

**From:** [Opel, Laura](#)  
**To:** [Hornsea Project Three](#)  
**Cc:** [West, Richard](#); [Stephenson, Paul](#)  
**Subject:** EN010080 - Hornsea Project 3 Deadline 3 submission  
**Date:** 15 January 2019 13:04:35  
**Attachments:** [A synthesis of current knowledge on the genesis of the Great Yarmouth and Norfolk Bank Systems - Cooper 2008.pdf](#)  
[Further Examining Authority questions for Hornsea 3 MMO.pdf](#)

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Good afternoon,

Identification Number: 20010662

Please find attached the MMOs Deadline 4 submission for Hornsea Project 3.

The following documents have been attached:

- The Examining Authority's Further Written Questions and Requests for Information, Issued on 19th December 2018
- A synthesis of current knowledge on the genesis of the Great Yarmouth and Norfolk Bank Systems - Cooper 2008

Please let me know if you have any questions.

Kind regards,  
Laura

Laura Opel BSc. (Hons), MSc., PIEMA | Marine Licensing Case Officer | Renewables Team | Her Majesty's Government – Marine Management Organisation.  
Direct Line: 020822 57690 | [laura.opel@marinemanagement.org.uk](mailto:laura.opel@marinemanagement.org.uk) | Lancaster House, Newcastle Business Park, Newcastle upon Tyne, NE4 7YH

[Website](#) | [Twitter](#) | [Facebook](#) | [Linkedin](#) | [Blog](#) | [Instagram](#) | [Flickr](#) | [YouTube](#) | [Google+](#) | [Pinterest](#)

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 Issued on 19<sup>th</sup> December 2018 submission at Deadline 4.

Ref	Question	MMOs position
	<b>Benthic Ecology</b>	
Q2.2.47	<p>If the Secretary of State were to conclude that there may be harm to the Cromer Shoal Chalk Beds MCZ and/or the Markham’s Triangle pMCZ, what measures of equivalent environmental benefit to the harm that might be caused could be provided?</p>	<p>There is currently no standardised approach defined to identify Measures of Equivalent Environmental Benefit (MEEB) for Marine Conservation Zones (MCZ) due to a lack of guidance from the Department for Environment, Food &amp; Rural Affairs (Defra). Without guidance, the MMO is unable to recommend any measures that could be taken, other than early engagement with Defra, Natural England and the MMO. In any case, the MMO recommend that any impact on MCZs should be minimised as far as possible, prior to any such measures being required.</p>
Q2.2.50	<p>Paragraph 2.87 of [REP2-004] states that a Cable Burial Risk Assessment would be produced post consent and paragraph 2.88 goes on to state that this would be secured as part of the Cable Burial Plan through Schedule 11, Condition 13(1)(h) (generation assets DML) and Schedule 12, Condition 14(1)(h) (transmission assets DML) of the dDCO. You highlighted the lack of adequate sampling along the inshore cable corridor re-route in relation to MPAs in ISH2 and the need for an early Cable Burial Risk Assessment to avoid problems that have arisen elsewhere.</p> <p>Please elaborate on the problems that have occurred elsewhere. What practical steps could be taken to avoid such problems in this project?</p> <p>How could adequate mitigation be secured through the dDCO?</p>	<p>The MMO is aware of significant issues following cable installation for Race Bank Offshore Wind Farm. Following publication of ‘Natural England Offshore wind cabling: ten years of experience and recommendations’ (Rep 1-208), the MMO consider that Natural England is better suited to elaborate on these issues. The MMO therefore defer to Natural England on this matter.</p> <p>As practical step to be taken in the future, early engagement with the MMO and Natural England is recommended, together with submission of a cable risk assessment. This should include sufficient information on substrates, based upon detailed geotechnical surveys together with a realistic assessment of the effectiveness of cable burial tools.</p> <p>In principle, the MMO is content that the use of a Cable Burial Risk Assessment would be an appropriate tool for mitigation to be secured through the dDCO. The MMO considers that the Cable Burial Risk Assessment should be submitted 6 month prior to the commencement of construction activities to enable sufficient time for discussions and consultation between the Applicant, the MMO and Natural England in the run up to the start of construction.</p>
Q2.2.61	<p>Paragraph 4.6 of your representation [RR-085] stated that the valued ecological receptors would respond differently to the impacts arising from sediment disturbance, sandwave removal and smothering. The Applicant has stated in [REP1-131] that the assessment of the overall significance of the effect of temporary habitat disturbance/loss to Habitats A-E was based on an appraisal of how each of the habitats would individually respond to the impacts of sediment disturbance, sandwave removal and</p>	<p>Paragraph 4.6 questioned whether the assessment had considered the sensitivity of the different habitats to the different types of temporary disturbance separately. The MMO wanted clarification on whether the assessment had taken into account that some habitats may be more impacted by certain activities than others.</p> <p>The Applicant has subsequently confirmed that the effects of temporary disturbance/loss to Habitats A-E was based on an appraisal of how each of</p>

