

# **Vattenfall Wind Power Ltd**

## **Thanet Extension Offshore Wind Farm**

### **Appendix 3 to Deadline 4: Response to Deadline 3 Submissions by Interested Parties (Non-Shipping)**

Relevant Examination Deadline: 4

Submitted by Vattenfall Wind Power Ltd

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Revision A

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## **1 Introduction**

- 1 As requested in the Rule 8 letter (PINS Ref PD-009) the Applicant has reviewed submissions by Interested Parties made at Deadline 3 and has provided responses to those. Responses to shipping interest parties can be found in Appendix 4 to this Deadline 4 Submission.
- 2 Where responses to points made have been picked up elsewhere in the Applicant's Deadline 4 submission, this is referenced in this document.

## 2 Comments on additional Submissions from Deadline 3

Interested Party	Key points raised in the Submission	Applicant's response
BritNed Interconnector	While the development of the Thanet Windfarm Extension will not have a direct impact on the BritNed cables, the closest point of approach of the zone appears to be some 3km distant, there will be potential risks from vessels anchoring during the construction phase and BritNed request that Vattenfall assess these risks and take appropriate mitigating measure	The Applicant can confirm that there will be no greater risk of project vessels anchoring on the BritNed cable than any other vessel not associated with the project. Where cables are appropriately reported to the Hydrographic Office and therefore appropriately marked on all charts, prudent mariners would avoid anchoring in the vicinity of the cable. It is worthy of note that the BritNed cable is immediately adjacent to the Tongue Deep Water anchorage and as such where concerns exist for potential interaction with anchor handling on the BritNed cable, the same confidence can be taken in existing measures/ marcation being appropriate to avoid damage to the BritNed cable asset from all vessels, immaterial of being part of the existing vessel baseline or the proposed Thanet Extension construction vessels. Further to this the Applicant can confirm that there is no proposal for a 3km anchor pattern to be employed at this location during construction.
Environment Agency (PINS Ref REP3-066)	We have agreed the statement of common ground. The applicant will be submitting this in due course.	The agreed SoCG was submitted by the Applicant as part of the Deadline 3 Submission (PINS Ref REP3-036).
Environment Agency (PINS Ref REP3-066)	Natural England and Environment Agency were both consulted on the Saltmarsh Mitigation Plan. We have discussed the plan with Natural England, who will be providing	This is noted by the Applicant with responses provided below.

Interested Party	Key points raised in the Submission	Applicant’s response
	the formal response, which also captures our concerns.	
Historic England (PINS Ref REP3-034)	Addressed in Appendix 6 to this Deadline 4 Submission.	
Kent Wildlife Trust (PINS Ref REP3-049)	We understand that the ExA needs to focus on the options that are presented in the application. However we are concerned that through the examination process we were not able to fully discuss/outline the issue regarding the consideration of viable alternative routes for the onshore cable route, as this is the area of primary concern for Kent Wildlife Trust, the National Trust and a number of other interested parties. We have outlined our objection to the proposed onshore cable route in the Relevant and Written Representations, in particular due to the dismissal of other potential onshore routes without adequate environmental evidence demonstrating that the chosen route is the least environmentally damaging.	The Applicant notes that KWT do not consider that adequate consideration of viable alternative routes has taken place. The Applicant would note that this matter has now been agreed within the draft SoCG with Natural England, Environment Agency, Dover District Council, Kent County Council, and Thanet District Council. Notwithstanding this the Applicant has provided detailed responses to the Examining Authority questions (ExQ1) (PINS Ref REP1-024) with regards the consideration of alternatives, the relevant data, and the approach taken.
Kent Wildlife Trust (PINS Ref REP3-049)	Kent Wildlife Trust’s (KWT) response to ISH3 Action Point 2 with regard to the effects of cable connections on saltmarsh in Pegwell Bay:	The Applicant notes this response and can confirm that a saltmarsh monitoring reinstatement and management plan has been drafted, a revised version of which accompanies the Deadline 4 submission in order to document the recovery of

Interested Party	Key points raised in the Submission	Applicant’s response
	<p>It is the responsibility of the developers to clearly identify and document any long-term, short-term and permanent adverse effects caused by existing cables on the site, and to monitor these at suitable intervals over the lifetime of the project. Therefore, for the site in question (Pegwell Bay Country Park, Stonelees, and the whole Sandwich and Pegwell Bay National Nature Reserve) Nemo and Vattenfall should be responsible for this, and for making this information available. However, we outline here some of our in-principle concerns relating to previous and proposed incursions on the site</p>	<p>the saltmarsh following the short term effects of cable installation, and where required provide for reinstatement.</p>
	<p>Kent Wildlife Trust do not have access to all post-construction monitoring findings/reports, in part due to confidentiality and through these reports not being publicly available in many cases. Therefore for a full understanding of the findings and details of the impacts from Nemo, we suggest that the ExA contact Nemo and request their post-construction monitoring reports for the Nemo interconnector cable.</p>	<p>The Applicant notes this response and can confirm that these potential effects have been considered in the application documents (Volume 2, Chapters 4 and 5 of the ES (Application Refs 6.2.4 and 6.2.5/ PINS Refs APP-045 and APP-046, respectively)). Importantly the effect of trenching has been assessed, and monitoring has been proposed to further understand any potential effect on the makeup of the habitat and potential lowering of saltmarsh, and critically a seasonal restriction put in place to avoid effects on over wintering birds.</p>

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	<p>In the short term there was complete removal of the vegetation where trenching took place.</p> <p>The long term impact is not certain however. Kent Wildlife Trust did not undertake formal survey/ monitoring of the saltmarsh vegetation as this was the responsibility of the developer. Any assertions made here would not be supported by hard data. However, <i>possible</i> impacts from this development include:</p> <ol style="list-style-type: none"> <li>1. The loss of native saltmarsh vegetation if non-native <i>Spartina anglica</i> replaced native saltmarsh species (as it can do according to the literature due to superior colonising rate).</li> <li>2. The loss of native saltmarsh vegetation due to changes in land level resulting from the work. A lowering of the ground resulting in the formation of permanent or semi-permanent pools; an increase in land level resulting in succession to maritime grassland habitat with a loss of typical saltmarsh plants like sea purslane, sea lavender etc.</li> <li>3. Recorded disturbance to wintering birds during the intertidal phase of construction.</li> </ol>	



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	<p>In addition to these, the impact on saltmarsh vegetation near Jet Petrol Station was significant with a swathe excavated including both native and non-native saltmarsh plants.</p> <ul style="list-style-type: none"> <li>• From previous Vattenfall cable, there was disturbance to wetland birds during intertidal construction phase, as documented during Pegwell Bay Bird Disturbance Study carried out by Kent Wildlife Trust (2010-2011). During this time a number of the observations of bird disturbance were recorded which related to motor vehicles associated with cable laying works for the offshore wind farm which took place in late January and February 2010. This involved quad bikes and excavators driving at low speed across the mudflats.</li> <li>• The timing of onshore/intertidal works of the previous cable installation was inappropriate and poorly timed as the cables were installed in the middle of the overwintering period. Given the known importance of the site for overwintering bird populations, this failure in timing and construction planning has resulted in a lack of confidence that the applicant will secure</li> </ul>	<p>The Applicant notes this concern raised by KWT and would highlight that in order to ensure such disturbance during critical periods (the over wintering period) is not repeated, a seasonal restriction has been committed to between October and March inclusive. This commitment is confirmed within the Schedule of Mitigation (REP3-047), details of which are referred to in Schedule 12 of the DCO (dML Condition 10(1)(c)(ii)).</p>

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	<p>suitable mitigation through timing of works if the current proposal is consented.</p> <p>However, whilst overwintering period is a particularly sensitive time of year for bird population, it is also important to note that no time of the year is without impact to birds, as the site is used year-round by different groups and species of birds, highlighting the overall importance of this site. For these reasons we would like to re-affirm our position that this site should not be subject to yet more disturbance activities and that it should be protected from further incursions.</p>	
	<ul style="list-style-type: none"> <li>• There will be temporary loss of saltmarsh vegetation if excavation is used, including possibly small areas of native saltmarsh vegetation and other coastal plants on sea wall. If native saltmarsh vegetation is removed recolonization by non-native species is possible resulting in permanent loss of native saltmarsh habitat.</li> <li>• The saltmarsh vegetation will be completely removed if trenching is adopted. It may recover over time, however uncertainty arises as to whether it will return to its original condition.</li> </ul>	<p>The Applicant can confirm that the temporary effects of excavation have been considered in the application documents (Volume 2, Chapters 4 and 5 of the ES (Application Refs 6.2.4 and 6.2.5/ PINS Refs APP-045 and APP-046, respectively)). The mitigation, including management of the topography and structure of existing saltmarsh, and not removing the existing saltmarsh, is secured within the saltmarsh monitoring, reinstatement and management plan (SMRMP), a revised version of which accompanies this Deadline 4 submission.</p> <p>The proposed methodology is to sidecast excavated material and return post installation of the cable. This methodology, detailed in the SMRMP, will ensure that saltmarsh vegetation</p>

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	<ul style="list-style-type: none"> <li>• The saltmarsh / maritime grassland / intertidal zone is used by breeding redshank and skylark and a range of invertebrates, some of which are of national importance e.g. moths.</li> <li>• In-combination effects: The impact of elements of this development are described as “minor adverse” but we are deeply concerned about the ‘in combination effect’ of a whole plethora of other developments, past and present affecting the site. These include: the hoverpad; road widening; local housing / increased recreational pressure; repeated cable laying works; Coast Path; cycle track; and Manston Airport.</li> </ul>	<p>is not completely removed, but reinstated and monitored to record recovery and confirm this with the relevant statutory nature conservation body.</p> <p>The Applicant can confirm that the potential cumulative effects associated with TEOW and other future projects has been considered in the application documents (Volume 2, Chapters 4 and 5 of the ES (Application Refs 6.2.4 and 6.2.5/ PINS Refs APP-045 and APP-046, respectively)). The assessment has, in common with all other NSIPs, been made against a baseline which accounts for projects already in-situ and considers the implications of future impacts cumulatively with the proposed project.</p>
<p>Kent Wildlife Trust (PINS Ref REP3-049)</p>	<p>KWT response to ISH3 Action Point 12 with regards Thanet Coast and Sandwich Bay Ramsar:</p> <p>There will be a temporary impact from the proposed development on birds using the intertidal zone and an “in combination” impact with other developments and disturbance pressures. Our main concerns relating to bird species are outlined below:</p> <ul style="list-style-type: none"> <li>• Indirect impacts on birds including disturbance to migratory, wintering and possibly breeding wetland birds.</li> </ul>	<p>The Applicant can confirm that there are not predicted to be any adverse effects on the Ramsar. The Applicant considers that temporally and spatially there is unlikely to be any significant effect from the project alone or in-combination effect as all other relevant projects will have completed construction by that point.</p> <p>Beyond these observations the Applicant notes that there will not be indirect effects during the over-wintering period due to the seasonal restriction, and nesting birds due to the commitments made within the Outline Landscape and Environmental Management Plan [PINS Ref REP1-069] which</p>

