



AQUIND Limited

AQUIND INTERCONNECTOR

Environmental Statement – Volume 3 – Appendix 8.2 Intertidal and Benthic Habitats Consultation Responses

The Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 – Regulation 5(2)(a)

The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017

Document Ref: 6.3.8.2

PINS Ref.: EN020022

AQUIND Limited

AQUIND INTERCONNECTOR

Environmental Statement – Volume 3 –
Appendix 8.2 Intertidal and Benthic Habitats
Consultation Responses

PINS REF.: EN020022

DOCUMENT: 6.3.8.2

DATE: 14 NOVEMBER 2019

Units 5 & 10
Stephenson House,
Horsley Business Centre
Horsley,
Northumberland,
NE15 0NY
England, UK

DOCUMENT

Document	6.3.8.2 Environmental Statement – Volume 3 – Appendix 8.2 Intertidal and Benthic Habitats Consultation Responses
Revision	001
Document Owner	Natural Power Consultants Ltd
Prepared By	Stuart McCallum/Sarah Lister
Date	1 October 2019
Approved By	Ross Hodson
Date	25 October 2019

CONTENTS

TABLE 1: SCOPING RESPONSES	1
TABLE 2: CONSULTATION PRIOR TO PUBLICATION OF THE PEIR	26
TABLE 3: PEIR CONSULTATION RESPONSES	29

TABLE 1: SCOPING RESPONSES

Consultee	Scoping Opinion ID/Page	Summary of Comment Received	How this has been addressed by the Applicant
Planning Inspectorate (PINS)	4.3.1	<p>Introduction of Non-Native Species (INNS): The Inspectorate agrees that this matter can be scoped out of the Environmental Statement ('ES') on the basis that the Applicant intends to apply available best industry practice, including the production and implementation of a biosecurity plan. The Scoping Report also indicates that imported material for the Proposed Development will not be of large volume.</p> <p>The ES application should provide reference to how the delivery of best practice measures for the control of INNS, including a biosecurity plan, are secured through Development Consent Order ('DCO') requirements (or other suitably robust methods). Effort should be made to agree such measures with relevant consultation bodies.</p>	Best practice measures for controlling INNS has been considered. These measures will be secured through a wider environmental management plan as a standalone document. See Marine Outline Construction Environmental Management Plan ('CEMP') (document reference 6.5).
PINS	4.3.2	Electro-Magnetic Field (EMF) and emissions from High Voltage Direct Current ('HVDC') Cable: The Inspectorate agrees on the basis of the evidence provided and the nature of the Proposed Development that effects of EMF on benthic receptors can be scoped out of the ES.	Noted

Consultee	Scoping Opinion ID/Page	Summary of Comment Received	How this has been addressed by the Applicant
PINS	4.3.3	Heat emissions from HVDC Cable: A number of features of the Solent Maritime Special Area of Conservation (SAC) are sensitive to temperature increases from power cable operation and therefore, the Inspectorate cannot agree to scope this matter out as significant effects may occur. The ES should include an assessment of heat emissions from the HVDC cable during operation on sensitive receptors where significant effect could occur	Chapter 8 Intertidal and Benthic Habitats, Section 8.6 (and accompanying information for Habitats Regulations Assessment ('HRA') report; document reference 6.8.1) includes an assessment of heat emissions during operation.
PINS	4.3.4	No study area is explicitly defined in this aspect chapter, although the Inspectorate notes the identification of protected areas within 50km of the Proposed Development in Table 8.1 and the benthic habitats identified at a variety of distances in paragraph 8.2.3. The ES should clearly identify and justify the study area applied to the assessment of effects on intertidal and benthic ecology.	The regional and local study area is described in Section 8.1.2 of this chapter, and identified in Figure 8.1 of the ES Volume 2 (document reference 6.2.8.1).
PINS	4.3.5	The Inspectorate notes from the Scoping Report that a suite of benthic surveys, together with intertidal surveys have been undertaken. The Scoping Report does not include the detailed methodology for the surveys or specify what standard protocols and quality standards are being utilised. The Applicant should	The benthic and intertidal surveys (Appendix 8.1 (Benthic Ecology Survey Report) of the ES Volume 3 (document reference 6.3.8.1) and Appendix 8.3 (Intertidal Survey Report) of the ES Volume 3 (document reference 6.3.8.3))

Consultee	Scoping Opinion ID/Page	Summary of Comment Received	How this has been addressed by the Applicant
		<p>ensure that the baseline information used to inform the assessment of likely significant effects is robust and suitable for that purpose. The Applicant should make effort to agree the approach to data collection and quality assurance with relevant consultation bodies. The ES and/or accompanying technical appendices should therefore provide detailed information regarding the survey methodology and analysis used to inform the impact assessment, together with appropriate figures to present the sampling locations.</p>	<p>identify their respective methodologies and identify the standard protocols and quality standards. These are also summarised in Section 8.6 of this chapter. In addition, as stated, within the Preliminary Environmental Information Report ('PEIR') response to Joint Nature Conservation Committee ('JNCC'), where guidelines exist for the detection and quality assessment of particular habitats these have been followed where relevant.</p> <p>Appendix 8.1 (Benthic Ecology Survey Report): Section 1.2 regarding sample analysis: Taxonomic identification of macrofaunal species was undertaken in accordance with National Marine Biological Analytical Quality Control ('NMBAQC') methodology standards. All biota was extracted and identified according to the NMBAQC Taxonomic Discrimination Protocol (TDP - Worsfold and Hall, 2010).</p> <p>Appendix 8.3 (Intertidal Survey Report) Section 2: The methodology used was taken from the Marine Monitoring</p>

