



Marine
Management
Organisation

Marine Licensing T +44 (0)300 123 1032
Lancaster House F +44 (0)191 376 2681
Hampshire Court www.gov.uk/mmo
Newcastle upon Tyne
NE4 7YH

East Anglia Two Case Team
Planning Inspectorate
EastAngliaTwo@planninginspectorate.gov.uk

(By email only)

MMO Reference: DCO/2016/00005
Planning Inspectorate Reference: EN010078
Identification Number: 20024119

25 March 2021

Dear Rynd Smith,

Planning Act 2008, Scottish Power Renewables, Proposed East Anglia Two (EA2) Offshore Windfarm Order

MMO Deadline 8 Response

On 19 December 2019, the Marine Management Organisation (the “MMO”) received notice under section 56 of the Planning Act 2008 (the “PA 2008”) that the Planning Inspectorate (“PINS”) had accepted an application made by Scottish Power Renewables (the “Applicant”) for determination of a development consent order (DCO) for the construction, maintenance and operation of the proposed East Anglia Two Wind Farm (the “DCO Application”) (MMO ref: DCO/2016/00005; PINS ref: EN010078).

The Applicant seeks authorisation for the construction, operation and maintenance (O&M) of the DCO Application, comprising of up to 75 wind turbine generators together with associated onshore and offshore infrastructure and all associated development (“the “Project”). This includes two Deemed Marine Licences (DMLs) under Schedules 13 and 14.

This document comprises the MMO comments in respect of the DCO Application submitted in response to Deadline 6 and 7.

The MMO submits the following:

1. **Summary of Oral Cases made during the Biodiversity and Habitats Regulations Assessment (HRA) Issue Specific Hearing (ISH) 14**
2. **Summary of Oral Cases made during the Draft development consent order Issue Specific Hearing (ISH) 15**
3. **Action Points from ISH 14**
4. **Action Points from ISH 15**
5. **Comments on any additional information/submissions received at Deadline 6**
6. **MMO Response to Aldeburgh Town Council Deadline 6 Response**
7. **Comments on any additional information/submissions received at Deadline 7**
8. **Issues agreed as of Deadline 8**
9. **Issues not agreed as of Deadline 8**
10. **Other Comments**

This written representation is submitted without prejudice to any future representation the MMO may make about the DCO Application throughout the Examination process. This representation is also



submitted without prejudice to any decision the MMO may make on any associated applications for consent, permission, approval or any other type of authorisation submitted to the MMO either for the works in the marine area or for any other authorisation relevant to the proposed development.

Yours Sincerely,



Jack Coe

Marine Licencing Case Officer



 [@marinemanagement.org.uk](mailto:jack.coe@marinemanagement.org.uk)



Marine
Management
Organisation

...ambitious for our
seas and coasts



Contents

1. Summary of Oral Cases made during the Biodiversity and Habitats Regulations Assessment (HRA) Issue Specific Hearing (ISH) 14.....	6
1.1 Agenda Item 2 (c).....	6
1.2 Agenda Item 3(d)(i).....	6
1.3 Agenda Item 3(e)(i).....	6
1.4 Agenda Item 4(b)(i).....	6
1.5 Agenda Item 6(a)(ii).....	6
1.6 Agenda Item 7(a)(ii).....	6
1.7 Agenda Item 11 (a)(i).....	7
1.8 Agenda Item 11 (a)(ii).....	7
1.9 Agenda Item 11 (a)(iii).....	7
1.10 Agenda Item 11 (b)(i).....	8
1.11 Agenda Item 11 (b)(ii).....	8
1.12 Agenda Item 11 (b)(iii).....	8
1.13 Agenda Item 11 (c)(i).....	8
1.14 Agenda Item 11(d)(i).....	8
1.15 Agenda Item 11 (e)(i).....	8
1.16 Agenda Item 11 (e)(ii).....	9
1.17 Agenda Item 11 (e)(iii).....	9
1.18 Agenda Item 11 (f).....	9
2. Summary of Oral Cases made during the draft Development Consent Orders & Other Matters Issue Specific Hearing (ISH) 15.....	9
2.1 Agenda Item 2.....	9
2.2 Agenda Item 4.....	11
3. Action Points from ISH 14.....	12
3.1 Action point 15.....	12
4. Action Points from ISH 15.....	12
4.1 Action point 2.....	12
4.2 Action point 5.....	12
4.3 Action point 8.....	12
4.4 Action point 9.....	12
5. Comments on any additional information/submissions received at Deadline 6.....	13
5.1 Deadline 6 Submission - 1.6 Guide to the Application - Version 07 [REP6-002].....	13
5.2 Offshore In-Principle Monitoring Plan (IPMP)- Version 03 [REP6-015].....	13
5.3 Displacement of red-throated divers in the Outer Thames Estuary SPA - Version 03 [REP6-019] 13	
5.4 Applicants' Response to Natural England's Legal Submissions Concerning Displacement of Red-Throated Divers - Version 01 [REP6-020].....	13
5.5 Applicants' Comments on Natural England's Deadline 5 Submissions - Version 01 [REP6-030] 13	



5.6	Deadline 6 Submission - ExA.AS-4.D6.V3 Outline Sabellaria Reef Management Plan [REP6-040].....	14
5.7	Habitat Regulations Assessment Derogation Case - Version 02 [REP6-044].....	14
5.8	Offshore Ornithology Without Prejudice Compensatory Measures - Version 1.0 [REP6-045] 14	
5.9	Applicants' Responses to Hearings Action Points- Version 01 [REP6-049].....	14
5.10	Applicants' Responses to Written Questions Introduction - Version 01 [REP6-058].....	15
5.11	Applicants' Responses to Written Questions 2 Volume 2 2.0 Overarching, general and cross-topic questions - Version 01 [REP6-059].....	15
5.12	Applicants' Responses to Written Question 2 Volume 4 2.2 Biodiversity Ecology and Natural Environment - Version 01 [REP6-061].....	15
5.13	Applicants' Comments on the ExA's Commentary on the dDCO - Version 01 [REP6-067] 15	
5.14	Historic England Deadline 6 Response [REP6-102]	16
5.15	NE Cover Letter Deadline 6 [REP6-112].....	16
5.16	Appendix A17 - NE Comments on Displacement of Red Throated Diver (RTD) in OTE SPA update REP5-025 Deadline 6 [REP6-113].....	16
5.17	Appendix E3b - NE Comments on AONB REP5-021 Deadline 6 [REP6-114].....	16
5.18	Appendix G4 - NE Comments on Updated DCO Deadline 6 [REP6-115].....	16
5.19	Appendix K3 - NE Response to ExQs2 Deadline 6 [REP6-116].....	17
5.20	Appendix K4 - NE Answers to DCO Commentaries (ExQs2) Deadline 6 [REP6-117].....	17
5.21	Appendix K5 - Natural England's ISH8 SLVIA Oral Representation Summary Advice Deadline 6 [REP6-118].....	17
5.22	Appendix I1e - NE's Risk and Issues Log Deadline 6 [REP6-119].....	17
6.	MMO Response to Aldeburgh Town Council Deadline 6 Response	17
7.	Comments on any additional information/submissions received at Deadline 7.....	17
7.1	EA2 Draft Development Consent Order (Clean) - Version 05 [REP7-006]	17
7.2	Outline Offshore Operations and Maintenance Plan (OOMP) [REP7-027].....	17
7.3	Draft Marine Mammal Mitigation Protocol (MMMP)[REP7-030].....	18
7.4	In Principle Site Integrity Plan for the Southern North Sea Special Area of Conservation [REP7-031].....	18
7.5	Applicants' Comments on Responses to ExQ2 [REP7-034]	18
7.6	Best Practice protocol for minimising disturbance to RTD [REP7-046]	18
7.7	EA1N&EA2 Applicants' Comments on Marine Management Organisation's Deadline 6 Submissions.....	18
7.8	Natural England Cover Letter Deadline 7 [REP7-069].....	19
7.9	Appendix A14b Natural England's Comments on Legal Submissions Concerning Displacement of RTD [REP7-070].....	19
7.10	Appendix A15b Natural England's response to Offshore Ornithology Compensation and Derogation documents [REP7-071].....	19
7.11	Appendix A18 TRACKED Change Version of The Applicant's Displacement of Red- throated divers in the Outer Thames Estuary SPA [REP7-072].....	19
7.12	Appendix C8 Natural England comments to the Ecology Survey results [REP7-073].....	19



7.13	Appendix F9- All Other Matters update [REP7-074]	20
8.	Issues agreed as of Deadline 8	20
8.1	Marine Geology, Oceanography and Physical Processes	20
8.2	Benthic Ecology	20
8.3	Commercial Fisheries	20
8.4	Shellfish Ecology	20
8.5	Monopiles for Offshore Platforms	20
8.6	Contaminant Sampling and Disposal Sites	20
8.7	Completion of Construction Condition	21
8.8	SNS SAC SIP Condition 26 (Schedule 13) and Condition 22 (Schedule 14)	22
8.9	Control of piling and UXO detonations	22
8.10	Red Throated Diver Condition	23
8.11	dDCO and DMLs	23
9.	Issues not agreed as of Deadline 8	24
9.1	Marine Mammals	24
9.2	Underwater Noise	25
9.3	Marine Water and Sediment Quality	25
9.4	Fish Ecology	25
9.5	UXO clearance activities included in Deemed Marine Licence	27
9.6	New scour protection and cable protection during operation	27
9.7	Article 5 – Benefit of the Order	27
9.8	Schedule 18	28
9.9	Implications of Hornsea Project Three Offshore Wind Farm Decision	28
9.10	Implications of Norfolk Vanguard Offshore Wind Farm Judicial Review Decision	29
10.	Other Comments	29
10.1	SNS Regulators Group	29



1. Summary of Oral Cases made during the Biodiversity and Habitats Regulations Assessment (HRA) Issue Specific Hearing (ISH) 14

1.1 Agenda Item 2 (c)

The MMO notes the Examining Authorities (ExA) expectation that the Deadline 8 response from the MMO will include a substantive list of resolved/unresolved issues for these projects associated with the Deemed Marine Licence (DML).

The MMO has presented the response in this way and hopes that this layout is appropriate for the ExA. The MMO wishes to assure the ExA that the MMO will continue to engage with both Natural England (NE) and the Applicant to ensure that this Deadline 8 response is as detailed as possible and serves as the definitive position the MMO takes on these projects.

1.2 Agenda Item 3(d)(i)

The MMO notes the Applicant's points made regarding the Best Practice Protocol for Red Throated Divers (RTD) and ultimately defers to NE on the appropriateness of the content of this document.

The MMO intends to discuss internally the proposition that a condition should be inserted into the DML to secure the use of this document and will endeavour to provide an update on its position at Issue Specific Hearing 15 (19 March 2021). Please see Section 8.10 for the MMO position on this matter.

