



THE PLANNING ACT 2008

THE INFRASTRUCTURE PLANNING (EXAMINATION PROCEDURE) RULES

2010

East Anglia TWO Offshore Wind Farm

Appendix B1b to the Natural England Deadline 1 Submission

Comments to the Applicant Comments on Natural England's Relevant and Written Representations [AS-036] Marine Mammals

For:

The construction and operation of East Anglia Two Offshore Windfarm, a 900MW windfarm which could consist of up to 75 turbines, generators and associated infrastructure, located 37km from Lowestoft and 32km from Southwold.

Planning Inspectorate Reference: EN010078

2nd November 2020



Appendix B1b Natural England’s comments on the Applicant’s Review of Natural England’s Relevant and Written Representations [AS-036] for Marine Mammals

This document is applicable to both the East Anglia ONE North and East Anglia TWO applications, and therefore is endorsed with the yellow and blue icon used to identify materially identical documentation in accordance with the Examining Authority’s (ExA) procedural decisions on document management of 23rd December 2019. Whilst for completeness of the record this document has been submitted to both Examinations, if it is read for one project submission there is no need to read it again for the other project.

Table 1. Marine Mammals

Point	Natural England’s Relevant and Written Representations	Applicant’s Comments	Natural England’s Response to Applicant’s Comments	Risk
1	The phrases ‘same day’ and ‘24 hour period’ seem to be used interchangeably throughout the marine mammal chapter and associated documentation when they are not quite the same thing. If this follows through to the assessment stage Natural England considers a clarification note may be required as to the intended wording and any consequences for either the EIA or HRA.	In the assessment same day and 24hrs have both been used and assume a 24hr period from midnight - midnight For implications, see the Applicant’s response to Point 3 of Marine Mammals below.	Natural England notes the Applicant’s response to this point is captured in the response to point 4.	
2	Natural England welcomes the commitments from the Applicant listed here and considers they should be specifically conditioned on the face of the deemed marine licence (DML), particularly to ensure there is no concurrent piling	These commitments are listed in section 6.1 of the <i>In-Principle Site Integrity Plan</i> (SIP) (APP 594) and other commitments are listed within the draft <i>Marine Mammal Mitigation Protocol</i> (MMMP) (APP 591). Final versions of the SIP and MMMP must	Natural England notes the Applicant’s response, however we still consider that the commitments listed in the SIP and MMMP should be conditioned in the DML to ensure they are adhered to. Natural England agrees that the final SIP and	



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	between EA1N and EA2. Please see Point 11 in Appendix G.	be submitted to and approved by the MMO and must accord with the in-principle/draft plans. It is not considered necessary to include such commitments on the face of the DCO.	MMMP documents will need to be submitted to and approved by the MMO. However, the commitments detailed in the documents are critical to the delivery of mitigation required to ensure the project(s) do not have an adverse effect on the integrity of the Southern North Sea SAC and therefore should be tightly secured in the DML. It is of particular importance to ensure no concurrent piling between EA1N and EA2. However, we are willing to discuss the possibility of amending the conditions relating to UXO detonation, to allow clusters of UXO within a 5km radius of a central point to be detonated. As discussed with the Applicant in a workshop on 10 August.	
3	The SNS SAC covers an area of 36,951km ² , not 36,715km ² as stated here.	Noted. This was an error within the assessment. Since the area assessed was smaller than the actual area, the Applicant considers the assessment to be conservative and therefore no additional clarification is required.	Natural England notes the Applicant's response and has no further comment.	
4	Although it is correct to say disturbance of	Modelling has currently been undertaken	Natural England welcomes the recognition	



