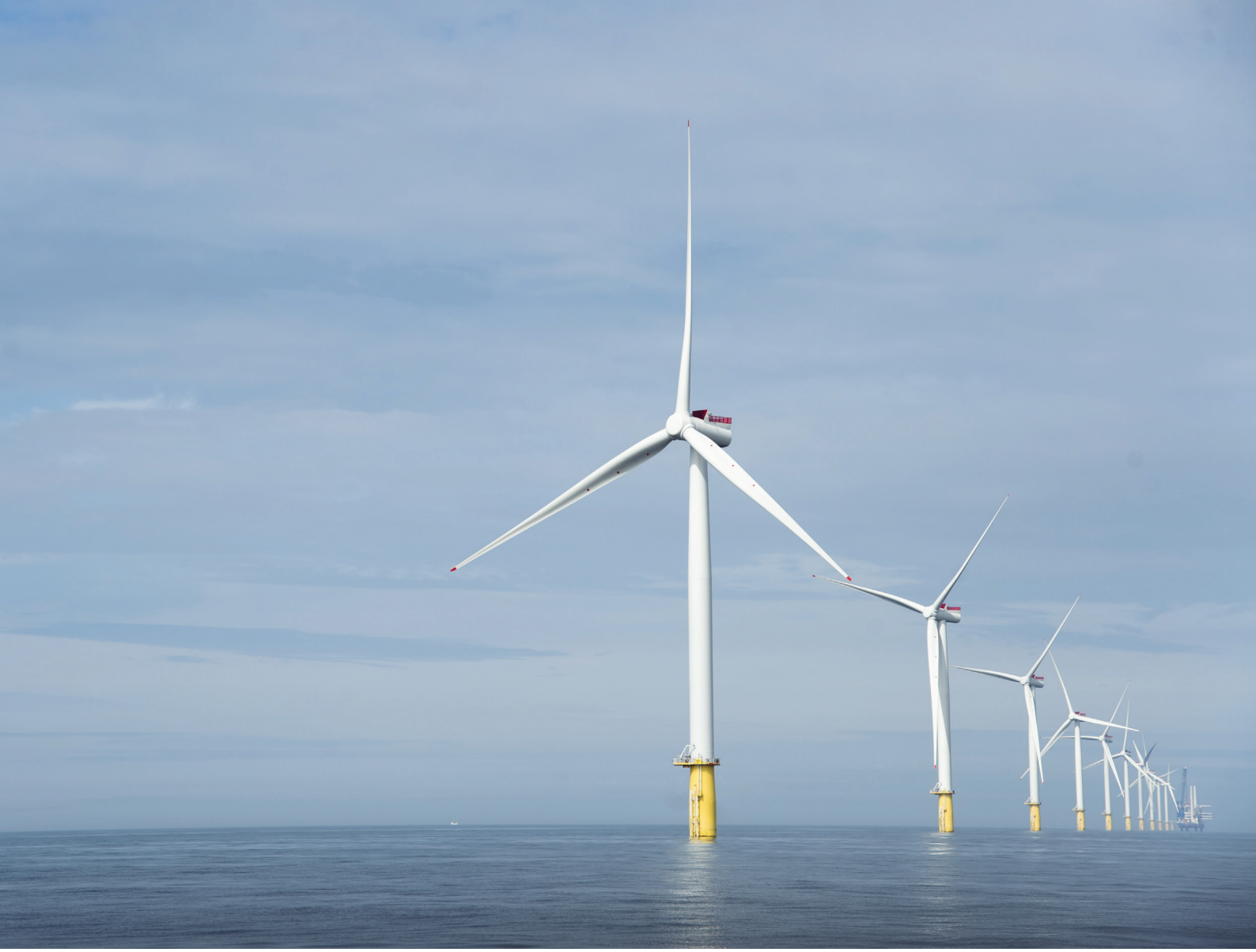

Sheringham Shoal and Dudgeon Offshore Wind Farm Extension Projects

The Applicant's Comments to Relevant Representations

Revision A
February 2023
Document Reference: 12.3

China Resources
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equinor

Sheringham Shoal and Dudgeon Offshore Wind Farm Extension Projects **Examination submission** **The Applicant's Comments on Relevant Representations**		
PINS document no.: 12.3		
Document no.: C282-RH-Z-GA-00201		
Date:	Classification	
February 2023	**Final**	
Prepared by: **Royal HaskoningDHV**		
Approved by: **Sarah Chandler, Equinor**	Date: **February 2023**	

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Glossary of Terms

Dudgeon Offshore Wind Farm Extension Project (DEP)	The Dudgeon Offshore Wind Farm Extension onshore and offshore sites including all onshore and offshore infrastructure.
DEP offshore site	The Dudgeon Offshore Wind Farm Extension consisting of the DEP wind farm site, interlink cable corridors and offshore export cable corridor (up to mean high water springs).
DEP onshore site	The Dudgeon Offshore Wind Farm Extension onshore area consisting of the DEP onshore substation site, onshore cable corridor, construction compounds, temporary working areas and onshore landfall area.
DEP North array area	The wind farm site area of the DEP offshore site located to the north of the existing Dudgeon Offshore Wind Farm
DEP South array area	The wind farm site area of the DEP offshore site located to the south of the existing Dudgeon Offshore Wind Farm
DEP wind farm site	The offshore area of DEP within which wind turbines, infield cables and offshore substation platform/s will be located and the adjacent Offshore Temporary Works Area. This is also the collective term for the DEP North and South array areas.
European site	Sites designated for nature conservation under the Habitats Directive and Birds Directive. This includes candidate Special Areas of Conservation, Sites of Community Importance, Special Areas of Conservation, potential Special Protection Areas, Special Protection Areas, Ramsar sites, proposed Ramsar sites and sites compensating for damage to a European site and is defined in regulation 8 of the Conservation of Habitats and Species Regulations 2017, although some of the sites listed here are afforded equivalent policy protection under the National Planning Policy Framework (2021) (paragraph 176) and joint Defra/Welsh Government/Natural England/NRW Guidance (February 2021).
Evidence Plan Process (EPP)	A voluntary consultation process with specialist stakeholders to agree the approach, and information to support, the EIA and HRA for certain topics.
Expert Topic Group (ETG)	A forum for targeted engagement with regulators and interested stakeholders through the EPP.