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	<ul style="list-style-type: none"> <li>• Trenching could result in damage to the invertebrate community and a reduction in food availability for birds. It is thought that Horizontal Directional Drilling (HDD) will probably have a negligible direct impact.</li> <li>• Possible disturbance to redshank and skylark breeding in saltmarsh / maritime grassland whilst work is taking place (depending on timing of works).</li> <li>• Damage to benthic invertebrate community in mud / saltmarsh caused by cable installation due to direct damage to invertebrates and disturbance to (reordering of) or compaction of the sediment, resulting in a loss of food for wetland birds. The scale of impact will depend on the cable installation method used.</li> <li>• Damage to reedbed habitat at base of sea wall which is used by breeding reed warbler and possibly reed bunting.</li> <li>• Either method of cable installation will result in disturbance to feeding, roosting and possibly nesting birds while the work is taking place.</li> <li>• Wintering / migratory birds: e.g. turnstone, golden plover, sanderling, ringed plover, grey plover. The mudflats</li> </ul>	<p>provides for <i>inter alia</i> an ecological clerk of works to ensure disturbance to nesting/breeding birds is minimised.</p> <p>The Applicant agrees that there may be a temporary effect on the invertebrate assemblage as a result of trenching and can confirm that this has been assessed [PINS Ref APP-061] with a conclusion made of no significant effect. This conclusion is agreed with Natural England and the Environment Agency with regards temporary effects on the saltmarsh habitat.</p> <p>The Applicant can also confirm that where trenching is required the saltmarsh monitoring, reinstatement and management plan provides the commitment to ensure that the structural integrity is maintained to ensure reinstatement is successful.</p>

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	<p>immediately in front of the bird hide are favoured by golden plover for roosting.</p> <ul style="list-style-type: none"> <li>• Breeding birds: redshank several pairs nest on saltings though possibly not in the area directly affected by the works. The same also applies to skylark.</li> <li>• A small area outside the sea wall was not within the recording area. This may be the reason why reed warbler was not recorded as the reedbed at the base of the sea wall supports this species.</li> <li>• Internationally important designated (Ramsar, SPA) site for wintering/migratory wetland birds. Several recorded in nationally significant numbers (golden plover, grey plover, ringed plover, sanderling, Lapland bunting).</li> <li>• Damage to reedbed habitat at base of sea wall (used by breeding reed warbler and possibly reed bunting)</li> <li>• The intertidal phase of work will result in disturbance to feeding, roosting and possibly nesting birds depending on the timing.</li> </ul>	
	<p>KWT note that the ornithological report provided by the Applicant includes a time restriction on works in the intertidal but KWT consider that they have little confidence in</p>	<p>The Applicant can confirm that the seasonal restriction is recorded within the Schedule of Mitigation [PINS Ref REP3-047], a certified document, and the ES, and as such the</p>

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	<p>the proposed mitigation of timing restrictions of intertidal works based on our experiences from the timing of the previous cable installation for the Thanet Offshore Wind Farm. What guarantees can the Applicant offer that the schedule will be adhered to?</p>	<p>seasonal restriction is secured fully and appropriately in the draft Development Consent Order.</p>
<p>Kent Wildlife Trust (PINS Ref REP3-049)</p>	<p>KWT response to ISH3 Action Point 5 with regards site selection and alternatives: We endorse the response submitted to the ExA by The National Trust regarding this point and fully support the comments made by them.</p>	<p>This is noted and the Applicant has responded to the points below.</p>
	<p>We believe that the current proposal will have numerous disruptive impacts on land designated for nature conservation – designations that have been determined objectively against criteria which have national and international recognition.</p>	<p>The Applicant notes this concern and has provided detailed responses at Deadline 1 [PINS Ref REP1-023], and subsequent oral submissions regarding the policy requirement for consideration of alternatives in the context of designated sites. It is important to note that with regard intertidal designated sites agreement has been met with Natural England and the Environment Agency, in addition to all local authorities.</p>

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	<p>KWT reinforces the points put across by The National Trust in their response to this question arising from ISH3 that whilst NPS EN-1 does not contain any general requirement to consider alternatives, it would be appropriate and good practice to do so, as investigating Site Selection Alternatives is a generally accepted and normal practice for Environmental Impact Assessments (EIA).</p>	<p>This is noted and the Applicant has previously provided responses confirming that alternatives have been considered [PINS Refs REP1-023 and REP2-013].</p>
	<p>We do not believe that the project has adequately demonstrated that the chosen route is the least environmentally damaging, or that the alternative onshore route options are not feasible. We believe it is not possible to state that the proposed development will not damage the integrity of the site, and we believe that feasible alternative route solutions exist that were prematurely discounted.</p>	<p>The Applicant has responded previously with regards the justification for the site selected for the proposed project landfall. Further to this the Applicant can confirm that with regards the integrity of the intertidal site, the Report to Inform Appropriate assessment concludes no adverse effect on integrity on the site either alone or in-combination with other projects. This conclusion is the subject of an agreed statement of common ground with Natural England.</p>
	<p>Ecological surveys were focused on one onshore cable route (Pegwell Bay) resulting in a lack of comparable ecological data. Without comparable ecological data for other proposed onshore cable routes and landfall options, we cannot accept that the route chosen is the least environmentally damaging.</p>	<p>The Applicant notes this concern and has previously provided responses to the Examining Authority questions with regards the ecological surveys, and coverage across initial areas of search and final route for application. The Applicant has confirmed through these responses that adequate survey coverage has been provided and that this is agreed with the relevant statutory adviser.</p>

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	<p>Overall, we believe that given the importance of this site; the numerous designations and the cumulative disturbance caused by several other large scale developments affecting the site, a precautionary approach should be taken and this area should be protected and an alternative route proposed that has less impact on these environmental designations.</p>	<p>The Applicant notes this concern and has previously provided responses confirming that alternatives have been considered.</p>
<p>Kent Wildlife Trust (PINS Ref REP3-049)</p>	<p>KWT response to ISH3 Action Point 15 with regards post-construction monitoring of fish and shellfish, and benthic ecology.: We would like to propose the following to be included or considered in monitoring plans for the proposed development:</p> <ul style="list-style-type: none"> <li>• Comparison of sites within the array area and OECC and with „reference“ areas outside of the footprint of the development</li> <li>• Monitoring to incorporate pre, during and post construction phases</li> <li>• Longer term monitoring studies that cover the lifetime of the project over suitable intervals</li> <li>• Fish monitoring surveys should consider pelagic and demersal fish species</li> <li>• Combine surveying expeditions (e.g. for underwater noise, benthic, and fish surveys) where possible, and also monitor</li> </ul>	<p>It is unclear from their response what the focus of KWT's suggestions should be. It appears from the general requests of sites within the array and OECC with reference sites, at the pre-, during, and post construction phases that the focus should be on broad scale monitoring.</p> <p>The Applicant has provided responses to this action, drawing the reader's attention to the MMO review of post-construction monitoring and the drive to focus on areas of uncertainty, sensitivity, and validation of ES predictions where there is a lack of confidence in the assessment. It is the Applicant's position that these matters have been addressed adequately both in response to Action Point 15 [PINS Ref EV-019] and through provision of the focussed, detailed monitoring proposals and commitments that have been submitted.</p> <p>The reasons and rationale for monitoring identified by KWT are understood; however, it is important to note that Thanet Extension is in a somewhat unique position as an extension to a project that has been the subject of detailed monitoring that has been published in peer review literature. There is</p>



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	<p>both wind farms (the existing Thanet Offshore Wind farm and the proposed Thanet Extension) at the same time. This will be less resource intensive, prevent “doubling up” on effort, and potentially allow comparisons to be made between the two wind farms.</p> <p>It is current practice to undertake up to three years’ post-construction monitoring studies. However, ideally, longer term monitoring should also occur at other relevant intervals throughout the lifetime of the wind farm, for instance after every five years of operation. The development will involve a different design of turbines using newer technologies, and they will be larger than the existing ones. Because of these differences, there is the potential for different environmental outcomes compared to those experienced following construction of the existing Thanet Offshore Wind Farm.</p> <p>For the Kentish Flats Wind Farm, the developer (Vattenfall) produced a FEPA (Food and Environmental Protection Act) monitoring summary report. We believe that a similar benthic monitoring methodology</p>	<p>therefore a higher than usual level of confidence in many of the assessments conclusions that draw on this site specific data, and when combined with the now mature understanding of the effects associated with the installation of OWFs no justification in broadscale monitoring.</p>

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	<p>should be developed and carried out for the Thanet Extension development, if consent is given.</p>	
	<p>Noise disturbances will need to be monitored during the construction and operation phases, primarily to determine if the ES predictions are accurate.</p>	<p>The Applicant can confirm that, in relation to offshore impacts, noise monitoring will be undertaken and this is secured through Schedule 11, Part 4, Condition 16 and Schedule 12, Part 4, Condition 14 in the draft DCO.</p>
	<p>We believe that for ease of understanding and consistency across projects, an IPMP should be produced for the Thanet Extension Offshore Wind Farm. This opinion was shared by the ExA at the Issue Specific Hearing on Environmental Matters (ISH 3, 19th February 2019) who also mentioned that an IPMP would be a useful document to allow the ExA and other interested parties to understand succinctly the during and post-construction monitoring plans, in a single document where such plans are clearly defined and laid out.</p>	<p>The Applicant has not produced an In Principle Monitoring Plan for the proposed project, instead drafting detailed monitoring proposals which will be undertaken to focus on key sensitivities identified in the ES chapters. Each of the detailed monitoring plans is secured within the DCO, with pre-construction, construction, and post-construction monitoring identified clearly and succinctly. The Applicant has also provided a schedule of monitoring in response to the relevant ISH Action Point 13 which was included as Appendix 48 to the D3 submission [PINS Ref REP3-067].</p>
	<p>Fish monitoring</p>	

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	<p>With respect to fish and shellfish, KWT assert that to evaluate the ecological impacts of wind farms on fish and shellfish populations, a BACI (Before, After, Control, Impact) strategy has been designed and utilised for other windfarms. This BACI approach is based on repeated samplings (annually and at some sites seasonally, before and after impact) in array areas and reference areas</p>	<p>The Applicant notes this and can confirm that KWT's assertion does not relate to a particular area of uncertainty or sensitivity, both of which are key tenets in the MMO's review of post construction monitoring of OWFs. The MMO review confirms that the sort of broadscale monitoring proposed here by KWT has yielded results which have been identified as lacking the power to detect change or meaningful contribution to the understanding of effects associated with OWF developments. The Applicant has instead sought to address key areas of uncertainty and submitted detailed monitoring proposals which will aid in mitigation, or the understanding of the potential impacts on the receiving environment.</p>
	<p>KWT refer to the Strategic Review of Offshore Wind Farm Monitoring Data Associated with FEPA Licence Conditions and propose that a precautionary approach should be taken and that relevant monitoring of fish species and abundance should be undertaken as part of the conditions for the Thanet Extension Offshore Wind Farm.</p>	<p>The Applicant notes this suggestion, but would seek to highlight that the primary conclusion of the strategic review was that monitoring should focus on key areas of uncertainty and should avoid broad scale monitoring.</p>
	<p>KWT note that monitoring of fish during the operational phase of a windfarm is a good way of determining the effects of operational noise on fish enhancement and aggregation.</p>	<p>The Applicant notes this response, but considers it important to note that the effect of operational noise on fish has not been predicted to be significant and has not been identified by any other stakeholders as being a relevant concern or an effect with which there is uncertainty in the conclusion. There is therefore no proportionate justification in broad scale monitoring of this nature.</p>

