

Sheringham Shoal and Dudgeon Offshore Wind Farm Extension Projects

The Applicant's comments on the Marine Management Organisation's Deadline 2 Submission

Revision A

Deadline 3 May 2023

Document Reference: 16.4









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- 1 The Applicant's comments on the Marine Management Organisation's Deadline 2 Submissions
- 1. This document presents that Applicant's comments on the Marine Management Organisation's (MMO) Deadline 2 submissions [REP2-059].

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Table 1 The Applicant's Comments on the MMO's Comments on Written Representations

ID	MMO Comment	Applicant's Response
Comn	nents on Written Representations	
2.1	REP1-117 Maritime and Coastguard Agency (MCA) Deadline 1 Submission - Written Representations	The Applicant notes that the MCA refers to condition 5(1) and 5(2) in Schedule 10 and 11 and condition 4(1) and 4(2) in schedules 12 and 13
2.1.1	The MMO note the MCA's appropriateness for condition 4(1) and 4(2) of schedules 10-11 to be within the DML. The MMO have reviewed and agree that these conditions would not be enforceable by the MMO, and as such agree that they would be better suited elsewhere in the DCO, rather than the DML.	which are headed 'Vessels under the undertaker's control'. The Applicant is progressing discussions with the MCA with regards to these comments in order to agree an appropriate way forward. An update will be provided at Deadline 4.
2.2	REP1-136 Natural England Deadline 1 Submission -Appendix A1 -Natural England's Comments on 9.5 SEP and DEP Offshore In-Principle Monitoring Plan	The Applicant has updated the Offshore In-Principle Monitoring Plan (IPMP) (Revision B) [document reference 9.5] at Deadline 3.
2.2.1	The MMO would like to echo Natural England's (NE) concerns regarding postponing fundamental decisions regarding the scope and purpose of the monitoring to the post-consent stage.	

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Table 2 The Applicant's Responses to the MMO's Further Responses to the Examining Authority's First Written Questions (WQ1)

ID	MMO Comment	Applicant's Response	
Furthe	Further Responses to the Examining Authority's First Written Questions (WQ1)		
3.1	The MMO deferred responses to some of the ExAs first written questions in our deadline 1 response. We have provided further comment on these here.	Noted.	
3.2	Q1 .3.1.9 Micro-Siting and Chalk Features. Are both the MMO and NE content that the use of micro-siting can avoid adverse impacts to Annex I I UK BAP priority habitat S. spinulosa reefs and the UK BAP priority habitat 'peat and clay exposures with piddocks.	Noted.	
	After further review of this the MMO have no further comment to make on the use of micro-siting and defer to NE for further comment on adverse impacts to Annex I/UK BAP priority habitat S. spinulosa reefs and the UK BAP priority habitat 'peat and clay exposures with piddocks.'		
3.3	Q1 .3.4.3 MEEB and Sandeels. Sandeels are considered an important part of the food resource for bird species, including kittiwakes and sandwich terns [APP-069].	The Applicant notes the Natural England response to this question in REP1-139: "MEEB are designed to offset impacts to Benthic features of the MCZ. Any	
	Could sandeel habitat be artificially formed and sustained in the MCZ?	habitat restoration /re-creation to improve productivity for Annex I kittiwakes	
	If so, would that area be afforded protection from the fishing industry due to the designation?	and sandwich terns is compensation to improve the productivity of those species. The most appropriate location would be within current foraging locations, which are outside of the MCZ."	
	Seabed habitat within the MCZ is currently protected from bottom towed fishing gears by The Closed Areas Bylaw 2021. This covers the entirety of the MCZ, except for a thin strip along the North East edge. The closed areas proposed in this byelaw will prevent damage from fishing activity to a range of protected features, including eelgrass beds, Sabellaria reef, intertidal mussel beds, subtidal mixed sediment and muds, subtidal rocky habitat, subtidal chalk, and peat and clay exposures. The MMO cannot currently guarantee protection for the habitat from further fishing methods, such as static gears.	Therefore, even if sandeel habitat could be artificially formed in the MCZ, would be of limited benefit to North Norfolk Coast Special Protection Area (SPA) Sandwich terns given that the MCZ is outside of their foraging rang	
3.4	Q1.11.3.2 Article 5 - Benefit of Order. MMO, elaborate on the risk that you have identified [RR-053] with regards to collaboration between two different asset holders working in the same area if transfer of benefits were to happen? MMO, provide proposed drafting for a collaboration condition, identifying a relevant precedence. Would the procedure set out in Article 5 be	The Applicant has updated Schedules 10, 11, 12 and 13 of the draft DCO (Revision F) [document reference 3.1] to include agreed wording for a collaboration condition.	