Grid option	Mechanism by which SEP and DEP will connect to the existing electricity network. This may either be an integrated grid option providing transmission infrastructure which serves both of the wind farms, or a separated grid option, which allows SEP and DEP to transmit electricity entirely separately.
Horizontal directional drilling (HDD) zones	The areas within the onshore cable route which would house HDD entry or exit points.
Infield cables	Cables which link the wind turbine generators to the offshore substation platform(s).
Interlink cables	Cables linking two separate project areas. This can be cables linking: 1) DEP South array area and DEP North array area 2) DEP South array area and SEP 3) DEP North array area and SEP 1 is relevant if DEP is constructed in isolation or first in a phased development. 2 and 3 are relevant where both SEP and DEP are built.
Interlink cable corridor	This is the area which will contain the interlink cables between offshore substation platform/s and the adjacent Offshore Temporary Works Area.
Integrated Grid Option	Transmission infrastructure which serves both extension projects.
Jointing bays	Underground structures constructed at regular intervals along the onshore cable route to join sections of cable and facilitate installation of the cables into the buried ducts.
Landfall	The point at the coastline at which the offshore export cables are brought onshore, connecting to the onshore cables at the transition joint bay above mean high water
Offshore cable corridors	This is the area which will contain the offshore export cables or interlink cables, including the adjacent Offshore Temporary Works Area.
Offshore export cable corridor	This is the area which will contain the offshore export cables between offshore substation platform/s and landfall, including the adjacent Offshore Temporary Works Area.

Offshore export cables	The cables which would bring electricity from the offshore substation platform(s) to the landfall. 220 – 230kV.
Offshore scoping area	An area presented at Scoping stage that encompassed all planned offshore infrastructure, including landfall options at both Weybourne and Bacton, allowing sufficient room for receptor identification and environmental surveys. This has been refined following further site selection and consultation for the PEIR and ES.
Offshore substation platform (OSP)	A fixed structure located within the wind farm site/s, containing electrical equipment to aggregate the power from the wind turbine generators and convert it into a more suitable form for export to shore.
Offshore Temporary Works Area	An Offshore Temporary Works Area within the offshore Order Limits in which vessels are permitted to carry out activities during construction, operation and decommissioning encompassing a 200m buffer around the wind farm sites and a 750m buffer around the offshore cable corridors. No permanent infrastructure would be installed within the Offshore Temporary Works Area.
Onshore cable corridor	The area between the landfall and the onshore substation sites, within which the onshore cable circuits will be installed along with other temporary works for construction.
Onshore export cables	The cables which would bring electricity from the landfall to the onshore substation. 220 – 230kV.
Onshore Substation	Compound containing electrical equipment to enable connection to the National Grid.
Order Limits	The area subject to the application for development consent, including all permanent and temporary works for SEP and DEP.
PEIR boundary	The area subject to survey and preliminary impact assessment to inform the PEIR.
Separated Grid Option	Transmission infrastructure which allows each project to transmit electricity entirely separately.
Sheringham Shoal Offshore Wind Farm Extension Project (SEP)	The Sheringham Shoal Offshore Wind Farm Extension onshore and offshore sites including all onshore and offshore infrastructure.

SEP offshore site	Sheringham Shoal Offshore Wind Farm Extension consisting of the SEP wind farm site and offshore export cable corridor (up to mean high water springs).
SEP onshore site	The Sheringham Shoal Wind Farm Extension onshore area consisting of the SEP onshore substation site, onshore cable corridor, construction compounds, temporary working areas and onshore landfall area.
SEP wind farm site	The offshore area of SEP within which wind turbines, infield cables and offshore substation platform/s will be located and the adjacent Offshore Temporary Works Area.
Study area	Area where potential impacts from the project could occur, as defined for each individual Environmental Impact Assessment (EIA) topic.
The Applicant	Equinor New Energy Limited. As the owners of SEP and DEP, Scira Extension Limited and Dudgeon Extension Limited are the named undertakers that have the benefit of the DCO. References in this document to obligations on, or commitments by, 'the Applicant' are given on behalf of SEL and DEL as the undertakers of SEP and DEP.

1 Introduction

1. This document presents the Applicant's comments on relevant representations received from Interested Parties (IP) identified as local authorities, town and parish councils, statutory consultees and non-statutory organisations.
2. As the owners of the Sheringham Shoal Offshore Wind Farm Extension Project (SEP) and Dudgeon Offshore Wind Farm Extension Project (DEP), Scira Extension Limited (SEL) and Dudgeon Extension Limited (DEL) are the named undertakers that have the benefit of the Development Consent Order (DCO). References in this document to obligations on, or commitments by, 'the Applicant' are given on behalf of SEL and DEL as the undertakers of SEP and DEP.

2 Comments on Local Authority Relevant Representations

3. The Applicant's comments on relevant representations received from local authorities are provided in this section.

2.1 East Suffolk Council [RR-030]

Table 2.1.1 Applicant's comments on East Suffolk Council's relevant representation

