

Rampion 2 Wind Farm

Statement of Common Ground – Marine Management Organisation

July 2024

Rev F

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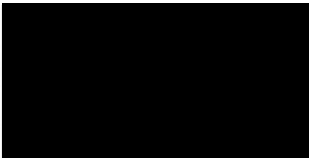
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1. Introduction

1.1 Background

- 1.1.1 This Statement of Common Ground (SoCG) has been prepared between Rampion Extension Development Limited (RED) (hereafter referred to as ‘the Applicant’) and Marine Management Organisation (MMO) to set out the areas of agreement and disagreement between the two parties in relation to the Proposed Development Consent Order (DCO) Application for the Rampion 2 Offshore Wind Farm (hereafter referred to as “Rampion 2” or “the Proposed Development”).
- 1.1.2 The need for a SoCG between the Applicant and MMO was set out within the Rule 6 letter issued by the Examining Authority on 14th December 2023 **[PD-006]**.
- 1.1.3 This SoCG covers all topics where there are areas for agreement and areas for disagreement between the Applicant and the MMO and covers the topics split by aspect as detailed in the Environmental Impact Assessment (EIA) for Rampion 2.
- 1.1.4 This SoCG has been prepared in accordance with the ‘Planning Act 2008: Guidance for the examination of applications for development consent’ (Department for Communities and Local Government (DCLG), 2015 (hereby referred to as ‘DCLG guidance’).
- 1.1.5 Following detailed discussions undertaken through pre-application engagement and consultation, the Applicant and MMO have progressed a SoCG.
- 1.1.6 It is the intention that this document provides the Examining Authority with a clear overview of the level of common ground between both parties. This document will facilitate further discussions between the Applicant and MMO and will be updated as discussions during both the pre-examination and the Examination phase.

1.2 Approach to SoCG

- 1.2.1 This SoCG has been developed during both the pre-examination phase and the Examination phase of Rampion 2. MMO issued their relevant representations **[RR-219]** and Principal Areas of Disagreement **[AS-005]** which covers the topics and points of discussion. The SoCG makes reference to other submission documents that set out, in greater detail, the discussions that have taken place between MMO and the Applicant. These documents are:
- **Consultation Report [APP-027];**
 - **Planning Statement [APP-036];**
 - **Evidence Plan [APP-243 to APP-253]; and**
 - The ‘Consultation’ section included within relevant chapters of the **Environmental Statement (ES), Volume 2 [APP-042 to APP-072]**.
- 1.2.2 The SoCG is structured as follows:

- **Section 1: Introduction:** outlines the background and approach to the development of the SoCG and provides an overview of the Proposed Development;
- **Section 2: MMO's remit:** describes the main areas of discussion within the SoCG and a summary of consultation to date; and
- **Section 3: Agreement/Disagreement Log:** provides a record of the positions of the Applicant alongside those of MMO as related to the topics of discussion and the status of agreement on those positions.

1.3 The Proposed Development

- 1.3.1 The Applicant is developing the Rampion 2 Offshore Wind Farm Project (Rampion 2) located adjacent to the existing Rampion Offshore Wind Farm Project ('Rampion 1') in the English Channel.
- 1.3.2 Rampion 2 will be located between 13km and 26km from the Sussex Coast in the English Channel and the offshore array area will occupy an area of approximately 160km².
- 1.3.3 The key offshore elements of the Proposed Development will be as follows:
- up to 90 offshore wind turbine generators (WTGs) and associated foundations;
 - blade tip of the WTGs will be up to 325m above Lowest Astronomical Tide (LAT) and will have a 22m minimum air gap above Mean High Water Springs (MHWS);
 - inter-array cables connecting the WTGs to up to three offshore substations;
 - up to two offshore interconnector export cables between the offshore substations;
 - up to four offshore export cables each in its own trench, will be buried under the seabed within the final cable corridor; and
 - the export cable circuits will be High Voltage Alternating Current (HVAC), with a voltage of up to 275kV.
- 1.3.4 The key onshore elements of the Proposed Development will be as follows:
- a single landfall site near Climping, Arun District, connecting offshore and onshore cables using Horizontal Directional Drilling (HDD) installation techniques;
 - buried onshore cables in a single corridor for the maximum route length of up to 38.8km using:
 - ▶ trenching and backfilling installation techniques; and
 - ▶ trenchless and open cut crossings.
 - a new onshore substation, proposed near Cowfold, Horsham District, which will connect to an extension to the existing National Grid Bolney substation, Mid Sussex, via buried onshore cables; and

- extension to and additional infrastructure at the existing National Grid Bolney substation, Mid Sussex District to connect Rampion 2 to the national grid electrical network.

A full description of the Proposed Development is provided in **Chapter 4: The Proposed Development, Volume 2** of the ES **[APP-045]**.

2. Marine Management Organisation's Remit

2.1 Introduction

2.1.1 The MMO is an executive non-departmental public body whose purpose is to protect and enhance the marine environment in English waters and support economic growth by enabling sustainable marine development.

2.1.2 The MMO's role in relation to the Planning Act 2008 are as follows:

- as a statutory consultee at the pre-application stage under s.42(1)(aa) of the 2008 Act and as an interested party during the examination stage; and
- as a licensing and consenting body.

2.1.3 The SoCG covers topics of the DCO application of relevance to the MMO, comprising:

- Principle of Development;
- DCO and Securing Mechanisms;
 - ▶ Marine archaeology;
 - ▶ Benthic, Subtidal and Intertidal Ecology;
 - ▶ Coastal processes;
 - ▶ Fish & Shellfish Ecology;
 - ▶ Marine mammals; and
 - ▶ Offshore and intertidal ornithology.

2.2 Consultation Summary

2.2.1 This section briefly summarises the consultation that the Applicant has undertaken with the MMO including both statutory and non-statutory engagement during the pre-application and post-application phases (See Table 2-1).

2.2.2 The Applicant and the MMO have agreed that the submitted SOCG at Deadline 5 is up to date. While the status of matters has been finalised as far as possible, some of the SOCG still report matters as being in the process of discussion. With relevant materials being submitted into Examination at Deadline 5 these need to be considered to close matters and enable the final SOCG to be submitted at Deadline 6.

Table 2-1 Consultation and Correspondence undertaken with MMO pre-application

Date and type	Description of consultation
04 August 2020	Draft Terms of Reference sent to MMO for review.
09 September 2020 Steering Group Meeting	First Steering Group Meeting to discuss the EPP.
14 September 2020 Response	MMO provides comments on draft Terms of Reference (TOR).
17 September 2020 Expert Topic Group (ETG) Meeting	First ETG Meeting to discuss the methodology for Physical Processes, the Water Framework Directive (WFD), Benthic Ecology, Fish & Shellfish Ecology and Nature Conservation
18 September 2020 Expert Topic Group (ETG) Meeting	First ETG Meeting to discuss the methodology for Offshore Ornithology.
13 October 2020 Expert Topic Group (ETG) Meeting	Additional One-to-One ETG Meeting.
13 October 2020 Response	Document 1: Rampion 2 Characterisation Surveys: Subtidal Habitats Survey: TOR received by the MMO.
21 October 2020 ETG Meeting	Evidence Plan Process (EPP) Steering Group meeting to discuss updates for the Proposed Development and activities undertaken.
30 October 2020 Response	Rampion 2 ETG Response Received from MMO
04 November 2020 Response	MMO provides comments of Document 1

Date and type	Description of consultation
06 November 2020 Response	<p>The following documents received by the MMO:</p> <p>Document 2: Rampion 2 Letter response MMO Benthic ToR_061120</p> <p>Document 3: GBERAM0919_Rampion2_Existing_Benthic_Dataset_V02.jpg</p> <p>Document 4: GBERAM0919_Rampion2_Sampling Array_V02.jpg</p>
30 November 2020 Targeted Meeting	Natural England, MMO and Cefas discussed literature, data and publications presented for fisheries and fish ecology for the purpose of the EIA.
11 February 2021 Response	MMO and scientific advisors from Centre for Environment, Fisheries and Aquaculture Science (Cefas) provide comments on Documents 1-4.
16 March 2021 Steering Group Meeting	EPP Update
18 March 2021 ETG Meeting	Second ETG Meeting to discuss SLVIA and Marine Archaeology methodology.
24 March 2021 Expert Topic Group (ETG) Meeting	Second ETG Meeting to discuss the methodology for Physical Processes, the Water Framework Directive (WFD), Benthic Ecology, Fish & Shellfish Ecology and Nature Conservation
26 March 2021 Expert Topic Group (ETG) Meeting	Second ETG Meeting to discuss the methodology for Offshore Ornithology.
14 July 2021 Letter	<p>Early engagement notifying the MMO of RED's intention to submit an application for development consent under the Planning Act 2008 for the construction, operation and maintenance and associated facilities of a new OWF. Consultation documents included the Preliminary Environmental Information Report (PEIR).</p>
15 September 2021	Section 42 Consultation Response received from MMO by The Applicant.

Date and type	Description of consultation
02 November 2021 Expert Topic Group (ETG) Meeting	Third ETG Meeting to discuss the methodology for Offshore Ornithology.
03 November 2021 Expert Topic Group (ETG) Meeting	Third ETG Meeting to discuss the methodology for Physical Processes, the Water Framework Directive (WFD), Benthic Ecology, Fish & Shellfish Ecology and Nature Conservation
04 November 2021 Expert Topic Group (ETG) Meeting	Third ETG Meeting to discuss Marine Archaeology methodology.
15 November 2021 Response	MMO provides some preliminary initial comments in respect to the DCO application.
15 February 2022 Targeted Meeting	Additional Targeted Offshore Cable Corridor Meeting.
24 February 2022 Targeted Meeting	Additional targeted Underwater Noise (UWN) mitigation meeting.
12 April 2022	Fourth ETG Meeting to discuss the methodology for Offshore Ornithology.
26 May 2022 Expert Topic Group (ETG) Meeting	Fourth ETG Meeting to discuss the methodology for Physical Processes, the Water Framework Directive (WFD) and Benthic Ecology.
16 June 2022 Expert Topic Group (ETG) Meeting	Fourth ETG Meeting to discuss Marine Archaeology methodology.
12 September 2022 Targeted Meeting	Underwater noise Black Bream.
14 October 2022	Statutory consultation carried out pursuant to Section 42 of the Planning Act 2008 notifying the MMO of RED's request for

Date and type	Description of consultation
	a consultation response of the potential amendments to the onshore cable corridor.
21 November 2022	MMO comment on the potential amendments to the onshore cable corridor noting that the modifications proposed are onshore and terrestrial in nature, thus fall outside of the MMOs jurisdiction.
30 March 2023	Underwater noise in Black Bream
Targeted meeting	
15 May 2023	Alderney Wildlife trust and State of Guernsey project update.
23 rd February 2024	Rampion 2 Statement of Common Ground Page Turn Meeting with MMO- Draft A
19 th April 2024	Expert to Expert Underwater Noise Meeting
Expert to Expert Meeting	
24 th June 2024	Expert to Expert Underwater Noise Meeting
Expert to Expert Meeting	
4 th July 2024	Rampion 2 Statement of Common Ground Page Turn Meeting with MMO- Draft B

3. Agreement/Disagreement Log

- 3.1.1 The following sections of this SoCG set out the level of agreement between the Applicant and the MMO for each relevant component of the Application identified in **paragraph 2.1.3**. The tables below detail the positions of the Applicant alongside those of the MMO and whether the matter is agreed or not agreed.
- 3.1.2 In order to easily identify whether a matter is ‘agreed’, ‘not agreed’ or an ‘ongoing point of discussion’, the agreements log in the tables below are colour coded to represent the status of the position according to the criteria in **Table 3-1** below.