Consultee	Scoping Opinion ID/Page	Summary of Comment Received	How this has been addressed by the Applicant
			Handbook (Davies <i>et al.</i> , 2001), specifically Procedural Guidance No 3-2 - in situ ACE biotope mapping techniques, Procedural Guidance No 3-1 - in situ biotope recording techniques (and the Handbook for Marine Intertidal Phase 1 Biotope Mapping Survey (Wyn <i>et al.</i> , 2000)
PINS	4.3.6	The Scoping Report does not address relevant quality standards applicable to the survey and analysis of impacts to benthic ecology. The ES should provide a description of these matters and how they are applied in the assessment.	Relevant quality standards applicable to the survey are set out in Appendix 8.1 (Benthic Ecology Survey Report) and 8.3 (Intertidal Survey Report). Where these standards or resultant methods are considered to have a bearing on the results, and therefore the assessment, this is highlighted.
PINS	4.3.7	The baseline section of the Scoping Report does not discuss protected habitats or species of conservation concern outside of designated sites. The Inspectorate acknowledges that the surveys undertaken will seek to identify any protected habitats and species potentially affected by the Proposed Development, as confirmed in paragraph 8.4.2. The Proposed Development could, for example, increase suspended sediment	A range of data sources have been used to define the baseline within the study area, and this is described within Section 8.5 of this chapter. Any protected habitats or species (within or without designated sites) have been assessed where connectivity is

Consultee	Scoping Opinion ID/Page	Summary of Comment Received	How this has been addressed by the Applicant
		<p>concentrations which have the potential to smother native oyster (<i>Ostrea edulis</i>) within the Solent.</p> <p>The ES should ensure that impacts on protected habitats and species (including, but not limited to, those protected under the Habitats Directive, Wildlife and Countryside Act 1981, Natural Environment and Rural Communities ('NERC') Act s41 habitats and species of principal importance), together with local Biodiversity Action Plan (LBAP) habitats and species and other habitats/species of conservation concern are assessed where significant effects are likely.</p>	<p>considered to arise as discussed in Section 8.6 of this chapter.</p>
PINS	4.3.8	<p>Habitat loss during construction is not specially identified in the Scoping Report as a potential impact, although it is noted that loss of habitat and species is included in the 'reason' column for the potential impact of seabed disturbance during construction. For the avoidance of doubt, the ES should include an assessment of habitat loss during construction and decommissioning.</p>	<p>This chapter assesses the impact of temporary habitat disturbance and/or loss during construction (and decommissioning) in Section 8.6. Habitat loss due to placement of non-burial protection measures is considered an operational impact and assessed accordingly.</p>
PINS	4.3.9	<p>Appropriate cross-referencing between this aspect chapter and other relevant aspects, such as physical processes and marine water and sediment quality, should be included in the ES.</p>	<p>The chapter now incorporates cross-referencing to other topics where inter-relationships with other topics exist.</p>

Consultee	Scoping Opinion ID/Page	Summary of Comment Received	How this has been addressed by the Applicant
PINS	4.12.2	The Inspectorate notes that assumptions have been made regarding potential impacts and mitigation measures to conclude that there is unlikely to be significant transboundary effects; however, such effects are stated as yet to be explored in the corresponding aspect chapter (e.g through sediment modelling). Limited information has been also provided with regard to the location of potential sensitive receptors in other EEA States. The Inspectorate notes reference in Appendix E to and the intention to consider transboundary effects in the Environmental Impact Assessment ('EIA') process. In accordance with the EIA Regulations, the ES should include a description of the likely significant effects as a result of the Proposed Development, including transboundary effects.	PINS has undertaken screening for possible transboundary effects and has notified the relevant European Economic Area ('EEA') States. This chapter has included consideration of the likely significant transboundary effects as a result of the Proposed Development both as part of EIA process in Section 8.7 of this chapter but also as part of the HRA (see HRA Report, (document reference) 6.8.1)).
PINS	4.12.3	The ES should consider the potential for cumulative impacts with proposals to redevelop the Fraser Range site at Eastney and the North Portsea Coastal Defence schemes. The Applicant should seek to consult with the Eastern Solent Coastal Partnership (ESCP) with regards to the latter and potential cumulative effects. The Applicant's attention is drawn to the comments of NE and the Environment Agency ('EA') contained in Appendix 2 to the Scoping Opinion in this regard.	Consultation has been undertaken with the ESCP (see Consultation Report, (document reference 5.1)). Both ESCP and Fraser Range projects have been considered within the cumulative effects assessment presented in Section 8.7 of this chapter.

Consultee	Scoping Opinion ID/Page	Summary of Comment Received	How this has been addressed by the Applicant
Environment Agency ('EA')	Page: 109	We agree with Section 6.2.14 that although the Marine Cable Route does not directly overlap with any Marine Conservation Zones ('MCZ's), the potential impact on these will need to be assessed.	An MCZ assessment is presented in Appendix 8.5 (Marine Conservation Zone Assessment) of the ES Volume 3 (document reference 6.3.8.5).
EA	Page: 109	In regard to Section 6.2.15, we agree that the potential impacts on the Solent Maritime SAC will also need to be assessed due to the close proximity to the proposed Landfall location at Eastney.	An information for HRA report (document reference 6.8.1) has been submitted with the Application and consider all impacts (including indirect) on any Natura 2000 sites where there is potential for connectivity, including the Solent Maritime SAC.
EA	Page: 109	In Section 8.3.1, we would expect habitat loss to be listed under potential impacts during construction and decommissioning. We agree with Table 8.3. We agree with the proposed methodology set out in section 8.4	Section 8.6 of this chapter assesses temporary habitat disturbance and/or loss during construction.
EA	Page: 109	We agree with Table 8.3.	Noted
EA	Page: 109	We agree with the proposed methodology set out in section 8.4	Noted

Consultee	Scoping Opinion ID/Page	Summary of Comment Received	How this has been addressed by the Applicant
EA	Page: 112	Habitat loss is to be listed in the ES under potential impacts during construction and decommissioning.	Section 8.6 of this chapter assesses the impact of temporary habitat disturbance and/or loss during construction.
EA (to East Hampshire District Council)	Page 107	In accordance with our previous advice (scoping opinion consultation response to Portsmouth City Council, dated 21 March 2018), we are pleased to see that the requirement to identify future phases of the North Portsea coastal defence scheme has been acknowledged (Appendix E - Table E3: Local Planning Authority ('LPA') scoping opinion responses (page 127)). The proposed cable route through Portsmouth passes along sections of the North Portsea coastal defence scheme. The North Portsea coastal defence scheme is being delivered by the ESCP, a team of specialist coastal officers and engineers, who should be consulted during preparation of the ES to determine whether there will be a likely significant effect of the proposed cable route on the scheme.	Consultation has been undertaken with the ESCP (see Consultation Report, (document reference 5.1)). Both ESCP and Fraser Range projects have been considered within the cumulative effects assessment presented in Section 8.7 of this chapter.
JNCC	Page: 203	JNCC note that geophysical surveys and benthic ecology surveys were undertaken along the cable route corridor in 2017 and 2018 respectively. JNCC reiterate the need for evidence of sensitive habitats and species present in the potential impact area of proposed cable laying operations including Annex I	A detailed survey and analysis report (including detailed methodology) is included with as the Application Appendix 8.1 (Benthic Ecology Survey Report).