1.3 Agenda Item 3(e)(i)

In relation to the In-Principle Monitoring Plan (IPMP) and the provisions it makes for Ornithology, the MMO defers to NE on this issue.

The MMO has sought scientific advice on this document and will provide an update at Issue Specific Hearing 14 (17/01/2021) in relation to marine mammals. Please see Section 5.2 for the MMO position on this matter.

1.4 Agenda Item 4(b)(i)

The MMO defers comment on the provisions associated with Ornithology to NE with regards to the IPMP. The MMO notes the comments the Applicants made regarding new technologies associated with monitoring Kittiwake, Gannet, Razorbill, Guillemot in relation to a collision risk monitoring system. The MMO welcomes the Applicant's commitment to considering this technology but acknowledges that it is very much experimental at this stage and would need to be considered more thoroughly at the post-consent stage of these applications.

The MMO reiterates that these systems and the technologies associated with them are being encouraged for Applicants to use, in particular, in respect of offshore renewable energy applications and that these technologies will hopefully be incorporated into future applications in the sector.

1.5 Agenda Item 6(a)(ii)

The MMO defers to NE on all matters associated with Habitats Regulations Assessment (HRA) and derogation.

1.6 Agenda Item 7(a)(ii)

The MMO notes the points made by the Applicant regarding the content of their compensation packages, however, the MMO defers the appropriateness of this detail to NE. The MMO notes that the updated compensation packages are contained in Schedule 18 of the DCO. Furthermore, the MMO consider this is an appropriate mechanism for these measures as, ultimately, they are for the decision of the Secretary of State as the competent authority.

Therefore, the MMO is of the opinion that the DCO is the appropriate place to secure them.



The MMO also wishes to make it clear that our comments on the updated Schedule 18 will be submitted in its Deadline 8 response and will concentrate on these projects specifically and will avoid comment on Hornsea Project Three Offshore Wind Farm (HOW03) at this stage.

The MMO intends to consider the ExA question as to whether securement of the compensation packages need to be conditioned in the DML as well as being included in the DCO Schedule 18 and will provide an update at Issue Specific Hearing 15 after seeking internal guidance, however, the MMO notes the Applicants point that replication of security should be avoided so as to not overpopulate the DCO. The MMO also notes that whilst consenting HOW03, the SoS expressed the necessity for securing compensation at the Examination stage.

1.7 Agenda Item 11 (a)(i)

The MMO generally defers to NE on issues related to HRA. The MMO welcomes the Applicant's decision to remove the Project Alone impacts from the In-Principle Site Integrity Plan (IPSIP) and Marine Mammal Mitigation Protocol (MMMP).

The MMO attended a meeting with the Applicant on 11 March 2021 to progress outstanding issues and has provided an update to the Applicant, which is still being discussed as priority, with the intention of closing out all issues at Deadline 8. In addition to this the MMO is working with NE to try and agree the final positions.

The MMO wishes to point out to the ExA that it is still part of the Southern North Sea (SNS) Regulators Working Group and there is a meeting 18 March 2021 to discuss Underwater Noise projects, the MMO will provide an update to the ExA at Deadline 8. Please see Section 10.1.

1.8 Agenda Item 11 (a)(ii)

The MMO welcomes the Applicants update to Condition 16 of Schedule 13 and Condition 12 of Schedule 14 to include the provision of a UXO close out report. The MMO is largely content with the wording for the condition, however, the MMO has been in discussion with the Applicant in relation to a time scale to produce this report and has proposed three months. Additionally, the MMO is confirming the appropriateness of the wording with NE and are aiming to agree this for Deadline 8. Please see Section 8.9 for the MMO position on this matter.

The MMO, in principle, agrees with the wording of the Condition 27 of Schedule 13 and Condition 23 of Schedule 14 in the DCO. The MMO is currently discussing with both NE and the Applicant as to whether UXO detonation needs to be defined in the DCO. This is in the event UXO clusters are to be used in this project or indeed, in future Offshore Wind Farms. Please see Section 8.9 for the final MMO position.

1.9 Agenda Item 11 (a)(iii)

The MMO's position remains that it considers UXO activities are better suited to a separate marine licence but continues to work on its without prejudice position with the Applicant.

The MMO welcomes the progress made by the Applicant on the UXO condition, however, the MMO's position remains unchanged and consider it is now up to the ExA recommendation and Secretary of State (SoS) to make a decision on this matter.

The MMO asserts that this is a concern for consistency with existing Offshore Wind Farms, if UXO clearance activities are included within in the DML, this does set a precedent. The MMO considers that it could be difficult to manage multiple consents that have UXO clearance activities on the main DCO in relation to in-combination effects.

The MMO believes that UXO clearance is a high risk activity and it is more appropriate to manage these activities through a separate marine licence. The reasoning behind this is for the consideration of best available evidence and technology which may have progressed by the time the activity is taking place.



1.10 Agenda Item 11 (b)(i)

The MMO understands that for in-combination impacts, NE are still not content as there is no mechanism to manage this.

The MMO believes the SNS Special Area of Conservation (SAC) SIP is the appropriate mechanism that allows review of cumulative noise activity at the time to ensure all activities are within the conservation objectives/guidance.

The MMO reiterates that SNS regulators group will be meeting 18 March 2021 and the MMO will be providing an update at Deadline 8 for the benefit of the ExA.

. Please see Section 10.1.

1.11 Agenda Item 11 (b)(ii)

The MMO welcomes the exclusion of project alone impacts from the IPSIP. The only outstanding issue which remains in regard to this document from the MMO standpoint is the usage of Temporary Threshold Shift (TTS) by the Applicant.

The MMO understands the Applicant has responded on this point in their Deadline 7 response to advise that this is included within the disturbances set out in Table 5.1. The MMO understands this point and is currently awaiting confirmation from our scientific advisors that the inclusion of the TTS is appropriate. Please see Section 7.4.

1.12 Agenda Item 11 (b)(iii)

Regarding the SNS SAC SIP condition, Condition 26 of Schedule 13 and Condition 22 of Schedule 14 of REP7-0007/8, the MMO is content with the current wording of this condition from the Applicant. Please see Section 8.8 for the MMO position on this matter.

1.13 Agenda Item 11 (c)(i)

The MMO asserts that the outstanding comments on this document were in relation to the metric used for UXO detonation and that the maximum potential Permanent Threshold Shift being used.

The MMO understands that the Applicant has made amendments to the MMMP. The MMO welcomes this and hopes to agree all unresolved issues at Deadline 8, the MMO is also discussing these points with our scientific advisors to close out these points. Please see Section 7.3.

The MMO also believes that NE may still have outstanding concerns on this document, and we support these concerns. The MMO will work with NE and the Applicant to provide a position on anything else raised.

1.14 Agenda Item 11(d)(i)

The MMO welcomes the Applicant's inclusion of Underwater Noise monitoring provisions. The MMO notes this was requested by NE and defers to NE to advise if this is acceptable.

The MMO also notes the Applicant's point regarding reverting back to the original wording for securing these measures, the MMO will discuss this with the Applicant and aims to have this agreed at Deadline 8. Please see section 8.11 for the MMO's final position.

1.15 Agenda Item 11 (e)(i)

With regards to the timescales for Condition 16(3) of Schedule 13 and Condition 12(3) of Schedule 14, the MMO is content with all the timescales relating to UXO clearance activities. The MMO notes this does not alter the without prejudice position as set out in Section 9.5 for the MMO position on this matter.



1.16 Agenda Item 11 (e)(ii)

With regards to Condition 25 of Schedule 13 and Condition 21 of Schedule 14, the MMO welcome all the updates from the Applicant and are content with all of the changes made in relation to the co-operation condition.

1.17 Agenda Item 11 (e)(iii)

The MMO notes NE's comments on Condition 21(3) of Schedule 13 and Condition 17(3) of Schedule 14 and understand the DCO updates were related to other discussions however this was prior to additional discussions with NE. The MMO and NE are in discussions to resolve this matter by Deadline 8. Please see Section 8.11 of this document.

1.18 Agenda Item 11 (f)

The MMO has one outstanding concern relating to Underwater Noise and marine mammals which relates to the modelling conducted by the Applicant for piling in a 24-hour period. The MMO notes that the response by the Applicant in REP-075/076 have been linked to point 060 which discusses the updates to the DCO in the new commitment, Schedule 13 Condition 27/Schedule 14 Condition 23, Control of piling and UXO detonations.

Currently, the MMO understands that paragraph 3 of this relates specifically to the winter period of the SNS SAC and this does not alleviate the concerns in relation to the modelling. The MMO understands that if the Applicant is going to pile more than once within the 24-hour period (of the summer period) then the modelling needs to be updated to take this into account as set out in points 075/076 of our Deadline 5 response [REP5-075]. The MMO will continue to work with the Applicant to address this concern for Deadline 8. Please see Section 9.2 for the MMO position on this matter.

2. Summary of Oral Cases made during the draft Development Consent Orders & Other Matters Issue Specific Hearing (ISH) 15

2.1 Agenda Item 2

Article 5 – Benefit of the order

In relation to Article 5 of the dDCO (REP7-006), the MMO notes the points raised by the Applicant in Applicants' Comments on Marine Management Organisation's Deadline 6 Submissions [REP7-055] however, the MMO believes that further information should be included in this article in the interest of clarity.

The MMO refers to Article 6 of the Norfolk Vanguard Offshore Wind Farm DCO and Article 5 HOW03 DCO, in particular, parts 1, 4, 10c or 6c and 14, 15 and 16 or 9, 10 and 11. The MMO believes that these sections should be included in the dDCO to ensure that there is a standard condition for all DCOs going forward. Please see Section 9.7 for the full MMO position on this matter.

Requirement 13 – Landfall Method Statement

In respect of requirement 13 and the Landfall Construction Method Statement, the MMO has reviewed this requirement and propose an amendment, to the Applicant, in that the MMO and NE should be cited as consultees on this document. This position has been formulated following discussions with East Suffolk Council and NE. The MMO is in the process of clarifying this position internally and will provide an update in writing at Deadline 8. Please see Section 8.11 for the MMO's final position on this matter.

Condition 16 (Schedule 13) and Condition 12 (Schedule 14)

The MMO is content with the updates made by the Applicant.



The MMO does have some outstanding issues regarding this condition that have been mentioned by the Applicant, the MMO welcomes the Applicants commitment to change the word 'may' to 'will' and have no other issues regarding phraseology. The MMO also welcomes the Applicants commitment to updating the condition to include a three-month timescale, the MMO is confident that other than the without prejudice position for UXO clearance activities being included in the DCO the wording of the condition will be agreed by Deadline 8. Please see Section 9.5 for the MMO's final position on this matter.