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	<p>harbour porpoise will not exceed 20% of the seasonal component of the site at any one time, the 20% threshold is for disturbance of harbour porpoise in any given day. Therefore detonation of 2 unexploded ordnance (UXO) in a 24 hour period would easily exceed the 20% threshold and disturb harbour porpoise from 32% of the winter area of the site, assuming the 2 UXO detonations are spatially separate from each other. Natural England therefore disagrees with the conclusion drawn in paragraph 512 that there is no significant disturbance or potential adverse effect on the SNS SAC if more than 1 UXO is detonated on any given day. Natural England considers that UXO detonations should be limited to 1 on any given day and this should be secured in the DML.</p>	<p>for a single UXO detonation to be carried out in 24hrs.</p> <p>The assessment was undertaken on the basis of no exceedance of '20% at any one time'. The assessment methodology was discussed and agreed through the Evidence Plan process and there were no comments on this either for EIA or HRA in NE's s42 comments. The Applicant notes that the assessment is based upon wording in assessment advice from NE which predates the publication of the updated Conservation Objectives for the SNS SAC in March 2019. In the updated Conservation Objectives the exceedance is based upon "20% of the relevant area of the site in any given day". This change in emphasis of the objective was not picked up in the finalisation of the assessment. Using this approach, as is now correct, the Applicant notes that on the basis of the current methodology for assessing noise impacts (i.e. using a 26km effective deterrent range (EDR)), 2 UXO clearance</p>	<p>from the Applicant that on the basis of the current methodology for assessing noise impacts, 2 UXO clearance events in a single day would exceed the 20% threshold. We also note the points made by the Applicant in their response regarding the SIP providing the best and most flexible mechanism to manage the issue. However, Natural England considers that, based on current understanding, limiting UXO detonations to one per day will ensure the spatial impact of UXO detonations will not exceed the 20% threshold in any given day and ensure there will not be an adverse effect on the integrity of the Southern North Sea SAC. However, as mentioned above we are willing to discuss the possibility of clusters of UXO's being detonated at the same time within a 5km radius of a central point. Therefore, limiting the projects to one detonation event per day, but the potential for multiple UXO's to be removed during that event.</p>	



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		<p>events in a single day would exceed the 20% limit for the winter area only. There is no exceedance for the summer area.</p> <p>The Applicant notes NE's request for a condition and makes the following observations. 1) The exceedance is only relevant to the winter area. 2) The Applicant considers that the SIP provides the best and most flexible mechanism to manage this issue. Recent JNCC guidance (see Appendix 8 of this document) (<i>"Guidance for assessing the significance of noise disturbance against Conservation Objectives of harbour porpoise SACs."</i> dated 1st June 2020) acknowledges that the EDR for UXO is precautionary. The guidance suggests that the effect footprint may be 1/3 of the area of the monopile effect. Given this uncertainty and the fact that work is ongoing to understand the footprint of these effects, the Applicant considers that it would be over-precautionary to apply a blanket condition given that the SIP allows for adaptive</p>		



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		<p>management based upon a) the scheduling of UXO detonation at multiple projects to reduce the total in-combination area of disturbance b) noise mitigation which may allow for multiple UXO detonations in one day without exceeding the 20% limit.</p> <p>The precautionary 26km EDR for the high order detonation of unexploded ordnance (UXOs) has been used given that there is no empirical evidence of harbour porpoise avoidance. Given the uncertainty around the actual effect of UXO clearance and the potential to apply at-source mitigation, the Applicant considers that it would be overly precautionary to have a condition limiting it to a single event per day.</p> <p>In addition, the SIP would allow for at source mitigation to reduce the noise footprint, potentially reducing effects below the 20% exceedance for multiple events.</p>		
5	As per comment 4 above, the 20% threshold applies to any given day so if 1 piling event disturbs harbour porpoise from	As above, the assessment was undertaken on the basis of no exceedance of '20% at any one time'. The Applicant notes that on	See point 4 above.	



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	<p>16% of the winter component of the Southern North Sea then 2 piling events on any given day will result in 32% of the SAC winter area being disturbed, therefore exceeding the 20% threshold. Therefore, Natural England disagrees with the conclusion of no significant disturbance and no potential adverse effect on the integrity of the SNS SAC if more than 1 piling event occurs on any given day. Natural England considers piling activities should be limited to 1 on any given day and this should be secured in the DML.</p>	<p>the basis of the current methodology for assessing noise impacts (i.e. using a 26km effective deterrent range (EDR)), 2 piling events in a single day would exceed the 20% limit for the winter area only. There is no exceedance for the summer area. As for UXO, the Applicant notes NE's request for a condition and makes the following observations. 1) The exceedance is only relevant to the winter area. 2) The Applicant considers that the SIP provides the best and most flexible mechanism to manage this issue. Recent JNCC guidance (see Appendix 8 of this document) ("<i>Guidance for assessing the significance of noise disturbance against Conservation Objectives of harbour porpoise SACs.</i>" dated 1st June 2020) acknowledges that the EDR for pin piles may be much smaller than for monopiles. The guidance suggests that the effect footprint may be 1/3 of the area of the monopile effect. Given this uncertainty and the fact that work is ongoing to understand the footprint of these effects, the Applicant considers that</p>		