Consultee	Scoping Opinion ID/Page	Summary of Comment Received	How this has been addressed by the Applicant
		species and Annex II habitats (under the Offshore Marine Regulations 2007, as amended), United Kingdom ('UK') BAP and Oslo and Paris Conventions ('OSPAR') Threatened and/or Declining Habitats and Species. Where guidelines exist for the detection and quality assessment of particular habitats (e.g. Irving, 2009 for stony reef; and Gubbay, 2007 and Limpenny <i>et al.</i> 2010 for <i>Sabellaria spinulosa</i> reef) then these should be followed.	Where guidelines exist for the detection and quality assessment of particular habitats (e.g. Irving, 2009 for stony reef; and Gubbay, 2007 and Limpenny <i>et al.</i> 2010 for <i>Sabellaria spinulosa</i> reef) these have been followed where relevant.
JNCC	Page: 203	The scoping report states that in the offshore area the HVDC cable route will pass close to the Offshore Overfalls and Offshore Brighton MCZs, 1.5 km and 8.5 km respectively: the former is partly in English inshore waters and the latter entirely offshore. The Application should fully assess any potential impacts on these Marine Protected Areas (MPAs). Information on these MCZs is available via the following links: Offshore Overfalls MCZ - http://jncc.defra.gov.uk/page-6776 Offshore Brighton MCZ - http://jncc.defra.gov.uk/page-6775	An MCZ assessment is presented in Appendix 8.5 (Marine Conservation Zone assessment).
MMO	Page: 210	The MMO EIA Scoping Opinion dated 22 June 2018 (paragraph 4.6.7) requested further information regarding the methods used to survey the intertidal benthos. This information has not been provided in the	A detailed intertidal survey and analysis report (including detailed methodology) is presented as Appendix 8.3 (Intertidal Survey Report).

Consultee	Scoping Opinion ID/Page	Summary of Comment Received	How this has been addressed by the Applicant
		<p>Scoping Report. In responding to this request (Table E1, Scoping Opinion Section 4.6.7), the Scoping Report briefly describes how the intertidal biotopes will be mapped in the ES, but not how the surveys used to infer biotopes were conducted. Without this information the MMO cannot comment on the appropriateness of the evidence base. The MMO and its advisers are happy to discuss this point in more detail if required.</p>	
<p>MMO</p>	<p>Page: 210</p>	<p>The MMO recommends that additional information on the number and locations of drop-down video transects, benthic grab stations is provided, as and sediment contaminant samples stations. The latter is apparently presented in Figure 7.1. (according to Section 7.2.2 of the Scoping Report); however, this figure is not provided.</p>	<p>A detailed survey and analysis report (including detailed methodology) is presented as Appendix 8.1 (Benthic Ecology Survey Report).</p> <p>Information on the sampling for contaminated sediments is presented in Chapter 7 (Marine Water and Sediment Quality) of the ES Volume 1 (document reference 6.1.7).</p>
<p>MMO</p>	<p>Page: 210</p>	<p>Details of quality standards have not been provided with respect to benthic ecology in Section 8 of the Scoping Report. For example, details on how benthic community samples were/will be collected (e.g. grab type, video transect length), processed onboard (e.g. sieve size), fixed (e.g. preserved in formaldehyde), and identified have not been provided.</p>	<p>Relevant quality standards applicable to the benthic survey are set out in Appendix 8.1 (Benthic Ecology Survey Report).</p>

Consultee	Scoping Opinion ID/Page	Summary of Comment Received	How this has been addressed by the Applicant
MMO	Page: 210	The MMO recommends sample processing and species identification to follow a standard quality control protocol (e.g. the NMBAQC scheme) and the details of the approach adopted to be stated in the ES.	Relevant quality standards applicable to the benthic survey are set out in Appendix 8.1 (Benthic Ecology Survey Report). All taxonomic identification was undertaken by a laboratory which participates in the NMBAQC scheme.
MMO	Page: 210	The MMO recommends similar standard protocols to be followed for sediment particle size analysis.	All particle size analysis was undertaken by a laboratory which participates in the NMBAQC scheme.
MMO	Page: 210	The proposed scope of the ES is adequate with respect to impacts on benthic ecological receptors (Table 8.3). This includes the assessment of impacts due to seabed disturbance, increase in suspended sediments, resuspension of contaminated sediments, and deposition of sediment during the construction phase, and habitat loss and seabed disturbance (associated with Operational and Maintenance (O and M) activity) during the operation phase.	Noted
MMO	Page: 210	In our EIA Scoping Opinion of 22 June 2018, the MMO advised that possible impacts on benthic ecological receptors due to contaminant release be considered and scoped into the ES if appropriate. Impacts relating	Correct

Consultee	Scoping Opinion ID/Page	Summary of Comment Received	How this has been addressed by the Applicant
		to the resuspension of contaminated sediment have now been scoped in (Table 8.3).	
MMO	Page: 211	A benthic survey campaign has been undertaken along the proposed cable route to characterise subtidal and intertidal habitats and identify any protected benthic features (Section 8.4.2).	Correct
MMO	Page: 211	The subtidal survey used drop-down video and benthic grabs to obtain information on sediment characteristics and infaunal/epifaunal communities (Section 8.4.3). The surveys were stratified so that sampling stations were placed in representative habitats along the entire route. Sampling stations were also placed in potentially sensitive or protected habitats, such as potential Annex I habitats or near designated sites such as Special Areas of Conservation (SACs) or MCZs. This approach is appropriate.	Noted
MMO	Page: 211	The MMO agrees that the following can be scoped out of the ES: The introduction of invasive non-native benthic species (Table 8.3 and Section 8.3.4), The impact of EMF emissions from HVDC cables on the benthos (Table 8.3 and Sections 8.3.5-8.3.7), The impacts from heat emissions from HVDC cables on the benthos (Table 8.3 and Sections 8.3.8-8.3.9).	Noted – though see also PINS comment (ref 4.3.3) and associated response regarding assessment of heat emissions.