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ID	MMO Comment	Applicant's Response
	applicable in full if, for example, DEL decided to step down as an undertaker of its own project and transfer the rights to develop DEP to SEL? Following on from the discussion at ISH1 [EV-013] [EV-017]:	
	The MMO are still considering wording of a provision for collaboration. Further concerns regarding article 5 have been raised in section 4.7 of this response. The MMO will continue to work with the applicant to provide wording for an adequate collaboration condition.	
3.5	Q1.12.2.3 Herring Spawning and Underwater Noise. Would a seasonal piling restriction to mitigate underwater noise and vibration effects on herring be an effective form of mitigation and, if so, is there any evidence to help define an appropriate and informed exclusion period for such works?	The Applicant does not consider that additional underwater noise modelling is required. The Applicant has responded to the MMO comments on the SEP and DEP underwater noise modelling at ID 154, 155, 159 and 173-178 of The Applicant's Comments to Relevant Representations - Part 1 [REP1-
	Please note that at this stage the MMO are unable to determine whether additional mitigation is required (e.g., a seasonal piling restriction during the herring spawning season) until additional clarification and/or Under Water Noise modelling has been presented. The MMO note that the Applicant agrees with the MMO Relevant Representation (RR053) that there is an absence of evidence that herring spawn in the vicinity of SEP and DEP and that if herring spawning activity was occurring in the vicinity of the wind farm sites it would likely be at low levels.	033].
3.6	Q1.12.2.5 Recreational Activity. It is known that recreational boat trips take	See the Applicant's response to this question in REP1-036.
	place from Blakeney to view seals along the North Norfolk Coast. What would the impacts be on recreational boat trips from the Proposed Development? Would there be a cumulative effect upon seals arising from construction/maintenance vessels for the Proposed Development and the continued recreational tourist boat trips?	Regarding a vessel code of conduct, this is included as a section of the Outline Project Environmental Management Plan (Revision B) (OPEMP) [document reference 9.10], which is secured in the DMLs.
	The MMO would like to highlight that increased vessel presence in an area would provide potential for increased stress for protected species in that area. An increased vessel presence density could impact protected seal species through increased collision risk and increased underwater noise impacts. The MMO recommends this question is directed to the applicant for review, as a cumulative impact should be considered within submitted assessments. Without further assessment the MMO are not able to provide further comment on cumulative impacts. A vessel code of conduct can be used throughout	



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	project development to address and minimise impacts for a project. If a vessel code of conduct is to be submitted post consent then a provision for this would be required within the DML.	
	The MMO note the applicants response to this question, and will review and provide further comment at deadline 3.	
3.7	Q1.12.2.6 Marine Mammals Position Statement. Confirm, in a simple tabular format, whether you are content with the Applicant's assessment of effects,	Noted, the Applicant will respond to the MMO's Deadline 3 response as appropriate at Deadline 4.
	mitigation and conclusions regarding harbour porpoise, minke whale, white-beaked dolphin, grey seal and harbour seal, or if more work is required. Suggested table headings: Species I Agree methodology (YIN) I Agree assessment of effects (YIN) I mitigation suitable (YIN) I agree conclusions (YIN) The table produced will also be requested for the final deadline in the Examination to provide a summary of where outstanding issues, if any, remain.	The Applicant notes that a Marine Mammals Technical Note and Addendum [document reference 16.14] has been submitted at Deadline 3 which aims to address a number of comments raised by the MMO and Natural England in their relevant and written representations.
	Due to the short timeframe between the publication of deadline 1 responses and deadline 2 the MMO have been unable to provide a response as our priority was to review the dDCO and DML. The MMO will provide comments at deadline 3	
3.8	Q1.14.1.3 RIAA, Screening and Outstanding Matters. Are the screening matrices in the RIAA [APP-059] acceptable or do further features/ sites need to be included? An explanation, with evidence as appropriate, as to whether you agree or disagree with the conclusions stated in paragraphs 105 and 106 of the RIAA presented by the Applicant. Provide an update on benthic SACs and whether the concerns raised in respect of the DOW have been addressed sufficiently by the Applicant either in advance of the Proposed Development being submitted or through the ES and HRA Reports [APP-059, Table 7-1].	Noted.
	The MMO defer comment on the screening matrices within the Report to Inform Appropriate Assessment to NE as the Statutory Nature Conservation body. As an interested party it is not within the MMOs remit to comment on the screening matrices for Habitats Regulation Assessment.	