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	<p>KWT highlight that one of the recommendations from the Strategic Review is to monitor over several sites to give better spatial coverage, greater allowance for temporal variability, utilisation of larger control areas, regional approaches and distribute monitoring requirements of different issues amongst specific sites. Longer time series or spatial extent for surveys may also add value to these surveys (both in terms of baseline and post-construction monitoring).</p>	<p>The Applicant notes this response, but considers it important to note that Thanet Extension cannot be expected to bear the burden of monitoring at a regional scale as this would be disproportionate to the scale of the effects, which are all noted as negligible.</p>
	<p>Benthic monitoring</p>	
	<p>KWT note that intertidal monitoring methodologies are available and note that there is no best practice with respect to intertidal monitoring currently exists that applies to cable landfalls.</p>	<p>It is the Applicant's position that the key habitat where there is uncertainty and/or sensitivity in the intertidal is the saltmarsh habitat. The Applicant has drafted a detailed saltmarsh monitoring plan (Deadline 2 – Appendix 23: Saltmarsh Mitigation, Reinstatement and Monitoring Plan) to ensure that where temporary effects result from the proposed project, i.e. following trenching, monitoring of saltmarsh is provided for.</p>
	<p>Marine mammal monitoring</p>	

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	<p>We believe that pre, during and post construction monitoring of both noise and harbour porpoise activity should be conducted in parallel, and suggest that marine mammal/porpoise monitoring includes hydrophones and boat/aerial surveys.</p> <p>We would also like to highlight that at present developers are only required to monitor the noise output from the first four piles to verify the underwater noise modelling results, which is arguably not adequate or representative. Instead there should be regular monitoring of the level of noise throughout the construction period to get a full picture of the noise levels being emitted and the duration during the construction phase.</p>	<p>The Applicant can confirm that monitoring of underwater noise, in line with standard best practice, will be undertaken. The purpose of monitoring is to validate the noise modelling predictions, and there is no justification in undertaking further monitoring during the post-construction phase. It is also of note that Thanet Extension is located in an area generally recognised as of lower marine mammal density, noting the presence of the over-winter element of the Southern North Sea cSAC, and as such any monitoring that deviates from the standard approach would be disproportionate.</p>
<p>London Pilots' Council (PINS Ref REP3-044)</p>	<p>Addressed in Appendix 4 to this Deadline 4 Submission</p>	
<p>Marine Management Organisation (PINS Ref REP3-039)</p>	<p>Response to ISH3 Action Point 16 with regard to revised wording for condition 16(3): The MMO outlined the two mechanisms of their enforcement power should the underwater noise exceed the modelled levels in the ES.</p>	<p>It is the Applicant's position, for the reasons outlined in the Appendix 9 to Deadline 3 Submission: Written Summary of Vattenfall's Oral Case put at the Issue Specific Hearing 3 that further wording is not necessary. In summary, the MMO already have the statutory powers to issue a stop notice in</p>

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<p>Marine Management Organisation (PINS Ref REP3-039)</p>	<p>The MMO proposed the following condition wording (as suggested for Norfolk Vanguard and Hornsea 3 OWF):                      “(4) The results of the initial noise measurements monitored in accordance with condition 18(2)(a) must be provided to the MMO within six weeks of the installation of the first four piled foundations of each piled foundation type. The assessment of this report by the MMO will determine whether any further noise monitoring is required. <i>If, in the opinion of the MMO in consultation with Natural England, the assessment shows significantly different impact to those assessed in the environmental statement or failures in mitigation, all piling activity must cease until an update to the MMMP and further monitoring requirements have been agreed.</i>”</p> <p>With the amendment being justified “In the interests of protecting the integrity of the Site of Community Interest.”</p>	<p>specific circumstances including where there is a risk of serious harm to the environment. This is contained within Section 201 of the Marine and Coastal Access Act 2009. It is not considered by the Applicant to be appropriate legal drafting to include powers that exist through other legal instruments within a DCO.</p>

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<p>Marine Management Organisation (PINS Ref REP3-039)</p>	<p>Response to ISH3 Action Point 14 with regard to the Goodwin Sands aggregate dredging marine licence application:                      The MMO confirmed:                      “The dredging programme is required to tie into the Dover Western Docks Revival (DWDR) scheme's construction stages. It is anticipated that dredging will take place in one or more distinct campaigns between September 2019 and September 2020, corresponding to the relevant DWDR construction stages for which aggregate is required. Dredging may be undertaken 24 hours per day, seven days per week. The licence start date is 26 July 2018 and end date is 31 December 2022.”</p>	<p>The Applicant notes that dredging for the DWDR scheme is anticipated to be completed in two campaigns between September 2019 and September 2020, and therefore there will be no temporal overlap between this project and Thanet Extension. It is considered that this is the best available information on the anticipated timing of the project.</p>
<p>Marine Management Organisation (PINS Ref REP3-039)</p>	<p>Response to ISH3 Action Point 11 with regard to the Site Integrity Plan:                      The MMO considers that proposed timescales for submission of the SIP on the DMLs should be reviewed and clarified.                       “It is also noted in point 21 that the applicant considers “there is no requirement to consider the need for additional mitigation measures...” The MMO seeks further clarity on how formal submission of the SIP fits into the flow process described in figure 2; and</p>	<p><b>Proposed timeframes for submission:</b> The timescales in Figure 2 of the revised SIP issued at Deadline 4 allow for the subsequently revised SIP to be issued at least 4 months prior to the first relevant (noisy) activity taking place. The timeframe for the final revision, linked to FID, has been clarified to state that the final SIP will be linked to FID and re-issued at least 4 months prior to the next relevant (noisy) activity. It is considered, given the geographic location of TEOW relative to the SNS cSAC/SCI, that at least 4 months is sufficient time to agree any required mitigation.</p>

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	<p>noting that the purpose of a SIP to ensure no risk to Adverse Effect on Integrity (AEoI), MMO seek clarity on how it will be demonstrated that the project will stay within the thresholds and conclusions in the HRA. The MMO would welcome further discussion with the applicant through the SoCG.”</p> <p>“Point 19, bullet one in the SIP, and Table 1 include geophysical works to take place by the end of March 2019. The MMO queries whether this is correct, given that this time will have passed before the end of examination.”</p>	<p><b>No requirement for additional mitigation:</b> The reason for the certainty that the proposed mitigation is sufficient to ensure no adverse effect on integrity is a combination of the seasonality of the SNS cSAC/SCI and the location of TEOW, as the combination effectively means that any noisy works at TEOW that occurs during the summer season (April to September inclusive) is not relevant to the HRA process (TEOW being at least 229km from the summer extents of the SNS cSAC/SCI and therefore beyond the maximum 26km screening distance). It is only works in the winter season (October to March inclusive) that have the potential to contribute to the thresholds. The inclusion in the mitigation of a seasonal restriction means the mitigation is wholly within the ability of the Applicant to control, commit to and deliver. As a worst case, a complete winter season restriction on noisy activity could be implemented, resulting in no contribution to the thresholds and effectively removing TEOW from all HRA considerations for the SNS cSAC/SCI. The actual need for such a seasonal restriction (if any) will be determined at the point the SIP is drafted, and may in practice result in a single winter season being excluded, or a single month, or a combination or no restriction. The mitigation does not require different construction techniques, different infrastructure or additional equipment on site, nor does it require liaison or discussion with other developers. Clarification on this point has been added to the SIP re-issued at Deadline 4. It is the measure of certainty offered by the seasonal mitigation that means that there is</p>



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		<p>no requirement for any further consideration of mitigation options.</p> <p><b>Clarity on how formal submission of the SIP fits into the flow process described in figure 2:</b> clarity has been added to Figure 2 for the revised SIP issued at Deadline 4. Effectively, submission of the revised SIP is linked to the RIAA Addendum.</p> <p><b>MMO seek clarity on how it will be demonstrated that the project will stay within the thresholds and conclusions in the HRA:</b> As described above, the geographic location of Thanet Extension relative to the SNS cSAC/SCI, combined with the seasonal nature of the SNS cSAC/SCI, mean that a seasonal restriction (if required) can fully address the risk of threshold exceedance. At its maximum, a complete winter season restriction would fully remove Thanet Extension from HRA issues in relation to the SNS cSAC/SCI – the degree to which such mitigation (if any) is required will be determined through the SIP process.</p> <p><b>Geophysical works to take place by the end of March 2019:</b> The MMO is correct to identify the potential for geophysical survey work in the 2018/19 winter season (ending March 2019). The potential need for such a survey was included in the RIAA as a worst-case scenario. However, it has since been confirmed by the Applicant that there is no such requirement</p>

Interested Party	Key points raised in the Submission	Applicant's response
		and therefore the survey has been removed from consideration within the SIP.
Marine Management Organisation (PINS Ref REP3-039)	The MMO does not consider the interpretation of 'commence' and 'pre-commencement' on the dDCO is suitable as currently drafted.	The Applicant notes the representation and notes that this was discussed in detail at Issue Specific Hearing 7. The Applicant therefore refers back Section 3 of Appendix 13 to Deadline 3 Submission: Written Summary of Vattenfall's Oral Case put at the Issue Specific Hearing 7 [PINS Ref REP3-015]. If the MMO considers this issue to be unresolved, the Applicant would welcome more specific representations on what is unsuitable about the current drafting.
Marine Management Organisation (PINS Ref REP3-039)	<p>The MMO outlined its concerns in relation to the arbitration provision in article 36 of the DCO. The MMO considers that it is not appropriate that differences relating to approvals of documents by the MMO under the DMLs following reasons:</p> <ul style="list-style-type: none"> <li>• The provision undermines MMO's public regulatory function;</li> <li>• Arbitration is a private process which is fundamentally inconsistent with the duty of a public body, who's decisions should be public and open to scrutiny; and</li> <li>• DMLs granted as part of a DCO should not be treated differently to a marine licence granted by the MMO under MACAA. The provision creates inconsistency with decisions made under DMLs and those</li> </ul>	<p>The Applicant has provided detailed responses at Deadline 3 to these positions, and therefore refers back to Section 7 of Appendix 13 to Deadline 3 Submission: Written Summary of Vattenfall's Oral Case put at the Issue Specific Hearing 7.</p> <p>With regards to confidentiality, the Applicant agrees with the representations made by the MMO and included amended wording within the draft DCO [PINS Ref REP3-048] also submitted at Deadline 3 to clarify that either party to the Arbitration process may disclose information when it would be necessary to do so to comply with legislative rules, functions or obligations.</p>

Interested Party	Key points raised in the Submission	Applicant's response
	<p>made under marine licences- resulting in a 2-tier licensing approach.</p> <p>In the event that a decision were made against the MMO's position, and it was found that the word 'difference' is capable of representing a refusal to discharge a condition, the MMO is further concerned that the currently drafted DCO wording could be arguably extended to include suspension, variation, revocation, transfer or even enforcement, which are currently covered by other provisions under MACAA.</p> <p>All information discussed in an arbitration process of this kind must be susceptible to disclosure to the public under the Freedom of Information Request and Environmental Information Request regimes. It would be wholly inappropriate for a public body like the MMO, discharged with public planning and regulatory protocols, to attend hearings in private.</p> <p>The ExA's Recommendation Report to the Secretary of State found in favour of the MMO for reasons stated in its submissions for Tilbury 2.</p>	