ID	Relevant Representation	Applicant Comment
1	Whilst the SEP and DEP projects are not due to be located within the East Suffolk District, it is understood that the Applicant is exploring possible compensation for kittiwake gulls due to the predicted level of impact introduced by the two extension projects on the Flamborough and Filey Coast (FFC) Special Protection Area (SPA) population. East Suffolk Council understands that as part of the DCO application, compensation plans are being prepared exploring proposals to deliver improved artificial nest sites within Lowestoft where kittiwakes are already nesting as compensation for the predicted impacts. East Suffolk Council will be making representations in relation to the possible requirement for kittiwake compensation within our District and wish to clarify our strategic position on such matters whilst working with PINS and the Applicant throughout the DCO Examination. As authorised by the Case Officer (18 October 2022), East Suffolk Council will be submitting additional detail regarding our Relevant Representation in letter format directly to PINS as part of this process and separate to this form.	It should be noted that modifications to the existing kittiwake tower at Gateshead represents the Applicant's preferred option for delivering nest site improvements to enhance breeding success. The Applicant recognises that there is strong opposition from East Suffolk Council for project-led delivery of nest site improvements to enhance kittiwake breeding success within Lowestoft town as it would be contrary to their strategic position. Whilst it remains the Applicant's view that its proposal for Lowestoft has strong ecological merit and is technically feasible, in light of East Suffolk Council's view and recognising the positive progress being made with respect to securing the option at Gateshead (see the **Habitats Regulations Assessment Derogation and Compensatory Measures Update** [document reference 13.7] note submitted at Deadline 1 which includes a letter of support from Gateshead Council in Appendix B), the decision has been taken to not actively progress the option at Lowestoft further at this stage.
2	*"The Suffolk coast currently supports the southernmost breeding colonies of kittiwake in the Southern North Sea, these being found at Lowestoft and Sizewell. Nesting at both colonies is associated predominantly with man-made structures (the buildings of the port and town at Lowestoft and the Sizewell A power station offshore rigs - designated as the Sizewell Rigs County Wildlife Site (CWS)). However, neither Suffolk colony is a feature of a European designated site. There is little or no natural cliff nesting opportunity for kittiwakes on the Suffolk coast due to the geology of the area, and therefore nesting by this species is heavily dependent on utilising man-made structures.* *Large parts of the Suffolk coast are also heavily protected for their ecological and landscape value, including a suite of national and international designations such as SPAs, Special Areas of Conservation (SACs), Ramsar Sites and Sites of Special Scientific Interest (SSSIs),*	Noted.

ID	Relevant Representation	Applicant Comment
	along with the Suffolk Coast and Heaths Area of Outstanding Natural Beauty (AONB) and the Suffolk Heritage Coast. It is therefore critically important that a strategic approach to artificial nesting compensation includes coordination amongst project promoters to minimise the number of sites due to be introduced."	
3	ESC's strategic position supports gull conservation measures where these are appropriately sited with terrestrial planning considerations having been given sufficient weight in site selection at the early stages of the process. We will however oppose any such scheme in proximity to heavily populated, sensitive, or urban areas (such as within the Town of Lowestoft itself) in order to minimise human interaction with the birds and to avoid further exacerbating the existing issues. The introduction of additional nesting capacity at existing sites in the town will effectively burden ESC and the owners of the buildings on which the birds nest, with significant and ongoing cleaning and maintenance issues which is something we will not be able to sustain. ESC would not be able to support proposals for additional artificial nesting at locations which would create or exacerbate existing issues.	Noted. See Applicant's response at ID 1 of this table.
4	We remain concerned that measures to address impacts on seabirds, particularly kittiwakes, are not being considered strategically, both geographically and across different projects. This is of particular concern given the expected quantity of projects coming forward in our coastal areas over the next decade to meet the Government's ambitions. The uncoordinated approach to the delivery of artificial nests in this region could lead to a significant oversupply which will never be filled by increases in colony sizes. Requirements for these structures have previously been imposed on developers in the latter stages of the development consent process with no tangible benefits being offered at that time to the local coastal communities set to host them.	Noted. See Applicant's response at ID 1 of this table. The Applicant gave early consideration to the potential requirement for kittiwake compensation during the pre-application stage. The iterative development of the proposals has been undertaken through a detailed consultation process with relevant stakeholders via the Ornithology Compensation Expert Topic Group (ETG) (see the C**onsultation Report Appendix 1 – Evidence Plan** [APP-030] for a record of meeting minutes and agreement logs). The Applicant has considered compensatory measures in the context of different delivery models including strategic, collaborative and project-led measures. The delivery models reflect how the Applicant considers each measure could be most feasibly, effectively and proportionately delivered, relative to the Projects' predicted impacts. Prey enhancement through sandeel stock (and sprat stocks in relation to Sandwich tern) recovery and ecosystem-based management is considered by the Applicant to be the most effective means of increasing breeding success
5	Considering the concerns raised, any artificial nest sites within East Suffolk will be required to demonstrate that every opportunity for coordination between consented and proposed projects has already been fully explored before any new (or enhanced capacity at existing sites) will	

ID	Relevant Representation	Applicant Comment
	be considered and progressed. Appropriate mitigation and a tangible package of community benefits will also need to be presented in the early stages to offset the negative planning impacts resulting from the proposal.	and therefore populations of Sandwich tern, kittiwake, guillemot and razorbill. This is evidenced by information presented in **Annex 1B Sandwich Tern and Kittiwake Ecological Evidence** [APP-066]. However, as outlined in the respective species compensation documents, this would necessitate, for example, a decision by Department for the Environment, Food and Rural Affairs (Defra) to legislate to reduce fishing pressure on sandeels in UK waters as strategic compensation for offshore wind, for which there is currently no agreed mechanism for delivery and which may not be achievable within the necessary timeframes for SEP and DEP. Given the huge potential of such an action to provide far greater compensation than even the most precautionary estimates of losses incurred due to SEP and DEP and offshore wind in total, prey enhancement is included as a key part of the Applicant's proposals for Sandwich tern, kittiwake, guillemot and razorbill compensation, but as a measure that could only be delivered strategically. Nonetheless, an option for the Applicant to pay a financial contribution towards the establishment of prey enhancement as a strategic compensation measure or as an adaptive management measure (should a mechanism become available within the necessary timescales for SEP and DEP) has been included within the **Draft Development Consent Order (DCO) (Revision C)** [document reference 3.1]. Similarly, with respect to measures which the Applicant aims to take forward (if required) on a purely collaborative basis i.e. construction of new artificial breeding sites for kittiwake onshore or offshore, these measures present an opportunity for collaboration which seeks to capitalise on existing learning and suitable locations (where these are limited) to either co-locate measures or deliver a single measure which can compensate for the predicted impacts of multiple projects. However, measures considered in the context of the collaborative delivery model do not currently form a component of the package of compensatory measures proposed for SEP and DEP but rather represent alternative options that may become available to the Applicant in the near future. It has been necessary to adopt this approach as discussions with other developers on the nature of an appropriate delivery mechanism for collaborative delivery are not yet sufficiently matured for the Applicant to rely upon these measures. However, discussions with other offshore wind developers are underway, and the Applicant will continue to explore the