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Table 3 The Applicant's Responses to the MMO's Comments on the Draft Development Consent Order Revision C (REP1-003)

ID	MMO Comment	Applicant's Response	
Draft I	Draft Development Consent Order Revision C (REP1-003)		
4.1	Due to the short timeframe between Deadlines of 11 working days, and the delayed upload of the deadline 1 documents as noted in point 1.1, the MMO have been unable to review the DCO and 4x Deemed Marine Licences (DML) in depth. Any comments not captured within this response will be provided for Deadline 3.	Noted.	
4.2	The MMO have reviewed the changes to the Draft Development Consent Order alongside the applicants Schedule of Changes to Revision C of the Draft Development Consent Order (REP1-004). The MMO acknowledge, and appreciate, that the applicant has carried out a significant number of changes requested by the MMO in our Relevant Representation (RR-053), however, there are still several points which have not been addressed which the MMO have outlined below.	Noted.	
4.3	Schedule 10 & 11 Part 1(4)(e) and schedule 12 & 13 Part (3)(e)- The MMO note that wording still includes "plastic and synthetic" despite the MMO's comment in its Relevant Representation (RR-053)	The Applicant notes that the MMO stated the following in its Relevant Representation: The MMO notes that the dDCO states that the substances or articles authorised for deposit at sea include plastics and synthetics as well as marine coatings and other chemicals. We recommend that depositing such materials and substances at sea should be avoided, where possible.	
		The Applicant read this as an advisory comment and does not consider that the words plastic and synthetic need to be removed from Schedules 10 & 11 Part 1(4)(e) and Schedules 12 & 13 Part (3)(e). However, the Applicant will of course seek to avoid the deposit of plastics and synthetics wherever possible.	
4.4	Schedule 11 Part 2 3(1)(c) - (c) is still italicised	The Applicant has updated the draft DCO (Revision F) [document reference 3.1].	
4.5	The MMO note the adjustments of some (but not all) timeframes to six months. The MMO welcome these changes and prior to Deadline 1 have confirmed to the applicant its position on post-consent timeframes and would	The Applicant has updated the draft DCO (Revision F) [document reference 3.1] to reflect the submission timescales now agreed with the	

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ID	MMO Comment	Applicant's Response
	like to reiterate for the benefit of the Examining Authority that the MMO's position is that all relevant post- consent documents should be submitted to the MMO for review at least 6 months in advance.	MMO as set out in the Draft Statement of Common Ground with Marine Management Organisation (Revision B) [document reference 12.11].
4.6	Schedule 10 Part 2(20) - Minor formatting still not amended gap between "MGN" and "654" which is not present in schedules 11-13	The Applicant has updated the draft DCO (Revision F) [document reference 3.1].
4.7	The MMO still have significant concerns with Article 5 of the DCO and Paragraph 7 of the DML. Our position on this is provided below:	Noted.
4.7.1	It is the MMO's stated position that the DML granted under a DCO's should be regulated by the provisions of the Marine and Coastal Access Act 2009 (MCM 2009), and in respect of this DCO application, specifically by all provisions of section 72 MCM 2009.	The Applicant provided a detailed response relating to the transfer of the benefit of the DMLs under Article 5 at Issue Specific Hearing 6 and confirmed that, subject to the drafting amendments highlighted below, it considers the drafting in Article 5 appropriate and necessary. The Applicant
4.7.2	PINS Guidance	disagrees that transfers of the DMLs should be regulated by the provisions of section 72 of the MCM 2009.
	As set out in Advice Note Eleven, Annex B - Marine Management Organisation	The Written Summary of the Applicant's Oral Submissions at Issue Specific Hearing 6 [document reference 16.11] sets out that where a
	where a developer choses to have a marine licence deemed by a DCO, we, the MMO, "will seek to ensure wherever possible that any deemed licence is generally consistent with those issued independently by the MMO."	transfer of a deemed marine licence is proposed, the Secretary of State would be looking at that in the context of all the provisions of the DCO and there are some Articles and Requirements relating to offshore matters
4.7.3	Developers can seek consent for a marine licence directly with the MMO, reinforcing that in respect of marine licences, the Development Consent Order (DCO) process is nothing more than a mechanism for granting a marine licence - it is not a vehicle to amend established process and procedures, such as those for the transfer of a marine licence.	within the DCO which overlap with the deemed marine licences. In that context, it is entirely appropriate that the Secretary of State has the ability approve the transfer of a deemed marine licence. The Applicant reiterate that this position has been accepted by the Secretary of State repeatedly the DCO context and the approach is well precedented in previous offshowind DCOs.
4.7.4	As the guidance further sets out, we, the MMO are responsible for enforcing marine licences regardless of whether these are 'deemed' by a DCO or consented independently, and it is therefore fundamental that all marine licences are clear and enforceable, and consistency is a key element in achieving this.	
4.7.5	Section 72(7)(a) MCM 2009 permits a licence holder to make an application for a marine licence to be transferred, and where such an application is	