Condition 17 (Schedule 13) and Condition 14 (Schedule 14)

The MMO is content with all the updates made to Schedule 13, Condition 17(1)(g) and Schedule 14, Condition 13(1)(g) and have no further comments to make.

Condition 21 (Schedule 13) and Condition 17 (Schedule 14)

The MMO agrees with the Applicant in respect of Schedule 13, Condition 21 in that there has been disagreement between parties due to the use of the word 'statistically'. The MMO notes the Applicant's suggestion of reverting back to the original wording of this condition, the MMO welcome this commitment and consider it to be wholly appropriate and believe this will be included in the next iteration of the draft DCO.

Condition 24 (Schedule 13) and Condition 20 (Schedule 14)

The MMO maintains its position on the inclusion of new scour and cable protection in that it cannot be installed in locations where protection was not installed during construction. The MMO considers that this activity would require a separate marine licence.

The MMO has worked on a without prejudice basis to draft a condition to include these activities in the DML for a maximum of five years after completion of construction and the MMO is content with the wording of this condition in its current form and have no further comments to make on the condition. Please see Section 9.6 for the MMO position on this matter.

Condition 25 (Schedule 13) and Condition 21 (Schedule 14)

The MMO is content with the updates made by the Applicant and has no further comments to make.

Condition 26 (Schedule 13) and Condition 22 (Schedule 14)

The MMO is content with the updates made by the Applicant in relation to the SNS SAC SIP and thank the Applicants for including this condition in the most recent version of the draft DCO. Please see Section 8.8 for the MMO's final position.

Condition 27 (Schedule 13) and Condition 23 (Schedule 14)

The MMO is, in principle, content with the wording set out in the control of piling and UXO detonations condition. However, the MMO is engaged in ongoing discussions with the Applicant and NE to discuss the inclusion of a definition of 'UXO Detonation' in the possible event that clustering is used. The MMO is confident that this issue will be closed out by Deadline 8. Please see Section 8.9 of this document for the MMO's final position.

Condition 27 (Schedule 13) and Condition 23 (Schedule 14)

In relation to the issue of Herring spawning the MMO remains in discussion with the Applicant.

The MMO is content with the updates put in place by the Applicant in relation to the addition of 'unless otherwise agreed in writing' in part 2 and the inclusion of the method to the analysis, however, there is an outstanding concern regarding the phraseology 'period of approximately 14 days'.



The MMO considers that a specific number of days should not be included in this condition. The MMO understands the Applicant's concerns regarding that without this wording the whole period from November-January would potentially need to be excluded from their works schedule.

The MMO asserts that if an agreement cannot be reached between the Applicant and MMO regarding this issue, the MMO will insist on a condition that excludes the period of November-January in order to account for Spawning Herring.

The MMO also wish to point out that this is not a live consideration, the period would be set and would be derived from the most up to date and appropriate data sources on the matter. The MMO will continue engaging in dialogue with the Applicant and hope to resolve this by Deadline 8. Please see Section 9.4 of this document for the MMO's final position.

Additional Conditions

The MMO wishes to raise the issue of contaminant sampling and the associated condition the MMO consider necessary to secure further sampling be undertaken by the Applicant. The MMO has received a draft version of this proposed condition from the Applicant, the MMO will review this and look to have this issue closed out before Deadline 8. Please see Section 8.6 of this document for the MMO's final position on this matter.

The MMO welcomes the Applicants commitment to including a headroom/close out construction report condition in this DCO. The MMO will review this and aim to have this condition finalised by Deadline 8. Please see Section 8.7 of this document for the MMO's final position on this matter.

Finally, regarding Examiner Powis' point raised during ISH 14 regarding the MMO's opinion on whether the provisions contained in the RTD Best Practice Protocol should be conditioned in the DML, the MMO has had some provisional discussions with NE and consider that this would be appropriate as it is linked to potential mitigation strategy, the MMO will continue discussions with both the Applicant and NE on this matter and aim to resolve this issue by Deadline 8. Please see Section 8.10 of this document for the MMO's final position.

2.2 Agenda Item 4

Schedule 18

In respect of the point made by Examiner Smith at the beginning of ISH 15 regarding the potential for changing the name of 'Compensation' in schedule 18 to 'Compensatory Measures', the MMO considers this would be an appropriate change for the Applicant to make.

The MMO defers to NE on the appropriateness of the content of any compensation measures however, the MMO is content that these measures be controlled via Schedule on the DCO as it is for the SoS to approve compensation as the competent authority.

The MMO highlights to the ExA that any condition within the DML needs to meet the five tests, therefore, a condition needs to be necessary, related to the activities or project, precise, enforceable and reasonable. Given that the MMO is unaware at this stage whether or not the compensation measures proposed by the Applicant will be related to the marine environment, it is not appropriate to include compensation in the DML conditions.

In relation to the wording of the Schedule 18, the MMO requests that the Applicant includes a timescale for the consultation period the MMO, and other stakeholders, would have to review in Part 3 of all compensation measures. The MMO suggests that a period of 6 weeks would be appropriate, this is because these works are beholden to Environmental Impact Assessment (EIA) regulations and this is the standard consultation period. Please see Section 9.8 for the MMO's final position on this matter.



3. Action Points from ISH 14

3.1 Action point 15

DML condition 27 (Schedule 13) and condition 24 (Schedule 14): control of piling and UXO detonations

The Applicants and MMO to report on discussions with regard to modelling for piling in the SNS SAC in the summer period.

The MMO and the Applicant had a meeting on 22 March 2021, the Applicant presented the updated modelling. The MMO agreed to review the document prior to Deadline 8. The MMO has reviewed the document and provide an update in Section 9.2.

4. Action Points from ISH 15

4.1 Action point 2

Responses to Applicants Revised Preferred dDCOs.

Responses to be provided to Applicants' final Draft DCOs.

The MMO notes this action and will provide a response at Deadline 9.

4.2 Action point 5

Schedules 17: Documents to be certified

Having regard to the Applicants' dDCOs submitted at D8, provide any final comments on the documents (and document versions) to be included in Schedule 17.

The MMO notes this action and will provide a response at Deadline 9.

4.3 Action point 8

Requirements 13: Landfall Construction Method Statement (LCMS).

Applicants are asked to respond to proposition that both NE and MMO are named as consultees on the LCMS under Rs13.

The MMO has liaised with the Applicant and is content with the update to Requirement 13 to be submitted in the dDCO at Deadline 8. The MMO will confirm this at Deadline 9.

4.4 Action point 9

Red-Throated Diver (RTD)

A new Condition should be provided in the Deemed Marine Licences (DMLs) (rather than in the Best Practice Protocol) regarding seasonal restrictions on vessel movements to mitigate RTD disturbance. If agreement cannot be reached then Applicants, NE and MMO to provide drafting for their preferred wording for DML Conditions.

The MMO provided the following updated wording in relation to Condition 17 (1)(g)(vi):

17.—(1) The licensed activities or any part of those activities must not commence until the following (as relevant to that part) have been submitted to and approved in writing by the MMO—

...

(e) A project environmental management plan covering the period of construction and operation to include details of—

(i) a marine pollution contingency plan to address the risks, methods and procedures to deal with any spills and collision incidents of the authorised scheme in relation to all activities carried out;

(ii) a chemical risk assessment to include information regarding how and when chemicals are to be used, stored and transported in accordance with recognised best practice guidance;

(iii) waste management and disposal arrangements;



- (iv) *the appointment and responsibilities of a fisheries liaison officer;*
- (v) *a fisheries liaison and coexistence plan, in accordance with the outline fisheries liaison and coexistence plan, to ensure relevant fishing fleets are notified of commencement of licensed activities pursuant to condition 10 and to address the interaction of the licensed activities with fishing activities;*
- (vi) *procedures which must ~~to~~ be adopted within vessels transit corridors to minimise disturbance to red-throated diver, during 1 November to 1 March inclusive, which must be in accordance with the best practice protocol for minimising disturbance to red-throated diver.*

The MMO believes NE are content with this condition and the Applicant has updated this in the dDCO to be submitted at Deadline 8.

5. Comments on any additional information/submissions received at Deadline 6

5.1 Deadline 6 Submission - 1.6 Guide to the Application - Version 07 [REP6-002]

The MMO appreciates the usefulness of this document and welcomes the Applicant's updated versions at each deadline throughout the course of the Examination process.

5.2 Offshore In-Principle Monitoring Plan (IPMP)- Version 03 [REP6-015]

The MMO welcomes the updates to the IPMP and notes that the benthic section has been updated to include monitoring for non-native species and wider benthic communities. The MMO can confirm this alleviates the concerns in relation to benthic matters. The fisheries section has also been updated to include sandeel monitoring through particle size analysis and this closes out the outstanding sandeel matter. The MMO notes the updates include sections on ornithology and defers to NE on the information within this section. In relation to marine mammals the MMO welcomes the inclusion and references of all monitoring in the document but understands there is still an outstanding issue on the word 'statistically'. The MMO has provided an update on this matter in Section 8.11 of this document.

5.3 Displacement of red-throated divers in the Outer Thames Estuary SPA - Version 03 [REP6-019]

The MMO is aware that the displacement of Red Throated Divers remains an outstanding issue between the Applicant and NE. The MMO defer Ornithological matters to NE.

5.4 Applicants' Response to Natural England's Legal Submissions Concerning Displacement of Red-Throated Divers - Version 01 [REP6-020]

The MMO notes that the displacement of Red-Throated Divers remains an outstanding issue between the Applicant and NE. The MMO defers all issues of ornithology to NE.

5.5 Applicants' Comments on Natural England's Deadline 5 Submissions - Version 01 [REP6-030]

The MMO notes that the positions may have moved on since Deadline 6 and has reflected the updated responses below.

Section 2- NE Appendix F5B

The MMO notes that there remains disagreement between the Applicant and NE regarding the content of the *Sabellaria* Reef Management Plan. The MMO defers to NE on the appropriateness of the mitigation contained in this document, please see Section 5.6 of this document.

Section 3- NE Appendix F8

The MMO notes that the content of the IPMP is now largely agreed and has no comments on this section of the document.



Section 4- NE Appendix A16

The MMO defers all Ornithological matters to NE and acknowledge that the Applicant and NE have outstanding issues regarding the in-combination effects of these works on avian species.

Section 5- NE Appendix G3

The MMO notes that collision risk figures remain an outstanding issue between the Applicant and NE. The MMO defers to NE on the appropriateness of Ornithological modelling undertaken by the Applicant in relation to this project.

Section 6- NE Appendix A15

The MMO understands that the issue of appropriate compensation measures for these projects remains an outstanding issue. The MMO defers to NE on this matter and again, wishes to point out to the ExA that the MMO attended a compensatory workshop on this issue 10 March 2021. Please see the MMO's extended point regarding compensation in Section 9.8 and 9.9 of this document.