ID	Relevant Representation	Applicant Comment
		potential for collaborative delivery of these measures with prospective partners and other relevant stakeholders. Further details are set out in the **Strategic and Collaborative Approaches to Compensation and Measures of Equivalent Environmental Benefit** [APP-084] and the **Habitats Regulations Assessment Derogation and Compensatory Measures Update** [document reference 13.7] note submitted at Deadline 1. Regarding project-led delivery of kittiwake compensation see the Applicant's response at ID 1 of this table. Should there be a need to revisit options for kittiwake compensation at a later stage (for example, in the unlikely event that the nest site improvements to enhance breeding success in Gateshead cannot be secured or are not entirely successful), the Applicant will re-examine its proposal for Lowestoft and any collaborative or strategic opportunities, in consultation with Natural England and other relevant stakeholders, to determine the most appropriate course of action.
6	We would also like to stress the importance of early engagement with the local communities set to host any such development relating to kittiwake compensation measures. Local communities often feel disconnected from such projects as the offshore wind farm generating the requirement for artificial nests in our region are often in an entirely different part of the country to the kittiwake populations where compensation measures are due to be located. Such engagement is very important given the existing sensitivities surrounding gull/human interactions meaning that associated community benefits must therefore be fully considered and implemented as part of any compensation proposal. We encourage Applicants to go above and beyond in relation to the possible community benefits offered.	Noted. The Applicant has engaged with East Suffolk Council on: • 18th May 2022: meeting to clarify aspects of the Applicant's proposal for artificial nesting structures for kittiwakes in Lowestoft. To provide further background to SEP and DEP and the development of compensatory measures for kittiwake, the Applicant provided the Council with a briefing note describing its proposals in relation to Lowestoft. • 18th July 2022: the Applicant submitted a formal pre-application consultation request to East Suffolk Council seeking feedback on a proposed shortlist of locations for delivering artificial kittiwake nesting in Lowestoft. The Applicant also sought input on any other suggested sites that should be taken forward for further consideration.

ID	Relevant Representation	Applicant Comment
		• 27th November 2022: A meeting to discuss East Suffolk Council's pre-application consultation response, which was received on 17th August 2022. This meeting included a discussion of the Council's key concerns with respect to the Applicant's proposal for nest site improvements in Lowestoft. East Suffolk Council noted that it was the Council's strategic position that they wouldn't support any additional kittiwake nesting capacity within the town. As noted at ID 1 of this table, this, alongside the positive progress being made at Gateshead, has led to the decision to not actively progress the proposal for Lowestoft further at this stage as a component of the Applicant's proposed package of compensatory measures for kittiwake. See **Annex 1D – Record of HRA Derogation Consultation** [APP-068] and the **Habitats Regulations Assessment Derogation and Compensatory Measures Update** [document reference 13.7] note submitted at Deadline 1 for a detailed record of stakeholder engagement undertake pre- and post-submission of the DCO application, respectively.
7	ESC understand that Equinor are seeking to find a solution to the expected level of kittiwake compensation required from the two projects ahead of examination and this is a welcome approach and must be commended. ESC is currently in the unfortunate position of having to engage at a post-consent stage with a number of other offshore wind promotors who have received DCOs for their projects but are seeking kittiwake compensation in East Suffolk. Having not been engaged on this matter for other projects during the examinations, this has proven to be very challenging and puts significant additional pressure on council resources.	Noted.
8	As stated, Equinor have engaged with ESC at the pre-application stage, this is reflected in Paragraph 117 within 'Appendix 3 – Kittiwake Compensation Document' (August 2022) which states 'in July 2022, [the Applicant] initiated a pre-application consultation with East Suffolk Council in order to get the council's views on initial site selection work undertaken on potential sites and buildings (see Annex 1D: Record of HRA Derogation Consultation (document reference 5.5.1.4) for further details)'.	The Applicant acknowledges that East Suffolk Council requested that pre-application advice be sought to gain the views of East Suffolk Council on any such proposals, noting that these were still in early development at the time of the meeting on 18th May 2022. The Applicant made no intention to misrepresent the views of East Suffolk Council within **Annex 1D – Record of HRA Derogation Consultation** [APP-

ID	Relevant Representation	Applicant Comment
	Equinor also refer to this within Paragraph 69 of the 'Consultation Report' (August 2022) stating that 'engagement was undertaken on a stakeholder-by-stakeholder basis rather than a broader non-statutory targeted consultation, recognising the very specific localities and the individual nature of the measures identified'. Paragraph 70 adds that 'very focussed yet open discussions' have been held allowing stakeholders the opportunity to feed into the development of the compensatory measures. The submitted 'Evidence Plan' (August 2022) provides Minutes from the HRA Compensation Expert Topic Group (ETG) 3 meeting (29 June 2022), with Equinor stating for Item 7 that 'We have met with Gateshead and East Suffolk Council who were very well aligned and supportive of our proposals' in reference to the proposed implementation of artificial nest sites within Lowestoft. However, ESC advised Equinor at the initial meeting held on 18 May 2022 that formal pre-application advice should be sought to gain the views of ESC on any such proposals, noting that these were still in early development at the time of the meeting. The Applicant also states in Table 1: 'Pre-Application Programme of Engagement (Ordered Chronologically By Commencement Date) (page 21 of 81) within Annex 1D – Record of HRA Derogation Consultation' that the purpose of this meeting was 'to clarify aspects of the Applicant's proposal for artificial nesting structures for kittiwakes in Lowestoft'. In 'Table 2: Record of ongoing consultation activities in relation to the compensatory measures for offshore ornithology' (page 77 of 81), the Applicant also states that *'East Suffolk Council noted the potential benefits of the proposed measures and was keen for subsequent dialogue to explore further'*, however no context has been provided for this statement, nor was any reference to the concerns raised or our strategic position made, justifying the need for formal pre-application advice.	068]. This document was intended to be a summary document, which by its nature did not capture the full detail of discussions.
9	Formal pre-application advice was provided to Equinor on 17 August 2022, this concluded that in addition to ecological factors underpinning possible site finding, consideration must be given to potential impacts introduced by new artificial nesting on coastal processes and geomorphology, economic implications for the local economy, environmental considerations, landscape and visual implications and	Noted. If nesting habitat improvements to enhance kittiwake breeding success in Lowestoft was to be actively progressed, the Applicant would consider the potential implications on relevant environmental receptors and seek to agree where possible on key aspects of the proposal, including the proposed

