-hour period and has updated the DCO accordingly [REP1-038].	
10	Schedule 11 Part 2 Condition 14	This condition ensures that for most documentation, plans need to be submitted 4 months in advance to the MMO. Given the significant increase in the size, scope and potential		Natural England notes and welcomes the change for some of the documents [REP1-038]. However, our concerns still remain and we would like further dialogue on adding further documents to the list	

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		<p>for in combination impacts of offshore windfarm projects we consider that 4 months is now insufficient time, and a 6-month requirement would be more appropriate. We highlight that a 6-month condition was recently agreed for EA1N and EA2.</p> <p>We request the condition be amended to reflect a 6-month requirement for pre-construction. However, we would be willing to discuss a more detailed condition that looked to remove the 'one size fits all' approach, allowing for most documents to be 4 months, but key documents to be 6 months.</p>		proposed by the Applicant. Such as the updated SIP document, for example (see Point 8 above).	
11	Schedule 11 Part 2 Condition 18	<p>This condition does not allow for a stop should the noise of the piling be significantly in excess of the predicted noise levels. Given concerns related to in-combination noise, especially in relation to Marine mammals and the SNS SAC, it is essential that appropriate controls are provided. We request that the following conditions agreed on EA1N and EA2 are included here:</p> <p>Draft DCO Schedule 13 Part 2, condition 2:</p> <p>(2) The undertaker must carry out the surveys approved under sub-paragraph (1), including any further noise monitoring required in writing by the MMO, and provide the agreed reports in the agreed format in accordance with the agreed timetable, unless otherwise agreed in writing with the MMO in consultation with the relevant statutory nature conservation bodies.</p> <p>(3) The results of the initial noise measurements monitored in accordance with sub-paragraph (1) must be provided to the MMO within six weeks of the installation of the first four piled foundations of</p>		No change.	

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		each piled foundation type. The assessment of this report by the MMO will determine whether any further noise monitoring is required. If, in the opinion of the MMO in consultation with the statutory nature conservation body, the assessment shows statistically significantly different impacts to those assessed in the environmental statement or failures in mitigation, all piling activity must cease until an update to the marine mammal mitigation protocol and further monitoring requirements have been agreed.			
12	Schedule 11 Part 2 Condition 18(2)(a)	Natural England notes that this condition includes a requirement to monitor the noise generated by the first four piles installed. This requirement is in line with previous requirements for similar projects. However, Natural England would consider the first four piles to represent the minimum requirement and would welcome discussion on expanding this proposed monitoring to include an agreed selection of the most resistant piles. The most resistant piles are likely to represent the largest noise impacts and could be further used to validate the noise impact predictions of the ES.		The Applicant has indicated their position and the drafting will not change. Natural England's position remains unchanged.	
13	Schedule 11 Part 2 conditions 17-19	No monitoring conditions include the requirement to follow the Marine Mammal Monitoring Plan. We consider that adherence to the plan should be secured within the dMLs.		The Applicant has advised that conditions 17(3), 18(4) and 19 (3) of schedules 11 and 12 secure the marine mammal monitoring plan as they require the Applicant to carry out surveys in line with the outline Marine Mammal Monitoring Plan. Natural England questions this assertion as the Outline Marine Mammal Monitoring Plan is not referenced anywhere in the DCO/DML and the conditions themselves do not refer to marine mammals at all.	

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				We would welcome a legal opinion from the MMO on this point.	
14	Schedule 11 Part 2 condition 24	Natural England welcome in principle the inclusion of a completion of construction condition, however we note that we may wish to raise issues at a later date following discussion with the MMO to agree industry wide standardisation of the condition.			
15	Schedule 12	All issues raised under Schedule 11 also apply to Schedule 12 where similar conditions exist.			
16	Schedule 12 Part 2	There are no conditions in this Schedule limiting the maximum hammer energy to be used during piling. Schedule 11 Condition 13(4) should be in repeated in Schedule 12 to restrict the maximum hammer energy to 5,000kJ.		Natural England welcomes the amendments the Applicant has made to add a condition and consider the proposed changes address these concerns [REP1-038].	
17	Schedule 12 Part 2 Condition 26(1)(a)	This condition refers to the final number of installed turbines. This licence does not cover turbine installation and the condition should therefore refer to the number of substations.		Natural England notes that the requirement for a close out report has been entirely removed. We would note that our comment was not asking for the removal of the close out report, and we still consider there is a need for a close out report for the transmission assets to confirm the end of construction of the transmission works and to provide the final details on the deployment of cable, cable protection and the installation of the substations.	
18	General			Although we haven't raised this previously within this Examination, we have suggested to both the Applicant and the MMO that there may be merit in including the landfall activities within a separate schedule of the DCO/dML. Landfall works usually commence ahead of the other offshore	