Section 7- NE Appendix C7

The MMO has no comments to make on this section as it related to terrestrial ecology.

5.6 Deadline 6 Submission - ExA.AS-4.D6.V3 Outline Sabellaria Reef Management Plan [REP6-040]

The MMO welcomes the updates to the document but understands that NE still have outstanding concerns in relation to the remaining uncertainty around the likelihood of buffers being encroached upon and to what degree. The MMO supports these concerns and defers to NE on this matter and understands as it is unable to be progressed during Examination.

5.7 Habitat Regulations Assessment Derogation Case - Version 02 [REP6-044]

The MMO defers matters of ornithology to NE. The MMO wishes to point out that the MMO, the Applicant and NE attended a joint workshop on 10 March 2021 to discuss compensatory measures related to these cases. Please see the MMO's position in Section 2.2 and Section 9.8 of this document.

5.8 Offshore Ornithology Without Prejudice Compensatory Measures - Version 1.0 [REP6-045]

The MMO defers comment on compensatory measures to NE, however, the MMO did attend a compensatory workshop with both NE and the Applicant on 10 March 2021 to discuss compensatory measures associated with these projects. Please see the MMO's detailed points on compensation in Section 9.8 if this document.

5.9 Applicants' Responses to Hearings Action Points- Version 01 [REP6-049]

Issue Specific Hearing 7

The MMO welcomes the Applicants commitment to include a condition that specifically restricts piling and Unexploded Ordnance (UXO) detonation to a single event in a 24-hour period during the winter season (October to March inclusive) and appreciate the engagement the MMO has had with the Applicant on this. The MMO has provided comments on the IPMP and MMMP in other sections of this submission.

The MMO welcomes the Applicants engagement on the SNS SAC SIP DML condition wording and the MMO has provided comments on the condition in Section 8.8 of this document.

The MMO welcomes the Applicants engagement and co-operation on the DML condition wording and the MMO is content with this wording.

Issue Specific Hearing 9



The MMO welcomes all the commitments stated by the Applicant in response to Agenda Item 2. The MMO has provided detailed comments on the dDCO in Section 1, 8 and 9 of this submission.

5.10 Applicants' Responses to Written Questions Introduction - Version 01 [REP6-058]

The MMO has no comments to make on this document.

5.11 Applicants' Responses to Written Questions 2 Volume 2 2.0 Overarching, general and cross-topic questions - Version 01 [REP6-059]

The MMO notes the Applicants responses to these questions and has no comments to make on this document.

5.12 Applicants' Responses to Written Question 2 Volume 4 2.2 Biodiversity Ecology and Natural Environment - Version 01 [REP6-061]

The MMO notes that the potential in-combination impacts to Guillemot and Razorbill of the Flamborough and Filey Coast (FFC) SPA remains an area of outstanding disagreement between the Applicant and NE. The MMO defers all HRA matters to NE.

The MMO notes the Applicant's response regarding compensatory measures. The MMO attended a workshop with the Applicant and NE on 10 March 2021 to discuss the compensatory measures associated with this case, please see the MMO's key points related to this in Section 9.8 of this document. Ultimately, the MMO defers matters of compensation to NE.

The MMO notes that the Sabellaria Reef Management Plan remains an area of disagreement between the Applicant and NE including securing the reef buffer. The MMO supports NE's comments and defers to NE on the appropriateness of this document please see Section 5.6.

5.13 Applicants' Comments on the ExA's Commentary on the dDCO - Version 01 [REP6-067]

The MMO notes the Applicant's comments on the Energy White Paper and has no further comments to make at this stage.

The MMO welcomes the Applicant's commitment to including a schedule similar to that of the Norfolk Boreas DCO that lists all the certified documents associated with these projects. The MMO appreciates that the Applicant has committed to checking that all certified documents have been included in Schedule 17. The MMO has also checked this in Section 8.11 of this document.

The MMO concurs with the Applicant that it is sufficiently clear that the discharge of requirements and DML conditions are outside the scope of the arbitration provision. The MMO has no further comments to make.

The MMO notes the Applicant's comment that it is not appropriate for the heights of Works No. 1, 2 and 3 to be secured within the description of the development in Part 1 of Schedule 1 of the DCO. The MMO is content with the Applicant's response as these are set out within the DMLs.

The MMO has reviewed the updated coordinates submitted by the Applicant for these applications and are content that they are correct. The MMO has no further comments to make on this.

The MMO notes the Applicants' position is that it is not necessary to specifically secure the maximum height of the offshore platform inclusive of a helipad, tower and mast. The MMO understands this position and is content with this position as this is standard across other offshore wind farms.



In relation to Condition 21(3) – construction monitoring - cessation of piling, please see Section 8.11 of this document for the MMO position.

5.14 Historic England Deadline 6 Response [REP6-102]

The MMO notes that Historic England is still in discussions with the Applicant regarding the wording of some of the DML conditions, namely Schedule 13, Part 2, 17(1)(g)(vi) & Schedule 14, Part 2, 13(1)(g)(vii). The MMO also notes however, that an updated SoCG and dDCO were also anticipated to be submitted at Deadline 7. The MMO defers to HE on matters of archaeology and heritage for offshore matters.

5.15 NE Cover Letter Deadline 6 [REP6-112]

The MMO notes that NE have requested that the Applicant produce a cumulative visual assessment based on a 'worst case scenario' of the Sizewell C changes in light of the judicial review that was upheld against Norfolk Vanguard Offshore Windfarm. The MMO defers to NE on the appropriateness of such an assessment.

The MMO also notes that NE considers that it would be prudent for the Applicant to provide as comprehensive a cumulative impact assessment as possible for the consideration of the ExA, the MMO supports this approach but defers to NE on its content.

The MMO recognises NE's point regarding the tight turnaround between Deadline 6 and Deadline 7 and would welcome longer periods between deadlines in future Examinations to allow for more effective communication between the Applicant and Interested Parties. The MMO notes there is also a short timescale between Deadline 8 and Deadline 9.

The MMO recognises NE's point regarding agreeing to disagree on areas of professional judgement with the Applicant. Further the MMO agrees that once it becomes apparent that further analysis or interpretation cannot resolve certain differences, it falls to the ExA and then the decision-maker to exercise their judgement on the evidence presented to them and the respective merits of any interpretation of that evidence. The MMO will endeavour to resolve all remaining issues by the close of Examination but consider NE's assessment of the process to be pragmatic and appropriate for the remainder of this Examination.

5.16 Appendix A17 - NE Comments on Displacement of Red Throated Diver (RTD) in OTE SPA update REP5-025 Deadline 6 [REP6-113]

The MMO notes that the displacement of RTD remains an area of disagreement between the Applicant and NE, the MMO also notes that NE do not intend to further address the modelling work undertaken by the Applicant that addresses this receptor or carry out any further validation.

The MMO defers to NE on all Ornithological matters and will continue to engage with the Applicant and NE to assist in the resolution of any potential issues.

5.17 Appendix E3b - NE Comments on AONB REP5-021 Deadline 6 [REP6-114]

The MMO is aware that there remains several seascape/landscape issues that are unresolved between the Applicant and NE. The MMO defers to NE on issues of landscape and seascape, however, we will endeavour to engage with both parties and hope that as many outstanding issues as possible can be resolved prior to the close of Examination.

5.18 Appendix G4 - NE Comments on Updated DCO Deadline 6 [REP6-115]

The MMO appreciates the support provided by NE on various points associated with the dDCO. The MMO welcomes NE's contentment with a variety of issues related to the dDCO and hopes that the remainder of issues can be closed out by the close of Examination.



5.19 Appendix K3 - NE Response to ExQs2 Deadline 6 [REP6-116]

The MMO supports NE's responses to these questions and has no additional comments to make.

5.20 Appendix K4 - NE Answers to DCO Commentaries (ExQs2) Deadline 6 [REP6-117]

The MMO welcomes NE's support regarding the MMO not being subject to arbitration.

The MMO also wishes to state that the MMO, the Applicant and NE will be attending a compensation workshop 10 March 2021 to discuss compensation measures associated with these projects, the MMO hopes that these discussions will result in this issue being closed out prior to the conclusion of Examination.

Finally, the MMO welcomes NE's continued engagement in relation to the Deemed Marine Licence, in particular, Schedule 13, Condition 21(3) and Schedule 14 Condition 17(3). The MMO has no further comments to make on this document.

5.21 Appendix K5 - Natural England's ISH8 SLVIA Oral Representation Summary Advice Deadline 6 [REP6-118]

The MMO notes that seascape and landscape visual amenity remain an outstanding issue between the Applicant and NE and that now both parties are in a position where they will 'agree to disagree' on these matters. The MMO supports this approach at this stage of the Examination period.

The MMO defers to NE on all matters related to seascape and visual amenity to NE.

5.22 Appendix I1e - NE's Risk and Issues Log Deadline 6 [REP6-119]

The MMO appreciates the usefulness of this document insofar as visualising the amount of unresolved issues associated with these applications and welcomes the updates at each deadline.

6. MMO Response to Aldeburgh Town Council Deadline 6 Response

The MMO thanks Aldeburgh Town Council for suggesting that the MMO pay regard to the Offshore Transmission Network Review (OTNR) and Department for Business, Energy and Industrial Strategy (BEIS) review that were published recently. The MMO has discussed this internally and it will pay regard to the proposal that clusters of radial connections could be reduced down to a few coordinated connections by 2030 and are involved in very early discussion around the feasibility of the implementation of such a proposal. However, for the purpose of this DCO, the MMO expects the development to follow the original transmission plans as published by the Applicant.

7. Comments on any additional information/submissions received at Deadline 7

7.1 Draft Development Consent Order (Clean) - Version 05 [REP7-006]

The MMO notes that the Applicant has made updates to this document. These were discussed at ISH 15 and the outstanding concerns have been covered in Section 9 of this document.

7.2 Outline Offshore Operations and Maintenance Plan (OOMP) [REP7-027]

The MMO notes that the Applicant has made updates to this document. At Deadline 3, the MMO made it clear that it had major concerns regarding the inclusion of the Scour and Cable protection at locations where protection was not placed during construction. The MMO continues to have concerns on this matter and believes that any reference to new cable protection should be removed from this plan. As the Applicant included a DML condition the MMO set out a without prejudice position and the MMO now agrees that the Applicant has updated this plan and the DML condition to only include the installation of new cable protection for five years after completion of construction.



The MMO welcomes this change but reiterates that new cable and scour protection during operational period should be removed from the project and a separate marine licence should be sought.

7.3 Draft Marine Mammal Mitigation Protocol (MMMP)[REP7-030]

The MMO notes that the Applicant has removed the sections in relation to project alone impacts and welcomes this.