Interested Party	Key points raised in the Submission	Applicant’s response
<p>Marine Management Organisation (PINS Ref REP3-039)</p>	<p>The MMO requested the licensed activities should be limited to the maximum parameters assessed within the ES, and these should be clearly defined on the DMLs. This should include maximum permitted cable protection and scour protection footprints, the number of cable crossings, maximum disposal volume/footprint for sandwave levelling and maximum hammer energy. This is to ensure the maximum impacts remain within those assessed and approved. If the applicant does not propose to exceed any of the maximum parameters assessed in the ES, this will result in no additional burden for the applicant from the inclusion of these parameters on the face of the DMLs, whilst providing greater clarity on what is permitted in order for the MMO to ensure compliance. If, however, the applicant does wish to undertake activities that are outwith the maximum parameters assessed and considered under the original licence, the appropriate process for dealing with this would be through a request to vary the DML, whereby the MMO can evaluate whether the proposed changes can be permitted. Such practice ensures proper scrutiny and ensures accountable, transparent and public due</p>	<p>The Applicant can confirm that the realistic worst-case scenario that has been assessed is considered to represent a reasonable and appropriate worst-case scenario that will allow the project to be delivered. If in the event a change to these parameters is required, the most appropriate method of action will be considered and agreed with the MMO at that time. The Applicant notes MMO’s concerns, and has therefore provided a detailed description of the parameters of the project description in the Explanatory Memorandum, submitted at Deadline 3, for ease of reference. The existing provision for a Construction Method Statement to be submitted, identifying the proposed construction methods and ensuring that these are in accordance with those assessed within the ES, is an appropriate method of ensuring that at the construction phase the project is in accordance with the project as assessed at the consenting phase. For further clarity, the Applicant has included the environmental statement as a certified document within the revised draft DCO submitted at Deadline 3.</p>

Interested Party	Key points raised in the Submission	Applicant's response
	<p>process is applied. This approach is consistent with the process that is followed for standard marine licences granted by MMO. The MMO is continuing to engage with the applicant through the SoCG.</p>	
<p>Marine Management Organisation (PINS Ref REP3-039)</p>	<p>The MMO requested the timescale for submission of pre-construction plans and documentation is increased from 4 months to 6 months. The initial requirement for 4 months was established during the round 1 projects. Since then, round 3 projects have significantly increased in complexity (due to HRA, case law, volume of documents, and increasing issues with in-combination impacts with other projects).</p> <p>The MMO has considered this further since the hearing. It recognises that there are some documents that typically have not experienced significant delays and therefore could potentially remain within the 4 month timeframe. The MMO therefore intends to provide a targeted list of documents that it considers are the most challenging to approve within the 4 month timeframe. The MMO is in the process of producing a standard list of documents that is will use to inform future projects, and will endeavour to</p>	<p>The Applicant notes this response and welcome this pragmatic approach to identifying the key documents that may require a greater level of consultation that the standard provision. The Applicant's position is however still that four months is an adequate amount of time within which to approve the various plans and documentation required. The Applicant will respond as appropriate when further information is made available.</p>

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	<p>provide a copy of this for deadline 4. The MMO is continuing to engage with the applicant through the SoCG.</p>	
<p>Marine Management Organisation (PINS Ref REP3-039)</p>	<p>MMO response to ISH7 Action Point 10 with regards arbitration:</p> <p>The MMO understands Trinity House is proposing a change to the wording for Article 36 to this effect and would support this approach.</p> <p>Furthermore, the MMO notes that on 26 February 2019, the ExA for the Hornsea 3 OWF published its schedule of changes to the dDCO amending arbitration in favour of submissions made by the MMO. They proposed the following:                      “Any matter for which the consent or approval of the Secretary of State or the Marine Management Organisation is required under any provision of this Order shall not be subject to arbitration.”</p> <p>The MMO would be supportive of this wording.</p>	<p>It is the Applicant's position that nothing within the arbitration provision fetters the ability of any statutory body, including Trinity House and the MMO, to fulfil its role as an advisory body. The purpose of an arbitration provision is to provide a mechanism for the legality and accuracy of their decisions to be tested; by its very nature, an arbitration provision is only used when a dispute has arisen. In this regard, an arbitration provision serves to supplement public law remedies by providing a more practical mechanism for dispute resolution and ensuring that nationally significant infrastructure projects are not subject to extensive delays due to an impasse between parties.</p> <p>By definition, arbitration only arises where there is a dispute as to the legality of the advice or decision reached by the statutory body; it doesn't operate as a hurdle to be taken into account before that decision is reached, which is what the MMO and others seem to suggest. It therefore does not in some way prevent the carrying out of any action by a statutory body.</p> <p>The Applicant does not consider that it is appropriate to rely on judicial review as a mechanism of resolving disputes between parties. Judicial review is a lengthy, time intensive</p>

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		<p>and costly exercise for all parties that can take many months, if not years, to resolve. It is an adversarial process that does not affect constructive relationships between parties that utilise it.</p> <p>Furthermore, there are specific decisions that could made within the DCO that would not be necessarily subject to judicial review. For example, if the Applicant were to submit a plan for approval under a certain condition, and the MMO then deemed the evidence that accompanied the plan insufficient, it is highly unlikely that this decision would reach the threshold of Wednesbury unreasonableness or procedural impropriety or required to allow judicial review to take place.</p> <p>As the Applicant has previously explained in detail, an arbitration provision has been included in made DCOs since the creation of the Planning Act 2008, and such a provision is included within the Model Articles (Article 42). The Applicant refers to their written summary of oral submissions made at ISH 7 (PINS Ref REP3-020), where they clearly explained their view that there is no statutory basis as to why public law bodies would be fettered in any way by being subject to some form of arbitration, and as to why status as a public body should form any preclusion to submitting to arbitration.</p>
Maritime Coastguard Agency (PINS Ref REP3-085)	Addressed in Appendix 4 to this Deadline 4 Submission	

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<p>Ministry of Defence (PINS Ref REP3-080)</p>	<p>Letter submitted by the MoD confirming “the proposed development will not directly affect national defence requirements or interests including defence maritime navigation”.</p>	<p>This is welcomed and noted by the Applicant.</p>
<p>National Trust (PINS Ref REP3-058)</p>	<p>National Trust response to ISH3 Action Point 5 with regards site selection and alternatives and the policy basis for the National Trust objection: The National Trust do not consider that the applicant’s high level appraisal approach to the issue of site selection is appropriate. Although the NPS EN1 does not contain any general requirement to consider alternatives, the National Trust considers that it would be appropriate, proportionate and good practice for it to happen in this case. This would specifically enable the Examining Authority (taking account of the views and submissions of consultees) to meet the test in para 4.2.4 of NPS EN1, ‘that the ExA should satisfy itself that ..... any proposed mitigation measures or any adverse effects .... have been adequately assessed.’ Just because there is no general requirement to undertake a detailed assessment of site alternatives, is not a reason not to do so. The NPS does not list or specify any requirements as to when a full assessment of alternatives</p>	<p>The Applicant responded to this Action Point at Deadline 3 [PINS Ref REP3-002] and would note that these matters have been addressed both in that response, orally at ISH3, and within the relevant chapter of the ES [Application ref 6.1.4; PINS Ref APP-040]. The Applicant notes that in the latest response the National Trust rely specifically on EN-1 paragraph 4.2.4. This paragraph advises generally that environmental effects have been adequately assessed. The Applicant considers that the environmental effects of the landfall proposals have been adequately assessed, including information about the alternative landfall options for cable installation that were considered. The Applicant has also shown that significant effects on biodiversity would be avoided, including through the consideration of landfall alternatives.</p>



Interested Party	Key points raised in the Submission	Applicant's response
	<p>should be carried out or any exclusions when it should not. Full assessment of site alternatives is a generally accepted and normal practice for Environmental Impact Assessment (EIA). The National Trust's request is for a full assessment of a specific and significant element of the scheme, that of the cable landfall and it is considered that undertaking a full assessment of alternatives, for this specific aspect of the scheme, which affects international nature conservation designations, would be a proportionate and appropriate approach.</p>	
<p>National Trust (PINS Ref REP3-058)</p>	<p>Paragraph 4.2.1 of EN-1 response: It is considered that a full appraisal of the landfall options, with commensurate environmental survey, data and technical appraisal would be relevant to meeting this part of the policy, particularly the comparative environmental impacts of the alternative route options outlines. It is not considered, as detailed in our written reps, that the Environmental Statement currently meets this requirement in relation to the alternative route options.</p>	
<p>National Trust (PINS Ref REP3-058)</p>	<p>Paragraph 4.2.4 of EN-1 response: It is not considered that the alternative route options have been satisfactorily and fully</p>	

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	<p>assessed to allow the ExA to meet this requirement. The National Trust is unable, from the information provided, to understand how the applicant has made its cable landfall site selection, particularly in relation to the comparative effects of the alternative routes considered in the high level study and therefore we do not consider the EIA is sufficient or has adequately assessed the likely impacts of the route options, nor how it has selected the proposed route.</p>	
<p>National Trust (PINS Ref REP3-058)</p>	<p>Paragraph 4.4.1 of EN-1 response:                      The applicant has undertaken a site selection process for the cable landfall and has considered alternative route options, as recorded in its high level review. This indicates that the applicant does consider that consideration of those route options is valid and falls within the process. If the general requirement not to consider alternatives had been followed then no optioneering work would have been done. Having accepted the need for consideration of alternatives and having identified and reviewed a range of routes, it is considered to be incumbent on the applicant to do so to a level of detail that enables the ExA to make</p>	

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	<p>an assessment in accordance with 4.2.4, and to adequately assess the alternatives to a level that we as consultee can understand and be satisfied of the choice made. More importantly it needs to demonstrate to the ExA that it has done so. It is the National Trust's position that the ES and other information provided does not meet this level of justification or demonstration.</p>	
<p>National Trust (PINS Ref REP3-058)</p>	<p>Paragraph 4.4.2 of EN-1 response:                      It is the National Trusts view that while this has been largely achieved in the ES, it has not been done to sufficient a level and detail to allow a clear understanding of the choices made, and the comparative impacts, so that we as a consultee and affected landowner can have confidence in that selection process. 4.4.2 does require technical and commercial feasibility to be considered and evidence of this having been done to any level of detail is not available in the ES to the best of our knowledge, especially the technical feasibility of the various route options. This technical appraisal is particularly relevant as the applicant in their response to the ExA first questions, again refer to various technical construction</p>	

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	<p>matters but no detail of these is again available to the best of our knowledge.</p>	
<p>National Trust (PINS Ref REP3-058)</p>	<p>Paragraph 4.4.3 of EN-1 response: It is our view that the European level habitat designations on the site warrant an appropriate level of scrutiny, which does not appear to have been given. It is not our view that the level of information provided in the ES is proportionate and is indeed lacking in technical detail and comparative analysis of likely impacts on the various options. As all the options have been provided by the applicant and as far as is known none have been ruled out on capacity grounds, all of the available options can be and should be assessed, both in general terms and specifically relating to the habitats regulations need.</p>	
<p>National Trust (PINS Ref REP3-058)</p>	<p>Paragraph 5.3.7 of EN-1 response: We believe that the current proposal will have numerous disruptive impacts on land designated for nature conservation – designations that have been determined objectively against criteria which have national and international recognition. NPS EN-1 outlines that ‘the most important sites for biodiversity are those identified through</p>	<p>Notwithstanding the Applicant’s previous responses with regard to the policy test, the Applicant would clarify that with regard to designated sites at the landfall, the matter of no adverse effect on integrity, either from the project alone or in-combination with other projects, is a matter of agreement with Natural England.</p> <p>The Applicant would further note that, as provided in response to the Examining Authority first written questions</p>