ID	Relevant Representation	Applicant Comment
	heritage and conservation. The precise location, scale, design and maintenance arrangements for the structures are important considerations alongside the ecological suitability of the sites proposed.	locations for installing ledges, mitigation requirements and a community benefits package.
10	ESC also expressed additional concerns regarding the legal protection which these structures will require and the potential for this to adversely restrict important developments in this part of East Suffolk. Government guidance on Habitats Regulations derogations (February 2021) states that "If the area providing compensatory measures is not within the European site, it should become designated as part of the European site. Until that happens, it's protected by government planning policy." Government planning policy on this matter is set out in paragraph 181(c) of the National Planning Policy Framework (NPPF 2021) which advises that sites required as compensatory measures for adverse effects on Habitats Sites (European designated sites) should be given the same protection as the Habitats Sites themselves. Such legal protection has the potential to restrict future developments in the area, both offshore and onshore. This includes creating additional Habitat Regulations Assessment (HRA) requirements in relation to the policy protection needs for new artificial nesting structures (ANS).	Noted.
11	Whilst ESC is keen to work with project promoters in finding an acceptable solution to kittiwake compensation, we will continue to raise significant concerns regarding the siting of artificial nesting in urban settings. We will work with project promoters who are willing to explore coordination with other promoters at suitable locations away from these areas or appropriately located in the nearshore environment where potential terrestrial planning constraints (including seascape visual impacts) are found to be more manageable in the right location. We will be taking a consistent stance on this matter across all projects seeking kittiwake compensation.	Noted. See the Applicant's response at ID 4 of this table.
12	The Applicant's submitted technical note provided to ESC at the time of the pre-application request titled 'Productivity benefits of improving artificial nest sites for kittiwake in Lowestoft' (30 May 2022) stated that *'Our proposal for artificial nest sites in Lowestoft is more scalable; the*	See the Applicant's response at ID 1 of this table.

ID	Relevant Representation	Applicant Comment
	greater the number of kittiwake pairs that require compensating, the more ledges could be installed', however ESC advised that this would be in direct conflict with the District's strategic position on increasing the numbers of kittiwakes in the central urban areas of Lowestoft, beyond the natural growth of the existing population, and is therefore not supported.	
13	In terms of the possible requirement for kittiwake compensation for the Flamborough and Filey Coast SPA, beyond the Applicant's 'ideal approach' which is stated as being UK Government led strategic compensation to address the sandeel stock issues in heavily fished areas (with sandeel being a primary food source for kittiwake), the Applicant provides details of a secondary option for kittiwake compensation. Paragraph 137 within 'Annex 1A – Initial Review of Compensatory Measures for Sandwich Tern and Kittiwake' (August 2022) states that *'A second possibility would be compensation provided by DEP and SEP by adjusting existing artificial nest sites (for example at River Tyne and Lowestoft) to enhance breeding success of kittiwakes attempting to nest on artificial structures in sub-optimal nest sites where they currently achieve lower breeding success than they could if those nest sites were better protected from predators and weather. The latter approach is one that as far as we know has not yet been proposed by any other offshore wind farm developers, but would be effective and practical, at least to provide the relatively small level of compensation required for an individual wind farm development. This would also be complementary to the proposal to create novel artificial colonies as put forward by Hornsea Three, Norfolk Vanguard and Norfolk Boreas'*. However, the Applicant overlooks the reasons behind why no other developer has progressed such an approach to date. Notwithstanding the positive work being undertaken by the Lowestoft Kittiwake Partnership, the Applicant's proposal would introduce additional kittiwake within the town of Lowestoft on existing buildings adding to the existing colony size. Such additionality of birds into the existing population exacerbates existing issues and as already stated, ESC would not be able to support such proposals within the town, being contrary to ESC's strategic approach.	

ID	Relevant Representation	Applicant Comment
14	It was also noted at the pre-application stage within the Applicant's provided document 'Pre-application consultation on locations for improved artificial nesting at Lowestoft' (18 July 2022), that discussions with the Lowestoft Kittiwake Partnership have advised that the SEP and DEP proposals for kittiwake compensation *'perfectly align'* with the objectives of the partnership. However, we note the aims and objectives are currently at the conceptual stage and are still being finalised for agreement amongst members. The proposed funding structure into which project promoters seeking compensation can contribute towards measures to address the current human/bird interaction concerns within the town is also in the early stages and yet to be agreed amongst members. It is therefore premature to state that this proposal perfectly aligns.	The Applicant acknowledges that the Lowestoft Kittiwake Partnership aims and objectives were still under development at the time but considers that following a meeting with the Lowestoft Kittiwake Partnership on the 27th October 2022 (see the **Habitats Regulations Assessment Derogation and Compensatory Measures Update** [document reference 13.7] note for a summary of this engagement), the proposals were aligned with the aims and objectives as they were presented at the time and are understood by the Applicant to remain so. See the Applicant's response at ID 1 of this table.
15	Notwithstanding ESC strategic position, the emerging aims of the partnership seek to encourage birds to nest at more suitable sites whilst equally discouraging them from those which are less suitable. The Applicant's approach is understood to focus on sites where kittiwakes are already nesting, however as noted, the Partnership seeks to discourage some of the existing less favourable sites which remain to be fully identified. Therefore, by focussing on existing sites where birds are already nesting ahead of the aims of the Partnership being finalised, this risks some of the Applicant's preferred sites having to be relocated in the future creating additional work and cost for the Partnership.	
16	ESC continues to work closely with the Partnership whilst helping prospective project promoters seeking to provide kittiwake compensation to initiate a proactive dialogue with them. However, whilst the Partnership aims to address the existing kittiwake colony issues in the Town of Lowestoft, ESC's primary concern with the SEP and DEP proposal is the additionality of kittiwake in an already extremely sensitive area, in close proximity to people within the Town itself. This proposal would introduce new nests alongside the existing kittiwake population in the Town, exacerbating the current issues which the partnership is seeking to address. This was raised as a concern in the pre-application response as it does not align with the Council's strategic position.	