The MMO notes that there were two previous concerns in relation to this document . These were that the MMMP should take into account the maximum potential Permanent Threshold Shift (PTS) impact ranges for marine mammals and that the most appropriate metric for assessing the potential impacts of UXO detonation is the peak sound pressure level (SPL_{peak}) (rather than the single strike sound exposure level). The MMO can confirm that these points were amended in REP3-043 and these points are now agreed.

7.4 In Principle Site Integrity Plan for the Southern North Sea Special Area of Conservation [REP7-031]

The MMO notes that the Applicant has removed the sections in relation to project alone impacts and welcomes this.

The MMO has one outstanding concern in relation to this point and this is that the TTS is also considered, in addition to permanent auditory injury and disturbance. The Applicant responded to this point in REP6-029 advising TTS is included in their definition of disturbance and as such, consider this issue had been addressed.

The MMO was not content with this response and has continued discussions with the Applicant. The Applicant confirmed the document will be updated at Deadline 8 to ensure this is included. The MMO will confirm their contentment at Deadline 9.

7.5 Applicants' Comments on Responses to ExQ2 [REP7-034]

The MMO notes the comments set out in this document and have no comments to add as these have been covered elsewhere in this document.

7.6 Best Practice protocol for minimising disturbance to RTD [REP7-046]

The MMO recognises the effort the Applicant has made to update this document in line with NE's feedback. The MMO defers to NE on the appropriateness of the information contained within this document as we do on all Ornithological matters.

7.7 EA1N&EA2 Applicants' Comments on Marine Management Organisation's Deadline 6 Submissions

The MMO notes that positions within this document have changed or been discussed elsewhere within this document. The MMO has provided comments on Section 1.2 of this document below.

Section 1.2: MMO Responses to ExA commentaries on the draft Development Consent Order

The MMO notes the Applicant's position that they do not consider it necessary to further clarify that the 'substations design principles statement' is an onshore document because it is not referenced in the DML, which is related exclusively to Offshore aspects of these projects. The MMO has no further comments on this point.

The MMO notes the Applicant's position that the maximum height of Works Nos. 1 (the offshore generating stations) 2 and 3 (offshore platforms) should not be secured within the description of the development in Part 1 of Schedule 1 as they are secured later in schedules 13 and 14. The MMO notes this position and has no further comments.

The MMO has reviewed the updated coordinates provided by the Applicant and can confirm that these are correct in both the DCO and DMLs. The MMO considers this issue to be closed.



The MMO welcomes the Applicant's agreement that any reference to 'this schedule' should be changed to 'this licence' and look forward to seeing this inclusion in the version of the DCO submitted at Deadline 8.

The MMO notes the Applicant's point that it is not necessary to specifically secure the maximum height of the offshore platform inclusive of a helipad, tower and mast. The MMO is aware of the Applicants rationale for this position and has no further comments on this issue.

The MMO notes the Applicants assertion that the word 'significantly' is caveated with the word 'statistically' within the IPMP. The MMO notes there is ongoing discussions with NE on this matter and has provided an update in Section 5.2 of this document.

7.8 Natural England Cover Letter Deadline 7 [REP7-069]

The MMO appreciates the usefulness of this document and encourages NE to continue to submit detailed cover letters for future submissions into this Examination.

7.9 Appendix A14b Natural England's Comments on Legal Submissions Concerning Displacement of RTD [REP7-070]

The MMO notes that there remains legal disagreement between the Applicant and NE regarding the displacement of RTD from these projects, the MMO defers to NE on matters related to Offshore Ornithology.

7.10 Appendix A15b Natural England's response to Offshore Ornithology Compensation and Derogation documents [REP7-071]

The MMO notes that the issue of potential Adverse Effect on Integrity on designated sites is still not agreed between the Applicant and NE, this has been the case throughout the entirety of the Examination and is something the MMO consider will not be resolved prior to the end of Examination.

The MMO notes that NE disagrees with the Applicants approach to devising compensatory measures using the mean/central prediction and assert that a range-based approach would be more appropriate.

The MMO supports NE's view is that it is not acceptable to present the details of compensatory measures to the SoS after they have made a decision on the need for compensation for these projects and suggest that at the point of decision the SoS should be provided with sufficient confidence that appropriate compensation measures are available and have been or can be secured.

The MMO attended a compensatory measures workshop with NE and the Applicant on 10 March 2021 and will continue to engage with both parties.

Overall, the MMO defers to NE on the appropriateness of all compensation measures. The MMO has provided further comments on the compensatory measures in Section 2.2 and Section 9.8.

7.11 Appendix A18 TRACKED Change Version of The Applicant's Displacement of Red-throated divers in the Outer Thames Estuary SPA [REP7-072]

The MMO notes that the issue of Displacement of Red-Throated Divers is still an area of disagreement between both the Applicant and NE and defers to NE on this issue.

7.12 Appendix C8 Natural England comments to the Ecology Survey results [REP7-073]

The MMO notes that this Ecology survey document [REP6-035] is a subject of disagreement between the Applicant and NE. The MMO notes NE's position that it would be inappropriate for the Applicant to provide further scientific advice based on this survey alone due to survey limitations. The MMO also notes that NE consider that the survey hasn't followed standard best



practice in relation to the timing and ground conditions and as such, do not agree with its conclusions. The MMO defers to NE on the appropriateness of this survey.

7.13 Appendix F9- All Other Matters update [REP7-074]

The MMO appreciates the usefulness of this document and notes NE's position on all the matters listed. The MMO is aware that the Applicant has several unresolved issues with NE and that some of these are unlikely to be resolved prior to the completion of this Examination.

The MMO notes the NE position that the ExA and decision makers will be required to make a risk-based judgement on all unresolved issues, the MMO supports this point.

8. Issues agreed as of Deadline 8

As requested by the ExA at ISH 14, the MMO has set out a comprehensive list of which issues have been agreed in relation to these projects at Deadline 8. Issues that remaining outstanding are in Section 9.

8.1 Marine Geology, Oceanography and Physical Processes

The MMO is content that all issues associated with Marine Geology, Oceanography and Physical Processes have been closed out between the MMO and the Applicant. This has been captured adequately in our SoCG with the Applicant of which the final version will be submitted at Deadline 8.

8.2 Benthic Ecology

The MMO considers that, all matters related to Benthic Ecology have been closed out between the MMO and the Applicant, noting that for the Outline Sabellaria Reef Management Plan the MMO supports the outstanding issue for NE.

This has been captured in our SoCG with the Applicant of which the final version will be submitted at Deadline 8.

8.3 Commercial Fisheries

The MMO considers that all matters related to Commercial Fisheries have been closed out between the MMO and the Applicant. This has been captured adequately in our SoCG with the Applicant which has been submitted for the final time at Deadline 8.

8.4 Shellfish Ecology

The MMO considers that all matters related to Shellfish Ecology have been closed out between the MMO and the Applicant. This has been captured adequately in our SoCG with the Applicant which has been submitted for the final time at Deadline 8.

8.5 Monopiles for Offshore Platforms

The MMO is content with the inclusion of the monopile and that it has been adequately assessed within the Environmental Statement. The Applicant has confirmed that the platform will be in the array area and not the cable corridor and is likely to be a location of the proposed wind turbine foundation. The MMO believes this alleviates the concern and that there is no requirement for additional modelling. The MMO will ensure that the layout plan is reviewed internally post consent and note that modelling may be required if this is not the case.

8.6 Contaminant Sampling and Disposal Sites

There remains an issue regarding the sediment sampling conducted by the Applicant for these projects. The MMO's current position is that the sampling that has been completed is not sufficient to allow for the MMO to designate the disposal sites.

This is because the sampling undertaken to date does not satisfy requirements set out in the OSPAR Convention for the Protection of the Marine Environment of the North-East Atlantic. In



these circumstances, the MMO would normally advise that all dredge and disposal activity should be removed from the dDCO and a separate sediment sampling plan and marine licence sought by the Applicant.

However, due to the late stage of the application process the MMO has made a pragmatic decision to agree to the inclusion of the dredge and disposal activity within the DCO consent.

The MMO understands that the Applicant considers that sufficient contaminant sampling has been undertaken for these projects and this remains their position, however, the Applicant has engaged with the MMO on this issue in an effort to draft a condition to secure that further sampling should take place, the MMO thanks the Applicant for their commitment to this.

The MMO notes that Part 1, Paragraph 2 of both Schedule 13 and 14 will be updated as set out in Section 1 of REP7-068.

In addition to this update the Applicant has also confirmed the following text will be included in Schedule 13 and 14 as an additional condition at Deadline 8:

Dredge and disposal

(X) The undertaker must not undertake dredge or disposal activities until the following have been submitted to and approved in writing by the MMO—

(a) details of an additional sediment contaminants sampling campaign; and

(b) a dredge and disposal process report detailing—

(i) the results of the sampling campaign referred to in paragraph (1)(a); and

(ii) the requirements to be adhered to during any dredge and disposal activities.

(2) Any dredge and disposal activities must be undertaken in accordance with the dredge and disposal process report approved under paragraph (1).

The MMO is content with this wording and therefore for the matters of this Examination this has been agreed in the SoCG to be submitted by the Applicant at Deadline 8.

8.7 Completion of Construction Condition

The MMO continued discussions with the Applicant in relation to the inclusion of a condition for the completion of construction and understands the Applicant is updating Schedule 13 and 14 to include the following conditions:

Schedule 13

Completion of construction

(1) The undertaker must submit a close out report to the MMO and the relevant statutory nature conservation body within three months of the date of completion of construction. The close out report must confirm the date of completion of construction and must include the following details—

(a) the final number of installed wind turbine generators; and

(b) the installed wind turbine generator parameters relevant for Ornithological collision risk modelling.

(2) Following completion of construction, no further construction activities can be undertaken under this licence.

Schedule 14

Completion of construction

(1) The undertaker must submit a close out report to the MMO and the relevant statutory nature conservation body confirming the date of completion of construction within three months of the date of completion of construction.

(2) Following completion of construction, no further construction activities can be undertaken under this licence.



The MMO is content with these conditions and believes that this is a good position at this stage and will feed these condition into the discussions at The Crown Estate-sponsored Ornithological Headroom Discussion Group.

8.8 SNS SAC SIP Condition 26 (Schedule 13) and Condition 22 (Schedule 14)

The MMO advised that the wording of the SNS SAC SIP condition was agreed at ISH15 with the wording of the condition, however after further discussions with NE on 22 March 2021, it was agreed that there was a need to ensure there would be a separate SNS SAC SIP 6 months prior to each noisy activity (piling and UXO clearance activities) and the MMO believes that the easiest way to set this out is to separate the activities.

The MMO proposed wording to the Applicant on 23 March 2021 and after further discussions the MMO can confirm that the Applicant will be updating the dDCO at deadline 8 to include the following agreed conditions.