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	<p>international conventions and European Directives’. The Habitats Directive provides statutory protection for these sites which include Special Protection Areas, Ramsar sites and Special Areas of Conservation which are known as ‘European Sites’. Many SSSIs are also designated as sites of international importance and all National Nature Reserves, are notified as SSSIs.</p> <p>Under the Habitats Directive, when considering granting consent for a development that may adversely impact on European sites, there must be sufficient evidence that ‘there are no feasible alternative solutions to the plan or project which are less damaging’ which includes using different routes. We do not believe that the applicant has adequately demonstrated that the chosen route is the least environmentally damaging, or that the alternative onshore route options are not feasible. We do not consider that it is appropriate for the ES to state that the proposed development will not damage the integrity of the site, and we believe that feasible alternative routes exist that were prematurely discounted. Ecological surveys were focused on one onshore cable route</p>	<p>[PINS Ref REP1-024], the query with regards ecological surveys is a matter of agreement with the relevant local authority and Natural England, furthermore pre-construction surveys will be undertaken in order to ensure all appropriate mitigation measures, as already identified, will be provided for. It is also a matter of record that certain surveys were undertaken at both the north and south options, including offshore geophysical surveys, onshore ornithological surveys, preliminary desk based analyses, scoping surveys, and phase 1 intertidal surveys; the latter having been agreed with KWT as members of the EIA evidence plan and for receipt of the survey access permit for works within the Pegwell Bay National Nature Reserve. Whilst the Applicant accepts that further surveys were carried out at the final option carried through for assessment this reflects the need to focus efforts and characterise the receiving environment for the purposes of EIA. The matter of adequate characterisation for this purpose is agreed with the local authorities and Natural England.</p>

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	<p>(Pegwell Bay) resulting in a lack of comparable ecological data. Without comparable ecological data for other proposed onshore cable routes and landfall options, we cannot accept that the route chosen is the least environmentally damaging.</p> <p>Overall, we believe that given the importance of this site; the numerous designations and the cumulative disturbance caused by several other large scale developments affecting the site, a precautionary approach should be taken and this area should be protected and an alternative route proposed that has less impact on these environmental designations.</p>	
<p>National Trust (PINS Ref REP3-058)</p>	<p>Paragraph 2.6.81 of EN-3 response:            Para 2.6.81 of EN-3 does require the specific analysis of alternative landfall sites, as well as a series of wider examinations including loss of habitat. This would indicate that a cable landfall and route options analysis or options appraisal should be undertaken as part of the DCO process and would normally fall within the ES. What has been provided does not meet this requirement in our view or to the depth and detail that enables us as consultee to understand the route selection process.</p>	<p>As noted in response to previous consultation responses the Applicant can confirm that information, where relevant, about alternative landfall sites considered during the design process has been provided both the relevant ES chapter and in response to representations and questions from the Examining Authority. Alternative landfall sites have been detailed, including the 3 pre-scoping zones, characterised by 7 indicative routes, and the 2 options brought forward for scoping, with the 2 indicative routes. Explanations have been provided within the chapter, including a detailed annex regarding constraints in the Sandwich Rd which influenced the options considered within Pegwell Bay.</p>

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		<p>Alternative installation methods have been considered, consulted on, detail provided, and design revisions made in response to stakeholder feedback. As a result, the Applicant has now refined the design to two methodologies (HDD and trenching) in order to avoid potential habitat loss or any significant effects on biodiversity.</p> <p>The Applicant considers this to be a comprehensive application of the guidance presented in para 2.6.81 of EN-3 and para. 5.3.7 of EN-1.</p>
<p>Natural England (PINS Refs REP3-011)</p>	<p>Response to ISH3 Action Point 1 with regards project description checks:</p> <p>Within Natural England’s Relevant Representations, it was stated the project description did not clearly highlight the worst case scenarios with inconsistencies highlighted across many of the environmental statement (ES) chapters. We therefore welcome the tabulation of the worst case scenarios for the proposed activities and the project transcription audit emphasising the final consented value the applicant requires and the differences across the original ES chapters.</p>	<p>This is noted and welcomed by the Applicant.</p>
	<p>From table 7 in Annex B, the majority of the changes to the overall requested consented value are minor and would not make any material difference to the conclusions the</p>	<p>This is noted and welcomed by the Applicant.</p>

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	<p>applicant has made in the relevant ES chapters.</p> <p>However, there is some significant changes to the total maximum volume of disturbance for O&amp;M cable works for both the inter-array and export cables. Natural England previously raised concerns that the applicant has proposed reburial of the entire inter array cable every five years. In addition the total volume of 3,039,000 m<sup>2</sup>, highlighted in table 7 for O&amp;M cable works, has not being sufficiently presented in chapters 6.2.1, 6.2.2 and 6.2.5. This raises concerns that this volume was not appropriately assessed if the maximum extents were not defined.</p>	<p>The Applicant has noted previously that this was a result of a transcription error, however the underlying assessments remain accurate. Section 1.6 of the Project Description (Offshore) chapter of the ES (PINS Ref APP-042/ Application Ref 6.2.1) presents the full list of O&amp;M works and quantifies the potential impacts (including areas of disturbance and vessel movements) which the Applicant is seeking to consent. These have been transcribed and presented in PINS Ref REP3-063 (to be certified). These assumptions form the basis of the technical assessments for the various relevant receptors within the ES.</p> <p>Paragraphs 2.11.101 and 2.11.102 of Volume 2, Chapter 2 of the ES (PINS Ref APP-043/ Application Ref 6.2.2) considers the likelihood and the associated impacts with the reburial of the cables during the lifetime of the project. The assessment notes that similar techniques would be used to rebury the sections of cable, as per the detailed assessment for the initial burial of the full export lengths presented in paragraph 2.10.32 <i>et seq.</i> The assessment (for the burial of the full length of cable) concluded that the identified physical processes receptors will be insensitive to elevated levels of SSC and localised changes in bed level. Therefore, the Applicant considers that the effects of reburial of cables has been appropriately considered in terms of physical processes.</p>



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		<p>The chapter identifies (in paragraph 2.10.31) that the potential for changes to other EIA receptor groups are considered elsewhere in the ES (where no significant effects were identified for the installation of cables).</p> <p>Paragraphs 5.11.23 to 5.11.30 of Volume 2, Chapter 5 of the ES (PINS Ref APP-046/ Application Ref 6.2.5) present the consideration of “Direct and indirect disturbance to the seabed from jack-up vessel operations and cable maintenance activities”. The assessment noted that the individual O&amp;M activities will represent a very small footprint of the overall extent of the proposed works and that the impacts would be throughout the lifetime of the project with a limited number of activities occurring each year. The assessment considered the de-burial and re-burial of a cable or cable section and along with cable preventative maintenance, including re-burial, the resulting increases in SSC and sediment deposition. The species and habitats identified were assessed according to the MarESA criteria as having high or medium recoverability to direct increased SSC and deposition. The conclusion of this assessment is that the effects from the O&amp;M works, including cable repairs, re-burial and maintenance, would be Minor adverse (which is not significant in EIA terms). As noted in REP3-055, despite the chapter not transcribing the maximum scenario assessed, it is based on appropriate assumptions and the maximum parameters presented in the Project Description (PINS Ref</p>

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		<p>APP-042/ Application Ref 6.2.1) to appropriately assess the impact of O&amp;M activities on benthic ecology receptors.</p> <p>The Applicant has updated the Outline Operations and Maintenance Plan following consultation with IPs; and the revised plan will be submitted as Appendix 22 to the Applicant's Deadline 4 Submission which will supersede the version submitted in the Application (PINS Ref App-145/ Application Ref 8.10).</p>
	<p>Further concern is provided in the Outline Operations and Maintenance Plan (Application reference 8.10) which highlights in table 10.1 that cable repair and replacement is marked as green, and not needing any additional marine licence if the volumes do not exceed those in the ES. Due to the uncertainty displayed by the proposed O&amp;M activities, this should be marked as amber as an additional licence may be required.</p>	<p>The Applicant has updated the Outline Operations and Maintenance Plan following consultation with IPs; and the revised plan will be submitted as Appendix 22 to the Applicant's Deadline 4 Submission which will supersede the version submitted in the Application (PINS Ref APP-145/ Application Ref 8.10).</p>
	<p>To provide certainty these total impact volumes should be presented in the DCO to provide that clear audit trail and certainty to the regulator that the need for an additional marine licence can be triggered and assessed appropriately if and when required.</p>	<p>The Applicant has produced a full audit of the maximum parameters for the Project and this is now appended to the explanatory memorandum to ensure each figure can be easily referenced. In addition, the Applicant has included the environmental statement as a certified document in the revised draft DCO submitted at Deadline 3. The environmental statement contains all of the maximum</p>

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		parameters for the Project. (PINS Ref REP3-063). Therefore, the maximum volumes have been adequately secured within the DCO.
	Natural England understand that the majority of this disturbance volume is associated with the Inter-Array cable and therefore outside any designated sites but in considering the export cable is there a figure that can be provided for the amount of potential disturbance within Goodwin Sands pMCZ and has it been considered in the MCZ assessment?	The requirements for O&M works for the export cables, which intersect Goodwin Sands pMCZ, are presented in PINS Ref REP3-063. As presented from paragraph 36 <i>et seq of</i> REP2-006 the effects from cable maintenance activities during the O&M phase have been assessed for Goodwin Sands pMCZ. This assessment concluded that the impacts would be temporary and intermittent (i.e. not a regular occurrence) and so would be minor adverse.
	Natural England request clarification if operations and maintenance activities take into account the BRMP.	The Biogenic Reef Mitigation Plan (PINS Ref REP1-071) is designed to be applicable for the construction of Thanet Extension. The placement of cables will be designed to avoid areas of core reef. Where reef has developed over the cable, and may therefore be subject to disturbance during O&M activities, this has been considered to represent areas of reef that would not be considered core and the O&M activities able to continue.
Natural England (PINS Refs REP3-011)	Response to ISH3 Action Point 5 with regards site selection and alternatives Natural England have provided further comment within the Site Selection and Alternatives (SSA) SoCG submitted by the applicant at Deadline 3.	The Applicant noted and welcomes that Site Selection no longer forms a concern for Natural England. The Applicant notes that this position is also shared by the Environment Agency in their SoCG.