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	approved for the MMO to then vary the marine licence accordingly (section 72(7)(b)).	
4.7.6	Application to transfer or lease	
	In considering the proposed provisions of Article 5 DCO, Article 5(2), being read with Article 5(4) introduces a process involving the Secretary of State providing consent to the transfer in certain circumstances, rather than the MMO as the regulatory authority for marine licences considering the merits of any application for a transfer. The MMO note the proposed ability for the undertaker to lease the deemed marine licence for an agreed period of time - This specific power has been addressed separately below.	
4.7.7	As the process proposed by the applicant is a significant departure from the current statutory framework in relation to marine licences, it has not been tested, it may therefore be the case that the applicant/undertaker will face unnecessary delays following it's application as it is not clear that the Secretary of State will have a process in place to deal with requests of this nature and it is not clear what any consultation period with the MMO would be.	
4.7.8	Duty to consult MMO	The Applicant considers that the obligation on the Secretary of State to
	It is noted that the Secretary of State "must consult" the MMO (Article 5(5)) - however the obligation goes no further than this, the Secretary of State is not obligated to take into account the views of the MMO in providing its consent and there is no obligation for the MMO to be informed of the decision of the Secretary of State - only by the undertaker under Article 5(8). This provision merely states that the notification must be 'prior' to any transfer or grant and does not indicate any time scale.	consult with the MMO is sufficient and appropriate. The Applicant also considers that the MMO will be given sufficient notice of the transfer as the undertaker must provide notification to the MMO under 5(8) prior to any transfer taking place. The Applicant does not consider that a specific timescale is required with regards to Article 5(8) so long as the relevant information required under 5(9) is given before the transfer takes place. In practice, the Applicant notes that the relevant undertaker is
4.7.9	In the regulatory sphere it strikes the MMO as highly unusual that a decision to transfer a marine licence or to lease is not the decision of the regulatory authority regulating in that area.	already likely to be in discussions with the MMO with regards to a proposed variation of the DML(s) as set out further at ID 4.7.10 below.
4.7.10	Power to vary the marine licence following a transfer Despite the proposed changes to the process of transferring a marine licence it remains that neither the licence holder/undertaker nor the Secretary of	With regards to concerns raised by that a transfer of the benefit under Article 5 would create an additional step in the process as a variation would still need to be made by the MMO to the deemed marine licence(s), the



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	State has any power to actually vary any terms of a marine licence and it will still therefore be necessary for the MMO to take steps to vary a marine licence to reflect that it has been transferred to another entity. To our mind the proposed mechanism for transfer of a marine licence does not actually work and in fact does little more than complicate the process.	Written Summary of the Applicant's Oral Submissions at Issue Specific Hearing 6 [document reference 16.11] highlights that that this is not an unusual situation. The situation can (and does) arise post consent where variations are made to a DCO which also require a separate application to be made to the MMO to vary the deemed marine
4.7.11	There are also very real practical concerns as to how the proposed process would work in practice. The transfer of the licence would happen first, and then the marine licence would need to be varied. After the transfer of the licence, the new license holder/undertaker would have a marine licence which would still be in the name of the license holder/undertaker who had transferred the licence. The new license holder/undertaker would have no authorisation to carry out any acts until the variation had taken place and until the variation had been affected the original licence holder/ original undertaker would remain liable for any actions undertaken. The procedure under section 72 MCAA avoids this issue entirely	licence(s). For example, the Applicant is aware that where there are Requirements within a DCO which have an offshore element and these are subsequently amended by the Secretary of State through a non-material change application, then this can also require a variation to the deemed marine licence which would have to be separately submitted to the MMO. This is simply a consequence of having the deemed marine licences wrapped up into the DCO through this consenting process.
4.7.12	Transfer of "any or all of the benefit"	The Applicant confirmed at Issue Specific Hearing 6 that it would amend Article 5 to provide for the transfer of the whole of a DML only. The relevant
	Article 5(2)(a) specifies the transfer of "any or all of the benefit of the provisions of this Order (including the deemed marine licence".	amendments have been included in the draft DCO (Revision F) [document reference 3.1].
	Article 72(7)(a) MCAA 2009 specifies:	
	"On an application made by the licensee, the licensing authority which granted the licence -	
	(a)may transfer the licence from the licensee to another person"	
4.7.13	As can be seen above there is no concept within the regulatory framework of MCAA 2009 for a marine licence to be transferred (or indeed leased) 'in part'. This proposal by the applicant creates a new power and an additional level of complexity. The MMO would be grateful if the applicant could indicate why it considers the ability to either transfer or lease 'in part' necessary.	
4.7.14	The ability to transfer 'part' of a marine licence is a wholly new concept and would lack consistency with marine licences granted independently by the	