ID	Relevant Representation	Applicant Comment
17	ESC encouraged the Applicant in the pre-application response to seek an alternative solution to the compensation needs for SEP and DEP in light of the planning constraints discussed by technical officers and the strategic position which has been clearly set out. Every opportunity for coordination between consented and proposed projects must be fully explored before a new or expanded artificial nesting site is progressed. Appropriate mitigation and a tangible package of community benefits will also need to be presented to offset the negative planning impacts resulting from the proposals.	Noted. See the Applicant's response at ID 1, 4 and 9 of this table.
18	It is acknowledged in Paragraph 128 within 'Annex 1A – Initial Review of Compensatory Measures for Sandwich Tern and Kittiwake' (August 2022) that the Applicant is monitoring the progress of other kittiwake compensation proposals within the coastal areas of East Suffolk, namely the Orsted Hornsea Three and Vattenfall Norfolk Vanguard / Norfolk Boreas proposals. In reference to a possible proliferation of kittiwake ANS in this region, the Applicant states *'This leads to a potential difficulty of competition among developers to construct artificial nesting colonies for kittiwakes at multiple sites on the east coast of England. For this reason, we suggest that this may not be the best approach to take if the proposals relating to Hornsea Three, Vanguard and Boreas do proceed'.* Whilst the timing of the Applicant's submission materials did not allow for the inclusion of ESC's pre- application advice, the Applicant has confirmed to ESC that they will continue to develop the kittiwake compensation proposal in the coming months in light of the pre-application advice received and welcomes the opportunity to further engage with ESC on this proposal. This approach is welcomed by ESC, and we also understand that the Applicant has initiated a dialogue with other developers seeking similar kittiwake compensation in this region to discuss collaborative opportunities which is also welcomed.	See the Applicant's response at ID 1 of this table. With regard to the consideration of potential collaborative opportunities, see the Applicant's response at ID 4 of this table.
19	ESC wishes to reiterate the importance of community projects and funding initiatives together with potential economic impacts being given sufficient consideration as part of any proposal being taken forwards. This will be central to its acceptability within the local communities of East Suffolk. Robust evidence will also need to be provided setting out how any	See the Applicant's response at ID 9 of this table.

ID	Relevant Representation	Applicant Comment
	identified negative effects on the local economy will be compensated, ensuring the proposed artificial nests do not compromise future development initiatives or the areas economic prosperity.	
20	ESC has significant concerns that compensation measures for impacts on seabirds are not being addressed strategically given the expected quantity of projects coming forward in our coastal areas over the next decade. We are also concerned that an uncoordinated approach to ANS delivery in this region would lead to a significant oversupply of artificial nests created which will never be filled by increases in colony sizes. We are also concerned about the legal protection such structures would attract, restricting future onshore and offshore development opportunities coming forwards in our region and the additional burden introduced on the Local Planning Authority.	See the Applicant's response at ID 4 of this table.
21	As stated previously, ESC will raise significant concerns to the siting of ANSs in our coastal areas. Clear justification needs to be provided for any ANSs proposed on the East Suffolk coastline. Notwithstanding the Council's position, if an onshore or nearshore proposal is advocated in East Suffolk, we would need to be satisfied that every opportunity for coordination between projects has been fully explored and that a tangible package of community benefits has been presented to offset the negative planning impacts raised, otherwise ESC will continue to raise significant concerns to the siting of ANSs in our coastal areas.	See the Applicant's response at ID 4 and 9 of this table.

2.2 Broadland District Council [AS-033]

Table 2.2.1 Applicant's comments on Broadland District Council's relevant representation

ID	Relevant Representation	Applicant Comment
1	In general, the District Council is supportive of the project, recognising its importance in relation to the diversification of UK energy supplies; the contribution the projects will make to the achievement of the national	The Applicant thanks Broadland District Council's (BDC's) for its support for the project and for their recognition of the need to diversify energy supply. The Applicant notes BDC's concerns raised regarding the combined visual impacts of Hornsea Three around Norwich Main and responds to this below.

ID	Relevant Representation	Applicant Comment
	renewable energy targets toward net zero; the reduction of the UK's reliance on imported energy and increased energy supply security; and potential contribution to the national and local economy. The economic benefits in terms of investment and job creation are welcomed. The Council is concerned however at the combined impact of the cable routes and construction compounds from the consented Norfolk Vanguard, Norfolk Boreas, Hornsea Project Three offshore windfarms, together with this project will have on its District.	
2	The Environmental Impact Assessment has been conducted using appropriate and agreed methods and has been informed by relevant and up to date surveys, modelling, evidence gathering and desk studies. The scope and methodology of these has been agreed with key stakeholders and consultees throughout the process. Overall, the ES is comprehensive and of good quality and there are no substantive issues arising from it, subject to the following comments:	The Applicant acknowledges BDC's comment regarding the Environmental Impact Assessment
3	Impact on Heritage Assets The Council consider that further clarification needs to be undertaking regarding the impact on the project on Honingham Park which is a historic parkland although not registered which is identified on Historic Environment record and can be considered a non-designated heritage asset."	It is acknowledged that Honingham Park is not listed in **ES Chapter 21 Onshore Archaeology and Cultural Heritage** [APP-107, Table 21-10]. However, the heritage asset is considered as a non-designated heritage asset within the **Onshore Archaeological Desk-Based (Baseline) Assessment** [APP-229] and shown on the **Historic Environment Plan (Onshore)** [APP-018]. The **Outline Written Scheme of Investigation (Onshore) (Revision B)** [document reference 9.21] details the staged approach to archaeological evaluation (Section 6) to inform the mitigation requirements (Section 7) across the Order Limits. This will include and consider all physical impacts from the project within Honingham Park.
4	In respect of the impact of the cable route, The Arboricultural Survey Report survey identifies the trees and constraints within parts of the DCO boundary, but not all. The Council considers that the tree/hedge details for the whole corridor should be provided, this should also include veteran trees which maybe outside the	The Applicant advises that an arboricultural desk-study covering the onshore cable corridor has been completed and is presented in **ES Appendix 20.15 Arboricultural Survey Report** [APP-228]. The objective of the desk-study was to identify known protected and high value trees such as those with a Tree Preservation Order (TPO), those in a Conservation Area and/or veteran and ancient trees. This desk-study was supplemented by ground level arboricultural surveys within the North Norfolk Area of Outstanding Natural Beauty (AONB) and the area around Norwich Main