Interested Party	Key points raised in the Submission	Applicant’s response
	<p>The applicant will find that Natural England within section 4.2 of the SSA SoCG has agreed with the applicant’s positions. This is primarily due to the applicant dropping Option 2 from their project envelope which has lessened many of our concerns.</p>	
<p>Natural England (PINS Refs REP3-011)</p>	<p>Response to ISH3 Action Point 9 with regards HRA:</p> <p>Natural England have provided comments within the Ornithology and Technical Topics Statement of Common Ground regarding our position upon European Designated sites.</p> <p>Natural England then provided summarized instances where discussions are on-going –</p> <ul style="list-style-type: none"> <li>• Outer Thames Estuary SPA</li> <li>• Flamborough and Filey Coast SPA</li> <li>• Thanet Coast SAC</li> </ul> <p>Natural England provided suggested wording for the ornithological SoCG for both of the SPAs.</p>	<p>It is noted that NE consider discussions to be ongoing for the following designated sites:</p> <ul style="list-style-type: none"> <li>• Outer Thames Estuary SPA</li> <li>• Flamborough and Filey Coast SPA</li> <li>• Thanet Coast SAC</li> </ul> <p>It is understood that for the Outer Thames Estuary SPA and Flamborough and Filey Coast SPA, those discussions are pending internal legal review within Natural England.</p>
		<p>Thanet Coast SAC remains under discussion as a result of a question raised at Deadline 3 concerning dredging at Ramsgate Harbour. the proposed dredging activities do not interact temporally with the proposed Thanet Extension activities, and these matters will be captured in the next iteration of the Statement of Common Ground.</p>
	<p>Additionally, we require clarity that the assessment of impacts from sandwave clearance and disposal reflects the potential</p>	<p>As noted and clarified in in Appendix 15 of the Applicant’s Deadline 4 Submission, the Applicant has considered both uniform and discrete disposal of material deriving from</p>

Interested Party	Key points raised in the Submission	Applicant’s response
	<p>working activities. Natural England is concerned that the assessment is based upon activity occurring uniformly across the cable route rather than in discrete areas.</p>	<p>sandwave clearance based on the worst case scenario being assessed (i.e. area or disposition depth).</p>
<p>Natural England (PINS Refs REP3-011)</p>	<p>Response to ISH3 Action Point 11 with regard to the Site Integrity Plan:</p> <p>The key items Natural England identified on the Site Integrity Plan submitted by the Applicant are</p> <ul style="list-style-type: none"> <li>• Natural England would find it helpful if a timeline could be included to better illustrate the timing of the events</li> <li>• There is still no overarching mechanism to manage and successfully implement the various SIPs that will be produced from other offshore windfarm projects. This needs to be determined as soon as possible to allow the SIPs to be successful in achieving the required mitigation measures.</li> <li>• Natural England is aware of a large-scale seismic survey being planned for 2019,... MMO should seek clarification on this from BEIS Oil and Gas along with whether any further surveys are planned for 2019.</li> <li>• With regards to table 1 and the geophysical survey row, it states that</li> </ul>	<p>An updated SIP has been provided at Appendix 18 of this Deadline 4 submission.</p> <p><b>Timing of events:</b> Text in paragraph 3 (including the subsequent bullet points and Figure 2) has been modified and clarified. The SIP is required to ensure relevant (noisy) activity does not represent a risk of AEoI due to disturbance. It is therefore logical to link the first revision of the SIP to the first such event -which will be the geophysical survey. There is an existing condition in the DCO that requires information on that geophysical survey to be submitted to the MMO at least 4 months prior to the survey commencing. As the SIP and the geophysical survey are intrinsically linked, it is logical to link the two together and provide the geophysical survey and SIP information at the same time. The second revision of the SIP is linked to FID, at which point final scheme design will be available to confirm the design parameters for the project alone (as identified in Table 1 of the SIP). Clarity on the final SIP can therefore be provided at that point, as the final design plan will be confirmed. That final SIP will be provided at least 4 months prior to the next relevant ‘noisy’ activity. An additional column has been added to Table 1, as a prompt for subsequent iterations of the SIP to confirm if the final design plan remains as assessed within the RIAA and, if</p>

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	<p>surveys have been assessed as occurring in the 2018/19 winter season.</p> <ul style="list-style-type: none"> <li>• The SIP should be submitted earlier than four months prior to the first noisy event.</li> </ul>	<p>any changes have occurred, if those changes affect the existing conclusion of no AEol (including, if required, the need for additional mitigation).</p> <p><b>Management of the SIP process:</b> The position of Natural England, that a mechanism is required to manage, monitor and review the various SIPs anticipated to come forward, is acknowledged. However, such a mechanism is outside the jurisdiction of the Applicant. The Applicant can only undertake the assessment, alone and in-combination, and provide mitigation as necessary to avoid an AEol. It is the Applicant's position that the RIAA (REP2-018 and REP2-019), MMMP (APP-146) and SIP (Appendix 18) provide certainty that an AEol will be avoided with respect to the SNS cSAC/SCI. Further, given that the mitigation is wholly within the ability of the Applicant to deliver (with no ambiguity as regards its success), with sign off required from MMO on the appropriateness of that mitigation through the SIP process, it is considered that Thanet Extension does not need to be involved directly with any such overall management process, as no external involvement is required to deliver the mitigation.</p> <p><b>Large scale seismic survey:</b> The Applicant notes the information regarding the large scale geophysical survey. The Applicant has sourced copies of the survey (specifically Application GS/858/0 Version 2 and the Environmental Overview and Marine Mammal Risk Assessment, issued by</p>

Interested Party	Key points raised in the Submission	Applicant's response
		<p>Spectrum in February 2019)). The maximum survey extent is contained within the documents, with the boundary being at its closest 51km from the winter extents of the SNS cSAC/SCI and is therefore beyond the maximum screening distance of 10km for seismic survey. The survey is therefore not relevant to the in-combination assessment for TEOW, which applies during the winter season only. As regards other oil and gas surveys, it can be confirmed that the RIAA -re-issued at Deadline 2 (REP2-019) - clarified if additional oil and gas surveys had come forward since the RIAA was first issued in June 2018 with the Application (paragraph 8.3.4). No surveys were identified within the relevant timeframe.</p> <p><b>2018/19 surveys:</b> Natural England is correct to identify the potential for geophysical survey work in the 2018/19 winter season (ending March 2019). The potential need for such a survey was included in the RIAA as a worst case scenario. However, it has since been confirmed by the Applicant that there is no such requirement and therefore the survey has been removed from consideration within the SIP.</p> <p><b>Sufficiency of 4 months prior to the first relevant (noisy) event:</b> There is an existing condition linking provision of documents at least 4 months prior to the geophysical survey, and it is logical to link the SIP to that process. It is acknowledged that should proposed mitigation (if required) were to be complicated, at least 4 months may be insufficient to enable agreement to be reached. However, as highlighted</p>

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		<p>above, the geographic location at Thanet Extension is such that the offered mitigation (if required), namely a seasonal restriction, enables a very clear and unambiguous way of providing certainty that no AEoI will result both alone and in combination. Such an approach does not result in changes to the 26km EDR, does not require changes to construction methods and does not require additional equipment on site. The approach also does not require liaison with other developers, with the ability to deliver the mitigation being entirely down to the Applicant. It is therefore considered that 4 months should be sufficient time to agree the conclusions.</p>
<p>Natural England (PINS Refs REP3-020)</p>	<p>Saltmarsh Mitigation, Reinstatement and Monitoring Plan – Revision B</p> <p>“Overall Natural England are satisfied with the changes made to the document following the removal of landfall option 2. We have made comments regarding clarifications as well as providing advice to ensure the plan is as robust as possible. Once these have been discussed and addressed we envisage the plan can be finalised and agreed within the Statement of Common Ground (SoCG).”</p> <p>Natural England (and the Environment Agency) have requested further clarification on design aspects included in the SMRMP.</p>	<p>The Applicant has updated the Saltmarsh Mitigation, Reinstatement and Monitoring Plan in line with Natural England’s (and Environment Agency’s) Submission and is submitted as Appendix 16 in this Deadline 4 Submission. The Applicant considers that non-native species, with regards the saltmarsh habitat, is not a matter of concern as the project development in this location will not act as a vector for non-native species.</p>



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	<p>Natural England wish to see the worst case scenario to be refined and advises the number of cables and trenches to be as low as possible.</p> <p>Natural England suggested regular consultation with themselves, the ECoW, VWPL and the Environment Agency to ensure compliance with the plan and all parties are informed.</p> <p>Natural England requested some further clarification on pollution and INNS prevention.</p> <p>Natural England propose the use of the Before After Control Impact Design (BACI) and one or two continuous belt transects for botanical habitat surveys. Natural England also advised that surveys should be undertaken at the same time of year to ensure an accurate comparison.</p>	
<p>Natural England (PINS Refs REP3-020)</p>	<p>MCZ Assessment Clarification Note                      “It is clear to see the applicant has taken on board many of Natural England’s suggestions regarding the MCZ assessment, such as using the Thanet Coast MCZ conservation objectives as a proxy and utilising Natural</p>	<p>The Applicant has submitted a revised MCZ Clarification Note (Appendix 20 to the Deadline 4 Submission). Table 1 of the document details the comments provided by Natural England in Table 2 of their response to Deadline 3 Submissions (PINS Ref: REP3-020) and how these have been addressed.</p>

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	<p>England’s Advice on Operations. However, Natural England still has some outstanding concerns with regard to the characterisation of the area of the pMCZ associated with the red line boundary, the suitability and lack of pre and post construction monitoring and the effects of associated works within the pMCZ itself.”</p> <p>Detailed comments are provided in Table 2 of the Submission.</p>	<p>With reference to Schedule 12, Part 4, Condition 13(2)(b) of the revised draft DCO (Appendix 2 to the Deadline 4 Submission), the Applicant has committed to undertaking focused pre- and post-construction monitoring within the Goodwin Sands pMCZ should cable protection and/or sandwave clearance be required in this area.</p>
<p>Natural England (PINS Refs REP3-020)</p>	<p>Characterisation of the pMCZ</p> <p>It is currently Natural England’s position that there is uncertainty with regards the adequacy of the MCZ characterisation data to be completely confident in the habitats within the area of the Goodwin Sands pMCZ. Characterisation should provide a broad coverage of the habitat types within the project area of interest, but particularly within any nature conservation designations that are intended to protect seabed features or where sensitive habitats and species may occur outside of designated sites. We acknowledge that the applicant has undertaken geophysical surveys across the Red Line Boundary (RLB) and inside Goodwin</p>	<p>The Applicant maintains that detailed geophysical data, sufficient for the purposes of characterisation and assessment, has been obtained for the entirety of the offshore export cable corridor (including in the area of overlap with the Goodwin Sands pMCZ).</p> <p>With reference to Schedule 12, Part 4, Condition 13(2)(b) of the revised draft DCO (Appendix 2 to the Deadline 4 Submission), the Applicant has committed to undertaking focused pre- and post-construction monitoring within the Goodwin Sands pMCZ should cable protection and/or sandwave clearance be required in this area.</p>

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	<p>Sands pMCZ. However, considering the applicant's assessment that sandwave clearance and rock protection will likely take place in some capacity, within a proposed designated site which is now a material consideration, we need further data and assessment to provide a better understanding of both the physical and biological environment in the proposed development's zone of impact and the effects upon the features and conservation objectives of the site.</p>	
<p>Natural England (PINS Refs REP3-020)</p>	<p>Pre and Post Construction Monitoring within the pMCZ</p> <p>Natural England are in agreement with the applicant that monitoring should be targeted for this project. However, Natural England do not currently deem the pre and post construction monitoring commitments within the pMCZ to be sufficient. Natural England advise that further pre construction surveys are required as well as commitments to post construction monitoring, which should be used together to minimise and validate impact predictions.</p>	<p>With reference to Schedule 12, Part 4, Condition 13(2)(b) of the revised draft DCO (Appendix 2 to the Deadline 4 Submission), the Applicant has committed to undertaking focused pre- and post-construction monitoring within the Goodwin Sands pMCZ should cable protection and/or sandwave clearance be required in this area.</p>