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		it would be over-precautionary to apply a blanket condition given that the SIP allows for adaptive management based upon a) the actual size of piles required and b) noise mitigation which may allow for multiple piling events in one day without exceeding the 20% limit.		
6	As per previous comments, if 1 UXO detonation and 1 piling event were to occur on the same given day as described in paragraph 626, the area of the winter component of the SNS SAC that harbour porpoise would be disturbed from would exceed the 20% threshold.	As per previous responses, this is only relevant for the winter area and the Applicant considers that the SIP provides the most flexible and appropriate mechanism for managing potential impacts	See point 4 above.	
7	Figures 9 and 10 do not show the overlap in disturbance figures as described in paragraph 763. Instead they relate to ornithology. Similarly figures 11 and 12 do not show what is described in paragraph 764.	Noted this was a typographic error, the correct figure references in paragraph 747 should be to Figures 12 and 13 and in paragraph 748 should be Figures 14 and 15.	Natural England notes the Applicant's response and has no further comment.	
8	Natural England queries how the figure of 5% has been arrived at as an increased collision risk in paragraph 849.	This is explained in Chapter 11 Marine Mammals (APP-059) in section 11.6.1.8 Impact 8: Vessel Interaction (Collision Risk) During Construction . This rate is	Natural England notes the Applicant's response and has no further comment.	



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		precautionary and based upon the percentage of all harbour porpoise post-mortem examinations from the Baltic, North East Atlantic, Irish and North Seas (ASCOBANS area) which are thought to have evidence of interaction with vessels ⁴⁷ . This approach was presented in the PEIR and draft HRA without comment, and has been used in previous project EIAs and HRAs (e.g. East Anglia THREE		
9	Natural England notes that it is predicted that a maximum of 11.7% of the grey seal from the Humber Estuary SAC could potentially be temporarily disturbed and overall 18.6% could be disturbed (table 5.79), however we agree with the approach considered by the Applicant of using the context of the wider in-combination reference population and recognising that not all of the impacted seals would be from the Humber Estuary SAC and that therefore the potential level of impact is more likely to be in the region of 3.5% and 5.5% respectively.	Noted.	Natural England notes the Applicant's response and has no further comment.	



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10	Natural England notes that additional noise abatement technologies may be subject to additional marine licensing if required and queries whether the Schedule of Agreement described in table 2.1 allows sufficient time to acquire any additional licence(s) and source and implement additional mitigation measures or noise abatement systems that may be required.	Noted. The Schedule is indicative and intended to provide a road map for the process. The In-Principle-SIP will be developed into the SIP post-consent and that will provide the opportunity to address issues such as these if they do indeed arise.	Natural England notes the Applicant's response and has no further comment.	
11	The SNS SAC covers an area of 36,951km2, not 36,715km2 as stated here.	Noted. This was an error within the assessment. Since the area assessed was smaller than the actual area, the Applicant considers the assessment to be conservative and therefore no additional clarification is required.	Natural England notes the Applicant's response and has no further comment.	
12	Natural England welcomes the commitments from the Applicant listed here and considers they should be specifically conditioned on the face of the DML, particularly to ensure there is no concurrent piling between EA1N and EA2. Please see Point 11 in Appendix G.	These commitments are listed in section 6.1 of the <i>In-Principle Site Integrity Plan</i> (SIP) (APP 594) and other commitments are listed within the draft <i>MMMP</i> (APP 591). Final versions of the SIP and MMMP must be submitted to and approved by the MMO and must accord with the in-principle/draft plans. It is not considered necessary to include such commitments on	See point 2 above.	