Table 3-1 Position status key

Position Status	Colour Code
The matter is considered to be agreed between the parties	Agreed
The matter is not agreed between the parties, however the outcome of the approach taken by either the Applicant or the MMO is not considered to result in a material outcome on the assessment conclusions.	Not agreed- No material impact
The matter is not agreed between the parties and the outcome of the approach taken by either the Applicant or the MMO is considered to result in a materially different outcome on the assessment conclusions.	Not agreed- material impact

- 3.1.3 The overview of the status of discussion on all of the themes presented in the Agreement/Disagreement log has been reported throughout the Examination via the Statement of Commonality. The opening position of the stakeholder is reported against the evolving position of the Applicant. Where agreement is reached- this indicates that the stakeholder and Applicant mutually support the position stated by the Applicant. The date of agreement is noted and the ‘Record of Progress’ section of the SOCG tables captures how the issue reached the final ‘position status’ (key for this is found in Table 3-1 above).

Table 3-2 Status of discussions related to Development Consent Order (DCO) and Securing Mechanisms

Reference number	Matter of contention	MMO'S position	Applicant's position	Current Status	Date of agreement	Record of Progress
MMO1	Expert Technical Group Terms of Reference (ToR) timescales	Both the MMO and NE disagree with the timescales proposed in the ToR. Both concur that the timescales for review should be 4-weeks, not the proposed 2-weeks.	ToR responses will be collated, and subject to confirmation the turnaround time for documents will be amended in the ToR to reflect this.	Agreed	22/12/2020	Page Turn Meeting (23/02/24): MMO agreed with the applicant's position
MMO2	ToR new evidence	Both NE and the MMO were concerned with the wording in the ToR in relation to PEIR and cut-off date for new evidence. NE and the MMO will need to present new evidence as and when it arises.	Wording within the ToR will need to be clarified to reflect this. Any further information on new evidence presented by NE or the MMO will be incorporated into the ES. If new conservation advice or scientific understanding needs to be applied after the final application date, then this would need to be addressed through the Examination phase.	Agreed	22/12/2020	Page Turn Meeting (23/02/24): MMO agreed with the applicant's position
MMO3 This is a Principal Area of Disagreement as identified by the MMO	<p>Draft DCO - Article 5, Benefits of the Order</p> <p>Any reference to the Marine Management Organisation (MMO) and Deemed Marine Licence (DML) should be removed from article for transfer of the benefit of the Deemed Consent Order (DCO). This also relates to Part 1 (7).</p>	<p>MMO requests removing reference to the MMO in the rest of Article 5 because this transfer process should exclude the DML. However, there may be transfers which relate to the exercise of the MMO's power beyond the deeming of the marine licence. If this is the case, MMO should be consulted, and this should be set out by the Applicant</p> <p>The MMO attended ISH2 with King's Counsel to make an oral representation on Article 5. The MMO has not received the level of discussion and cooperation it hoped for from the Applicant.</p>	The wording of Article 5, Benefit of the Order is appropriate and adequate. The approach of allowing the transfer of the benefit of a marine licence with the consent of the Secretary of State is well established in DCOs for offshore wind farms. Whilst in some DCOs the transfer of the marine licence is excluded in the first part of the article dealing with the benefit of the Order, the Applicant has provided examples of Orders which allow the transfer of the benefit of the deemed marine licence subject to consultation with the Secretary of State and their consent in some circumstances. The wording of the draft DCO for Rampion 2 combines the two steps but retains the same protections as in the previously made Orders.	Not Agreed – Material Impact	31/07/24	<p>03/06/24: Deadline 4 Response: The MMO objects to the provisions relating to the process of transferring and/or granting the deemed marine licences set out in the draft DCO at Article 5. The Applicant will respond to MMO's Deadline 4 submission at Deadline 5.</p> <p>03/04/24: Deadline 2 Response: The MMO acknowledges that the Applicant notes MMO concerns, but states there is existing DCO and legislative precedent for the current wording. The MMO will provide a full response to this after reviewing the Applicant's next tracked DCO submission.</p> <p>Page Turn Meeting (23/02/24): MMO is hopeful that the Applicant will make these updates and these concerns will be resolved during Examination.</p> <p>The applicant has responded to this and it has been covered in the deadline 1 written response to the relevant representations.</p>

Reference number	Matter of contention	MMO'S position	Applicant's position	Current Status	Date of agreement	Record of Progress
MMO4 This is a Principal Area of Disagreement as identified by the MMO	Draft DCO - Part 4 Supplemental Powers (20(2) Public rights of navigation	<p>MMO notes that the public rights of navigation where any permanent structures are located within territorial waters will be extinguished and will take effect 14 days after the undertaker has submitted a plan to the SoS, Martine Coastguard Agency and the MMO.</p> <p>MMO requests clarity on this as there are no powers under the DCO for the MMO to comment or refuse.</p>	<p>This article is included because the wind farm is partially located in territorial waters where there is a right of public navigation.</p> <p>The article confirms the suspension of public rights of navigation where permanent infrastructure is located. This infrastructure will be located in accordance with the detailed design plan to be submitted and approved by the MMO under condition 11(1)(a) of the deemed marine licences, as required by condition 12</p>	Agreed	23/02/24	<p>Page Turn Meeting (23/02/24): MMO is hopeful that these concerns will be resolved during Examination.</p> <p>The applicant has responded to this and has been covered in the deadline 1 written response to the relevant representations.</p>
MMO5 This is a Principal Area of Disagreement as identified by the MMO	Draft DCO – Schedules 11 & 12 Condition 12	<p>MMO notes submission of documents and determination date is 4 months. Due to the nature of the documents and larger scale project the MMO requests these are updated to 6 months.</p> <p>MMO requests that determination dates are updated to 6 months not 4 months.</p>	<p>As the project comprises a nationally significant infrastructure project it is necessary for there to be a degree of certainty as to the programme for its delivery, particularly given the need for the project to contribute to the Government achieving its net zero target.</p> <p>Four months is considered an appropriate period for the approval of submitted details. However, the applicant is willing to work with the MMO, and Natural England as statutory nature conservation body, to identify any approvals which require a longer determination period.</p> <p>The Applicant has updated the approval period to six months in the Draft DCO [REP4-004] for the following plans:</p> <p>Project Environmental Management Plan;</p> <p>Sensitive Features Mitigation Plan; and</p> <p>Offshore Monitoring Plan.</p>	Agreed	04/07/2024	<p>Page Turn Meeting (23/02/24): MMO believes this may not be fully resolved during Examination but is hopeful that the Applicant will discuss some if not all timescales during Examination.</p> <p>The applicant has responded to this and has been covered in the deadline 1 written response to the relevant representations.</p> <p>The MMO have requested that the updated timescales be included on the updated plan for clarity.</p> <p>As per the MMO's request, the plans listed below have been updated to a 6 month approval period. Other plans listed in Condition 11(1) of the dMLs, Schedule 11 and 12 of the Draft DCO [REP4-004], have maintained a 4 month review period.</p> <p>Project Environmental Management Plan;</p> <p>Sensitive Features Mitigation Plan; and</p> <p>Offshore Monitoring Plan;</p> <p>in the Draft DCO [REP4-004].</p>

Reference number	Matter of contention	MMO'S position	Applicant's position	Current Status	Date of agreement	Record of Progress
MMO6a This is a Principal Area of Disagreement as identified by the MMO	Draft DCO – Schedules 11 & 12 – Additional Conditions	MMO requests additional conditions to be included in the DML to ensure all parties are aware of the stages of construction and maintenance, the Applicant abides with the Marine Noise Registry.	<p>The programme for the construction will not necessarily be known prior to the commencement of licensed activities. The purpose of including a scheme of stages for the onshore works is to allow the discharge of requirements in respect of each stage separately. This is not relevant for the offshore works. A construction programme is required to be submitted and approved prior to commencement of the authorised scheme pursuant to condition 11(1)(b) of Schedules 11 and 12 to the Draft DCO [REP4-004].</p> <p>Adherence to the Marine Noise Registry has been included in the draft DCO [REP4-004], in Part 2 of Schedules 11 and 12, Condition 25.</p>	Agreed	04/07/2024	<p>Page Turn Meeting (23/02/24): MMO is hopeful that the Applicant will make these updates and these concerns will be resolved during Examination.</p> <p>The applicant has responded to this and has been covered in the Deadline 1 written response to the relevant representations [REP1-017].</p>
MMO6b This is a Principal Area of Disagreement as identified by the MMO	Draft DCO – Schedules 11 & 12 – Additional Conditions- Seasonal Restrictions	<p>MMO requests additional conditions to be included in the DML for any seasonal restriction for mitigation.</p> <p>The MMO has requested that seasonal restrictions be included within the DML's as stand-alone conditions. These include seasonal piling restrictions for Herring and Black Sea bream. These have not been incorporated into the DMLs.</p>	<p>It is the Applicant's position that such a ban would be disproportionate in the context of the information presented to the Examination as to the mitigation measures that would be adopted by the Applicant in the event that piling is proposed during this period; these measures are detailed in the In Principle Sensitive Features Mitigation Plan [REP5-082].</p> <p>The implementation of a full piling ban would have a direct effect on the construction schedule of the project by prohibiting construction in the months of the year with the most accommodating weather conditions. Until the final design of the turbines and foundations, and until comprehensive geotechnical surveys are completed, it is difficult to determine with a high level of confidence, what the magnitude of the impacts on the construction schedule would be. However, preliminary construction modelling has strongly indicated that a full piling ban would be extremely challenging, leading to an additional year</p>	Not agreed – Material Impact	31/07/24	