Southern North Sea Special Area of Conservation Site Integrity Plan (Piling)

—a) (1) *No piling activities can commence until a Site Integrity Plan (SIP), which accords with the principles set out in the in principle East Anglia TWO Project Southern North Sea SAC Site Integrity Plan, has been submitted to, and approved in writing, by the MMO in consultation with the relevant statutory nature conservation body.*

(2) *The SIP submitted for approval must contain a description of the conservation objectives for the Southern North Sea Special Area of Conservation (SNS SAC) as well as any relevant management measures and it must set out the key statutory nature conservation body advice on activities within the SNS SAC relating to piling as set out within the JNCC Guidance and how this has been considered in the context of the authorised scheme.*

(3) *The SIP must be submitted to the MMO no later than six months prior to the commencement of piling activities.*

(4) *In approving the SIP the MMO must be satisfied that the authorised scheme at the pre-construction stage, in-combination with other plans and projects, is in line with the JNCC Guidance.*

Southern North Sea Special Area of Conservation Site Integrity Plan (UXO clearance)

—b) (1) *No removal or detonation of UXO can take place until a Site Integrity Plan (SIP), which accords with the principles set out in the in principle East Anglia TWO Project Southern North Sea SAC Site Integrity Plan, has been submitted to, and approved in writing, by the MMO in consultation with the relevant statutory nature conservation body.*

(2) *The SIP submitted for approval must contain a description of the conservation objectives for the Southern North Sea Special Area of Conservation (SNS SAC) as well as any relevant management measures and it must set out the key statutory nature conservation body advice on activities within the SNS SAC relating to removal or detonation of UXO as set out within the JNCC Guidance and how this has been considered in the context of the authorised scheme.*

(3) *The SIP must be submitted to the MMO no later than six months prior to removal or detonation of UXO being undertaken.*

(4) *In approving the SIP the MMO must be satisfied that the authorised scheme at the pre-construction stage, in-combination with other plans and projects, is in line with the JNCC Guidance.*

The MMO has agreed that the Guidance definition will be included as an interpretation within the DMLs and has no further comments on this condition.

8.9 Control of piling and UXO detonations

The MMO advised that the wording of Condition 27 (Schedule 13) and Condition 24 (Schedule 14) was largely agreed. The only outstanding issue was the need to define 'UXO detonation' within the condition.



The MMO, NE and the Applicant have had further discussions on this matter and it has been agreed that this can be included in the MMMP and SIP. The MMO will review this document and provide final confirmation at Deadline 9.

8.10 Red Throated Diver Condition

As set out in response to Action Point 9 (Section 4.4) the MMO has proposed a small amendment to Condition 17 (1)(g)(vi):

(vi) procedures *which must* ~~to~~ be adopted within vessels transit corridors to minimise disturbance to red-throated diver, *during 1 November and 1 March inclusive*, which must be in accordance with the best practice protocol for minimising disturbance to red-throated diver.

The MMO believes NE are content with this condition and the Applicant has updated this in the dDCO to be submitted at Deadline 8. This has been included as agreed within the SoCG.

8.11 dDCO and DMLs

The below articles and conditions have been agreed with the Applicant and there is no further amendments required.

Part 7

- Article 36: Certification of plans etc.
- Article 37: Arbitration

Schedule 1 Part 3

- Requirement 13 – Landfall Method Statement
 - As set out in Section 2.1, the MMO has reviewed this requirement and proposed an amendment to the Applicant to include the MMO as a consultee. The MMO understands the Applicant is updating the dDCO to include this requirement and is content with this wording.

Schedule 13 Part 2

- Conditions 1 to 15
- Condition 17
 - The MMO is content with this condition.
- Conditions 18, 19 and 20
- Condition 21(3) – Construction Monitoring
 - The MMO is content to revert back to the wording below, which was previously agreed by the Applicant and NE, and understand this will be updated at Deadline 8.

(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 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 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.

- Conditions 22 and 23



- Condition 25 – Co-operation
 - The MMO is content with this wording.
- Conditions 26
 - As per Section 8.8 this wording is now agreed.

Schedule 14 Part 2

- Conditions 1 to 11
- Condition 13
 - The MMO is content with this condition.
- Conditions 14, 15 and 16
- Condition 17(3) – Construction Monitoring
 - The MMO is content to revert back to the wording below, which was previously agreed by the Applicant and NE, and understand this will be updated at Deadline 8.

(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 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 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.
- Conditions 18 and 19
- Condition 21 - Co-operation
 - The MMO is content with this wording.
- Conditions 22
 - As per Section 8.8 this wording is now agreed.

The MMO notes that for some other conditions the wording has been agreed however the position for including the condition within the DML is not agreed therefore these have been included in Section 9 for clarity.

Schedule 17

The MMO welcomes the inclusion of this schedule and is content with the current wording. The MMO will review the updated version of the dDCO to be submitted at Deadline 8 and will advise if this position has changed for Deadline 9.

9. Issues not agreed as of Deadline 8

9.1 Marine Mammals

Section 7.4 highlighted that there is one outstanding point in relation to the SNS SAC SIP and that the Applicant will be updating the document at Deadline 8 to ensure TTS is included.

The MMO will confirm that this matter is closed at Deadline 9.



9.2 Underwater Noise

The MMO had a meeting with the Applicant on 22 March 2021 and discussed the outstanding issue in relation to the cumulative sound exposure level (SEL_{cum}) assessment and the modelling for piling more than one pile in a 24-hour period.

The Applicant presented information in relation to sequential piling for pin piles (jacket foundation) in a single location and it looked satisfactory on the call. The Applicant provided the information on 23 March 2021 and the MMO has reviewed this and the MMO is content with this information.

However, the MMO still requires the worst case scenario in relation to piling within 24 hours for monopiles. The MMO provided comments to the Applicant on 25 March 2021 understanding that there may not be a possibility for this to be updated at Deadline 8. The MMO has included this in Annex 1 of this document.

To summarise the MMO requests that this is updated to take the worst case scenario for monopiles into account. This needs to be acknowledged and referenced in the document and any evidence or justification to the contrary to be set out in the document. The MMO notes that for monopiles in separate locations in a 24 period – the modelling may need to be updated once the locations of the piles have been identified – if this worst case scenario is required – this should also be referenced within the document as the construction monitoring and analysis report needs to be able to refer back to the predictions in the Environmental Statement.

9.3 Marine Water and Sediment Quality

Site Characterisation reports

The MMO is still not content with the Site Characterisation Report [REP5-009] at this stage however has agreed this can be updated post consent to alleviate the concerns in relation to the disposal sites. This is still an outstanding matter in the SoCG to be submitted by the Applicant at Deadline 8 as this is an agreed route forward by both parties. The final comments sent to the Applicant on this matter are in Annex 2 of this document.

All other matters in relation to marine water and sediment quality have been agreed as per Section 8.6 above.

9.4 Fish Ecology

Herring Spawning

The MMO provided detailed comments on herring Spawning in Section 10 of REP6-104 and REP7-068. This included additional data that was required by the Applicant to define a restriction between the Herring Spawning period 1 March and 31 January.

It was agreed between both parties that this could be done post consent so the data was up to date. In doing this the MMO proposed a condition to the Applicant which was amended and included as Condition 28 (Schedule 13) and Condition 24 (Schedule 14) in the dDCO submitted at Deadline 7 (REP7-006), set out below:

Herring spawning

24.—(1) *The undertaker must not undertake pile driving or UXO detonations during the herring spawning period.*

(2) *The “herring spawning period” means a period of **approximately** 14 days between 1 November and 31 January to be confirmed in writing by the MMO following submission of a herring spawning report by the undertaker which analyses the International Herring Larval Survey data for the periods 1-15 January and 16-31 January for the preceding ten years in order to determine when the highest larval densities occur.*



- (3) The report referred in paragraph (2) must be submitted to the MMO at least six months prior to—
- (a) the date on which it is intended for UXO clearance activities to begin; or
 - (b) the commencement of construction,
- whichever is earlier.

As stated in Section 2.1 of this document the MMO is content with the proposed updates for Deadline 8 in relation to the addition of unless otherwise agreed in writing in part 2 and the inclusion of the method to the analysis in part 3, however, there is an outstanding concern regarding the phraseology '*period of approximately 14 days*'.

The MMO considers that a specific number of days should not be included in this condition as the number of days is unknown at this time, it could be more or less than 14 days.

The MMO notes that if this data had been produced a specific restriction could be set at this stage and if the Applicant wanted to change this with more up to date data post consent this could be done with a DML variation. If this data was produced during the Examination then there may not be an outstanding issue as there would be a defined period.

The MMO understands the Applicant's concerns in relation to the risk to the business as without this wording the whole period from November-January would potentially need to be excluded from their works schedule and continued liaising with the Applicant to see if there could be changes made to agree this matter.

The MMO and the Applicant had a meeting on 22 March 2021 and it was clear that this condition wording would not be agreed by the end of Examination. Therefore the MMO has set out the final position below and believe it is not for the matter of the SoS to make the final decision.

The MMO does not believe that the wording '*approximately 14 days*' meets the 'Five Tests' as adopted from the National Planning Policy Framework (2012), these are:

1. The condition must be **Necessary**.
2. The condition must **Relate** to the activity or development.
3. The condition must be **Precise**.
4. The condition must be **Enforceable**.
5. The condition must be **Reasonable**.

The MMO believes that the current condition is not precise enough or enforceable. In relation to precise the word approximately is defined as a word that is used to show that something is almost, but not completely, accurate or exact; roughly. This is the opposite of precise. Therefore the MMO considers that the current draft of the condition is not precise and therefore not enforceable.

In addition to this, this wording is not consistent with standard conditions on Marine Licences or other Deemed Marine licences that have been consented. The MMO has agreed to a different wording than that set out in the Rampion Offshore Windfarm herring spawning condition set out in Section 3 (Action Point 15) of REP6-104, however the inclusion of '*approximately 14 days*' goes against this.

The MMO believes the following condition should be included as this sets out a defined period within the whole herring spawning season.

Herring spawning

24.—(1) *The undertaker must not undertake pile driving or UXO detonations during the herring spawning period.*

(2) *The "herring spawning period" means a period ~~within of approximately 14 days between~~ 1 November and 31 January to be confirmed in writing by the MMO following submission of a herring spawning report by the undertaker which analyses the International Herring Larval*



Survey data for the periods 1-15 January and 16-31 January for the preceding ten years in order to determine when the highest larval densities occur.

(3) The report referred in paragraph (2) must be submitted to the MMO at least six months prior to—

- (a) the date on which it is intended for UXO clearance activities to begin; or*
 - (b) the commencement of construction,*
- whichever is earlier.*

The MMO can confirm that all other comments on Fish Ecology have been resolved.

9.5 UXO clearance activities included in Deemed Marine Licence

The MMO position remains that the best mechanism for controlling UXO clearance is a separate marine licence.