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				transmission works and this results in developers seeking partial discharge of conditions and associated documents to enable these works to progress. We therefore query whether the inclusion of these works in a separate schedule would give greater clarity to all parties and allow more efficient discharge of conditions post consent. We would welcome feedback from the Applicant and the MMO on this suggestion.	
Draft DCO conditions for the compensation schedules, provided in B2.7 FFC SPA: Gannet and Kittiwake Compensation Plan and B2.8 FFC SPA: Guillemot and Razorbill Compensation Plan					
19	Part 1 Condition 2	<p>This condition needs to include a requirement to consult the relevant SNCB, as well as all other members of the Hornsea 4 (H4) Offshore Ornithology Engagement Group (OOEG). Please note this condition includes the terms of reference (TOR) that the H4 OOEG will adhere to, as well as details of the requirements upon the members in terms of timetables, meetings etc. Also, the details of the dispute mechanism and what the scope of the discussions of the H4 OOEG is to cover. It is essential that these factors are discussed and ideally agreed with all the members of the H4 OOEG and this is not currently secured within these draft conditions.</p> <p>Throughout the schedule KGIMP and GKIMP are both used for the Gannet and Kittiwake Implementation and Monitoring Plan. For consistency please could this be limited to GKIMP.</p>		<p>Natural England notes the response and that the Applicant considers consultation on the KCIMP elsewhere is sufficient. However, as noted in our original response the draft KCIMP document is produced after the OOEG Terms of reference, timetables, requirements, membership and dispute mechanism. All of which the membership of the OOEG should be consulted upon if they are to be bound by these documents. As currently drafted the membership of this group are going to be informed of the obligations on them with no formal option to respond.</p> <p>We note that Section 1.4.1.3 of the Kittiwake Compensation Plan [REP5-017] states that "Terms of Reference would be agreed between the parties". We consider this should be secured in the DCO condition.</p>	

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20	Part 1 Condition 2 (e)	Natural England disagrees with the Applicant being the Chair of the Steering group. We note that an independent Chair has been appointed for the equivalent steering groups established to deliver Hornsea Three's compensatory measures. Further, as noted above the details of this condition allow the Applicant as chair to define the scope of discussions on several key aspects of mitigation, and this could take place without any requirement for discussion or agreement with the other members of the Hornsea 4 OOEG.		Whilst the Applicant being Chair has been removed from the DCO condition, it remains in the Kittiwake Compensation Plan [1.4.1.3; REP5-017]. We note that the Applicant does not consider any further change necessary, however Natural England's position remains unchanged.	
21	Part 2/3 Condition 3 and 8	If it is conditioned that the GKIMP and GGRIMP must be based on the strategies set out in the gannet and kittiwake compensation plan and the gannet, guillemot and razorbill compensation plans, we advise that a final version of the compensation plans would need to be provided to account for any changes made during the examination process. We note that a commitment is made to this effect in Volume B2, Annex 7.2: Compensation measures for FFC SPA: Offshore Artificial Nesting Roadmap, 4.1.1.1. Condition 3 has a typo in the last line - KGIMP instead of GKIMP. All references to Natural England should be amended to the relevant Statutory Nature Conservation Body (SNCB), for consistency.		The Applicant has confirmed that final versions of the compensation plans will be submitted prior to the final deadline. Natural England will comment on all versions of the compensation plans at appropriate deadlines. Natural England notes the correction to refer to the Statutory Nature Conservation Body and welcomes this change.	
22	Part 2 Condition 3(c)	Natural England is concerned with the significant reduction in lead in times proposed by the Applicant compared to those agreed for Hornsea 3. We further highlight that the Applicant defines the breeding season as running from 1 April- 31		Natural England welcomes the commitment to an increased lead in time to three full breeding seasons prior to operation, however as kittiwake do not breed until they are 4+ years old breeding	