ID	Relevant Representation	Applicant Comment
	corridor but could still be implicated. Currently there is not an assessment in line with the 1997 Hedgerow Regulations, in the absence of the information in terms of the 'importance' of hedgerows under the Hedgerows Regulations and assessment of trees implicated in the scheme, it is not possible to conclude on the impacts of the cable route.	Substation. Both these areas were targeted due to the sensitivity of the landscape as a result of arboricultural impacts. It is worth noting that in addition to the arboricultural desk-study and targeted arboricultural surveys, ecological work including site surveys to identify trees with bat roost potential (which veteran and ancient trees often have) were undertaken. The information from the arboricultural desk-study, targeted arboricultural surveys, and ecological surveys was used in the site selection process to refine the cable route, minimising possible impacts to veteran and ancient trees from the outset through embedded mitigation (mitigation by design). Further arboricultural surveys will be undertaken prior to construction of the development. Requirement 11 (Provision of Landscaping) of the **draft DCO (Revision C)** [document reference 3.1] which requires the Applicant to submit a written landscape management plan (which accords with the outline landscape management plan) for that phase for approval by the relevant planning authority. Each landscaping scheme must include details of existing trees and hedges to be removed and details of existing trees and hedges to be retained, with measures for their protection during the construction period where applicable. This would take the form of a full arboricultural assessment. Important hedgerows and potentially important hedgerows are shown in the **Tree Preservation Order and Hedgerow Plan** [APP-017], which also identifies which of those will also require removal. Details of potentially important hedgerows and important hedgerows to be removed within the Order Limits are listed in the **draft DCO (Revision C)** [document reference 3.1]. The Article detailing the undertaker's powers to fell or lop trees and remove hedgerows is set out in the **draft DCO (Revision C)** [document reference 3.1, Article 34]. Mitigation measures in relation to hedgerows are detailed in the **ES Chapter 20 Onshore Ecology and Ornithology** [APP-106. para. 262-265]. The proposed approach to reinstating hedgerows post-construction is detailed in the **Outline Ecological Management Plan (Revision B)** [document reference 9.19] and the **Outline Landscape Management Plan (Revision B)** [document reference 9.18], which are secured by Requirement 13 (Ecological Management Plan) and Requirement 11 (Provision of Landscaping) of the **draft DCO (Revision C)** [document reference 3.1].
5	It is also noted as above that the cable route is passing through Honingham Park and the loss of trees could have a harm on the Landscape character of the parkland.	The Applicant would like to signpost BDC to Section 26.12.1 of **ES Chapter 26 Landscape and Visual Impact** [APP-112, para. 518] which sets out how the cable routing has been designed to avoid crossing woodlands and areas or groups of trees, where possible. Where this is not possible, all significant woodlands, many smaller woodlands and areas of trees and scrub would be retained where they lie within the cable corridor, by utilising trenchless

ID	Relevant Representation	Applicant Comment
		crossing techniques, e.g. HDD, as described in **ES Chapter 4 Project Description** [APP-090], shown in **ES Chapter 4 (Figures) - Project Description** [APP-117, Figure 4.10] and described in **ES Appendix 4.1 Crossing Schedule** [AS-022]. The Crossing Schedule indicates that, at Honningham Park, this area of landscape would be crossed via trenchless crossing techniques, e.g. HDD, thus omitting the possibility of the removal of trees.
6	With regards to specified works to be undertaken issues relating to Control of Noise, Air Quality, Artificial Light, Waste Management, Pollution Prevention, Contamination Assessment and Mitigation and Working Hours are adequately covered by the Requirements in the Draft DCO. The Council is in general agreement but wishes to confirm that issues relating to hours of operation, siting of any standby generators, good practise procedures, prior notification of constructional noise, floodlighting, movement and storage of waste materials, public safety, dust control, emissions, telecommunication or television interference and decommissioning should be in place in the final documents.	The Applicant would like to signpost BDC to the **Outline Code of Construction Practice** [APP-302], which sets out how noise, air quality and artificial light will be controlled, and pollution prevented. This is secured by Requirement 19 (Code of Construction Practice) of the **draft DCO (Revision C)** [document reference 3.1]. In relation to constructions hours, these are detailed and secured by Requirement 20 (Construction Hours) of the **draft DCO (Revision C)** [document reference 3.1]. In addition, the Applicant would like to signpost BDC to the Environmental Protection Statement of Engagement (Statutory Nuisance Statement) [APP-085]. Whilst the ES concludes that no such nuisance will occur, a provision has been included in the **draft DCO (Revision C)** [document reference 3.1] at Article 7 which relates to defence to proceedings in respect of statutory nuisance. The Statement of Engagement considers Noise and Vibration, Air Quality and Artificial Lighting effects and signposts to the relevant mitigation management plans secured within the **Outline Code of Construction Practice (Revision B)** [document reference 9.17].
7	The Council considers that all developments should take all reasonable opportunities to enhance biodiversity to achieve a net gain for nature. To achieve this the application should adhere to the mitigation hierarchy (providing effective avoidance, minimisation and compensate measures) and deliver biodiversity net gains."	The Applicant acknowledges BDC's comment and would like to signpost to the Outline Biodiversity Net Gain Strategy [APP-306] and **Initial Biodiversity Net Gain Assessment** [APP-219]. In addition, the **Outline Ecological Management Plan (Revision B)** [document reference 9.19] and **Outline Landscape Management Plan (Revision B)** [document reference 9.18] includes information on Biodiversity Net Gain (BNG). These plans are secured by Requirements 13 (Ecological Management Plan) and 11 (Provision of Landscaping) of the **draft DCO (Revision C)** [document reference 3.1] respectively. Further to this, Requirement 12 (Implementation and Maintenance of Landscaping) of the **draft DCO (Revision C)** [document reference 3.1] requires the applicant to carry out landscaping in accordance with the plan approved in Requirement 11. The Applicant will seek to ensure its enhancement proposals accord with contemporary BNG issues throughout this process. For example, if forthcoming nature recovery strategies target new sites, features or habitats as priorities for enhancement, SEP and DEP would aim to incorporate this within its BNG proposals wherever feasible.