Reference number	Matter of contention	MMO'S position	Applicant's position	Current Status	Date of agreement	Record of Progress
			or more of offshore installation activity being required.			
MMO7 This is a Principal Area of Disagreement as identified by the MMO	Draft DCO – Condition 9: (1) Unless otherwise agreed in writing by the MMO all chemicals used in the construction of the authorised project must be selected from the List of Notified Chemicals approved for use by the offshore oil and gas industry under the Offshore Chemicals Regulations 2002(a) (as amended).	The MMO will provide comments on this condition in due course. The MMO provided the following comment in their Relevant Representation [RR-219] : MMO suggests that this condition is changed to the wording below, as the offshore chemical regulations 2002(a) (as amended) do not apply to chemicals used by the offshore wind industry, and the regulations only pertain to chemicals used in the oil and gas industry. <i>"Unless otherwise agreed in writing by the MMO all chemicals, paints and coatings used in the construction and operation and maintenance of the authorised project (not subject to other regulations) with a pathway to the marine environment must be approved by the MMO. Chemicals should be submitted to the MMO at least eight weeks prior to the use of the chemical, unless otherwise agreed in writing by the MMO."</i>	The reference to these regulations is well precedented in DCOs for offshore wind farms and operates to provide prior approval for these chemicals for use in the marine environment. Where other chemicals are proposed for use, prior approval of the MMO will be required. Applicant's response to the MMO's Relevant Representation at Deadline 1 [REP1-017] . The wording has not been amended as it is consistent with the approach adopted in a number of previously granted DCOs for windfarms including the Hornsea Four Offshore Wind Farm Order, 2023, in order to provide prior approval for some chemicals. Written approval will be required for the use of any chemical not included in the list approved under the Offshore Chemicals Regulations 2002.	Not agreed – Material Impact	31/07/24	31/07/24: The MMO provided the below updated condition to the Applicant on 04 July 2024: The MMO requests that Condition 9 (1) is removed and replaced with the following condition <i>"Unless otherwise agreed in writing by the MMO, all chemicals and substances, including paints and coatings, used below MHWS for the undertaking of the licensed activities must be approved in writing by the MMO prior to use. Submission for approval to the MMO must take place no later than eight weeks prior to use."</i> Although the condition used by the Applicant has been used previously. This is a fundamental change to this process due to the ability to access the offshore chemical regulations 2002(a). The Chemicals on this list have been modelled using oil and gas structures and the use of these chemicals in offshore wind is different and require further review. This drafted condition will be the condition used by the MMO for future OWF projects and should be updated accordingly. 04/07/2024 MMO sent the new condition following the page turn meeting for inclusion in the DCO which the Applicant is now considering. 28/03/24: The Strategic Renewables Unit for MMO are currently doing some work on this. Condition wording has delayed other windfarms construction so the work should clear this up. (April/May ETA on this) Deadline 4 update from the MMO [REP4-088] : <i>"The MMO would like to update the Applicant with regards to Condition 9(1) that we are still working with our Strategic Renewables Unit (SRU) to reach the final wording for this condition. The MMO SRU</i>

Reference number	Matter of contention	MMO'S position	Applicant's position	Current Status	Date of agreement	Record of Progress
						<p>are developing new wording for this condition that will be included in all future DCO's."</p> <p>Page Turn Meeting (23/02/24): The MMO believes that any comments relating to this condition will be resolved during Examination.</p> <p>The applicant has responded to this and has been covered in the Deadline 1 written response to the relevant representations.</p>
MMO8 This is a Principal Area of Disagreement as identified by the MMO	<p>The DCO states 'no more than 116 wind turbines', whilst the ES (non-technical summary, Section 1.2.3 states' up to 90 offshore wind turbines'</p> <p>Discrepancy between the ES and the DCO.</p>	<p>The DCO and ES and differing chapters within the ES should contain the same specifications for consistency, and the ensure impacts are accurately described, mitigated and monitored properly.</p>	<p>There is no discrepancy between the draft DCO and the ES. The reference cited within the DCO referring to 116 wind turbines relates to an amendment to the Rampion Offshore Wind Farm Order 2014 to limit the number of turbines that can be constructed pursuant to that Order.</p>	Agreed	23.02.24	Agreed at the Page Turn Meeting (23.02.24)
MMO09 This is a Principal Area of Disagreement as identified by the MMO	<p>Outline Offshore Operations and Maintenance Plan</p>	<p>The MMO requests changes to timescales for submission of the Offshore Operations and Maintenance Plan prior to construction commencing; the addition of a range of activities for chemical notifications to the MMO be Conditioned; clarification of the definition of 'new' cable protection and 'additional' scour protection; and inclusion of total volumes of material anticipated for disposal arising from construction works.</p> <p>Updates are required to this document.</p>	<p>The Outline Operations and Maintenance Plan is appropriate and adequate, however the Applicant will discuss each issue raised by the MMO in order to progress matters.</p> <p>The Applicant has updated the review period to four months pre-completion in the Draft DCO [REP4-004] (updated at Deadline 5) and in the Outline Operations and Maintenance Plan [REP3-043] (updated at Deadline 5).</p>	Agreed	04/07/24	<p>An updated Outline Operations and Maintenance Plan [REP3-043] will be submitted at Deadline 5 with an updated review period of 4 months pre-completion as requested by MMO's Deadline 4 response [REP4-088].</p> <p>An updated Outline Operations and Maintenance Plan was submitted at Deadline 3 [REP3-042] stating that a final OOMP will be provided to the MMO no more than three months following the Completion of the authorised scheme.</p> <p>28/03/24: At Deadline 2 [REP2-035] The MMO welcomes the clarifications provided by the Applicant and corrections of errors relating to points raised by the MMO in the Outline Offshore Operations and Maintenance Plan of its Relevant Representation.</p>

Reference number	Matter of contention	MMO'S position	Applicant's position	Current Status	Date of agreement	Record of Progress
						<p>Page Turn Meeting (23/02/24): MMO is hopeful that the Applicant will provide these updates for this to be resolved during Examination.</p> <p>MMO would like 6 months incorporated into the plan and to get that clarification into the document.</p>
<p>MMO10</p> <p>This is a Principal Area of Disagreement as identified by the MMO</p>	<p>Offshore In Principle Monitoring Plan</p>	<p>The MMO requests changes to timescales for submission of the Offshore Monitoring Plan; removal of the wording 'within reason' to the objective of validating ES predictions (for Marine Mammals); and a range of issues related to the need for additional monitoring for fish.</p> <p>Updates are required to this document.</p>	<p>The Offshore In Principle Monitoring Plan is appropriate and adequate, however the Applicant will discuss each issue raised by the MMO in order to progress matters. The Applicant notes that the need for monitoring has been based on the identification of a significant effect arising on a receptor.</p> <p>The Applicant has updated the approval period to a 6 months time period in the Draft DCO Schedule of changes [REP4-008] as per MMO's request.</p>	<p>Not agreed – Material Impact</p>	<p>31/07/24</p>	<p>31/07/24: 'Within reason' still within the report despite MMO requesting this be removed several times.</p> <p>MMO has requested that 8 of the first 12 piles be monitored in the presence of ambiguity. The MMO understand that this is industry standard, but this is to compensate for uncertainties regarding the effectiveness of a DBBC in water greater than 50m. Due to the changes in use of DBBC the MMO believe the monitoring is justified.</p> <p>The MMO understands the Applicants current position is if they do not have a piling restriction during 1st March to 31st July (the black sea bream spawning period), then they will monitor 8 piles in total:</p> <p>4 (of the first 12) piles during the black seabream spawning season and</p> <p>4 (of the first 12) piles outside of this spawning season.</p> <p>If the Applicant does end up getting a piling restriction however, then they will only monitor 4 of the first 12 piles (outside of the spawning period).</p> <p>The MMO believes that 8 piles would still be beneficial with a piling restriction but if this wasn't taken forward by the SoS then there should be a commitment to the first 4 piles to be the worst-case scenario piles and this information should be provided as soon as possible to ensure if there is an impact larger than what was predicted no more impact occurs.</p>

Reference number	Matter of contention	MMO'S position	Applicant's position	Current Status	Date of agreement	Record of Progress
						<p>04/07/24: The Offshore In Principle Monitoring Plan has been updated for Deadline 4. [REP4-055].</p> <p>03/04/24: The Offshore In Principle Monitoring Plan has been updated for Deadline 3. [REP3-046].</p> <p>Timescales updated to six months in Deadline 3 Schedule of Change [REP3-007]</p> <p>Page Turn Meeting (23/02/24): MMO believes this may not be fully resolved during Examination but is hopeful that the Applicant will provide the updates and further discussions can take place. MMO hopes these concerns will be resolved during Examination, noting they have not been resolved through pre examination</p> <p>Might take longer to sign off as well. Option to split the plan e.g. benthic, marine mammals, etc</p>

Table 3-3 Status of discussions related to Marine Archaeology

Reference number	Matter of contention	MMO'S position	Applicants position	Current Status	Date of agreement	Record of Progress
MMO11	Marine Archaeology	MMO agrees with Historic England that no issues with the assessment have been identified.	The Applicant welcomes MMO's agreement with the study.	Agreed	16/06/2022	Page Turn Meeting (23/02/24): MMO agree with the Applicant's position
MMO12	Marine Archaeology	MMO defers to the Historic England on matters of marine archaeology and supports any comments raised. The MMO will continue to be part of the discussions relating to securing any mitigation, monitoring or other conditions required within the DMLs.	The Applicant welcomes MMO's agreement to work with Historic England on marine archaeology.	Agreed	06/11/2023	Page Turn Meeting (23/02/24): MMO agree with the Applicant's position