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	MMO - which would make a significant departure from the PINS guidance to applicants as set out above.	
4.7.15	Grant to a lease of a deemed marine licence	The Applicant confirmed at Issue Specific Hearing 6 that it would amend
	Article 5(2)(b) specifies a grant to a lessee for an agreed period of "any or all of the benefit of the provisions of the Order (including the deemed marine licences)".	Article 5 to remove the ability to grant a lease of a deemed marine licence. The relevant amendments have been included in the draft DCO (Revision F) [document reference 3.1].
4.7.16	'Leasing'	
	There is however no mechanism either in the DCO or indeed in MCAA 2009 for a marine licence to be 'leased', specifically there is no provision for the licence 'reverting' to the licence holder after the agreed lease period - in practical terms it would be necessary to vary the marine licence to change the details of the licence holder at the beginning of the agreed period and then again at the end of the agreed period.	
4.7.17	It is not clear why the applicant considers it necessary to introduce the ability to 'lease' the whole or part of a deemed marine licence and we should be grateful for any clarity on this issue.	
4.7.18	There are significant practical implications should the power to lease be created in this DCO as there is no procedure in place to affect such a lease. Any such lease would require a transfer or variation to allow lessee to claim the benefit of the licence, and then at the end of the lease period the marine licence would need to be varied to transfer it back to the lessor. Further information is required from the applicant as to the detail of this process, for example is it anticipated that the return of the licence to the lessor to be automatic and what would the process be if the lessee refused to transfer the marine licence back.	
47.19	Article 5(2)(b) use of the term 'grant'	
	he MMO would be grateful for clarification on the use of the term 'grant' in Articles 5, specifically 5(2)(b) in respect of granting the benefit of the marine licence to a lessee. Article 5(2)(a) refers to the transfer of the marine licence - as is the language of Article 72 MCAA 2009. As the granting of marine licences fall under section 69 MCAA and not section 72, can the applicant	



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	provide further explanation of it intention in this regard and its use of the term?	
4.7.20	Enforcement It is essential as the regulatory authority in the marine environment that the MMO is always fully aware who has the benefit of marine licence in order that it can carry out its regulatory function and where necessary take enforcement action. The mechanism the applicant is currently proposing for the transfer of a marine licence departs from this established process without clear justification as to why such a departure is necessary or appropriate in the circumstances.	The Applicant has set out above why it considers the process included in Article 5 (as amended in the draft DCO (Revision F) [document reference 3.1] is necessary and appropriate.
4.7.21	Conclusion It is firmly the MMOs position that the current regulatory framework should prevail, specifically that only a transfer of the whole of a marine licence should be permitted and not part of it and the transfer should be left entirely to the MMO to process outside of the Nationally Significant Infrastructure Project process. The provisions currently proposed by the applicant raise several significant issues and complicates a what is a straightforward and well- established statutory process and the MMO can see little or no benefit to this.	

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Table 4 The Applicant's Responses to the MMO's Comments on the Disposal Site Characterisation Report Revision B (REP1-020)

ID	MMO Comment	Applicant's Response	
Dispo	Disposal Site Characterisation Report Revision B (REP1-020)		
5.1	The MMO welcome the Applicant's commitment to carry out additional contaminants sampling and analysis as Fugro are not an accredited lab. The MMO will work with the Applicant on this matter and have received a sample plan request from the applicant for additional sampling and analysis advice external to examination.	The Applicant notes that it had initially sought to 'piggy-back' additional contaminants sampling onto surveys that were already planned for 2023, however this is no longer feasible and therefore the contaminants sampling and analysis will be undertaken post-consent in light of MMO advice that sample plan requests remain valid for up to three years, but that they should be used as soon as practicable. The MMO were informed by email on 6 April 2023 that the Applicant has withdrawn its sample plan request and will resubmit once more clarity over the timing of the sampling campaign.	
		The MMO and the Applicant have agreed wording which has been included in the updated the draft DCO (Revision F) [document reference 3.1] for the post consent submission of a sampling plan.	
5.2	The MMO note that fish receptors have not been referenced anywhere within the Disposal Site Characterisation Report (DSCR), and therefore the potential impacts relating to fish receptors has not identified or assessed. Whilst there is signposting to relevant sections of the Environmental Statement (ES) in relation to the potential impacts of disposal, these refer to physical processes, marine water and sediment quality, and benthic ecology only. The MMO would have expected to see a discussion on the impacts of disposal on fish receptors within the DSCR, or signposting to the relevant sections of Chapter 9 (Fish and Shellfish Ecology) of the ES in which the impacts to fish have been assessed. This is of particular relevance to herring and sandeel as both species are reliant on specific sediment types for part or all of their life stages and could therefore be vulnerable to impacts from the disposal of dredged arisings, especially if this results in changes to sediment composition.	The relevant assessments on fish species are provided in Sections 9.6.1.3 9.6.1.3, 9.6.2.5 and 9.6.2.6 of ES Chapter 9 Fish and Shellfish Ecology [APP-095]. These assessments conclude negligible to minor adverse efferon herring and sandeel. Further contaminants sampling and analysis is being undertaken post-consent (see ID 5.1 of this table). Therefore, the licence for the disposal of sediment at sea will be applied for post-consent. The Applicant therefore proposes to withhold any further updates to the Disposal Site Characterisation Report until the post-consent stage when more accurate details on the design (e.g. foundation types) and therefore quantities of material that are required to be disposed of, are known. This will enable a more accurate assessment to be undertaken. The updates will include signposting to the relevant fish and shellfish ecology assessments and	
5.3	Although no reference has been made to fish receptors or their ecology, the MMO note that the Applicant has identified impacts relating to benthic ecology. The impact pathways identified by the Applicant for benthic ecology would also be relevant for fish receptors:	details of whether a fall pipe is proposed to be used for disposal of sediments at the seabed.	
	(i) Increases in suspended sediment concentration (SSC)		