Consultee	Scoping Opinion ID/Page	Summary of Comment Received	How this has been addressed by the Applicant
MMO	Page: 211	Section 4.9 states that mitigation measures will be identified and incorporated into the design as environmental assessments are developed and any potentially high magnitude impacts are identified. This approach is reiterated with specific regard to impacts on benthic ecology that have been scoped in (Table 8.3). This approach is appropriate at this stage.	Noted
MMO	Page: 211	Impacts due to EMF and heat emissions from HVDC cables (both of which have been scoped out for benthic receptors) will be mitigated by the shielding and burial of the cables (Table 8.3).	Noted
MMO	Page: 211	The EIA assessment methodology presented in Section 4 is appropriate and clearly justified with reference to Guidelines for Environmental Impact assessment (2004).	Noted
MMO	Page: 211	The data sources for subtidal benthic species and habitats (i.e. drop-down camera and benthic grab surveys, supplemented by geophysical data) are appropriate (Section 8.4.3).	Noted
MMO	Page: 211	The Scoping Report clarifies that cumulative impacts on benthic receptors will be scoped into the ES (Table E1, Scoping Report Section 4.6.11).	Correct

Consultee	Scoping Opinion ID/Page	Summary of Comment Received	How this has been addressed by the Applicant
MMO	Page: 211	<p>The effects of all activities on benthic features within designated sites in the vicinity of the proposed works will be assessed, and the possible implications for the sites' conservation objectives evaluated (Sections 8.4.5-8.4.7). These sections of the Scoping Report make specific reference to MCZs; however, the MMO recommends such transboundary effects to be considered for all designated sites (i.e. those listed in Table 8.1) and any other sensitive benthic receptors known to be present within the area likely to be affected by sediment resuspension, sediment deposition, and/or the release of contaminants. The Scoping Report acknowledges the requirement that such impacts must be included in the ES (Table E1, Scoping Opinion Section 4.6.13).</p>	<p>Noted. Any protected habitats or species (within or without designated sites) have been assessed where connectivity is considered to arise.</p>
MMO	Page: 211	<p>In Sections 7 and 8 of the Scoping Report, water quality and intertidal and benthic habitats organisms have been appropriately identified as receptors to the potential impacts associated with dredge and disposal activities, such as temporary increased suspended sediments, the resuspension of contaminated sediments, smothering and disturbance of seabed.</p>	<p>Noted</p>

Consultee	Scoping Opinion ID/Page	Summary of Comment Received	How this has been addressed by the Applicant
Natural England (NE)	Page: 224	<p>Solent Maritime SAC</p> <p>Chichester and Langstone Harbours Special Protection Area (SPA)</p> <p>Chichester and Langstone Harbours Wetland of International Importance under the Ramsar Convention (Ramsar site)</p> <p>Chichester Harbour Site of Special Scientific Interest ('SSSI')</p> <p>Langstone Harbour SSSI</p> <p>Portsmouth Harbour SPA</p> <p>Portsmouth Harbour Wetland of International Importance under the Ramsar Convention (Ramsar site)</p> <p>Portsmouth Harbour SSSI</p> <p>Offshore Overfalls MCZ</p> <p>Utopia MCZ</p> <p>Offshore Brighton MCZ</p> <p>Kingmere MCZ</p>	<p>Noted - Chapter 8 (Intertidal and Benthic Habitats) of the ES Volume 1 (document reference 6.1.8) (and associated appendices) assesses the potential for the Proposed Development to affect the designated sites listed, and is also supported by a HRA Report (document reference 6.8.1) which has been produced in consultation with NE, JNCC and EA.</p>

Consultee	Scoping Opinion ID/Page	Summary of Comment Received	How this has been addressed by the Applicant
		<p>Solent and Dorset Coast potential Special Protection Area (pSPA)</p> <p>Bembridge proposed Marine Conservation Zone (pMCZ)</p> <p>East Meridian pMCZ</p> <p>Norris to Ryde pMCZ</p> <p>Selsey Bill and the Hounds pMCZ</p> <p>The information supplied by the Applicant confirms that the project will take place within or adjacent to the designated sites listed above. Whilst subsea cables are not a form of development specifically listed in Annex I or II of the EIA Directive, due to the length of the proposed cable and its route crossing internationally and nationally designated nature conservation sites, NE advises that an EIA should be undertaken to allow full consideration of the proposal's impacts as identified within the submitted scoping report.</p> <p>The ES should thoroughly assess the potential for the proposal to affect the designated sites listed above. Furthermore, the ES should also thoroughly assess the impact of the proposals on habitats and/or species listed as 'Habitats and Species of Principal Importance' within the England Biodiversity List, published under</p>	

Consultee	Scoping Opinion ID/Page	Summary of Comment Received	How this has been addressed by the Applicant
		<p>the requirements of S41 of the NERC Act 2006. Section 40 of the NERC Act 2006 places a general duty on all public authorities to conserve and enhance biodiversity. Further information on Habitats and Species of Principal Importance is available via the following link:</p> <p>http://www.naturalengland.org.uk/ourwork/conservation/biodiversity/protectandmanage/habsandspeciesimportance.aspx</p>	
NE	Page: 225	<p>Government Circular 06/2005 states that Biodiversity Action Plan (BAP) species and habitats ‘are capable of being a material consideration...in the making of planning decisions’. NE therefore advises that survey, impact assessment and mitigation proposals for Habitats and Species of Principal Importance should be included in the ES. Consideration should also be given to those species and habitats included in the relevant Local BAP.</p> <p>The EIA should include details of:</p> <ul style="list-style-type: none"> Any historical data for the sites affected by the proposal (e.g. from previous surveys); Additional surveys carried out as part of this proposal; The habitats and species present; 	Noted - Chapter 8 (Intertidal and Benthic Habitats) presents details of and assessment of Habitats and Species of Principal Importance.