Table 3-4 Status of discussions related to Coastal Processes

Reference number	Matter of contention	MMO'S position	Applicants position	Current Status	Date of agreement	Record of Progress
MMO13	Physical Processes study area	Agreement of assessment study area.	The Applicant welcomes MMO's agreement of the study area.	Agreed	17/09/2020	Page Turn Meeting (23/02/24): (MMO agree with the Applicant's position
MMO14	Physical Processes baseline data	Agreement of data gathered for baseline considered acceptable for assessment.	The Applicant welcomes MMO's agreement that the data sources gathered for the baseline for assessment within DCO application documents are the most suitable.	Agreed	17/09/2020	Page Turn Meeting (23/02/24): MMO agree with the Applicant's position
MMO15	Physical Processes methodology	Agreement of assessment approach/ methodology.	The Applicant welcomes MMO's agreement of the assessment approach/methodology.	Agreed	17/09/2020	Page Turn Meeting (23/02/24): MMO agree with the Applicant's position
MMO16 This is a Principal Area of Disagreement as identified by the MMO	Trace Heavy metal analysis	<p>The MMO has not been able to determine the method of extraction and what digest or if sieving has been applied to these sediments. Therefore, we have been unable to say whether the comparison to Cefas action levels is appropriate.</p> <p>The MMO recommends that this is confirmed alongside the name of the laboratory undertaking the analysis for trace heavy metals and Polyaromatic Hydrocarbons.</p>	<p>The Methodology used is detailed in Section 5.3 of Volume 4 of the ES, Appendix 9.3 Rampion 2 Offshore wind farm subtidal benthic characterisation survey report [APP-137].</p> <p>The name of the Analytical lab is SOCOTEC, who are MMO approved.</p>	Agreed		<p>28/03/24: The MMO thanks the Applicant for providing confirmation that all organic matter, hydrocarbon and metals analysis was undertaken by SOCOTEC UK Limited. (MMO D2 Submission response [REP2-035])</p> <p>Page Turn Meeting (23/02/24): MMO is hopeful that the Applicant will provide these updates for this to be resolved during Examination.</p> <p>The applicant has responded to this and it has been covered in the deadline 1 written response to the relevant representations.</p> <p>MMO will consult with Cefas and will aim for deadline 2 for response. MMO have requested any documents being submitted to PINS be submitted to them.</p>
MMO17 This is a Principal Area of Disagreement as identified by the MMO	Excavation at the punch out site	<p>The MMO notes that each of the four cables may require excavation at the punch out site. If this material were to contain chalk, then this might cause mounds on the seabed and the impact of chalk rather than silt sand and gravel has not been considered.</p> <p>The impact of chalk should be considered as part of the discussion in the impact assessment.</p>	<p>The potential impact of excavating HDD exit pits is described and assessed in paragraph 6.9.61 onwards in Volume 2 of the ES, Chapter 6: Coastal processes [APP-047]</p> <p>The assessment mainly addresses the potential impact of the pit depression on local waves and currents (and therefore on local beach processes and morphology) and also as a sediment trap. It is noted that the excavated material would be temporarily stored 'in the array area or export cable corridor' and recovered to provide backfill for the HDD exit pits as part of finishing the cable installation.</p>	Not agreed- No material impact	04/07/2024	<p>Page Turn Meeting (23/02/24): MMO is hopeful that the Applicant will provide these updates for this to be resolved during Examination.</p> <p>The applicant has responded to this issue and it has been covered in the Deadline 1 written response to the Relevant Representations [REP1-017].</p>

Reference number	Matter of contention	MMO'S position	Applicants position	Current Status	Date of agreement	Record of Progress
			The material nature of the excavated spoil (other than its overall volume and typical clast size) is not relevant to the assessment of the physical processes impacts described above. It is noted that the underlying chalk is exposed extensively along this coastline, and that loose chalk boulders (and likely smaller pieces) are commonly observed on the beach and seabed. The introduction of an additional relatively small volume of chalk clasts (especially following a reasonably short period of reworking, e.g. one large storm) would not noticeably change the seabed in this area.			
MMO18 This is a Principal Area of Disagreement as identified by the MMO	Coastal Processes Chapter 4 and Appendix 6.3	Multiple clarifications and updates are required to ensure correct understanding from the MMO. Please see comments in Section 4.2 of our Relevant Representation. The comments should be reviewed and updated, or further justification provided.	The assessment presented in Chapter 4: The Proposed Development, Volume 2 of the ES [APP-045] and Appendix 6.3: Coastal processes technical report impact assessment, Volume 4 of the ES [APP-131] is appropriate and adequate, however the Applicant will discuss each issue raised by the MMO in order to progress matters, including through responses to Relevant Representations which address each item raised specifically.	Agreed	31/07/24	04/07/2024 MMO will confirm the status of this issue. Following the request from the MMO at Deadline 3 [REP3-076] to confirm if Continuous Flow Devices (CFD) has been included in the assessment, the Applicant confirmed at Deadline 4 that the use of CFD had been incorporated into the MDS for Chapter 6: Coastal Processes [APP-047] . In their Deadline 3 response, the MMO stated they would prefer to see information in terms of changes in tidal currents and sediment currents with cumulative projects. At Deadline 4, The Applicant signposted the MMO to the relevant assessments on tidal conditions with cumulative scenario projects in Appendix 6.3 Coastal processes technical report Impact assessment [APP-131] and Chapter 6: Coastal Processes [APP-047] . Page Turn Meeting (23/02/24): MMO is hopeful that the Applicant will update the information required for this to be resolved during Examination The Applicant has responded to this and it has been covered in the Deadline 1 written response to the relevant representations.

Table 3-5 Status of discussions related to Benthic, Subtidal and Intertidal Ecology

Reference number	Matter of contention	MMO'S position	Applicants position	Current Status	Date of agreement	Record of Progress
MMO19	Benthic Ecology study area	Agreement on assessment study area.	The Applicant welcomes MMO's agreement on the assessment study area.	Agreed	17/09/2020	Page Turn Meeting (23/02/24): MMO agree with the Applicant's position
MMO20	Benthic Ecology methodology	Agreement of assessment approach/methodology	The Applicant welcomes MMO's agreement of the assessment approach/methodology	Agreed	17/09/2020	Page Turn Meeting (23/02/24): MMO agree with the Applicant's position
MMO21	Benthic Ecology baseline data	Agreement on data sources gathered for baseline considered acceptable for assessment.	The Applicant welcomes MMO's agreement that the data sources gathered for the baseline for assessment within DCO application documents are the most suitable	Agreed	17/09/2020	Page Turn Meeting (23/02/24): MMO agree with the Applicant's position
MMO22	Benthic Ecology Electric and magnetic field (EMF)	The MMO agrees with Cefas that the justification to scope out operational EMF, noise and accidental pollution is satisfactory.	The Applicant welcomes MMO's agreement with Cefas that the justification to scope out operation EMF, noise and accidental pollution is satisfactory.	Agreed	17/09/2020 – Feedback provided from MMO on 30/11/2020	Page Turn Meeting (23/02/24): MMO agree with the Applicant's position
MMO23	Benthic Ecology chalk features	Concerns of cables passing through chalk feature and permanent habitat loss. <u>The MMO note that the Applicant has added an additional commitment C-300 to the Outline Scour Protection and Cable Protection Plan, which commits to cable protection with the minimum practicable environmental impact. However, the Outline Scour Protection and Cable Protection Plan does not commit to any of the available choices, so it is not possible for the MMO</u>	As per the Applicant's Deadline 2 Response: The assessment of permanent habitat loss is presented in Section 9 of Chapter 9: Benthic, subtidal and intertidal ecology, Volume 2 of the Environmental Statement (ES) [APP-050] , with the sensitivity of chalk afforded a 'high' sensitivity category within the assessment as a result of its protected status. Recognising that due to the widespread nature of chalk in the region, often as underlying geology beneath surficial sediment cover, not all chalk can be avoided, the Applicant has provided its approach to minimising permanent loss of chalk within the updated In Principle Sensitive Features Mitigation Plan [REP4-0053] , which includes the use of specialist equipment to minimise impact footprints in such areas where full avoidance is not possible. The	Not Agreed- Material Impact	31/07/24	31/07/24: Updates to the Outline Scour Protection and Cable Protection Plan (OSPCPP) have added additional commitments to C-300 (committing to the cable protection with least impact). However, the document does not yet commit to any of the available choices, so it is not possible to comment on whether C-300 is met. The MMO believes that this can be discussed through the OSPCPP at post consent should the DCO be granted. 04/07/24: The Applicant will be submitting an outline Cable Specification and Installation Plan document and an outline Cable Burial Risk Assessment at Deadline 5. Deadline 2: The Applicant provided further information at Deadline 2 (Deadline 2 Submission- Responses to WRs [REP2-035]), which maintained the Applicants position as detailed within the 'Applicants position' column 4. Deadline 1: The Applicant has responded to this, and it has been covered in the Deadline 1 written response to the relevant representations (Deadline 1 Submission

Reference number	Matter of contention	MMO'S position	Applicants position	Current Status	Date of agreement	Record of Progress
		<p><u>to comment on how C-300 is met. The MMO is therefore not able to close this until a method is chosen.</u></p>	<p>Applicant confirms that trench cutting on the seafloor using a mechanical cutter would be able to deposit the majority of the cuttings back into the trench, however this process will obviously be influenced by the characteristics of the chalk rock itself. The development of the mitigation, which will be provided in the final Sensitive Features Mitigation Plan, forms an important component of the approach to ensuring the 'minor' magnitude impact assigned to chalk receptors, as well as Habitats of principle Importance, is appropriate. The final Mitigation Plan will be submitted to and approved in writing by the MMO, as secured in condition 11(1)(k) of the dMLs (Schedules 11 and 12 of the Draft Development Consent Order [REP4-004]), alongside the Cable Specification and Installation Plan, Condition 11(1)(n) of the dMLs (Schedules 11 and 12 of the Draft Development Consent Order [REP4-004]), both of which will draw upon the cable burial risk assessment (secured in Condition 11(1)(n) of the dMLs (Schedules 11 and 12 of the Draft Development Consent Order [REP4-004]).</p> <p>As detailed within Applicant's response to Prescribed Consultees Deadline 3 submissions [REP4-070]. The Applicant confirms that both side scan sonar and Multi-beam Echo Sounder methods will be used together to collect more information, including backscatter, to support the use of drop-down video to confirm the presence of these features. The Offshore In Principle Monitoring Plan [REP4-055] has been updated at Deadline 4.</p>			<p>– 8.24 Applicant's Response to Relevant Representations [REP1-017].</p> <p>Page Turn Meeting (23/02/24): Continued discussion for suitable mitigation methods.</p>

Reference number	Matter of contention	MMO'S position	Applicants position	Current Status	Date of agreement	Record of Progress
MMO24a This is a Principal Area of Disagreement identified by the MMO	Benthic Ecology Assessment of Significance	<p>There is information missing from Table 9-14 and the sensitivity from smothering should be reconsidered. Please see comments in Section 4.3 of our relevant representations.</p> <p>The comments should be reviewed and updated, or further justification provided.</p>	<p>The assessment presented in Chapter 9: Benthic, Subtidal and Intertidal Ecology, Volume 2 of the ES [APP-050] is appropriate and adequate, however the Applicant will discuss each issue raised by the MMO in order to progress matters, including through responses to Relevant Representations which will address each item raised specifically.</p> <p>The Applicant has provided an updated version of Chapter 9: Benthic, subtidal and intertidal ecology, Volume 2 of the ES [REP4-018] at Deadline 4. The Applicant has updated paragraph 9.6.31 to avoid confusion relating to value according to the functional role of the habitat or species as per the MMO's request.</p>	Agreed	04/07/2024	<p>The Applicant has also responded to this at Deadline 4 in the Applicant's Comments on Deadline 3 Submissions [REP4-070].</p> <p>The Applicant has responded to this and it has been covered in the Deadline 1 written response to the relevant representations [REP1-017].</p> <p>Page Turn Meeting (23/02/24): MMO is hopeful that the Applicant will update the information required for this to be resolved during Examination.</p>
MMO24b This is a Principal Area of Disagreement identified by the MMO	Benthic Ecology Monitoring	<p>The MMO would like to see secured more than 1 year of post-construction monitoring.</p>	<p>The Applicant has confirmed to the MMO that this will not be agreed to,</p>	Not agreed- No material impact		04/07/24: MMO raised this request at the page turn