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ID	MMO Comment	Applicant's Response
	(ii) Sediment deposition	
	(iii) Remobilisation of contaminated sediments	
5.4	The most vulnerable fish receptors to disposal of dredged material are likely to be those with a strong association with the seabed, such as herring and sandeel.	
	Herring require sediments with a high gravel content and a low proportion of fine sediment for spawning. Whereas sandeel show a strong preference for medium and coarser sandy sediments and avoid areas of fine sediment. Disposal of 1,131,319m³ of dredged arisings has the potential to change the sediment composition, which could reduce its suitability as herring spawning habitat and/or sandeel habitat.	
	Although no net sediment transfer is planned between disposal areas, changes could occur within the disposal areas which contain both suitable and unsuitable sediment types. If sediment is released at the surface (the worst-case disposal method), this will form a plume, the size of which will depend on factors such as sediment type, particle size and currents. There is the potential for some particles, especially finer silt particles which are unsuitable for herring and sandeel, to travel some distance in the period of half of a tidal cycle (six hours). In addition, the sub-surface arisings produced during drilling activities are likely to be finer and may result in a net increase in finer sediment in each disposal area. However, it should be noted that the volume of sediment produced during drilling activities is relatively small, making up approximately 2% of the arisings for disposal (see Annex 1). In addition, it should be noted that the seabed in the area is considered to be relatively dynamic, with background SSC relatively high (10-30mg/l) and increasing further with winter storms.	
5.5	The MMO note that the applicant has assumed 'worst-case' scenarios for the construction methods to determine the 'worst-case' disposal volumes and effects, which is appropriate. The scenarios include assuming the maximum amount of sand- wave levelling (SWL) required, the use of piled foundations requiring drilling, SEP and DEP being built concurrently, the maximum amount of wind turbine generator (WTG) and substations, and the assumption of dredged arisings being released from the surface as overflow	



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ID	MMO Comment	Applicant's Response
	from the dredger. Whilst I support the use of worst-case scenarios, it is my understanding that the Applicant may have overestimated the maximum amount of arisings produced. As a mitigation measure, the Applicant has committed to positioning monopile and jacket foundations for WTGs in such a way as to avoid the need for seabed preparation. However, when estimating the maximum sediment volume (1,131,319m³), this figure is derived from combining, among other things, seabed preparation (wind turbines) and drilling (wind turbines) which should be mutually exclusive (see Annex 1). This would result in a worst-case scenario of 1,107,427m3.	
5.6	The MMO recommend that the Applicant uses a fall pipe in all disposal activities wherever practicable, to ensure that sediments are broadly returned to the same areas they were removed from. This may help to ensure that sediment composition will remain broadly the same in areas of herring spawning habitat and sandeel habitat.	
5.7	As part of the Disposal Site Characterisation Report, the impact of disposal of material within SEP and DEP wind farm sites on benthic ecology has been assessed by the applicant. The applicant mentions "overall the impact from disposal site activities is predicted to result in no impact with the exception of temporary increases in SSC and deposition impacts which would be of minor adverse significance". The MMO recommend that the applicant consider the impact of particle dispersal on brown shrimp, as literature has suggested that particle size was found to be a major influencing factor on the degree of burial achieved by C. crangon (Pinn & Ansell 1993) and they have been shown to be a key commercial species in the area.	



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Table 5 The Applicant's Responses to the MMO's Comments on the Outline Cromer Shoal Chalk Beds (CSCB) Marine Conservation Zone (MCZ) Cable Specification, Installation and Monitoring Plan (CSIMP) (APP-291)

ID	MMO Comment	Applicant's Response	
Outlin	Outline Cromer Shoal Chalk Beds (CSCB) Marine Conservation Zone (MCZ) Cable Specification, Installation and Monitoring Plan (CSIMP) (APP-291)		
6.1	Please note that the following comment is related to the CSIMP submitted as part of the applications submission to PINS.	Noted	
6.1.1	The MMO recommend that where possible, and subject to local seabed geology and other receptors in the area, the Applicant aims for a cable burial depth of greater than 1.5m in order to minimise potential effects of electromagnetic fields (EMF) on electro-sensitive fish receptors and of sediment heating to benthic- dwelling fish, eggs and larvae. Notwithstanding the above, for this locality in particular, the MMO recognise that burial of cables may impact the designated features within the CSCB MCZ, such as causing direct damage to the chalk reef, for example. The MMO defer to NE, as the lead statutory consultee for the CSCB MCZ, to comment further on the impacts of buried cables in relation to the MCZ features.	Cables will be buried where the substrate allows burial to a target burial depth of 1.0m, with 0.6m or greater being acceptable in chalk. Furthermore, as described in the Export Cable Burial Risk Assessment [APP-293], reduced burial depths (0.3m) may be accepted in order to avoid the need for external cable protection in the MCZ. Acceptance of burial depths is something that will be decided between the Applicant and the export cable installation contractor at the time of the cable installation. Should the required depths not be achieved, the necessary remedial action would be discussed with MMO and Natural England at the time.	