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		August in each year. This is inconsistent with the breeding season accepted for Hornsea Three, which was defined as 1 March – 30 September. As with the reduced lead in time, the Applicant must provide evidence to justify this reduced breeding season. Furthermore, we consider that the compensation needs to be delivering and not just implemented prior to impact. Noting the wording for adaptive management at 3 (f) does not capture changes to timelines for the measures, or to the development should the monitoring highlight the measures are not delivering the required compensation.		<p>recruits will not enter the biogeographic population until that point.</p> <p>Justification is needed on the deviation from 4 breeding seasons consented for Hornsea Project Three, Norfolk Boreas and Norfolk Vanguard, demonstrating that the required colony size/growth is achievable prior to wind farm operation for the reduced lead in time.</p> <p>We note that further information on this point was submitted at Deadline 5. We will provide further comment at Deadline 6.</p>	
23	Part 2 Condition 3(d)	We consider this should include monitoring and reporting on the effectiveness of the measures, as has been included for the guillemot and razorbill measures (8(a)(iv)).		<p>We note that in the updated DCO this now relates to Part 2 Condition 1(e).</p> <p>Natural England welcomes that the Applicant has updated the condition to include a requirement to monitor. However, the new requirement does not include a requirement to report the results of the monitoring and the effectiveness of the compensation for either measure.</p>	
24	Part 2 Condition 3(e); Part 3 Condition 8 (a)(v) and (b)(iv)	This condition should not just require a reporting of the consultation. It should require the Applicant to detail how the consultation responses have been considered and give information explaining why any recommendations or advice has not been included.		<p>We note that in the updated DCO this now relates to Part 2 Condition 1(f), Part 6 Condition 1(a)(x) and (b)(iv).</p> <p>No change.</p>	
25	Part 2 Condition 3 (f); Part 3 Condition 8	Captured within any adaptive measures should be any changes to timescales for both the project and for the compensation proposals.		We note that in the updated DCO this now relates to Part 2 Condition 1(g), Part 6 Condition 1(a)(xi) and (b)(v).	

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	(a)(vi) and (b)(v)			The Applicant has requested clarification on this query. Natural England notes that the current drafting requires the Applicant to submit any adaptive measures required should the monitoring highlight the compensation measures are not providing compensation. We consider that, should the compensation be found to be not or only partially functioning, a consideration needs to be provided on what the implications of this failure are for the timeline of providing fully functioning compensation and what this may mean for the feature of the site. Natural England is happy to engage further on this issue to ensure clarity.	
26	Part 2 Condition 3(i)	This condition says it links to 9 (b), but there is no 9 (b). We assume this refers to 8 (b), but it should be corrected and or clarified.		Natural England notes this has been corrected.	
27	Part 2 Condition 3(g); Part 3 Condition 8 (a)(vii) and (b)(vi)	The reporting here should require the provision of this report to all members of the H4 OOEG. Or to the relevant statutory nature conservation body as a minimum.		We note that in the updated DCO this now relates to Part 2 Condition 1(h), Part 6 Condition 1(a)(xii) and (b)(vi). No change.	
28	Part 3 Condition 8(a)(iii)	As with the lead in times for artificial nest structures, we are concerned that implementation of predator eradication and/or control two years prior to operation of the wind farm does not give sufficient time for the measure to be delivering prior to impact.		We note that in the updated DCO this now relates to Part 6 Condition 1(a)(iii) and (b)(ii). We note the Applicant has indicated they will work towards implementation and delivery four full breeding seasons prior to works. However, we also note no proposed change of wording to secure this.	

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32	Part 4 Condition 12	The single condition for Fish Habitat Enhancement lacks the details as per the other compensatory measures. Key elements such as location, extent, timing, adaptive management, monitoring, reporting etc are not detailed to be included. This seems insufficient should this be required as part of compensatory measures.		The Applicant has suggested this wording may be updated as the discussions on compensation progress. Natural England acknowledges that less detail will be required of a resilience measure compared to a compensatory measure, however it would be welcomed if known parameters (e.g. extent) could be committed to in the final DCO. We will consider all changes as they are made.	
33	General	We further note that none of the current conditions secure the need to produce the target level of compensation each year (on average). It should be noted the concerns regarding this are compounded further by our concerns on the adaptive management conditions and need to be addressed.		No change.	
34	Part 1 Condition 1(a)(i); Part 6 Condition 1(a)(xiii) & 1(b)(vii)			<p><i>“provision for the option to be exercised at the sole discretion of the undertaker to pay a contribution (in addition to the sum stipulated in Part 3 of this Schedule) to the Marine Recovery Fund wholly or partly in substitution for the onshore compensation measure and/or the offshore compensation measure [predator eradication measures; bycatch eradication measures] or as an adaptive management measure for the purposes of paragraph 1.g. of this Part of this Schedule. The sum of the contribution to be agreed between the undertaker and Defra in consultation with the OoEG and included in the KCIMP [GRCIMP].”</i></p> <p>This is a new condition which Natural England will provide comment on at Deadline 6, upon consideration of new information submitted by the</p>	

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				Applicant at Deadline 5 in relation to strategic compensation.	