Table 3-6 Status of discussions related to Fish and Shellfish Ecology

Reference number	Matter of contention	MMO'S position	Applicants position	Current Status	Date of agreement	Record of Progress
MMO24	Fish and Shellfish study area	Agreement of study area and data gathered for the baseline is considered acceptable for assessment.	The Applicant welcomes MMO's agreement of the study area and data gathered for the baseline.	Agreed	17/09/2020	Page Turn Meeting (23/02/24): MMO agree with the applicant's position
MMO25	Commercial Fisheries shellfish landings	MMO are satisfied that fisheries would indeed be consulted with, in relation to shellfish landings.	The Applicant notes the MMO's satisfaction on fisheries consultation.	Agreed	30/11/2020	Page Turn Meeting (23/02/24): MMO agree with the applicant's position
MMO26	Fish and Shellfish baseline data	MMO agrees the source of literature, data and publications listed in the presentation slides are appropriate of fisheries and fish ecology for the purpose of the EIA.	The Applicant welcomes MMO's agreement that the sources of information presented were appropriate.	Agreed	30/11/2020	Page Turn Meeting (23/02/24): MMO agree with the applicant's position
MMO27	Fish and Shellfish fisheries surveys	MMO agrees that no new fisheries surveys are required to inform the characterisation. However, as noted, this is caveated by adding that the MMO defers to Natural England and The Seahorse Trust regarding the need for any additional surveys for seahorses.	The Applicant welcomes MMO's agreement that no additional fisheries surveys are required.	Agreed	30/11/2020	Page Turn Meeting (23/02/24): MMO agree with the applicant's position
MMO28	Fish and Shellfish EMF	MMO agree that scoping in effects of Electro Magnetic Fields (EMF) on elasmobranch and electro-sensitive fish is appropriate.	The Applicant welcomes MMO's agreement on scoping in EMF effects.	Agreed	30/11/2020	Page Turn Meeting (23/02/24): MMO agree with the applicant's position
MMO29	Fish and Shellfish export cable installation	Agree with seasonal restriction for black seabream during cable installation.	The Applicant confirms that, when a consensus with stakeholders has been achieved, seasonal restrictions will be secured in through the submission and approval of the sensitive features mitigation	Agreed	15/02/2022	Page Turn Meeting (23/02/24): MMO agree with the applicant's position

seasonal restriction

plan. Proposed seasonal restrictions are set out in the **In Principle Sensitive Features Mitigation Plan [REP4-053]** submitted with the application and which the later plan must accord with.

<p>MMO31</p> <p>This is a Principal Area of Disagreement as identified by the MMO</p>	<p>Fish Ecology</p> <p>Discrepancies between the maximum duration of piling per day state in the Under Water Noise (UWN) Impact Assessment and throughout Chapter 8.</p>	<p>There are discrepancies between Chapter 8 and Appendix 11.3 on the worst-case duration of monopile and jacket foundation installation.</p> <p>Discrepancies to be amended with the correct maximum duration of piling per day, so that impacts can be assessed properly and mitigated.</p>	<p>This inconsistency was acknowledged by the Applicant, and was amended in the Errata, Submitted to the Planning Inspectorate by the procedural deadline of 16th January 2024 (Deadline 1).</p>	<p>Agreed</p>	<p>23/02/24</p>	<p>Page Turn Meeting (23/02/24): MMO is hopeful that the Applicant will update the discrepancies and provide any additional information required so this will be resolved during Examination.</p> <p>Deadline 1: The applicant responded to this, and it has been covered in the Deadline 1 written response to the relevant representations (Deadline 1 Submission – 8.24 Applicant’s Response to Relevant Representations [REP1-017]), and amended in the Errata.</p>
<p>MMO32</p> <p>This is a Principal Area of Disagreement as identified by the MMO</p>	<p>Fish Ecology</p> <p>Habitat suitability assessments including Herring and Sandeel mapping</p>	<p>Whilst the applicant has completed a herring potential spawning habitat and sandeel potential habitat suitability assessment. The Applicant has not followed the recommended MarineSpace (2013a) and (2013b) methodologies.</p> <p>MMO requests that the Applicant revises their habitat suitability assessments by following the MarineSpace (2013a and 2013b) methods and provides ‘heat’ maps of herring potential spawning habitat, and sandeel potential habitat, for the fish ecology study area as an addendum to the ES and update the conclusion from this information.</p>	<p>The Applicant submitted revised habitat suitability heatmaps for both sandeel and herring at Deadline 1 (Further information for Action Points 38 and 39 – Underwater Noise [REP1-020]). In response to feedback received from the MMO at Deadline 3, the Applicant provided revised heatmaps (Further information for Action Points 38 and 39 – Underwater Noise [REP1-020] (updated at Deadline 4)). Further feedback was received from the MMO at Deadline 5, and the heatmaps were subsequently revised at Deadline 6 (Further information for Action Points 38 and 39 – Underwater Noise (document reference 8.25.1)).</p>	<p>Not Agreed – Material Impact</p>	<p>31/07/24</p>	<p>Deadline 6: The Applicant has revised the habitat suitability assessments following the MMO’s feedback at Deadline 5, these are in Further information for Action Points 38 and 39 – Underwater Noise (document reference 8.25.1)</p> <p>31/07/24: The MMO acknowledges that the Applicant provided new heat maps at both Deadline 1 and Deadline 4, respectively. However, the Applicant has not followed the recommended methodologies requested.</p> <p>Meeting 24/06/24: The MMO and the Applicant discussed the update to commitment C-265, the MMO agreed, in principle, that a change to the piling ban for herring would be required pending the submission of revised herring heat maps in line with the MarineSpace 2013 methodology at Deadline 6.</p> <p>Deadline 4: Applicant has provided revised heatmaps in response to feedback received from Cefas and the MMO at Deadline 3, these are in Applicant’s Post Hearing Submission – Issue Specific Hearing 1 Appendix 9 - Further information for Action Points 38 and 39 – Underwater Noise [REP4-061].</p> <p>Deadline 3: MMO provided feedback on the herring and sandeel heatmapping exercise undertaken by</p>

the Applicant. The Applicant reviewed this feedback and is revising the heatmaps accordingly.

Deadline 2: The MMO thanks the Applicant for their submission of spawning and habitat suitability heatmaps for both sandeel and herring following the MarineSpace et al., (2013a) methodology. ([Further information for Action Points 38 and 39 – Underwater Noise \[REP1-020\]](#)). MMO to review spawning and habitat suitability heatmaps and respond to this at Deadline 3

Deadline 1 submission: The Applicant submitted revised habitat suitability heatmaps for both sandeel and herring following the MarineSpace et al., (2013a) methodology at Deadline 1 ([Further information for Action Points 38 and 39 – Underwater Noise \[REP1-020\]](#))

Page Turn Meeting (23/02/24): MMO is hopeful that the Applicant will update the assessments and Maps to accord with the recommended methods so this will be resolved during Examination.

Deadline 4: The Applicant has submitted disturbance impact ranges as defined using the 135dB threshold (the use of which the Applicant does not support), in the [In Principle Sensitive Features Mitigation Plan \[REP4-053\]](#).

Deadline 3: The Applicant set out the implications on mitigation measures for black seabream as defined using the 135dB threshold (for behavioural responses). This submission defined exclusion zones, using the 135dB threshold, with noise abatement measures modelled where the 135dB threshold was exceeded within the Kingmere MCZ when piling in array. The consequential implications on the construction programme were also detailed (Appendix K FS of [Applicant's Responses to Examining Authority's First Written Questions \(ExQ1\) \[REP3-051\]](#)).

Expert to Expert meeting (19th April 2024): Applicant maintains position that 141 dB SELss is an appropriate disturbance threshold, MMO maintained

MMO33
This is a Principal Area of Disagreement as identified by the MMO

Fish Ecology
Black seabream UWN disturbance threshold

MMO does not consider a SELss of 141 dB re 1 mPa²s used for a 44cm captive seabass to be an appropriate or conservative threshold. MMO understands there was no agreement between MMO, Natural England (NE) and the Applicant on a noise threshold or proxy species for black seabream prior to submission of the Application. If the Applicant wants to pursue a noise threshold route the MMO would expect to see more noise modelling based on the 135 dB threshold. However, even if this is provided the MMO is unlikely to agree a threshold approach for black seabream. Further mitigation may be required.

The Applicant maintains their position that a threshold of 141 dB SELss is an appropriate disturbance threshold for black seabream.

Not agreed-material impact

				<p>position that stated that 135dB threshold is appropriate.</p> <p>ExA first Written Questions (3rd April 2024): ExA queried the effects on mitigation if 135dB threshold was adopted.</p> <p>Deadline 1: The Applicant responded to this in written response to the relevant representations (Deadline 1 Submission – 8.24 Applicant’s Response to Relevant Representations [REP1-017]). The Applicant maintains their position that a threshold of 141 dB SELss is an appropriate disturbance threshold for black seabream.</p> <p>Page Turn Meeting (23/02/24): MMO believes this may not be fully resolved during Examination but is hopeful that the Applicant will provide the modelling and further discussions can take place. MMO hopes these concerns will be resolved during Examination, noting they have not been resolved through pre-examination</p>
<p>MMO34</p> <p>This is a Principal Area of Disagreement as identified by the MMO</p>	<p>Fish Ecology</p> <p>Mitigation for spawning herring conclusion</p>	<p>The Applicant has concluded in paragraph 8.9.195 that, as the UWN contours do not directly overlap with the spawning grounds as indicated by the Coull et al. (1998) shapefile, the magnitude of a behavioural impact to spawning herring from UWN is considered to be negligible. Whilst the Coull et al. (1998) spawning maps are valuable for providing an indication of the location of herring spawning grounds based on historic data, it is more appropriate for the Applicant to draw their conclusions from overlap with areas of higher IHLS larval abundance as this is a more recent, direct measure of herring spawning intensity for this region. Further to this, Figures 8.18, 8.19 and 8.21, which present UWN for</p> <p>The Applicant maintains their position, that there will be no population level effects on spawning herring, as there is no overlap with the spawning ground. Any overlap of noise contours with the IHLS larval data reflects the potential for effects on herring larvae (as opposed to spawning adult herring), which are considerably less sensitive to underwater noise than adult herring.</p> <p>Notwithstanding this, the Applicant has committed to the use of DBBC throughout the piling campaign. The implementation of this mitigation will further reduce the impact ranges of underwater noise (including behavioural effect ranges) to sensitive features such as herring.</p> <p>Commitment C-265 has been updated accordingly to reflect this proposed mitigation. The mitigated impact ranges, afforded by the implementation of DBBC throughout the piling campaign, have been presented relative to the herring spawning grounds and areas of high densities of eggs and larvae, in Further information for</p>	<p>Not Agreed – Material Impact</p>	<p>31/07/24</p> <p>31/07/24: The MMO believes this a fundamental disagreement and no progress forward has been made.</p> <p>Meeting 24/06/24: The MMO and the Applicant discussed the update to commitment C-265, the MMO agreed, in principle, that a change to the piling ban for herring would be required pending the submission of revised herring heat maps in line with the MarineSpace 2013 methodology at Deadline 6.</p> <p>Deadline 4: The Applicant maintains their position, that there will be no population level effects on spawning herring, as there is no overlap with the spawning ground. Notwithstanding this, the Applicant has committed to the use of DBBC throughout the piling campaign. The implementation of this mitigation will further reduce the impact ranges of underwater noise (including behavioural effect ranges) to sensitive features such as herring. The mitigated impact ranges from the use of DBBC are presented in Further information for Action Points 38 and 39 – Underwater Noise [REP4-0261] updated.</p>

sequential pinpiling, sequential mono-piling, and simultaneous pin-piling, all indicate that the likely range of impact of TTS in fish is also anticipated to overlap the herring spawning grounds.