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Table 6 The Applicant's Responses to the MMO's Comments on Deadline 1 Submission - 13.6 Marine Plan Policy Review (REP1-060)

ID	MMO Comment	Applicant's Response	
Dead	Deadline 1 Submission - 13.6 Marine Plan Policy Review (REP1-060)		
7.1	The MMO thanks the applicant for submission of a complete Marine Plan policy Review. The MMO are currently reviewing this document and will provide updated comment at future deadlines. From initial review of the assessment, the MMO are under the impression that it is adequate, however a more indepth review may be provided in the future. Some of the responses to technical points raised will be addressed in further deadline responses.	Noted.	
7.2	The MMO note multiple areas within the assessment where the applicant refers to mitigation measure included within the application, but do not expand on what the mitigation measure are. An example of this is for policy BIO1. While the MMO appreciates that the applicant has referenced the chapters where this is visible within the ES, the Marine Plan Policy Review should be able to be read as a standalone document and should provide evidence of the mitigation measures relevant to the policies within the assessment.	The Applicant does not consider that it is necessary to include mitigation measures for each marine plan policy for each receptor topic within the Marine Plan Policy Review document. There are multiple mitigation measures relevant to e.g. BIO1 and it would therefore not be appropriate to list all of these within the Marine Plan Policy Review [REP1-060] tables. However, following a more in-depth review by the MMO, the Applicant will provide a cross reference in the next iteration of the Marine Plan Policy Review to the Schedule of Mitigation and Mitigation Routemap [APP-282] which lists all of the SEP and DEP mitigation measures.	

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Table 7 The Applicant's Responses to the MMO's Comments on EN010109-000984-12.3 The Applicant's Comments on Relevant Representations; Section 4.12 Marine Management Organisation

ID	MMO Comment	Applicant's Response	
Dead	Deadline 1 Submission - 13.6 Marine Plan Policy Review (REP1-060)		
8.1	The MMO have provided comment on some of the applicant's responses below, however note that some of the responses also require review of the first written questions. Due to the short timeframe between deadlines the MMO have been unable to give a full detailed review of the first written question responses at this time and will be providing response to these at deadline 3.	Noted.	
8.2	Any Applicant responses not commented on here, the MMO will provide a response at deadline 3.		
8.3	The MMO acknowledges that the applicant relies heavily on precedence set with other consented DCOs. The MMO remind the applicant that this only considers what was consented and not what was discussed during examination, or any previous concerns raised by the MMO. This also does not consider that the MMO currently have experience working within the confines of those consented DMLs, and the responsibility falls to us to make them enforceable. Through this experience the MMO are keenly aware of the issues created through the drafting and consenting process of DMLs. The MMO raise comments using their past experience and from issues that have arisen with other projects. The MMO aim to continuously improve our advice in the everchanging landscape of offshore wind, to ensure that the DCO and DMLs created is the best version for both the Applicant and the MMO. The precedence the applicant is relying on does not account for the constraints the MMO have encountered during the post consent and construction phases of those DMLs.		
8.4	Point ID 12 - The MMO note that the applicant does not consider a provision for temporary deposits or removal for mitigation and monitoring activities necessary. The MMO request further clarity on why this is the case. This provision was requested following experience with consented DCO projects, and with the knowledge that a deposit or removal within the marine environment could constitute a licensable activity. This provision was requested to provide cover for the applicant for the duration of the mitigation	The Applicant does not intend to make any additional deposits as part of its mitigation or monitoring activities. The Applicant notes that the launching of equipment or towing of equipment is not a licensable activity.	