Consultee	Scoping Opinion ID/Page	Summary of Comment Received	How this has been addressed by the Applicant
		<p>The status of these habitats and species (e.g. whether BAP priority habitat);</p> <p>The direct and indirect effects of the development upon those habitats and species;</p> <p>Full details of any mitigation or compensation that might be required.</p> <p>The development should avoid adversely impacting the most important wildlife areas within the area of the project, and should if possible provide opportunities for overall wildlife gain. The record centre for the relevant Local Authorities should be able to provide the relevant information on the location and type of BAP habitat for the area under consideration.</p>	
<p>NE</p>	<p>Pages: 225-226</p>	<p>This is a complex proposal which will result in a number of different impacts. NE supports the consideration of the following impacts which have been scoped in for further assessment (as summarised in Appendix C - Table C1 of the scoping report):</p> <p>Intertidal and Benthic Ecology:</p> <p>Seabed disturbance (construction and decommissioning)</p>	<p>Noted</p>

Consultee	Scoping Opinion ID/Page	Summary of Comment Received	How this has been addressed by the Applicant
		<p>Deposition of sediment (construction and decommissioning)</p> <p>Increase in suspended sediments (construction and decommissioning)</p> <p>Impacts from the resuspension contaminated sediment (construction and decommissioning)</p> <p>Habitat loss (operation)</p> <p>Seabed disturbance due to O&M activity</p>	
NE	Page:226	<p>Habitat loss from (operation) has been listed as a potential impact for the receptors; intertidal and benthic ecology and fish and shellfish. The loss from the initial construction phase would be regarded as a one-off event in comparison to any habitat loss impacts from the operation phase. On this basis, NE recommends that habitat loss during the construction phase should be scoped in for the appropriate receptors.</p>	<p>Section 8.6 of this chapter assesses the impact of temporary habitat disturbance and/or loss during construction.</p>
NE	Page: 227	<p>NE has noted that the following impacts have been scoped out of further assessment:</p> <p>Intertidal and Benthic Ecology:</p> <p>Impacts from EMF emissions (operation)</p> <p>Introduction of invasive non-native species</p>	<p>Correct</p>

Consultee	Scoping Opinion ID/Page	Summary of Comment Received	How this has been addressed by the Applicant
		Impacts from heat emissions (operation)	
NE	Page: 227	Impacts from heat emissions upon intertidal and benthic ecology have been scoped out due to cable burial depth and dissipation within the sediment. However, NE's Advice on Operations for the Solent Maritime SAC identifies a number of intertidal and subtidal features that are sensitive to temperature increase from power cable operation. On this basis, NE recommends that impacts from heat emissions are scoped in for further assessment.	Chapter 8 (Intertidal and Benthic Habitats) (and accompanying information for HRA Report) include assessment of heat emissions during operation.
NE	Page: 227	The works, as set out in the information supplied by the Applicant, are near to the designated MCZs and pMCZs as listed above. NE understands that the current proposed cable route will not travel through any of these MCZs and welcomes the planned assessment for potential impacts on their geomorphological features and benthic communities.	Noted
NE	Pages: 227-228	Under Regulation 63 of the Conservation of Habitats and Species Regulations 2017, an appropriate assessment needs to be undertaken in respect of any plan or project which is (a) likely to have a significant effect on a European site (either alone or in combination with other plans or projects) and (b) not	An HRA Report (document reference 6.8.1) accompanies the Application.

Consultee	Scoping Opinion ID/Page	Summary of Comment Received	How this has been addressed by the Applicant
		<p>directly connected with or necessary to the management of the site.</p> <p>NE considers that this proposal is not directly connected with or necessary to the conservation management of the site and therefore requires a HRA to determine whether there will be a likely significant effect on the European sites. Given the limited information available at this stage on the final design and potential construction/operational impacts, NE is of the view that, at present, it cannot be excluded, on the basis of the objective information supplied by the Applicant, that the Application will have a likely significant effect on the internationally designated sites listed above.</p> <p>This is because there is a risk that it will affect the following features of the designated site(s):</p> <p>Benthic habitats</p> <p>Breeding and non-breeding birds</p> <p>In reference to the proposed structure of the ES shown in Appendix D of the EIA scoping report, we recommend the inclusion of a separate section of the ES to address impacts upon European and Ramsar sites entitled 'Information for Habitats Regulations Assessment' as this will help the Planning Inspectorate</p>	

Consultee	Scoping Opinion ID/Page	Summary of Comment Received	How this has been addressed by the Applicant
		to determine whether the proposal is likely to have a significant effect on the European sites and to undertake an appropriate assessment if required.	
NE	Page: 228	<p>We can confirm that the proposed works are located within the vicinity of the above SSSIs. Further information on these SSSIs and their special interest features can be found at:</p> <p>https://designatedsites.naturalengland.org.uk/SiteSearch.aspx</p> <p>The ES should include a full assessment of the direct and indirect effects of the proposal on the features of special interest within these sites and should identify such mitigation measures as may be required in order to avoid, minimise or reduce any adverse significant effects.</p>	Chapter 8 (Intertidal and Benthic Habitats) presents full assessment of the direct and indirect effects of the proposal on the features of special interest within these sites.
NE	Page: 228	In addition to impacts on the designated sites listed above, the EIA will need to consider the potential impacts upon habitats or species listed within the UK and Hampshire BAPs and suggest suitable mitigation should a negative impact arise. For example, construction work could increase suspended sediment concentrations and this could result in smothering	Chapter 8 (Intertidal and Benthic Habitats) includes a full assessment of the direct and indirect effects of the proposal on the habitats or species listed within the UK and Hampshire BAPs.

Consultee	Scoping Opinion ID/Page	Summary of Comment Received	How this has been addressed by the Applicant
		effects on beds of native oysters (<i>Ostrea edulis</i>) within the Solent.	
NE	Pages: 232-233	<p>The ES should include an impact assessment to identify, describe and evaluate the effects that are likely to result from the project in combination with other projects and activities that are being, have been or will be carried out. The following types of projects should be included in such an assessment, (subject to available information):</p> <ul style="list-style-type: none"> existing completed projects; approved but uncompleted projects; ongoing activities; plans or projects for which an application has been made and which are under consideration by the consenting authorities; and plans and projects which are reasonably foreseeable, i.e. projects for which an application has not yet been submitted, but which are likely to progress before completion of the development and for which sufficient information is available to assess the likelihood of cumulative and in-combination effects. <p>NE would advise that the cumulative impacts section should also consider impacts on ecologically sensitive</p>	A cumulative effects assessment of the Proposed Development in combination with other projects is presented in Section 8.7 of this chapter.