Update to the conclusion should be made and further discussion on mitigation should take place.

Action Points 38 and 39 – Underwater Noise [REP1-020] (updated at Deadline 4 and at Deadline 6 (**Further information for Action Points 38 and 39 – Underwater Noise (document reference 8.25.1)**)).

Deadline 2: The MMO thanks the Applicant for their additional consideration of the potential impacts of noise disturbance on spawning herring. The MMO will review this document along with our scientific advisors and provide further comments at Deadline 3.

Deadline 3: **Responses to Written Questions (ExQ1 [REP3-076])**: MMO maintain that it is reasonable to assume that herring engaged in spawning activity are likely to exhibit behavioural responses during piling activities, due to the overlap of both mitigated and unmitigated noise contours with areas of high densities of eggs and larvae.

Deadline 1: The Applicant responded to this in written response to the relevant representations (**Deadline 1 Submission – 8.24 Applicant’s Response to Relevant Representations [REP1-017]**) maintaining their position that actively spawning herring are present within the spawning ground as defined by Coull et al. (1998), and that after hatching larvae are transported by the prevailing water currents away from the spawning ground. The Applicant presented underwater noise modelling outputs of both mitigated (6dB noise reduction) and unmitigated piling scenarios (including using the 135dB threshold, the use of which the Applicant does not support) relative to the herring spawning grounds (as defined by Coull et al. (1998) and areas of high densities of eggs and larvae in **Appendix 9 – Further Information for Action Points 38 and 39 – Underwater Noise [REP1-021]**).

Page Turn Meeting (23/02/24): MMO believes this may not be fully resolved during Examination but is hopeful that the Applicant will provide the updates and further discussions can take place.

MMO35
This is a Principal Area of Disagreement as identified by the MMO

Fish Ecology
 Noise abatement during – exclusion of July

It is not clear why July has been treated separately within the Applicant’s proposed mitigation zoning plan. Black seabream are at their most sensitive when undertaking spawning and guarding their nests, and as a result, the conservation objectives of the Kingmere Marine Conservation Zone (MCZ) are of heightened importance during the spawning period. As we have clear evidence that black seabream continues to spawn and maintain their nests into and during July, we must consider that July is part of the spawning period.

July should be included in the defined mitigation period for the zoning plan however as above any mitigation must have the correct modelling.

The Applicant maintains their position, that the proposed mitigation measures in July will ensure no hindrance to the conservation objectives of the Kingmere MCZ.

The **In Principle Sensitive Features Mitigation Plan [REP4-053]** sets out multiple mitigation measures during the month of July; these include (in the event that piling is undertaken in July in the western part of the array) the combination of Double Big Bubble Curtains and potentially another noise mitigation measure, and a sequencing approach to piling starting in locations furthest from the MCZ. Through the application of a variety of mitigation measures in July, the Applicant is confident that piling operations will not hinder the Kingmere MCZ conservation objectives.

Not agreed-material impact

Deadline 3: MMO maintain recommendation of a seasonal piling restriction to limit disturbance to adult spawning and nesting black sea bream during their spawning and nesting period (March to July, inclusive) (**Responses to Written Questions (ExQ1) [REP3-076]**). The Applicant set out the implications on mitigation measures for black seabream as defined using the 135dB threshold (for behavioural responses) on request of the ExA. The piling programme implications from a seasonal restriction from March to July inclusive, are detailed in Appendix K FS of **Applicant’s Responses to Examining Authority’s First Written Questions (ExQ1) [REP3-051]**.

Deadline 2: MMO acknowledges the Applicant’s concerns (MMO 4.6.58) that a full piling exclusion from March-July inclusive would have significant issues for the practical development of the Proposed Development. The MMO is still of the view that seasonal restrictions in the month of July are required (**Deadline 2 Submission- Responses to WRs [REP2-035]**). The Applicant maintains a full piling restriction from 1 March to 31 July is disproportionate to the risk of an impact arising that could result in significant population level effects on nesting black bream (based on reduced spawning in July (as informed by outputs of monitoring surveys in 2020)).

Deadline 1: the MMO maintain their position that piling activities from 1 March – 31 July inclusive, has the potential to hinder the conservation objectives of Kingmere MCZ in relation to black seabream, and the MMO supports the need for a full seasonal restriction (**Deadline 1 Submission – Written Representations (WRs) [REP1-056]**).

Page Turn Meeting (23/02/24): MMO believes this may not be fully resolved during Examination but is hopeful that the Applicant will provide the updates and further discussions can take place. MMO hopes these concerns will be resolved during Examination, noting they have not been resolved through pre-examination.

<p>MMO36</p> <p>This is a Principal Area of Disagreement as identified by the MMO</p>	<p>Fish Ecology</p> <p>Seasonal Piling Restriction</p>	<p>The MMO considers it necessary for a seasonal piling restriction to be implemented in order to prevent disturbance to spawning herring and their eggs and larvae at the Downs spawning ground during the spawning period of 1st November to 31st January (inclusive).</p> <p>This restriction may be subject to refinement, providing the additional UWN modelling (135dB) and further discussions on mitigation. However, at this time, the MMO considers that a seasonal piling restriction be implemented.</p> <p>The MMO also requests a complete piling restriction for black sea bream from 1st March to 31st July inclusive.</p>	<p>The Applicant maintains their position, that there will be no population level effects on spawning herring, as there is no overlap with the spawning grounds of piling noise at a level that will disturb spawning adults (185dB SELcum) at the recognised spawning ground and no overlap of noise at injurious levels (210dB SELcum) intersecting areas of high larval abundances. On this basis, there is no requirement for a seasonal restriction on piling at Rampion 2 for the protection of herring.</p> <p>Notwithstanding this, the Applicant has committed to the use of DBBC throughout the piling campaign. The implementation of this mitigation will further reduce the impact ranges of underwater noise (including behavioural effect ranges) to sensitive features such as herring.</p> <p>Commitment C-265 has been updated accordingly to reflect this proposed mitigation. The mitigated impact ranges, afforded by the implementation of DBBC throughout the piling campaign, have been presented relative to the herring spawning grounds and areas of high densities of eggs and larvae, as defined by 135dB SELss (the Applicant does not agree with the use of this threshold) and 141dB SELss disturbance thresholds in the Further information for Action Points 38 and 39 – Underwater Noise (document reference 8.25.1)(updated at deadline 6).</p>	<p>Not agreed – material impact</p>	<p>31/07/24</p>	<p>Deadline 6: The Applicant has revised the habitat suitability assessments following the MMO’s feedback at Deadline 5, these are in Further information for Action Points 38 and 39 – Underwater Noise (document reference 8.25.1)</p> <p>Meeting 24/06/24: The MMO and the Applicant discussed the update to commitment C-265, the MMO agreed, in principle, that a change to the piling ban for herring would be required pending the submission of revised herring heat maps in line with the MarineSpace 2013 methodology at Deadline 6.</p> <p>Deadline 4: The Applicant maintains their position, that there will be no population level effects on spawning herring, as there is no overlap with the spawning ground. Notwithstanding this, the Applicant has committed to the use of DBBC throughout the piling campaign. The implementation of this mitigation will further reduce the impact ranges of underwater noise (including behavioural effect ranges) to sensitive features such as herring. The mitigated impact ranges from the use of DBBC are presented in the In Principle Sensitive Features Mitigation Plan [REP4-053].</p> <p>Deadline 3: Responses to Written Questions ExQ1 [REP3-076]: MMO maintain that it is reasonable to assume that herring engaged in spawning activity are likely to exhibit behavioural responses during piling activities, due to the overlap of both mitigated and unmitigated noise contours with areas of high densities of eggs and larvae.</p> <p>Deadline 2: The MMO thanks the Applicant for their additional consideration of the potential impacts of noise disturbance on spawning herring. The MMO will review this document along with our scientific advisors and provide further comments at Deadline 3.</p> <p>Deadline 1: The Applicant responded to this in written response to the relevant representations (Applicant’s Response to Relevant Representations [REP1-017]) that there will be no population level effects on spawning herring, as there is no overlap with the spawning ground</p>
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spawning ground of piling noise at a level that will disturb spawning adults (185dB SELcum) at the recognised spawning ground and no overlap of noise at injurious levels (210dB SELcum) intersecting areas of high larval abundances. On this basis, there is no requirement for a seasonal restriction on piling at Rampion 2 for the protection of herring. The Applicant presented underwater noise modelling outputs of both mitigated (6dB noise reduction) and unmitigated piling scenarios (including using the 135dB threshold, the use of which the Applicant does not support) relative to the herring spawning grounds (as defined by Coull et al. (1998) and areas of high densities of eggs and larvae in [Appendix 9 – Further Information for Action Points 38 and 39 – Underwater Noise \[REP1-021\]](#)).

Page Turn Meeting (23/02/24): MMO believes this may not be fully resolved during Examination but is hopeful that the Applicant will provide the updates and further discussions can take place. MMO hopes these concerns will be resolved during Examination, noting they have not been resolved through pre-examination.