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ID	MMO Comment	Applicant's Response
	and monitoring activities secured through the DCO/DMLs. If this provision is not included, it could leave the applicant in the position of requiring further consents to deposit or remove equipment for the purpose of monitoring or mitigation.	
8.5	Point ID 13 - The MMO note that the applicant will not be providing a total maximum volume of scour protection per turbine. This was requested to provide further clarity for the future enforceability of the DMLs.	The Applicant's position remains as stated at Deadline 1 that the inclusion of the total volume of scour protection within the DMLs is appropriate and that a further breakdown is not necessary.
8.6	Point ID 28 - The MMO is not satisfied with the applicant's response to the definition of 'maintain' and reiterate that this should be updated to remove references to 'adjust' and 'alter'. The applicant has referred to other projects which include this definition within the DMLs, however for projects such as East Anglia two, the MMO also raised concerns regarding the definition of 'maintain' which were not addressed.	The Applicant's position remains as stated at Deadline 1 that references to 'adjust' and 'alter' are appropriate and necessary. In addition, the Applicant notes that condition 13(1)(f) in Schedules 10 and 11 and condition 12(1)(g) of Schedules 12 and 13 requires approval of an offshore operations and maintenance plan prior to commencement and for it to be reviewed by the MMO every 3 years. Offshore maintenance activities are therefore subject to appropriate controls within the DMLs.
8.7	Point ID 55 - The MMO have raised further concerns regarding Article 5 in point 4.7 of this response and have given example of the legal standing and requirements under MaCCA. The MMO request the applicant to further review this.	The Applicant's response is set out in Table 3 above.
8.8	Point ID 59 - The MMO note the response to this in the first written questions, and their response to the timeframe for the decision to be made. However, the point responded to here is in reference to a timeframe for the notification to be sent to the MMO. This is standard in notification conditions and would be worded along the lines of "The MMO must receive notification of the decision within XXX days of the decision being finalised".	The Applicant does not consider that this additional wording is necessary to include in relation to condition 4 of Schedules 10 and 11 and condition 3 of Schedules 12 and 13. The scenarios notification is bespoke to this DCO and places a restriction on commencing activities under each licence until notification of the chosen scenario and the phasing plan have been provided to the MMO. The drafting in the DMLs reflects the drafting in Requirement 9. It is difficult to see how the additional wording proposed could be enforced in practice.
8.9	Point ID 130 -134 - The MMO note that that applicant has not provided any justification other than precedence for why they think the use of the phrase 'materially' is acceptable within the DCO/DMLs in relation to materially new impacts under the EIA. The MMO reiterate their comments about EIA. The concern with this is that the inclusion of the word "materially" here would allow the undertaker to carry out works whose effects are outside of the likely	The Applicant provided a detailed response on this at Issue Specific Hearing 5 and does not consider that reference to 'materially' within paragraph 9(1) of Part 1 of Schedule 10 of the draft DCO (Revision F) [document 3.1] or within the equivalent drafting in Schedules 11, 12 and 13 should be removed.



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	significant effects assessed in the EIA, providing they do not do so materially, i.e. in any significant way, greatly, or considerably. This is not what the purpose of the EIA process is, and it runs contrary to the purpose of EIA. The other issue with this is that whilst the undertaker is responsible for producing the environmental information and statement on which the EIA decision is based, the appropriate authority is responsible for the EIA consent decision, the inclusion of the word materially essentially means that the undertaker makes the decision as to what is and what is not material. Under EIA it is for the appropriate authority to determine what the likely significant effects will be and how those should be mitigated.	The Written Summary of the Applicant's Oral Submissions at Issue Specific Hearing 5 [document reference 16.10] confirms that the reference to 'materially' at paragraph 9(1) of Part 1 of Schedule 10 of the draft DCO (Revision F) [document 3.1] "deals with potential amendments and variations to the approved details, plans and schemes, which can only be agreed with the MMO where it is demonstrated that such amendment or variation is unlikely to give rise to any materially new or materially different environmental effects from those assessed in the ES. This approach is entirely in accordance with general planning and EIA principles and the process routinely undertaken to apply for amendments and variations of any consent in an EIA context, in particular the tests to be considered by the decision maker for a non-material change request as set out in the Planning Act 2008: Guidance on Changes to Development Consent Orders."
		In addition, the Written Summary of the Applicant's Oral Submissions at Issue Specific Hearing 5 [document reference 16.10] also confirms the following:
		The Applicant disagrees that the wording at Schedule 10, Part 1, paragraph 9(1) allows for the Applicant to determine what is or is not material because paragraph 9(1) provides that amendments and variations can only be done in agreement with the MMO. If the MMO consider that the amendment or variation proposed is materially different to what is provided for within the ES, the undertaker could not implement the amendment or variation as it won't be agreed as required by paragraph (9).
		 There is a condition in each deemed marine licence which requires an offshore operations and maintenance plan (OOMP) to be submitted for approval to the MMO (e.g. in Schedule 10, Part 2, paragraph 13(1)(f) and this addresses the MMO's concerns as it sets out what would and would not require a new marine licence and therefore what would be considered 'material' in terms of activities undertaken during the operational phase.
		The Applicant also notes that the OOMP condition requires the OOMP to be resubmitted for review every 3 years by the MMO and therefore the offshore

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The Applicant's comments on the Marine Management Organisation's Deadline 2 Submission

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ID	MMO Comment	Applicant's Response
		operation and maintenance activities are subject to continued monitoring and control by the MMO through this mechanism.
8.10	Point ID 192 -197 - The MMO welcomes the additional sample plan request from the applicant and will process this as a priority outside of examination to allow for timely updated sampling and analysis.	See response at ID 5.1 of Table 1-4 .

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