Consultee	Scoping Opinion ID/Page	Summary of Comment Received	How this has been addressed by the Applicant
		<p>receptors such as designated sites, non-designated sites, priority habitats and species, protected species etc. In relation to point e, NE advises that the ES should also consider known forthcoming planning applications in close proximity to the development application, where there is potential impacts on key ecological interests.</p> <p>For example, a scoping report has been submitted for the redevelopment of the Fraser Range site at Eastney, Portsmouth and the Coastal Defence schemes that are being progressed for Portsea Island. Cumulative impacts on sensitive receptors such as designated sites and priority habitats should be considered.</p>	
NE (to East Hampshire District Council/ Havant Borough Council)	Page 99/131	<p>NE advise that the ES be supported by a Biodiversity Mitigation and Enhancement Plan (BMEP) to include measures for mitigating impacts on protected species and habitats and include biodiversity compensation measures for residual biodiversity losses that cannot be mitigated on-site. This may include provision of off-site replacement habitats or a financial contribution for biodiversity improvements elsewhere. In the recent 25 Year Environment Plan, there is a drive to ensure net gains in biodiversity from development so the ES</p>	<p>All benthic priority species and habitats with potential to be affected by the Proposed Development have been assessed within Section 8.6 of this chapter.</p>

Consultee	Scoping Opinion ID/Page	Summary of Comment Received	How this has been addressed by the Applicant
		should demonstrate how the development will meet the duty set out in Section 40 of the NERC Act 2006.	

TABLE 2: CONSULTATION PRIOR TO PUBLICATION OF THE PEIR

Consultee	Date (Method of Consultation)	Discussion	Summary.
<p>NE</p>	<p>Consultation on Horizontal Directional Drilling ('HDD') methods in Langstone Harbour (teleconference and emails -16/07/2018)</p>	<p>NE recognised that Langstone Harbour possesses the full suite of designations and as such, features such as those (but not limited to) below will need to be given consideration:</p> <ul style="list-style-type: none"> • Grasslands • Lagoons • Strandline communities • Saltmarsh • Seagrass • Mudflats • Native Oyster <p>Overwintering birds (noise and visual impacts)</p> <p>NE's understanding of the HDD method is that a hole would be drilled underneath the area with an increasing in diameter drill bit. NE request that a water-based mud</p>	<p>Noted.</p> <p>NE was further consulted during the PEIR consultation and whilst preparing the HRA Report (document reference 6.8.1).</p>

		<p>lubricant is used that is Cefas approved.</p> <p>NE also recognise that a fair amount of slurry can exit the drill entry and exit holes. It will be important that this slurry is disposed of correctly (e.g. use of groundsheets to contain the material is often effective as the slurry can then be removed from site).</p> <p>If the HDD entry and exit holes are anywhere near the marine environment that may directly affect the marine environment then NE would generally require survey work to be undertaken. However, as the HDD compound and exit and entry holes will be above Mean High Water Springs ('MHWS') (and as pollution prevention measures should be in place in the HDD compound above MHWS) then NE has advised that it would not be proportionate to ask for surveys, but that consideration to the designated features/habitats of Langstone Harbour can be undertaken by desk based assessment using datasets available in the public domain. NE has habitats datasets available on their website and the</p>	
--	--	--	--

		Langstone Harbour environment officer should be contacted as they hold a wealth of knowledge on the area.	
--	--	---	--

TABLE 3: PEIR CONSULTATION RESPONSES

Consultee	Summary of Comment Received	How this has been addressed by the Applicant
<p>JNCC</p>	<p>JNCC is of the opinion that insufficient survey evidence was presented in the Application to allow the best provision of accurate and meaningful advice. While we recognise that it is unlikely that survey-based data can be expanded upon for this Application, we provide the following to help Business, Energy and Industrial Strategy ('BEIS') and the operator understand what we consider necessary in an application.</p> <p>It is good practice to include high resolution acoustic data, video and / or still images in the context of the proposed activity.</p> <ul style="list-style-type: none"> Survey sample 22 was collected outside the Marine Cable Corridor, therefore it is unclear whether there is the potential for Annex I stony reefs to be present within the Marine Cable Corridor. The habitat identified within the Marine Cable Corridor was offshore circalittoral coarse sediment with numerous to occasional boulders which follows the composition of a classified Annex I stony reef. The JNCC would advise that if any Annex I stony reefs are present during the cable installation that these 	<p>High resolution acoustic data coupled with drop down video and sediment data were collected as part of the Application and was used to classify the habitats present. See Appendix 8.1 (Benthic Ecology Survey Report).</p> <p>The potential for Annex I habitats to be present (including reef habitats in the proximity to Sampling Station 22) was identified and has assessed accordingly within Section 8.6 of this chapter.</p> <p>Due to the mobile nature of many features and parts of the seabed, a pre-construction survey will be undertaken which will identify reef features present. Cable routes will be micro-sited to avoid any such features identified where possible. Mechanism for these measures are presented within the draft Deemed Marine Licence ('dML') in the DCO (document reference 3.1).</p> <p>JNCC's advice regarding DP vessels is noted.</p>

Consultee	Summary of Comment Received	How this has been addressed by the Applicant
	<p>are avoided and we would recommend micro-routing to ensure a 500m clearance of this feature.</p> <ul style="list-style-type: none"> JNCC would advise the use of dynamic positioning ('DP') for the vessel during the cable installation to minimise potential impacts on the seabed, specifically the Annex I reef. 	
JNCC	<p>Whilst JNCC appreciates that subtidal sands and gravels are identified across the majority of the benthic survey area, this is a UK BAP priority habitat and therefore the impact to this habitat should be reduced as much as practically possible.</p>	Noted.
JNCC	<p>JNCC does not believe that the proposed operations are likely to cause a significant impact upon the marine environment. However, we note that many protected habitats are highly sensitive to cable operations and we would therefore always expect the operator to mitigate as much damage as possible to the habitats. Here we include our most up-to-date understanding about the habitat found within the area of proposed operations and also any comments we have concerning possible methods to mitigate damage.</p>	Noted