<p>MMO37</p> <p>This is a Principal Area of Disagreement as identified by the MMO</p>	<p>Fish Ecology</p> <p>Pre- and post-construction surveys</p>	<p>Pre- and post-construction surveys should be implemented to enhance the baseline data and to validate any predictions made in the ES on nesting habitat recoverability. These surveys should be suitably timed and use appropriate methods.</p> <p>Therefore, MMO recommends that a requirement for pre- and postconstruction monitoring of black bream nesting habitat be included in the DML to ensure that the habitat recovers and continues to support black bream nesting, and that comparisons of nest</p>	<p>The pre-and post-construction monitoring to be undertaken is detailed in the Offshore In Principle Monitoring Plan [REP4-055] . As set out in the Offshore In Principle Monitoring Plan [REP4-055], the Applicant will design the post-construction monitoring and any subsequent years that might be required following the acquisition of pre-construction monitoring data which will be consulted on with the MMO and its advisors.</p>	<p>Not agreed- No material impact</p>	<p>04/07/2024</p>	<p>04/07/2024 While MMO recognises there will be underwater noise monitoring at Kingmere MCZ during black seabream breeding season the proposed monitoring of the nesting sites has not been included.</p> <p>Deadline 4: As set out in the Offshore In Principle Monitoring Plan [REP4-044], the Applicant will design the post-construction monitoring and any subsequent years that might be required following the acquisition of pre-construction monitoring data which will be consulted on with the MMO and its advisors.</p> <p>Deadline 3: Response to Written Questions (ExQ1) [REP3-076]. The MMO notes that only one single post-construction survey is proposed, and no timescale is given as to how soon after construction this survey will take place. The MMO would expect</p>
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location and density pre- and post-construction can be made. This should be clearly referred to within conditions 16-18

additional years of monitoring to be conducted in the event that any affected habitats are identified as not having recovered by the initial post construction monitoring survey.

Deadline 2: **Responses to WRs [REP2-035]**. The MMO notes that the Applicant has confirmed it is committed to undertaking pre-construction surveys as referenced in the **Offshore In Principle Monitoring Plan [APP-240]**. The MMO maintain their position that both pre-and post-construction surveys of nesting habitats should be proposed. **Applicants' response to Prescribed Consultees Written Representations [REP2-026]**. Applicant confirms that subsequent, post-construction, monitoring will be informed by the findings of the pre-construction survey in relation to the occurrence and locations of sensitive habitat features noted above.

Page Turn Meeting (23/02/24): MMO believes this may not be fully resolved during Examination but is hopeful that the Applicant will provide the updates and further discussions can take place. MMO hopes these concerns will be resolved during Examination, noting they have not been resolved through pre-examination.

<p>MMO38a This is a Principal Area of Disagreement as identified by the MMO</p>	<p>Fish Ecology Appendix 8.3 Underwater noise study for sea bream disturbance, August 2023</p>	<p>The MMO agrees that the use of proxy species may be suitable (use of the audiogram for red seabream as a proxy for black seabream in terms of hearing ability), but requires, additional evidence (as detailed in rows MMO38b-d)</p> <p>Updates are required to this document.</p>	<p>The information presented within Appendix 8.3 Underwater noise study for sea bream disturbance, Volume 4 of the ES [APP-134] is appropriate and adequate. This Appendix was revised in response to feedback provided by the MMO and Natural England in the Relevant Representations (8.24 Applicant's Responses to Relevant Representations [REP1-017]) and was subsequently submitted to Examination at Deadline 2 (Volume 4, Appendix 8.3 – Underwater noise study for sea bream disturbance [REP2-011]).</p> <p>The Applicant welcomes the agreement of the MMO of the principle for using the red seabream audiogram as a proxy for black seabream based on hearing ability. The</p>	<p>Not agreed-Material impact</p>	<p>04/07/2024</p>	<p>Deadline 4: Applicant has also presented the 135dB threshold (as based on a study by Hawkins et al. (2014) for the simultaneous piling scenarios (for multileg and monopile foundations) relative to the Kingmere MCZ, in Figures 5.16 and 5.17 of the In Principle Sensitive Features Mitigation Plan [REP4-053] at Deadline 4. Note the Applicant does not support the use of the 135dB SELss disturbance threshold.</p> <p>Deadline 3: On request of the Examining Authority, the Applicant has set out the proposed piling restrictions for sensitive features (including black seabream) as defined using a threshold of 135dB SELss for behavioural responses (based on the findings of Hawkins et al., 2014). These were submitted at Deadline 3 and are presented in Appendix H FS: Noise Thresholds for Black</p>
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Applicant also confirms that within **Volume 2 Chapter 8 Fish and shellfish Ecology [APP-049]** reference was also made to research based on seabass as a proxy (Kastelein et al. 2017), as well as red seabream, to inform the recommendation for a noise limit at the Kingmere MCZ. Seabass and red seabream are considered morphologically similar species to black seabream.

Applicant maintains position that the use of seabass as proxy (based on a study by Kastelein et al. (2017) is appropriate for the definition of a disturbance threshold, as seabass are in same hearing group as black seabream.

Seabream within Deadline 3 Submission – 8.54 Applicant’s Responses to Examining Authority’s First Written Questions (ExQ1) [REP3-051]. Note the Applicant does not support the use of the 135dB SELss disturbance threshold.

Deadline 3: **Applicants Responses to Examining Authorities First Written Questions [REP3-051]** - No change to the Applicant’s position on this. Applicant supports the use of seabass as proxy (based on a study by Kastelein et al. (2017), as in same hearing group as black seabream. **Responses to Written Questions (ExQ1) [REP3-076]** The MMO continues to not support the use of a 141 dB SELss threshold for black sea bream, and the MMO maintain that the threshold of 135 dB SELss, as per Hawkins et al., (2014), should be used as a more precautionary approach to modelling.

Deadline 2: Following feedback from the MMP and Natural England, a revised **Volume 4, Appendix 8.3 – Underwater noise study for sea bream disturbance [REP2-011]** was submitted into Examination.

Page Turn Meeting (23/02/24): MMO is hopeful that the Applicant will update this document for this to be resolved during Examination.

<p>MMO38b</p> <p>This is a Principal Area of Disagreement as identified by the MMO</p>	<p>Fish Ecology</p> <p>Appendix 8.3 Underwater noise study for sea bream disturbance, August 2023</p> <p>The MMO agrees that the use of proxy species may be suitable (use of the audiogram for red seabream as a proxy for black seabream in terms of hearing</p>	<p>a) additional evidence for the efficacy of noise abatement measures</p>	<p>The Applicant has undertaken additional work to provide a comparison of the environmental conditions at the Proposed Development with other projects where Noise Abatement Systems (NAS) have been deployed. The outputs of this work are detailed in Information to support efficacy of noise mitigation / abatement techniques with respect to site conditions at Rampion 2 Offshore Windfarm [REP4-067]. These outputs have been used to inform the mitigation measures detailed in In Principle Sensitive Features Mitigation Plan [REP4-053] at Deadline 4.</p> <p>Please also refer to MMO42.</p>	<p>Agreed</p>	<p>31/05/24: The MMO considers there to be remaining uncertainty around noise abatement reductions. The main outstanding concerns around NAS for the MMO are as follows:</p> <p>The report stated that the achievable overall noise reduction of the proposed DBBC might be slightly decreased by 1-2dB in water depths >40m</p> <p>It is not known where in the array the water depth is >40m, and therefore there is uncertainty as to where a –12 or –14 dB noise reduction should be expected relative to sensitive features.</p> <p>The MMO has also not seen UWN modelling showing the mitigated UWN contours for a 13dB, 14dB and 15dB noise abatement reduction compared to each other</p>
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ability), but requires:

Deadline 4: Additional work has been undertaken to provide a comparison of the environmental conditions at the Proposed Development with other projects where Noise Abatement Systems (NAS) have been deployed. The outputs of this work are detailed in [Information to support efficacy of noise mitigation / abatement techniques with respect to site conditions at Rampion 2 Offshore Windfarm \[REP4-067\]](#). This report has been produced by the Institute of Technical and Applied Physics who have considerable experience monitoring noise abatement measures in Germany. These outputs have been used to inform the mitigation measures detailed in [In Principle Sensitive Features Mitigation Plan \[REP4-053\]](#) at Deadline 4.

Deadline 3 Submission: Further information on the efficacy and limitations of noise abatement systems was provided in Appendix I MM: Noise Abatement Systems in the [Applicant's Responses to Examining Authority's Written Questions \[REP3-050\]](#).

MMO038c

Fish Ecology
Appendix 8.3 Underwater noise study for sea bream disturbance, August 2023

b) further (longer term) evidence for the baseline soundscape at Kingmere MCZ and

The Applicant notes that the results of a longer-term noise monitoring survey were submitted to the Examination at the first Procedural Deadline (16 January 2024) ([Volume 4 – Appendix 8.4: Black Seabream Underwater Noise Technical Note and Survey Results Revision A \[PEPD-023\]](#)). This underwater noise monitoring was conducted during the black seabream breeding season of March to July 2023. This updated the previous underwater noise monitoring sample conducted between 4th and 20th July 2022 in response to concerns raised that the 2022 monitoring was limited as it did not cover the entire black seabream breeding season (March to July).

Not agreed-Material impact

04/07/2024

While the MMO is satisfied with the underwater noise monitoring data provided, the MMO does not agree with the use of seabass as a proxy species and the 141db threshold used in this report.

Pre-Exam Procedural Deadline: – 16 January 2024: The results of a longer-term noise monitoring survey was submitted to the Examination ([Volume 4 – Appendix 8.4: Black Seabream Underwater Noise Technical Note and Survey Results Revision A \[PEPD-023\]](#)).

<p>MMO038d</p>	<p>Fish Ecology Appendix 8.3 Underwater noise study for sea bream disturbance, August 2023</p> <p>The MMO agrees that the use of proxy species may be suitable (use of the audiogram for red seabream as a proxy for black seabream in terms of hearing ability), but requires:</p>	<p>c) seeks clarification on noise spectra.</p> <p>The Applicant has specified in REP4-055 the proposed noise monitoring has the following specific aims:</p> <ul style="list-style-type: none"> to show that the noise level predictions made are appropriate and that the impacts predicted within the Environmental Statement are valid; to validate the mitigation measures in terms of effectiveness; to validate mitigation zones implemented during piling; and to validate compliance with the specified noise threshold proposed for black seabream at the Kingmere Marine Conservation Zone site, should one be implemented. 	<p>The Applicant will continue to engage with the MMO on this matter to seek clarification of the specific information required.</p>	<p>Agreed</p>	<p>31/07/2024</p>	<p>31/07/24: The MMO has no further comments at this point but hope to see the Applicant follow these specific aims in their monitoring (during construction) which will be reviewed by the MMO post-consent.</p>
<p>MMO39</p> <p>This is a Principal Area of Disagreement as identified by the MMO</p>	<p>Fish Ecology Appendix 11.3 Underwater noise assessment technical report</p>	<p>The MMO agrees that the general approach and methodology for the underwater noise modelling is appropriate and that the basis for noise assessment on marine receptors has drawn upon the most contemporary and authoritative criteria for marine mammals and fish. However, the MMO seeks clarifications on a range of issues relating to noise criteria, propagation loss, and comparability of the data from Rampion 1 data with the proposed Rampion 2 predictions within the Appendix.</p>	<p>The information presented within Appendix 11.3 Underwater noise assessment technical report, Volume 4 of the ES [APP-149] is appropriate and adequate, however the Applicant will discuss each issue raised by the MMO in order to progress matters.</p>	<p>Agreed</p>	<p>31/07/24</p>	<p>Page Turn Meeting (23/02/24): MMO is hopeful that the Applicant will update this document for this to be resolved during Examination.</p> <p>MMO have shared the document and are hoping Cefas will have reviewed them by the Expert to Expert call (19th April 2024).</p> <p>Discussed in the Expert to Expert meeting on 19th April and follow up explanatory notes/documents were sent to the MMO and Cefas from the Applicant.</p> <p>The Applicant will submit an updated Appendix 11.3 Underwater noise assessment technical report, Volume 4 of the ES [APP-149] at Deadline 5 to address the MMO's outstanding concerns raised in their Deadline 2 [REP2-035] and Deadline 3 [REP3-076] responses.</p>

Updates are required to this document.