The MMO believes that this is a concern for consistency with existing Offshore Wind Farms, if the inclusion of UXO clearance activities in the DML, this does set a precedent, the MMO considers that it could be difficult to manage multiple consents that have UXO clearance activities on the main DCO in relation to in-combination effects.

The MMO believes that UXO clearance is a high risk activity and it is best placed to manage these activities through a separate marine licence. Further reasoning behind this approach is for the consideration of best available evidence and technology which may have progressed by the time the activity is taking place, and for implementation of this as appropriate.

The MMO put forward a without prejudice position on the wording included in Condition 16 (Schedule 13) and Condition 12 (Schedule 14) that highlighted multiple issues with the condition wording. The MMO welcomes the work that the Applicant has done to ensure all factors are secured within the DML and understands only one amendment will be added to the condition in Part 5 to include a timescale of 3 months.

Currently both parties and NE agree on the wording of the UXO Clearance Activities condition.

Notwithstanding this, the MMO's position remains unchanged and consider it is now up to the ExA recommendation and Secretary of State (SoS) to make a decision on whether UXO clearance activities should be included within the DCO.

9.6 New scour protection and cable protection during operation

The MMO considers that new scour and cable protection that is not defined as maintenance should not be included in the DCO and should be in a separate marine licence.

This refers to installing new scour and cable protection in locations where protection was not installed during construction. The MMO believes that the Outline Operations and Maintenance Plan (OOMP) should be updated to show a separate licence should be applied for this activity and Condition 24 (Schedule 13) and Condition 20 (Schedule 14) should be removed from the DMLs. The MMO will maintain this position until the end of Examination.

Notwithstanding this, the MMO provided a 'without prejudice' condition at Deadline 6 (REP6-104). This was to ensure if the SoS was minded to include the activity that it would only be allowed for 5 years and that adequate information was provided for each campaign of activities.

The MMO and the Applicant continued discussions on this condition wording and the Applicant updated the dDCO to include the agreed wording at Deadline 7 (REP7-006). The MMO is content with this wording and the amendments to the OOMP but maintains the position that a separate marine licence should be sought for this activity.

9.7 Article 5 – Benefit of the Order

The MMO raised some concerns at ISH and has set these out in section 2.1 of this document.



To summarise, the MMO refers to Article 6 of the Norfolk Vanguard DCO and Article 5 Hornsea 3 (HOW3) Offshore Wind farm DCOs, in particular, parts 1, 4, 10c or 6c and 14, 15 and 16 or 9, 10 and 11. The MMO believes that these sections should be included in the dDCO to ensure that there is a standard condition for all DCOs going forward.

The MMO continued discussions with the Applicant on 22 March 2021 and understands the dDCO will be updated to include the details for the notification information but does not believe that other points are required.

The MMO welcomes the inclusions of the notification details and understands the Applicant's position on the other points raised but believes the additional details in set out above are required to maintain a standard across the DCOs.

This position is not agreed with the Applicant and this position is unlikely to be agreed by the end of the Examination therefore both parties consider that it should be left to the Secretary of State to decide.

9.8 Schedule 18

The MMO understands that the Applicant is going to update the name of Schedule 18 DCO to 'Offshore Ornithology Compensation Measures'. The MMO is content with this update.

At ISH 15, the MMO set out that a timescale should be included in condition 3 of each section of the compensatory packages to ensure that it was clear on how long the consultation period was.

The MMO understands the Applicant does not believe that this is necessary or appropriate in the schedule as timescales are not specified elsewhere in the Schedule. The Applicant have advised that a 6 week timescales will be included in the 'Offshore Ornithology Without Prejudice Compensation Measures document' for which the Kittiwake Implementation and Monitoring Plan must be based on and for each of the strategies in the 'Offshore Ornithology Without Prejudice Compensation Measures document'. The MMO however considers that, notwithstanding the Applicant's position, the compensation measures are a key aspect of the DCO. Therefore, the inclusion of consultation timescales will aid clarity and assist the SoS when determining the security of such measures.

9.9 Implications of Hornsea Project Three Offshore Wind Farm Decision

The MMO's general position is that any compensation should be secured within the DCO as it is for the Secretary of State as the competent authority to ensure the compensation is secured and adhered to and any licensable activities would require a separate marine licence.

The MMO notes if there are licensable activities as part of the compensation then the Applicant may request this to be included within the DMLs. Again, the MMO is reviewing how this would work in principle and how this would be considered within a DML.

In relation to Schedule 14 the MMO is still discussing the implications in detail internally. The MMO does have comments on Part 2, Benthic Compensation Measures, Part 17 set out below:

17. No later than four months prior to each deployment of cable protection, except where otherwise stated or unless otherwise agreed in writing by the MMO, the undertaker must submit the following documents for approval by the MMO:

(a) A decommissioning feasibility study on the proposed cable protection to be updated at intervals of not more than every ten years throughout the operational phase of the project; and

(b) A monitoring plan including appropriate surveys of cables situated within WNNC and NNSSR that are subject to cable protection to assess the integrity and condition of that cable protection and determine the appropriate extent of the feasibility of the removal of such cable protection having regard to the condition of the cable protection and feasibility of any new removal techniques at that time, along with a method statement for recovery of cable protection.



The MMO does note that this wording does not appear in the East Anglia One North (EA1N) and EA2 Schedule 18 but would like to highlight the concerns to inform the SoS if this to be added during the decision making process.

Part 17 appears to give the MMO responsibility in signing off the decommissioning feasibility study and a monitoring plan. The MMO believes that the DCO should be the place to manage compensatory measures (unless there is a defined offshore activity at the stage of consent) as the decision maker, and therefore regulator, it is for the SoS to discharge requirements.

The MMO is content with being a consultee, but adds, as stated in Section 9.8 that a timescale should be set out within the schedule for the consultation process.

The MMO does not have any regulatory role within Schedule 14 and therefore as this is not set out in the DMLs then it does not fall under the Marine and Coastal Access Act 2009, and this means that the MMO has no enforcement powers. The MMO believes that future compensatory measures do not include the MMO signing off documents.

Notwithstanding this position, if the SoS is minded for the MMO to discharge documents then this should be part of the of a separate DML that sets out the compensatory measures as the MMO considers that these measures should be decided by the SoS as the competent authority. The MMO believes that if this is part of the decision the MMO should be consulted on any additional conditions added to the compensatory measures

The MMO would also add that unless discussed in the Examination that any new conditions that are likely to be added to the DML at the decision stage, the MMO could be consulted on these to ensure they meet the 'five tests' ensuring enforceability.

9.10 Implications of Norfolk Vanguard Offshore Wind Farm Judicial Review Decision

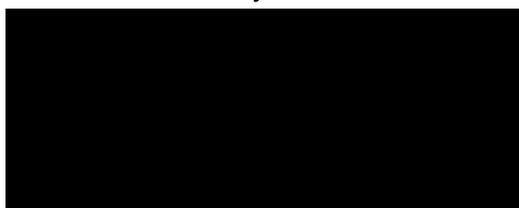
The MMO is continuing to discuss this matter internally. However, the MMO notes that the review decision was based upon the intention to defer the cumulative impact assessment to a later DCO application in the same vicinity. The MMO therefore discourages any potential plan to include this approach in any capacity for these applications.

10. Other Comments

10.1 SNS Regulators Group

The SNS Regulators Group met on 18 March 2021 and the MMO highlighted at this meeting the urgent need to ensure the concerns of the Statutory Nature Conservation Bodies (SNCB) are resolved. The MMO will continue to engage with the group and the SNCB's to establish a process.

Yours Sincerely,



Jack Coe

Marine Licencing Case Officer



[\[Redacted\]@marinemanagement.org.uk](mailto:jack.coe@marinemanagement.org.uk)



Annex 1: Monopile within a 24 Hour period

Firstly we want to thank all the team for the hard work on supplying the additional information on UWN.

The basic position is that they are content with the jacket pin piles but not for monopiles. We will be mentioning this in our Deadline 8 response for audit but are happy to continue discussions next week. If it is easier to send over any additional text to review, we have agreed this is acceptable to try and agree this issue.

As noted in the Subacoustech note, no concurrent piling is proposed. The MMO concerns, however, stem from multiple piles installed sequentially. Therefore, modelling has been undertaken to predict the noise exposure from the installation of four sequential piles for a wind turbine generator (WTG) multi-leg jacket foundation, at a single location¹, to marine mammal receptors, in comparison to the single driven foundation pile presented in the EA1N/EA2 Environmental Statement.

Remodelling of the underwater noise exposure for marine mammals at EA2 and EA1N has shown that there is a small increase in the PTS and/or TTS ranges for mid-frequency and high-frequency cetaceans and pinnipeds, when considering four sequential driven pile installations compared to a single installation. Overall, the modelling demonstrates that the effect of subsequent piles at a given location is relatively modest, perhaps as expected, since it is presumed that the animals largely vacate the surroundings during the installation of the first pile. Therefore, the MMO is content that my concerns regarding multiple piles installed in a single location have now been addressed.

However, in response to the following text on page 4 of the Subacoustech note:

“These results represent the effect of installation of multiple piles for a jacket foundation in a 24-hour period. It is understood that the monopile option for turbine foundations could potentially include up to two pile installations in a day. The results for monopiles are unlikely to be significantly different to those provided for the pin piles above: while the overall noise level produced by a driven monopile might be slightly greater than from the smaller multi-leg jackets, fewer piles driven in a day will lead to less energy introduced overall”.

Please note that the case of more than one monopile installed in 24-hours is likely to be a more complex situation, particularly where the piling locations of the subsequent monopiles are substantially spaced apart. If the piles are sufficiently spaced apart, so that during the installation of the first pile, there is no displacement of animals in the vicinity of the second pile location, then it is expected that the second pile would produce similar impacts as the first, and these would be in addition to the impacts of the first pile. To put it simply if the animal flees it may flee to the second piled location in the 24 hours and therefore have additional impacts.

In summary, the evidence presented demonstrates that the potential additional effects from the installation of four piles (jacket foundation) at a single location are relatively modest. With regard to the installation of more than one monopile in a 24-hour period, there will be no concurrent piling and therefore we would not require additional modelling.

However, from a technical point of view, we emphasise that the effect areas scale up directly with the number of monopiles installed per day. The affected areas within a 24-hour period, for two monopiles for example, are essentially twice the size if the piles are sufficiently far apart, as noted above. If the monopiles are not spaced sufficiently apart, then there is the risk that a receptor may be exposed to both the first pile, and then the second pile, and may experience effects above what is predicted for a single monopile.

¹ Please note that in the Subacoustech note it is stated that “concerns stem from multiple piles installed sequentially from a single location”. However, multiple piles may not be installed in a single location. For example, in the case that more than one monopile is installed, then it is likely that the locations will be different.