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Natural England (PINS Refs REP3-020)	Natural England noted several areas where further information or clarification are required for the sandwave clearance, dredging and disposal assessment.	The Applicant has updated the 'Sandwave Clearance, Dredging and Drill Arisings: Disposal Site Characterisation' has been submitted as Appendix 15 to the Deadline 4 Submission in line with Natural England's Submission, each of the issues raised have been included in a consultation table and responded to on a point by point basis.
Natural England (PINS Refs REP3-020)	Sandwave clearance, dredging and disposal is proposed to occur within the pMCZ. Natural England believes that further evidence needs to be provided on these activities as the information presented is too broad to provide site specific advice on.	<p>A revised document 'Sandwave Clearance, Dredging and Drill Arisings: Disposal Site Characterisation' has been submitted as Appendix 15 to the Deadline 4 Submission. This provides detailed information as regards the sandwave clearance, dredging and disposal activities for Thanet Extension.</p> <p>With reference to Schedule 12, Part 4, Condition 13(2)(b) of the revised draft DCO (Appendix 2 to the Deadline 4 Submission), the Applicant has committed to undertaking focused pre- and post-construction monitoring within the Goodwin Sands pMCZ should cable protection and/or sandwave clearance be required in this area.</p>
Natural England (PINS Refs REP3-020)	<p><b>Cable Protection</b>                      Natural England acknowledge that the applicant has considered a worst case scenario for rock protection. This loss should be fully assessed in terms of the significance of the loss in its own right (i.e. percentage loss), as well as the functional importance of that loss to the overall feature and the site as a whole. Therefore, taking the Thanet Coast MCZ conservation advice package as a proxy,</p>	<p>The Applicant can confirm that a realistic worst case assessment has been undertaken whereby the effect of cable protection on a given receptor has been assessed. The long-term effect of the introduction of hard substrate on any benthic habitat has been presented within the relevant chapter [Application Ref 6.2.5/ PINS Ref APP-046]</p> <p>For clarification, the assessment does not assume that the entirety of the cable corridor will be covered with cable protection, rather the maximum length of cable that could</p>

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	<p>we advise that this assessment should consider how a range of attributes associated with subtidal sediments may be affected.</p> <p>Natural England also advises that a realistic approach to cable protection resulting in habitat loss should be taken, rather than applying to cover the entirety of the cable corridor within the site. Pre-construction surveys and ground truthing can also be used to help ensure that adequate burial is achieved, avoiding the need for future rock protection.</p>	<p>require protection. This conservative assumption assumes that 0.025% of the Goodwin Sands pMCZ could be covered in cable protection. With reference to Schedule 12, Part 4, Condition 13(2)(b) of the revised draft DCO (Appendix 2 to the Deadline 4 Submission), the Applicant has committed to undertaking focused pre- and post-construction monitoring within the Goodwin Sands pMCZ should cable protection and/or sandwave clearance be required in this area.</p>
<p>Natural England (PINS Refs REP3-020)</p>	<p>Review of the Environment Statement Following the Removal of the Option 2 Landfall Design</p> <p>Following a review of the above document, Natural England agree with applicant's conclusions that the removal of landfall Option 2 (the permanent loss of saltmarsh) from the project design envelope, will not result in any additional or greater effects than those already considered within the current Environmental Statement.</p> <p>As previously stated, one of Natural England's major concerns was associated</p>	<p>This is noted and welcomed by the Applicant.</p>

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	<p>with landfall option 2 and the permanent loss of saltmarsh. As a result of its removal and the addition of a Saltmarsh Mitigation, Reinstatement and Monitoring Plan (SMRMP) our concerns relating to the effects upon the saltmarsh in this area have been reduced significantly. In Natural England’s opinion, Option 3 (trenching) is now considered the worst case scenario.</p>	
<p>Natural England (PINS Refs REP3-020)</p>	<p>Report to Inform Appropriate Assessment (Revision B)</p> <p>Natural England welcomes the removal of EA1, Hornsea 3 and Norfolk Vanguard from the group of projects deemed to have no temporal overlap with Thanet Extension. We disagree that there is no potential for temporal overlap between Thanet Extension and Norfolk Vanguard.</p>	<p>The comment from Natural England states <i>‘If Vanguard are due to begin construction in 2024 than it stands to reason that they will be undertaking pre-construction ‘noisy’ activities, such as geophysical surveys or UXO detonation in 2023, which overlaps with the 2021-2023 construction window for Thanet Extension. However, we understand that there is no information available regarding the schedule of works at Vanguard at this time’</i>.</p> <p>It is acknowledged that other noisy works may come forward within the relevant timeframe, that are not included within the in-combination assessment within the RIAA. However, these are not currently foreseeable. It is also clear in the RIAA (paragraph 8.36 of REP2-018) that <i>‘The RIAA only takes account (and should only take account) of planned/consented works within the licensing process’</i>. Without any information on further planned works, it is not considered appropriate to include speculative works within the RIAA. However, it is noted that there is provision within the SIP (update provided at Deadline 4) for the in-combination assessment to be</p>

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		revisited and confirmed at two discrete instances, which provide reassurance that should Vanguard propose further works within the relevant timeframe, these can be included at that point.
	Natural England welcomes the inclusion of Tier 2 projects in the in-combination assessment and the associated figures presented in tables 12.4 and 12.5. These figures clearly demonstrate that under the worst case scenario the SNCB thresholds are exceeded considerably. Natural England is satisfied that these figures represented an unlikely worst-case scenario and the assessment will be revisited through the Site Integrity Plan (SIP) and any further mitigation that is required will be implemented prior to construction commencing at Thanet Extension.	This is noted and welcomed by the Applicant.
	Following the removal of option 2 this section has been appropriately updated. Natural England agree with the updated conclusions presented and the remaining effects screened in for LSE in relation to onshore biodiversity (7.5.22 – 7.5.37). Noting the SMRMP requires amendment as noted above.	This is noted and welcomed by the Applicant.

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	<p>Natural England are content with the changes made to this section (11.5). Natural England welcome the updates regarding the Terrestrial Invertebrate Mitigation Strategy (TIMS) and the inclusion of the accidental pollution text.</p>	<p>This is noted and welcomed by the Applicant.</p>
	<p>Natural England are also content with the changes regarding this section (12.5). Regarding the Manston Airport development, although any in combination effects will be during construction and outside of the sensitive bird overwintering period, we ask the applicant to keep up to date with the progress of this application and any changes which may affect the Thanet Extension project.</p>	<p>This is noted by the Applicant. However, the Applicant would expect that should Manston Airport make changes to their project with HRA Implications, that these would be assessed by Manston Airport alone and in-combination.</p>
	<p>Thanet Coast SAC – Chalk Reefs – It states “Where possible, the cable route will be microsited to avoid features present.” The cable route now fully avoids all chalk reef features of the SAC and so this may need to be amended.</p>	<p>The Applicant notes this representation and agrees that Natural England are correct. The text remained following the edits for the re-issue of the RIAA ad Deadline 2 and is no longer required - no micrositing will be required of the cable route within the Thanet Coast SAC, as no cable will be laid within the Thanet Coast SAC. However, the inclusion of the text does not alter the conclusions of the assessment and therefore the RIAA does not need to be re-issued.</p>
	<p>Although the original TOWF cable has recovered well it should state alongside this</p>	<p>The Applicant notes this representation, however recovery is expected to be complete by the time Thanet Extension is constructed.</p>



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	<p>that the Nemo cable installation still represents an area still in an impacted state.</p> <p>Although screened out of the RIAA, the physical processes chapter of the ES does refer to the disposal site used by Ramsgate Harbour. This disposal site does have a long term licence and therefore a reasonable estimate of disposal activity can be made. The ES does consider the in combination effect of plumes arising from the disposal site and this application, and concludes that the effect is small. More clarity is sought about that conclusion and how that relates to designated sites. It is not anticipated that this will materially affect the outcome of assessments.</p>	<p>It is acknowledged that Ramsgate Harbour have an existing Marine Licence for maintenance dredging within Ramsgate Port and Harbour (MLA/2015/00144/1). The licence runs from March 2016 for a period of ten years, allowing up to 125,000 tonnes per year of silt and up to 12,000 tonnes per year of sand. The silt to be deposited at TH140 Pegwell Bay, TH146 Ramsgate Harbour Site A and DV010 Dover, with the sand having a beneficial use on the Ramsgate Sands foreshore. The licence states ‘The Port of Ramsgate has been dredged in this way for over 30 years with no environmental concerns’. The licence includes conditions (maximum tonnage at particular disposal sites) to minimise the risk for the Thanet Coast MCZ.</p> <p>The Benthic Ecology chapter of the Environmental Statement (APP-046) in Table 5.17 found the following as regards cumulative effects from suspended sediment and deposition <i>‘The use of the Pegwell Bay and Ramsgate Harbour disposal sites is primarily for the dumping of sediment removed during maintenance dredging. The use of these sites is intermittent and the volumes used are unknown in advance and therefore it is not possible to determine if the use of the sites will</i></p>

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		<p><i>overlap with impacts from the construction of Thanet Extension. However, the while the volumes are likely to be greater, the impacts are likely to be similar to those for the deposition of the drilling arisings predicted for Thanet Extension.’</i> Followed by paragraph 5.13.20 <i>’ However, as the disposal events are discrete and the disposal areas are wide, it is considered unlikely that the increases in SSC and sediment deposition resulting from the use of the disposal sites combined with the other identified projects will cumulatively exceed the natural variation or the 5 cm smothering baseline to be considered ‘light’ smothering for the sensitivity assessments’.</i></p> <p>The RIAA (P2-020) considered the potential for suspended sediment and deposition to affect the Thanet Coast SAC alone in paragraph 11.2.42 inter alia. No in-combination risk was identified during the drafting of the RIAA or highlighted during consultation. However, for the project alone the conclusion found in paragraph 11.2.44 <i>‘the short-term and temporary nature of the change, the existing levels of SSC in the area, the ES conclusion of minor significance and the known low sensitivity of the chalk reef feature to siltation, it is concluded that the sites conservation objectives will be maintained in the long-term’.</i> This was followed by a conclusion of no adverse effect on integrity.</p> <p>Given the conclusion for the project alone with respect to suspended sediment and deposition on chalk reefs in the</p>

Interested Party	Key points raised in the Submission	Applicant's response
		<p>Thanet Coast SAC, the assessment in the ES in-combination with respect to benthic ecology from suspended sediment and deposition, together with the ongoing and longstanding maintenance dredging and disposal activity which is acknowledged to not represent an environmental concern, even if LSE were found to apply it</p>
	<p>Natural England advises that further consideration needs to be given to impacts, sensitivity and recoverability of habitats to deposition of material from sandwave clearance / disposal including the habitat and size of area affected. Disposal areas should avoid protected sites and areas of habitats of conversation interest. NE is concerned that this may not represent a realistic worst case scenario for assessing impacts (eg smothering). From experience of other windfarms and cable activities, disposal is more likely to occur at discrete locations, and therefore plumes and deposition at and from these locations are likely to be bigger than what has been assessed as the worst case scenario.</p>	<p>The Applicant has updated the sandwave clearance, dredging and disposal Site Characterisation in line with Natural England's Submission, this point is considered further within the consultation table, and is submitted as Appendix 15 in this Deadline 4 Submission.</p> <p>Regarding disposal of material within the Goodwin Sands pMCZ, material originating from the pMCZ will be retained within the site as far as reasonably practicable.</p>
	<p>With regards to the Offshore Ornithology Natural England's primary comments are associated with the conclusions regarding the designated sites as outlined in the SoCG.</p>	<p>The statement of common ground for offshore ornithology with Natural England (REP3-064) includes a number of items that are not yet agreed. Of these, some are pending legal review internally within Natural England, others require further discussion between Natural England and the</p>