<p>MMO40</p> <p>This is a Principal Area of Disagreement as identified by the MMO</p>	<p>In Principle Sensitive Features Mitigation Plan</p>	<p>The MMO considers the overall approach to mitigation is somewhat reasonable, however a number of issues still require further discussion. The MMO notes that the basis for the piling mitigation relies on a disturbance threshold of 141dB but that this has not yet been agreed with all Parties. Given the uncertainties regarding behavioural responses and the zoning approach, MMO recommends a conservative approach be taken by the Applicant in relation to underwater noise and recommended noise abatement measures across the entire site rather than zoning. MMO strongly recommends the Applicant commit to using noise abatement technologies which achieve the greatest amount of noise reduction.</p>	<p>The Applicant maintains that a threshold of 141 dB SELss is a reasonable precautionary threshold for Black Sea Bream as supported by Kastelein et al. (2017).</p> <p>The In Principle Sensitive Features Mitigation Plan [REP4-053] sets out multiple mitigation measures, this includes commitment C-265 which has been updated from the original text:</p> <p><i>“At least one offshore piling noise mitigation technology will be utilised to deliver underwater noise attenuation in order to reduce predicted impacts to sensitive receptors at relevant Marine Conservation Zone (MCZ) sites and reduce the risk of significant residual effects on the designated features of these sites.”</i></p> <p>To the updated version of C-265 (updated at D4):</p> <p><i>“Double big bubble curtains will be deployed as the minimum single offshore piling noise mitigation technology will be utilised to deliver underwater noise attenuation for all foundation installations throughout the construction of the Proposed Development where percussive hammers are used in order to reduce predicted impacts to:</i></p> <ul style="list-style-type: none"> • <i>sensitive receptors at relevant Marine Conservation Zone (MCZ) sites and reduce the risk of significant residual effects on the designated features of these sites;</i> • <i>spawning herring; and</i> • <i>marine mammals.”</i> <p>Through the application of a variety of mitigation measures, the Applicant is confident that piling operations will not hinder the Kingmere MCZ conservation objectives.</p>	<p>Not Agreed-Material Impact</p>	<p>31/07/24</p>	<p>31/07/24: MMO welcomes the inclusion of DBBC, but still rejects to zoning plan for Black Sea Bream, and does not support the threshold of 141dB.</p> <p>Deadline 4: Applicant has also presented the 135dB threshold (as based on a study by Hawkins et al. (2014) for the simultaneous piling scenarios (for multileg and monopile foundations) relative to the Kingmere MCZ, in Figures 5.16 and 5.17 of the In Principle Sensitive Features Mitigation Plan [REP4-053] at Deadline 4. Note the Applicant does not support the use of the 135dB SELss disturbance threshold.</p> <p>Deadline 4: Additional work has been undertaken to provide a comparison of the environmental conditions at the Proposed Development with other projects where Noise Abatement Systems (NAS) have been deployed. The outputs of this work are detailed in Information to support efficacy of noise mitigation / abatement techniques with respect to site conditions at Rampion 2 Offshore Windfarm [REP4-067]. This report has been produced by the Institute of Technical and Applied Physics who have considerable experience monitoring noise abatement measures in Germany.</p> <p>Deadline 3: On request of the Examining Authority, the Applicant has set out the proposed piling restrictions for sensitive features (including black seabream) as defined using a threshold of 135dB SELss for behavioural responses (based on the findings of Hawkins et al., 2014). These were submitted at Deadline 3 and are presented in Appendix H FS: Noise Thresholds for Black Seabream within Deadline 3 Submission – 8.54 Applicant’s Responses to Examining Authority’s First Written Questions (ExQ1) [REP3-051]. Note the Applicant does not support the use of the 135dB SELss disturbance threshold.</p>
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			<p>The Applicant has undertaken additional work to provide a comparison of the environmental conditions at the Proposed Development with other projects where Noise Abatement Systems (NAS) have been deployed as detailed in Information to support efficacy of noise mitigation / abatement techniques with respect to site conditions at Rampion 2 Offshore Windfarm [REP4-067]. These outputs have been used to inform the mitigation measures detailed in In Principle Sensitive Features Mitigation Plan [REP4-053] at Deadline 4</p> <p>This is an ongoing point of discussion.</p>			<p>28/03/24: MMO's D2 submissions state they will respond at D3 and discuss further at the at ETE meeting (19th April 2024).</p> <p>Deadline 3: Applicants Responses to Examining Authorities First Written Questions [REP3-051] - No change to the Applicants position on this. Applicant supports the use of seabass as proxy (based on a study by Kastelein et al. (2017), as in same hearing group as black seabream. Responses to Written Questions (ExQ1) [REP3-076] The MMO continues to not support the use of a 141 dB SELss threshold for black sea bream, and the MMO maintain that the threshold of 135 dB SELss, as per Hawkins et al., (2014), should be used as a more precautionary approach to modelling.</p>
MO41	In Principle Sensitive Features Mitigation Plan	The MMO supports the seasonal restriction (among other commitments) to ensure Offshore Export Cable Corridor installation activities are undertaken outside the black seabream breeding period (March – July) to avoid any effects from installation works on black seabream nesting within or outside of the Kingmere MCZ (Commitment C- 273).	The applicant welcomes agreement from the MMO.	Agreed	06/11/2023	Page Turn Meeting (23/02/24): MMO agree to the Applicant's position
MMO42	Efficacy of noise mitigation	The MMO raised concerns regarding the Information to support efficacy of noise mitigation / abatement techniques with respect to site conditions at Rampion 2 Offshore Windfarm [REP4-067] as it only covers depths up to 50m.	Additional work has been undertaken by the Applicant, to provide a comparison of the environmental conditions at the Proposed Development with other projects where Noise Abatement Systems (NAS) have been deployed. The outputs of this work are detailed in Information to support efficacy of noise mitigation / abatement techniques with respect to site conditions at Rampion 2 Offshore Windfarm [REP4-067] and have been used to inform the mitigation proposed in the In Principle Sensitive Features Mitigation Plan [REP4-053] . In addition, the Applicant has committed to a seasonal restriction on export cable corridor activities	Not Agreed- Material Impact	31/07/24	31/07/24: The MMO still request enhanced monitoring of the first 8 piles.

during the black bream nesting period (March to July (C-273), and to develop a cable routing design to microsite around areas considered to support nesting seabream where possible (C-269) (as detailed in the **In Principle Sensitive Features Mitigation Plan [REP4-053]**).

Table 3-7 Status of discussions related to Principle of Development

Reference number	Matter of contention	MMO'S position	Applicants position	Current Status	Date of agreement	Record of Progress
MMO44	Principle of Development	MMO do not object in principle to the Proposed Development. However, we have concerns that harm to the marine environment may result from its construction, operations and maintenance, and decommissioning.	The project will contribute materially towards meeting the urgent national need for renewable energy generation, significantly reducing carbon emissions from energy.	Not agreed- No material impact	04/07/2024	

Table 3-8 Status of discussions related to Marine Mammals

Reference number	Matter of contention	MMO'S position	Applicants position	Current status	Date of agreement	Record of Progress
MMO45	Marine Mammals study area and baseline data	Agreement of study area and data gathered for the baseline is considered acceptable for assessment.	The applicant welcomes agreement from the MMO that the study area and data gathered for the baseline are the most suitable.	Agreed	18/09/2020	Page Turn Meeting (23/02/24): MMO agree to the Applicant's position
MMO46	Marine Mammals methodology	Agreement of assessment methodology.	The applicant welcomes agreement from the MMO on the assessment methodology.	Agreed	26/03/2021	Page Turn Meeting (23/02/24): MMO agree to the Applicant's position
MMO47 This is a Principal Area of Disagreement as identified by the MMO	Permanent Threshold Shift	<p>In the Environmental Statement, the sensitivity of all cetaceans to PTS-onset is assessed as Low. In the PEIR, all cetaceans were originally assessed as having a 'Medium' sensitivity to PTS.</p> <p>Until and unless empirical evidence can shed light on whether this opinion holds water, the precautionary principle will continue to apply. Therefore, cetaceans should be assessed as having a high sensitivity to PTS.</p>	Sensitivity of marine mammals to PTS has been appropriately and adequately assessed in Section 3 of Appendix 11.2: Marine mammal quantitative underwater noise impact assessment, Volume 4 of the ES [APP-148] . As outlined in the Appendix, based on the best available evidence(see detail in Booth & Heinis 2018), experts recommend that PTS from piling is unlikely to significantly affect the fitness of individuals (ability to survive and reproduce). This does not align with a sensitivity score of High.	Not agreed- No material impact	04/07/2024	Page Turn Meeting (23/02/24): The applicant has responded to this and it has been covered in the Deadline 1 written response to the relevant representations and Deadline 4 response to MMO.

4. References

Rampion 2 DCO Project Glossary:

[1.7 Rampion 2 Application Document Tracker \(planninginspectorate.gov.uk\)](https://www.planninginspectorate.gov.uk/17-rampion-2-application-document-tracker)

Examination Library - [EN010117-000419-Rampion 2 Exam Library.pdf \(planninginspectorate.gov.uk\)](https://www.planninginspectorate.gov.uk/en010117-000419-rampion-2-exam-library.pdf)

Planning Inspectorate Application Area- [Rampion 2 Offshore Wind Farm - Project Information \(planninginspectorate.gov.uk\)](https://www.planninginspectorate.gov.uk/rampion-2-offshore-wind-farm-project-information)