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		the face of the DCO.		
13	Natural England notes that additional noise abatement technologies may be subject to additional marine licensing if required and queries whether the Schedule of Agreement described in Table 2.1 allows sufficient time to acquire any additional licence(s) and source and implement additional mitigation measures or noise abatement systems that may be required.	Noted. The Schedule is indicative and intended to provide a road map for the process. The In Principle SIP will be developed into the SIP post-consent and that will provide the opportunity to address issues such as these if they do indeed arise.	Natural England notes the Applicant's response and has no further comment.	
14	As per Natural England's previous advice, a mechanism needs to be developed by the regulators to ensure continuing adherence to the statutory nature conservation bodies (SNCB) thresholds over time. Multiple Site Integrity Plans (SIPs) will be developed, piling can take place over several years, and new projects can come online during this time. Should potential exceedance of the thresholds occur, a process for dealing with this issue needs to be in place – the affected developers / industries will need to work together with the regulator and SNCBs to	The Applicant notes NE's concerns, but highlights that the SIP is now the recognised framework by which impacts will be managed cumulatively, having been agreed for the consent of East Anglia THREE in 2017. The SIP provides an adaptive management framework to allow the MMO to regulate underwater noise, with the exact mechanism determined at a point in time where detailed design information is available. SIPs have also been applied retrospectively to projects which were consented prior to the designation of the	Natural England notes the Applicant's response and is in agreement that Site Integrity Plans (SIPs) have become the recognised framework by which impacts will be managed cumulatively. However, Natural England considers a mechanism is still required to manage multiple SIPs coming forward from multiple projects, but that this is for the regulators to develop rather than individual applicants. It is understood that there is a regulators group developing a mechanism to control multiple SIPs across the various noise causing industries and legislations. However, until a	



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	prevent adverse effect on the Southern North Sea Special Area of Conservation (SNS SAC). Until the mechanism by which the SIPs will be managed, monitored and reviewed is developed, Natural England are unable to advise that this approach is sufficient to address the in-combination impacts described below and therefore the risk of Adverse Effect on Integrity (AEOI) on the SNS SAC cannot be fully ruled out.	SNS SAC as part of the Review of Consents process ⁴⁸ .	mechanism is produced and Natural England has a chance to review and agree the effectiveness of this mechanism our advice, provided in our relevant and written representations, cannot change.	



Natural England's key to RAG status	Risk
<p>Purple</p> <p>Note for Examiners and/or competent authority. May relate to DCO/DML</p>	
<p>Red</p> <p>Natural England considers that unless these issues are resolved it will have to advise that (in relation to any one of them, and as appropriate) it is not possible to ascertain that the project will not affect the integrity of an SAC/SPA and/or comply fully with the Environmental Impact Assessment requirements and/or avoid significant adverse effect on landscape/seascape, unless the following are satisfactorily provided:</p> <ul style="list-style-type: none"> new baseline data; significant design changes; and/or significant mitigation; <p>Natural England feels that issues given Red status are so complex, or require the provision of so much outstanding information, that they are unlikely to be resolved during examination, and respectfully suggests that they be addressed beforehand.</p>	
<p>Amber</p> <p>Natural England considers that if these issues are not addressed or resolved by the end of examination then they would become a Red risk as set out above. Likely to relate to fundamental issues with assessment or methodology which could be rectified; preferably before examination.</p>	
<p>Yellow</p> <p>These are issues/comments where Natural England doesn't agree with the Applicant's position or approach. We would flag these at the PEI stage with the view that they would be addressed in the Application. But otherwise we are satisfied for <u>this particular project</u> that it will not make a material difference to our advice or the outcome of the decision-making process. However, it should be noted that this may not be the case for other projects. Therefore it should be noted by interested parties that just because these issues/comments are not raised as part of our Relevant Representations in this instance it should not be understood or inferred that in other cases or circumstances Natural England will take this approach. Furthermore, these may become issues should further evidence be presented.</p>	
<p>Green</p> <p>Natural England supports the Applicant's approach.</p>	