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	<p>smothering. Individually and overall, the significance of effects was considered to be of minor significance. The Applicant maintains that the assessment would have highlighted where there was an exception to this conclusion for a particular habitat.</p> <p>Are your concerns addressed by this clarification and if not, why not?</p>	<p>the habitats would individually respond to the impacts of sediment disturbance, sandwave removal and smothering. The MMO confirms that our concerns have been addressed by this clarification.</p>
	<b>Marine Mammals</b>	
Q2.2.77	<p>WDC have stated in [REP1-022] that they wish to see temporary threshold shift as well as permanent threshold shift evaluated as an alone or in combination piling noise impact. The Applicant has indicated that in [REP1-218] you agreed that this is not required. Do you agree that an evaluation of temporary threshold shift is not required to inform the ES and HRA?</p>	<p>The MMO acknowledges that to date, it remains difficult for temporary threshold shifts (TTS) to be quantified and to what extent TTS results in permanent threshold shifts (PTS) for cetaceans. The MMO recommend that the ES should reference TTS in a qualitative manner for context.</p> <p>The MMO defer to Natural England’s position with regard to evaluation of TTS in the HRA.</p>
Q2.2.79	<p>WDC have pointed out [REP1-022] that an EPS license would be required for any pile-driving activity.</p> <p>With the Morge case in mind, is the project likely to infringe Article 12 of the Habitats Directive?</p> <p>If so, is it likely that a derogation, in the form of an EPS licence, would be granted?</p>	<p>The MMO confirms that, should pile driving activities be required for Hornsea 3 which could result in disturbance likely to infringe Article 12 of the Habitats Directive for features of the Southern North Sea SCI, the Applicant would need to apply for an EPS licence for those activities. Determination of an EPS licence would depend upon the proposed activities and the potential mitigation measures available to the Applicant to reduce the impact of pile-driving activities at the time of submission. It is not possible for the MMO to comment on the determination of an EPS licence prior to such an application, however the MMO would be able to provide pre-EPS licence application advice to the applicant following agreement of a design plan.</p>
Q2.2.84	<p>Please provide the following publications that you have relied upon in evidence:                  Cooper et al (2008) [REP1-094]</p>	<p>Please find the publication attached to the MMOs submission for Deadline 4.</p>
	<b>Content of the DCO as submitted for Deadline 1</b>	
Q2.13.20	<p>Please provide an update on your discussions regarding the timescales set out in Condition 14.</p>	<p>No progress has been made regarding the discussions around the timescales as set out in condition 14. The MMO continues to assert that a submission timescale of 6 months prior to construction would be most appropriate, and considers the applicants suggestions as unachievable</p>
Q2.13.23	<p>The MMO has commented [REP3-092] that it has received reports on Offshore Wind Farms (OWF) under construction which have cast doubt over the efficacy of soft-start mitigation measures relating to piling. In Condition 18, the MMO (supported by NE)</p>	<p>The MMO would like to highlight that the request for condition 18 to be amended has arisen from concerns around the condition wording previously used in DMLs being fit for purpose.</p>

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	<p>suggests an amendment to the effect that, if monitoring shows significantly different impacts to those assessed in the ES, piling activity should cease until an update to the marine mammal monitoring plan and further monitoring requirements have been agreed. Please provide evidence of the need for this approach.</p>	<p>The MMO is of the opinion that there is the potential for situations where a stop to piling is required where impacts through monitoring are found to be greater than those assessed in the ES. A stop would therefore be required to ensure that the Applicant is compliant with current legislation which may require a new EPS licence under such circumstances. As such, the MMO considers that the DML condition should be amended to reflect this.</p>
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