The MMO understands that this document will be classed as a certified document. The MMO requests that this is updated to take the worst case scenario for monopiles into account. This needs to be acknowledged and referenced in the document and any evidence or justification to the contrary to be set out in the document. The MMO notes that for monopiles in separate locations in a 24 period – the modelling may need to be updated once the locations of the piles have been identified – if this worst case scenario is required – this should also be referenced within the document as the construction monitoring and analysis report needs to be able to refer back to the predictions in the ES.



Marine
Management
Organisation

...ambitious for our
seas and coasts



Annex 2: Site Characterisation Report

FID	MMO comment as per Annex 1 in REP6-104	Applicant response	MMO response 24 March 2021
088	<p>In relation to HU212, because there was disposal activity at this site from the EA1 project, as detailed in the EA1N Site Characterisation Report, this disposal site is considered 'Open' as opposed to 'Closed'. Because of this, the proposal now relates to an open disposal site which has recently received disposed sediment. The premise of the proposal to open a new disposal site from HU212 and the EA1N area made was predicated on the status of the site not having received any disposed material. Furthermore, the EA1N Site Characterisation Report refers to the disposal of material from EA3, which indicates that there is an active licence consenting future disposal of material at the site, For these reasons, a new site cannot be designated that would overlap HU212 and the EA1N site.</p>	<p><i>The Applicants have been working on the assumption that the disposal site has been open since before the application submission and indeed the fact the site is open has been the premise of the discussions around the ability of EA1N to share the HU212 site. The Applicants have never stated an intention to designate a new disposal site that would overlap with HU212 because it is open. However, the Applicants considered it to be a pragmatic way forward to potentially extend the HU212 disposal site to cover the entire EA1N site as explained in the updated site characterisation report (REP5-009).</i></p>	<p>The MMO recognises that the Applicants have not stated an intention to designate a new disposal site. However, an existing, open disposal site cannot be extended or amended.</p> <p>This particular comment was referencing a comment set out previously which stated that the site appears to be closed. With the provision of the East Anglia One disposal returns, the initial proposal could no longer be a valid way forward.</p>
089	<p>In their comments Cefas state that HU212 can be used for the disposal of EA1N pending the question of the site's capacity to receive material.</p>	<p><i>The Applicants consider that they have demonstrated in the updated Site Characterisation Report (windfarm site) (REP5-009) that sufficient disposal capacity is available at the HU212 site.</i></p>	<p>Please see the response in row 94 concerning the assessment of HU212's disposal capacity.</p>
090	<p>The remaining area of EA1N overlaps with TH075 (Warren Springs Experimental Area 1) and TH026 (AEA Experimental Area). TH075 is currently closed and the designation of a new disposal site over this area to align with the EA1N windfarm area is acceptable, however, it is unclear whether the same can be said for TH026. This site is</p>	<p><i>The Applicants have demonstrated within the Site Characterisation Report that the disposal of sediment of the assessed worst case quantities would not result in impacts that are significant and therefore do not consider that additional information is required to demonstrate that sediment can be disposed of in disposal site TH026.</i></p>	<p>The characterisation of the disposal sites including nature of the seabed and impacts of disposal over these sites need to be addressed. There is no dredge data for area TH026 (AEA Experimental Area), as this was data are preexisting the site would need to be considered as a new area for disposal and characterisation assessed for that purpose.</p>

	currently closed, and further evidence would be required that this area was acceptable for use. The MMO do not believe work of this nature has been conducted. In this regard, the MMO recommend that a new disposal site is designated only over the overlapping area of EA1N and TH075, but not over the overlapping area of EA1N and TH026. This conclusion can be amended should any evidence concerning the use of TH026 be provided which indicates that disposal of sediment in this area is acceptable.	<i>Notwithstanding this, the Applicants understand that the MMO/Cefas would likely be one of the few holders of any information or data relating to the disposal of sediment within this site. Indeed, the only information available to the Applicants is held on the attributes list in the GIS shapefiles which does not provide any detailed information.</i>	The MMO hasn't been able to confirm in the context of this consultation whether the overlapping area of TH026 was characterised as part of a new disposal site, i.e. with particle size data. If it is the case that the overlapping area of TH026 has indeed been characterised in this way such that disposal of EA1N dredged sediment in the area would be appropriate based on similar physical composition, then the MMO would agree with the Applicant's assertion.
Sediment Volumes			
091	The documents presented for review adequately detail the likely volumes of sediment that the proposed re-designated site HU212 would receive. Table 5 of the EA1N Site Characterisation Report shows that only 246.8 m ³ of material was disposed at site HU212 for the generation assets of East Anglia ONE (EA1), out of the total licensed volume for generation assets of 2.8M m ³ . This means that there is an outstanding disposal volume (remaining disposal capacity) of approximately 2.79 Mm ³ , which is just above the worst-case anticipated disposal volume for EA1N (2.9 Mm ³). Herein, the Applicant proposes that approximately half of the anticipated EA1N disposal volume (~1.4 Mm ³) be disposed within site HU212.	<i>Noted</i>	N/A
092	The documents presented for review adequately detail the likely volumes of sediment that the proposed re-designated site HU212 would receive.	<i>Noted</i>	N/A

	<p>Table 5 of the EA1N Site Characterisation Report shows that only 246.8 m³ of material was disposed at site HU212 for the generation assets of East Anglia ONE (EA1), out of the total licensed volume for generation assets of 2.8M m³. This means that there is an outstanding disposal volume (remaining disposal capacity) of approximately 2.79 Mm³, which is just above the worst-case anticipated disposal volume for EA1N (2.9 Mm³). Herein, the Applicant proposes that approximately half of the anticipated EA1N disposal volume (~1.4 Mm³) be disposed within site HU212.</p>		
093	<p>Section 5.1 of the EA1N Site Characterisation Report also considers the volumes proposed for disposal for the East Anglia THREE (EA3) wind farm, which has a total anticipated disposal volume of approximately 2.5 Mm³. The Applicant stated that: "However, it is important to note that 65% [1.6 Mm³] of [the total disposal capacity for EA3] is for generation assets for which it is reasonable to assume sediment will be disposed within the East Anglia THREE windfarm site and therefore outside of the area of HU212 which overlaps with East Anglia ONE North." Notwithstanding the generation assets, the anticipated disposal volumes for site HU212 from EA3 would comprise 878,896.5 m³ (transmission and interconnector assets only).</p>	<i>Noted</i>	N/A
094	<p>Considering the likely volumes that would be disposed from EA1N total volumes, and EA3 transmission asset volumes, SPR have concluded that the</p>	<p><i>The disposal volume by the EA1 project within the HU212 site was 246.8m³. This volume is nugatory compared to the 2.8 million m³</i></p>	<p>The MMO notes the Applicant's points concerning the actual disposal volumes for EA1. The MMO agrees that the volume was nugatory</p>

	<p>remaining disposal capacity for site HU212 (2.79 Mm³) is greater than the disposal volumes anticipated for EA1N and EA3 (2.3 Mm³). Whilst this is a reasonable conclusion to make, it should be noted that the EA1N overlapping area of HU212 is much smaller than the HU212 site as a whole (Figure 1). It is unclear from the materials presented for review whether the disposal volumes from EA1 were placed throughout HU212 as a whole or whether they were placed in an area of a similar spatial scale as the EA1N/HU212 overlap. There is a risk that, should the former scenario be true, any impacts from disposal could be of a greater magnitude than those assessed for EA1, i.e. the remaining disposal capacity the Applicant refers to would have been assessed for site HU212 as a whole, rather than the much smaller overlapping section with EA1N.</p>	<p><i>licensed for disposal in the HU212 site for EA1.</i></p> <p><i>As is envisaged for the disposal method for EA1N, the method for disposal at EA1 was from the dredger vessel whilst in transit which aids dispersion, a process which would also be aided by natural processes. This approach ensures that material is dispersed across the whole disposal site to reduce mounding.</i></p> <p><i>No information on exactly where within the HU212 site the 246.8m³ of sediment from EA1 was disposed is available however it is very highly likely that this will already have been dispersed by natural processes so is not considered to be an issue.</i></p> <p><i>The assessment of disposal is largely driven by physical processes and the rate of dispersion which therefore isn't determined by lines on a map. The impacts of dispersion of sediment/increases in suspended sediment concentrations are assessed in Chapter 7 of the ES (APP-055) and discussed in the context of the disposal sites in section 7.1 of the site characterisation report.</i></p> <p><i>The assessment states:</i></p> <p><i>Coarser sediment fractions (medium and coarse sands and gravels) and aggregated 'clasts' of finer sediment would settle out of suspension close to the foundation location, whilst disaggregated finer sediments (fine sands and muds) would be more prone to dispersion. Due to the small quantities of sediment released, however, these disaggregated finer sediments are likely to be widely and rapidly dispersed, resulting in only low elevations in suspended sediment concentration.</i></p> <p><i>Modelling for East Anglia ONE (ABPmer 2012) predicted that away from the immediate</i></p>	<p>and clarify that whether it has yet dispersed is not a concern in this situation.</p> <p>Concerning their responses to my point regarding disposal site capacity, I do not find that the issues raised have been addressed. Indeed, as the Applicant points out, the assessment of disposal is difficult to determine by "lines on a map", however, the detail provided is limited in how it closes out the initial concern.</p> <p>Fundamentally, what the Applicant is proposing is, that a volume similar to, but less than the initial assessment volume for the entirety of HU212, is disposed in a section of HU212 that is much smaller. In this regard, the assessment that has already been conducted and what's been presented does not scale.</p> <p>For example, if you have assessed that 100 m³ can be disposed of in a 1000 m² area, and that you wish to dispose of 90 m³ in a 100 m² area, the assessment does not scale. On the basis of the hypothetical assessment, an area that is one tenth the size of the original assessment should, at a very rudimentary basis, support one tenth the volume of the original assessment. Naturally there are many other factors concerning this, i.e. likely dispersion, the presence of any sensitive receptors etc, but ultimately, the MMO believes that the assessment presented does not support the claim.</p>
--	--	--	--

	<p><i>release locations, near-field elevations in suspended sediment concentration above background levels were low (less than 10mg/l) and within the range of natural variability. Indeed, concentrations were generally no greater than 5mg/l at 5km from the release location, indicating wide dispersion in low concentrations. Net movement of fine-grained sediment retained within the plume was to the north, in accordance with the direction of residual tidal flow, although gross movement to both the north and south was possible depending on the timing of release. Sediment concentrations arising from installation of one foundation were deemed unlikely to persist for sufficiently long that they significantly interact with subsequent operations and therefore no cumulative effect was anticipated.</i></p> <p><i>The Applicants therefore consider that there should be no impediment to granting a disposal licence for EA1N windfarm site at the HU212 disposal site.</i></p>	
--	--	--