Consultee	Summary of Comment Received	How this has been addressed by the Applicant
JNCC	The proposed operations take place close to an Annex I Reef which is an Annex I habitat under the European Union ('EU') Habitats Directive. As such, their presence contributes to the national resource of that habitat. For more information, please see here: http://jncc.defra.gov.uk/page-1523 .	Noted
JNCC	We encourage the operator to work to minimise the amount of stony reef impacted, and that mitigation is put in place to ensure this.	The potential for Annex I habitats to be present (including reef habitats in the proximity to Sampling Station 22) was identified and has assessed accordingly within Section 8.6 of this chapter. Due to the mobile nature of many features and parts of the seabed, a pre-construction survey will be undertaken which will identify reef features present. Cable routes will be micro-sited to avoid any such features identified where possible. Mechanism for these measures are presented within the draft dML (document reference 3.1).
JNCC	The scoping report states that in the offshore area the HVDC cable route will pass close to the Offshore Overfalls and Offshore Brighton MCZs, by 1.15km and 8.5km respectively: the former is partly in English inshore waters and the latter entirely offshore. The Application should fully assess any potential impacts on these MPAs. Information on these MCZs is available via the following links:	Noted and assessment has been included as part of the MCZ assessment, see Appendix 8.5 (Marine Conservation Zone Assessment).

Consultee	Summary of Comment Received	How this has been addressed by the Applicant
	Offshore Overfalls MCZ - http://jncc.defra.gov.uk/page-6776 Offshore Brighton MCZ - http://jncc.defra.gov.uk/page-6775	
JNCC	The operation potentially involves the introduction of hard substrate into a mainly sedimentary environment. Although the changes are not necessarily considered as having a significant impact in this instance, we still encourage the operator to continue working to minimise the amount of hard substrate material used. We note that the long-term effects of the introduction of substratum into naturally sandy or muddy sea beds is not fully understood at present and should be carefully considered by the regulators.	Noted.
JNCC	JNCC welcome detailed commentary on stabilisation operations to allow further understanding of their actual nature conservation impact. This would include: <ul style="list-style-type: none"> • Location of dump sites; • Size / grade of rock to be used; • Tonnage / volume to be used; • Contingency tonnage / volume to be used; 	Details on the use of rock placement and other cable protection measures is presented within Chapter 3 (Description of the Proposed Development) of the ES Volume 1 (document reference 6.1.3). Assessment of the potential impacts of rock placement and cable protection is presented in Section 8.6 of this chapter. More detailed methodology of cable installation, including proposals regarding cable protection, will

Consultee	Summary of Comment Received	How this has been addressed by the Applicant
	<ul style="list-style-type: none"> • Method of delivery to the seabed; • Footprint of rock; • Assessment of the impact; • Expected fate of deposit after end of production, i.e. will it be left in situ or recovered. <p>Where stabilisation material cannot be avoided, we recommend using a more targeted placement method e.g. fallpipe vessel rather than using vessel-side discharge methods.</p>	be submitted to the MMO for approval prior to construction (as a dML requirement).
MMO	The information presented within the various sections of the PEIR relating to benthic ecology are appropriate and the MMO does not consider there to be any missing information.	Noted
MMO	The comments previously raised in the MMO Scoping Opinion have all been suitably addressed in this PEIR.	Noted
MMO	The MMO considers that all the potential impacts relevant to benthic ecology have been identified.	Noted
MMO	The MMO cannot currently identify any information gaps relating to benthic ecology in the PEIR. The embedded mitigation measures proposed (e.g., routing the cable corridor to minimise impacts with key receptors) are suitable at the current stage of	Noted

Consultee	Summary of Comment Received	How this has been addressed by the Applicant
	<p>the assessment, as all potential benthic ecology impacts have been identified as non-significant. However, it is noted that there are still a small number of assessments yet to be conducted in the ES identified in Section 8.10.1.1. Therefore, our position may change.</p>	
MMO	<p>It is noted that the cumulative assessment of the relevant projects is yet to be undertaken and this will be detailed in the ES when more detailed modelling work will have been undertaken which is an appropriate approach.</p>	<p>See Section 8.7 of this chapter for cumulative effects assessment.</p>
MMO	<p>The potential transboundary impacts have been considered in Section 8.6.6. While there is potential for any sediment plume arising to extend into French waters, transboundary impacts are not considered to have the potential to be significant. The MMO support this conclusion.</p>	<p>Noted</p>
Centre for Environment, Fisheries, and Aquaculture and Science ('Cefas')	<p>The information presented within the various sections of the PEIR are apposite; I do not consider there to be any missing information.</p>	<p>Noted</p>

Consultee	Summary of Comment Received	How this has been addressed by the Applicant
Cefas	The comments previously raised regarding benthic ecology that are of relevance to me (i.e., those cited as originating from the MMO) have all been suitably addressed in this PEIR.	Noted
Cefas	I consider that all the potential impacts relevant to benthic ecology have been identified.	Noted
Cefas	I cannot identify any information gaps in the PEIR. The embedded mitigation measures proposed (e.g., routing the cable corridor to minimise impacts with key receptors) are suitable and result, so far as the present stage, in all potential benthic ecology impacts being non-significant. However, there are a small number of assessments yet to be conducted in the ES (these are identified in Section 8.10.1.1).	Noted
Cefas	It is noted that the cumulative assessment of the relevant projects is yet to be undertaken and this will be detailed in the ES (when more detailed modelling work will have been undertaken).	See Section 8.7 of this chapter for cumulative effects assessment.
Cefas	Consideration of potential transboundary impacts has been given (Section 8.6.6). It is concluded that such impacts will not be significant as they are limited to some sediment plume migrating into	Noted