Interested Party	Key points raised in the Submission	Applicant's response
		<p>Applicant. The status of the under discussion items as of 14 March 2019 is as follows:</p> <p>Outer Thames Estuary SPA – agreed alone, awaiting legal review on position in-combination.</p> <p>Flamborough and Filey Coast SPA - agreed alone, awaiting legal review on position in-combination.</p> <p>The following points were discussed during the 1 March 2019 telephone call with Natural England but do not all appear to have been up dated:</p> <p>Use of site-specific data on seabird flight heights (from digital aerial surveys) - under discussion.</p> <p>Use of site-specific data on seabird flight heights (from ORJIP study findings) - under discussion.</p> <p>Use of a range in the data on seabird flight heights (from SOSS 02) - under discussion.</p> <p>Nocturnal activity rates used for seabirds in CRM - under discussion.</p> <p>The contribution of Thanet Extension being of no material difference to cumulative collision risk – under legal review.</p>

Interested Party	Key points raised in the Submission	Applicant’s response
		<p>The contribution of Thanet Extension being of no material difference to in-combination collision risk – under discussion.</p> <p>Post-consent Monitoring Plan – provided at Deadline 3 and under discussion.</p>
<p>Natural England (PINS Refs REP3-020)</p>	<p>Natural England welcomed the clarification from the application that the geophysical surveys will be ground truthed in order to inform the biogenic reef plan.</p>	<p>The Applicant notes this representation. This is captured in the Schedule of Monitoring [PINS Ref REP3-067] and is secured at Schedule 12, Part 4, Condition 13(2)(b) in the revised draft DCO submitted at Deadline 4.</p>
<p>Natural England (PINS Refs REP3-020)</p>	<p>Further pre and post monitoring within the MCZ is required to determine the impacts upon any designated features from the proposed activities, particularly from sandwave clearance or cable protection.</p>	<p>The Applicant notes this representation. This is captured in the Schedule of Monitoring [PINS Ref REP3-067] and is secured at Schedule 12, Part 4, Condition 13 (12)(b) in the revised draft DCO submitted at Deadline 4.</p>
<p>Natural England (PINS Refs REP3-020)</p>	<p>The Outline Operations and Maintenance Plan (Application reference 8.10) which highlights in table 10.1 that cable repair and replacement is marked as green, and not needing any additional marine licence if the volumes do not exceed those in the ES. Due to the uncertainty displayed by the proposed O&amp;M activities, this should be marked as amber as an additional licence may be required.</p> <p>Natural England enquired if a figure could be provided for the amount of potential</p>	<p>The Applicant has updated the Outline Operations and Maintenance Plan following consultation with IPs; and the revised plan will be submitted as Appendix 22 to the Applicant’s Deadline 4 Submission which will supersede the version submitted in the Application (PINS Ref APP-145/ Application Ref 8.10).</p>

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	<p>disturbance within Goodwin Sands pMCZ [during O&amp;M] and has it been considered in the MCZ assessment?</p> <p>Natural England request clarification if operations and maintenance activities take into account the BRMP.</p>	
<p>Natural England (PINS Refs REP3-020)</p>	<p>Natural England's concerns around sand wave clearance, particularly in Goodwin Sands pMCZ, a sandwave clearance plan should be conditioned within the DCO to ensure the effects of sandwave clearance and disposal are appropriately considered and addressed post-consent.</p>	<p>The Applicant considers that a standalone sandwave clearance plan is not required. However, monitoring is captured in the Schedule of Monitoring [PINS Ref REP3-067] and is secured at Schedule 12, Part 4, Condition 13 (12)(b) in the revised draft DCO submitted at Deadline 4.</p>
<p>Natural England (PINS Refs REP3-020)</p>	<p>Natural England are still seeking to alter the wording of condition 16(3) within Part 4 regarding the results of initial noise measurements. Although the efficacy of soft start is no longer under scrutiny the change we are seeking provides a mechanism for piling to cease quickly in a situation where noise monitoring confirms there is a significant issue.</p>	<p>It is the Applicant's position, for the reasons outlined in the Appendix 9 to Deadline 3 Submission: Written Summary of Vattenfall's Oral Case put at the Issue Specific Hearing 3 that further wording is not necessary. In summary, the MMO already have the statutory powers to issue a stop notice in specific circumstances including where there is a risk of serious harm to the environment. This is contained within Section 201 of the Marine and Coastal Access Act 2009. It is not considered by the Applicant to be appropriate legal drafting to include powers that exist through other legal instruments within a DCO.</p>

Interested Party	Key points raised in the Submission	Applicant's response
Port of London Authority and Estuary Services Limited (PINS Refs REP3-001, REP3-040 and REP3-045)	These Submissions are addressed in Appendix 4 to this Deadline 4 Submission	
Port of Tilbury London Limited and London Gateway Port Limited (PINS Ref REP3-030)	Addressed in Appendix 4 to this Deadline 4 Submission	
Thanet Fishermen's Association (PINS Ref REP3-068)	TFA provided two anonymised screenshots showing tracks and gear positions.	The Applicant notes this representation.
Thanet Fishermen's Association (PINS Ref REP3-068)	TFA highlighted that they did not raise the request for the shipping survey tracks and noted that it may have been an action point from ISH5.	
Trinity House (PINS Ref REP3-006)	<p>Trinity House noted that, as currently drafted, public rights of navigation could be extinguished under article 16 solely on the basis of the plan submitted to the Secretary of State, even though no physical marking indicating to mariners where navigation remains safe and permissible, has been laid out by the Applicant.</p> <p>Trinity House is also concerned that public rights of navigation might be extinguished under article 16 of the draft DCO even</p>	The Applicant notes the representation. The revised draft DCO submitted at Deadline 3 included amendments to Article 16 to clarify that Trinity House will receive notification eight weeks prior to the extinguishment of rights taking effect, which will allow Trinity House to direct the Applicant as to the necessary markings that will need to be put in place.

Interested Party	Key points raised in the Submission	Applicant's response
	<p>though there is no imminent prospect of construction works being commenced by the Applicant.</p> <p>In Trinity House's view, an amendment to article 16 of the draft DCO is therefore necessary to make clear that the extinguishment of public rights of navigation should only take effect once the Applicant has marked the area within which construction works are to be undertaken, to the reasonable satisfaction of Trinity House.</p>	
<p>Trinity House (PINS Ref REP3-006)</p>	<p>Trinity House has also sought to elucidate more fully its concerns in respect of the proposed arbitration procedures, as well as to respond to written submissions made by the Applicant at Deadline 2 in the ExA's examination timetable, in order to provide greater context to its request that article 36 of the draft DCO should be amended.</p> <p>Trinity House made written submissions in respect of the proposed arbitration procedures in the draft DCO, as part of its comments more generally on the Applicant's proposals, at Deadline 1 in the ExA's examination timetable.</p>	<p>The Applicant notes the representation and has addressed Trinity House's point regarding amendments to Article 36 below.</p>



Interested Party	Key points raised in the Submission	Applicant's response
	<p>Trinity House also notes that the MMO has expressed similar concerns in relation to the proposed arbitration procedures in the draft DCO.</p>	
<p>Trinity House (PINS Ref REP3-006)</p>	<p>Trinity House does not therefore agree with the Applicant's view that the proposed arbitration provision is the only mechanism to resolve disputes within the DMLs. MCAA 2009 already contains such a mechanism and there is no reason to suspect that Parliament intended, in passing the 2008 Act, for this mechanism to be usurped by Orders granting development consent.</p> <p>For the avoidance of doubt, Trinity House confirms that it is specifically concerned by any drafting proposals that might enable the Applicant to refer matters relating to the discharge of conditions under the DMLs to arbitration, since it is required to perform a number of functions under the DMLs contained in Schedules 11 and 12 of the draft DCO.</p> <p>It is therefore inevitable that Trinity House would be implicated in any arbitration proceedings, where directions made or</p>	<p>The Applicant notes the representation and is aware of the appeal mechanisms available under section 73 of the Marine and Coastal Access Act 2009 and in accordance with the Marine Licensing (Licence Application Appeals) Regulations 2011. However, it is the Applicant's understanding that the 2011 Regulations do not apply to decisions made in relation to conditions within a license once granted; rather, they are intended to provide a mechanism to appeal against a decision made in relation to the granting of a licence. Therefore, they do not provide a suitable mechanism to resolve potential disputes relating to the discharge of conditions within the DMLs and so they are not an adequate substitute for the Arbitration schedule as drafted.</p>

Interested Party	Key points raised in the Submission	Applicant’s response
	<p>advice given by Trinity House in respect of AtoN matters is at the root of the reference to arbitration.</p>	
<p>Trinity House (PINS Ref REP3-006)</p>	<p>Trinity House also noted at the ISH that the applicants for the Wylfa Newydd Nuclear Power Station application currently under examination have, following representations made by Trinity House, amended the standard model clause arbitration provision (article 78 in that draft DCO) by adding the following words:</p> <p>'(2) This article must not apply to the provisions of the 1847 Act incorporated in this Order by article 43 or to Trinity House in the exercise of its statutory functions.' (our emphasis)</p> <p>The concerns raised by Trinity House in this application are therefore not new, as the Applicant suggests, but part of a more concerted and coordinated effort to ensure that its important regulatory functions are not adversely affected by the inclusion of an inappropriate arbitration provision in Orders granting development consent under the 2008 Act.</p>	<p>The Applicant notes the representation and has considered the amendments suggested wording. The Applicant is keen to make clear that the Arbitration article (Article 36) does not overrule Trinity House's saving provision (at Article 39). This therefore means that the arbitration article cannot be relied upon by the Applicant against Trinity House if it would prejudice or derogate from any rights, duties or privileges of Trinity House. The Applicant has amended the dDCO submitted at Deadline 4 as follows:</p> <p><b>Arbitration</b>  <i>36. <u>Subject to Article 41 (Saving provisions for Trinity House), any difference under any provision of this Order, unless otherwise provided for, must be referred to and settled in arbitration in accordance with the rules at Schedule 9 of this Order, by a single arbitrator to be agreed upon by the parties, within 14 days of receipt of the notice of arbitration, or if the parties fail to agree within the time period stipulated, to be appointed on application of either party (after giving written notice to the other) by the Centre for Effective Dispute Resolution.</u></i></p>

Interested Party	Key points raised in the Submission	Applicant's response
Trinity House (PINS Ref REP3-006)	<p>In accordance with action point 10 of the list of actions arising from the ISH published by the Inspectorate, Trinity House enclosed the following proposed amendments to article 36 of the draft DCO:</p> <p><i>(4) This article is without prejudice to article 39 (saving provision for Trinity House).</i></p> <p><i>(5) The powers of the arbitrator appointed under this article do not extend to considering the appropriateness of a decision or determination made by a body exercising regulatory functions on behalf of the Secretary of State under or pursuant to an enactment.</i></p>	
Trinity House (PINS Refs REP3-006)	Addressed in Appendix 4 to this Deadline 4 Submission	