Consultee	Summary of Comment Received	How this has been addressed by the Applicant
	French waters. I would concur with this assessment.	
NE	NE welcomes the application of Chartered Institute of Ecology and Environmental Management (CIEEM) guidelines to inform the assessment methodology. We have reviewed this methodology and agree with the approach taken to identify whether an effect is of ecological significance.	Noted
NE	<p>We note that assessments for Intertidal and Benthic Ecology do not consider the following methods, as described in Chapter 3 – Description of the Proposed Development:</p> <ul style="list-style-type: none"> • Use of flotation pits to enable installation vessels to approach closer to shore; • Grounding of installation vessels on the seabed at low tide; • Use of a Trailing Suction Hopper Dredger (TSHD) vessel to create the trench for pre-lay installation; and • Potential driving of four ducts into the seabed at HDD marine exit/entry at Eastney Landfall (approx. 1-1.6 km off the coast at Eastney). 	<p>The use of flotation pits and TSHD for cable trenching are no longer proposed or included in the project design and are therefore not assessed. All included construction techniques presented in Chapter 3 (Description of the Proposed Development) of the ES are considered in the form of the Rochdale envelope approach whereby the worst case for each effect is assessed. Section 8.6.2 of this chapter presents the worst-case design envelope. Potential effects on the nearby Solent Maritime SAC are considered in the accompanying HRA report (document reference 6.8.1). Potential effects from direct seabed disturbance (including HDD pit excavation, temporary cable protection and boulder removal/re-location) and temporary increases in SSC are presented in Section 8.6 of this chapter.</p>

Consultee	Summary of Comment Received	How this has been addressed by the Applicant
	<p>It is understood that a more detailed assessment of potential significant impacts on sensitive receptors will be undertaken and presented in the ES; and a HRA Report will also be provided as part of the final Application. Given the proximity of some of these activities to the Solent Maritime SAC, we would highlight the importance of thoroughly assessing potential impacts on intertidal and benthic ecology. Particular focus should be placed on direct seabed disturbance (including HDD pit excavation, temporary cable protection and boulder removal/re-location) and temporary increases in SSC.</p>	
NE	<p>In response to NE's previous recommendation to consider effects arising from heat emission from the burial of the cable, NE welcomes the inclusion of this assessment in the ES and the accompanying information for the HRA Report.</p>	Noted
NE	<p>NE notes that the proposed Marine Cable Corridor Route falls through the designated sites; Solent Maritime SAC and Solent Dorset Coast pSPA, as set out in the Red Line Boundary (RLB) Overview document (Section 10 – Eastney (Landfall)). We understand that cable installation within the Solent Maritime SAC will be undertaken using HDD and</p>	Noted

Consultee	Summary of Comment Received	How this has been addressed by the Applicant
	welcome this approach as a means of minimising environmental impacts upon this site.	
NE	<p>Table 8.7 (page 8-50) outlines the worst-case design parameters relevant to benthic ecology during the construction (and decommissioning) and operational stages. In order to further inform the assessment of potential impacts, NE requests additional information with respect to the following:</p> <ul style="list-style-type: none"> • Direct seabed disturbance: we note that there will be direct impacts from the removal and re-location of boulders. It is currently unclear whether this aspect of construction has been included in the worst-case disturbance scenario within the Marine Cable Corridor. • Deposition of sediment (smothering): more information is required as to the likely depth of deposition over the affected areas within the Marine Cable Corridor. This information could be presented in the form of different scenarios. • Habitat loss: it would be helpful to refine these figures by habitat type impacted where possible. We note that Table 8.7 does not include the worst-case scenario for habitat loss during construction. Clarification should also be 	<p>All construction techniques included in the project design are considered through the Rochdale envelope approach, whereby the worst case for each effect is assessed. The worst case design envelope for benthic ecology is presented in Section 8.6.2 of this chapter.</p> <p>Boulder clearance is assessed in terms of habitat disturbance.</p> <p>Information on depth of sediment likely to be deposited is assessed in Section 8.6 of this chapter and is informed by Chapter 6 (Physical Processes) assessment.</p> <p>Areas of habitat loss potentially experienced are presented per habitat type. Chapter 3 (Description of the Proposed Development) presents further information regarding decommissioning which would be subject to a separate Marine Licence application closer to the end of the Project lifespan. However, the worst case assumption for habitat loss in this chapter is that cable protection will not be removed at decommissioning.</p> <p>Chapter 3 (Description of the Proposed Development) presents further detail on</p>

Consultee	Summary of Comment Received	How this has been addressed by the Applicant
	<p>provided as to whether non-burial cable protection will be removed upon decommissioning; and if so, whether this will be permitted under a dML.</p> <ul style="list-style-type: none"> Maintenance (O&M) activity: any maintenance works that are to be permitted as part of a DML should be clearly defined; including the estimated length of cable, frequency of works and anticipated impacts. 	<p>maintenance and potential repair activities. Although maintenance and repair activities are not considered as licensable activities, they are covered within the dML and are assessed within this chapter.</p>
NE	<p>Additionally, we note that the potential impacts of habitat loss from construction (and decommissioning) has not been included in Table 8.8 – Summary of effects (page 8-67). NE therefore recommends that that this aspect is clarified in the ES and HRA Report.</p>	<p>Temporary habitat loss during construction was included in the habitat disturbance impact statements. This has been clarified.</p>
NE	<p>NE advises that for the following figures: 3.3 (UK Landfall), 3.6 (UK Mobile Sediment) and 3.5 (Indicative Seabed Preparation), it would be beneficial to display nationally and international designated conservation sites for ease of reference.</p>	<p>All three figures have been updated to display nationally and internationally designated sites.</p>
Langstone Harbour	<p>The routes pass through (or under) seagrass beds in the harbour, as well as areas of saltmarsh. Seagrass is particularly sensitive to smothering by</p>	<p>Impacts to seagrass beds have been assessed within Section 8.6 of this chapter.</p>

Consultee	Summary of Comment Received	How this has been addressed by the Applicant
	silt stirred up in the water column and this should be considered, and if necessary mitigation measures put into place, if any aspect of construction is likely to agitate the substrate.	Use of HDD underneath Langstone Harbour ensures no connectivity with seagrass beds/saltmarsh as the route travels some 10-15 m below ground level. Commitments to mitigation measures for these works are presented in the Marine and Onshore Outline CEMPs (document references 6.5 and 6.9)