ID	Relevant Representation	Applicant Comment
8	The scope for terrestrial ecological surveys has been previously agreed and surveys of 90% of the route were undertaken between 2020-2021 by suitably qualified and experienced ecologist in line with best practice guidelines. The Council would also encourage the applicant to update the desk top study as our County Wildlife Sites were recently updated.	The Applicant acknowledges BDC's comment Regarding County Wildlife Sites, it should be noted that an updated desk study would be considered prior to finalisation of the Ecological Management Plan secured through Requirement 13 of **the draft DCO (Revision C)** [document reference 3.1], and which will be submitted to the relevant planning authority for discharge.
9	The cable route has been designed to avoid impacts where possible and further micro-siting is expected at the detailed design. The Council would encourage the applicant to explore further opportunities to avoid/minimise impacts in partnership with other schemes in the area as the schemes develop and are delivered.	The Applicant acknowledges BDC's comment and will continue to explore further opportunities to avoid/minimise impacts in partnership with other schemes in the area.
10	The ES provides an outline for mitigation and the Council welcome the use of native species of local provenance and biodegradable tree guards. The proposed mitigation will be reviewed and adjusted as the design progresses. Consideration should be given to the use of moveable 'hedges' which could be placed within hedge gaps at night and removed the following day, to provide for continued connectivity. These have been proposed and will also be trailed by another linear scheme. Should reptile translocation be required, the translocation site will need to be identified, secured, and maintained for at least the lifetime of the scheme.	The Applicant acknowledges BDC's comment. The final ecological mitigation will be detailed within the Ecological Management Plan which is secured through Requirement 13 (Ecological Management plan) of the **draft DCO (Revision C)** [document reference 3.1]. The Applicant agrees with this point regarding reptile translocation. However, the only reptile site at which translocation is proposed is at Hickling Lane near the Onshore Substation within South Norfolk Council. Here the proposed translocation would consist of translocating reptiles from the parts of Hickling Lane within the construction footprint to parts of Hickling Lane (with similarly suitable habitat conditions) outside the construction footprint. In this respect, the donor site and the receptor site comprise the same unit of reptile habitat, with micro-scale translocation proposed inside this one site. This will be detailed in the final Ecological Management Plan, which is secured through Requirement 13 (Ecological Management Plan) of the **draft DCO (Revision C)** [document reference 3.1].
11	The applicant is committed to deliver biodiversity net gain (BNG) and an Initial Biodiversity Net Gain Assessment1 has been undertaken. At the present time it is anticipated that the scheme will deliver a 0.50% net loss in habitats, and a 3.02% net gain in hedge units. Because it is not possible to offset the loss of habitat units against the gain in hedge units additional work will	The Applicant acknowledges the comment and will continue to develop the project Biodiversity Net Gain following the completion of detailed design work post-consent, and looks forward to continued engagement with the LPAs and Natural England on this.

ID	Relevant Representation	Applicant Comment
	be required to deliver net habitat gains to ensure the scheme complies with National Planning Policy. With regards to the delivery of BNG we would encourage consideration of the Local Nature Recovery Strategy which should be published by November 2023, and compliance with best practice guidelines to ensure that BNG is delivered post-construction.	
12	Letters of No Impediment (LoNI) have been received from Natural England for bats and badgers and great crested newts will be licenced under the District Level Licensing Scheme. No other licences are anticipated to be required based on the information obtained to date although additional ecological surveys will be undertaken on the remaining 10% of the route to inform the detailed design. In line with best practice Reasonable Avoidance Measures should be employed to minimise impacts on great crested newts and we would encourage the design of a wildlife friendly surface water drainage scheme, with Sustainable Urbans Drainage Systems designed for the benefit of wildlife.	The Applicant agrees with the points made regarding Reasonable Avoidance Measures for Great Crested Newt, and this will be updated in the **Outline Ecological Management Plan (Revision B)** [document reference 9.19]. Opportunities for wildlife friendly surface drainage schemes will be explored, where appropriate, during the development of detailed design.
13	Overall, following mitigation which will be secured via the DCO, the scheme is predicted to have negligible or minor adverse impacts on ecological receptors i.e., the impacts would have minimal effect at the lower end of the scale, but could adversely affect an ecological receptor but would not adversely affect the integrity or conservation status at the other end. The ES has addressed interrelationships between ecology, water and air, noise, and vibration.	The Applicant acknowledges BDC's comment
14	The Council acknowledge that there are national benefits in delivering the projects, however there are limited benefits at the local level. The Council is concerned at the combined impact of the cable routes	The Applicant would like to signpost to the cumulative impacts assessment sections of each ES chapters, where the effects of SEP and DEP in combination with other offshore wind farm projects are assessed, where relevant.

ID	Relevant Representation	Applicant Comment
	and construction compounds from Norfolk Vanguard, Norfolk Boreas, Hornsea Project Three offshore windfarms, together with this project will have on its District.	The Applicant is keen to continue to work with the local community to deliver benefits to the area. As noted within the **Outline Skills and Employment Plan** [APP-310, Section 1.1], the Applicant is a long-term partner in Norfolk and the East of England and has been an active member of the community for over a decade through its Sheringham Shoal and Dudgeon Offshore Wind Farms that it operates off the Norfolk coast (APP-310, para. 5). Both existing wind farms have established community funds. Each fund allocates £100,000 of funds per year to Norfolk community groups including schools and non-governmental organisations seeking financial assistance for projects or initiatives that focus on renewable energy, marine environment and safety, sustainability or education (APP-310, para. 7). The Outline Skills and Employment Plan is secured by Requirement 26 (Local skills and employment) of the **draft DCO (Revision C)** [document reference 3.1] which states that no phase of the onshore works may commence until a skills and employment plan (which accords with the outline skills and employment plan) for that phase has been submitted to and approved by the relevant planning authority.
15	The Council wishes to continue to work pro-actively with the applicants as the application is progressed through to Examination to try to resolve some of the outstanding issues, particularly in relation to hedgerows and trees, and the specific wording of some of the requirements.	The Applicant acknowledges BDC's comment and looks forward to continue to work with BDC to seek to resolve any outstanding issues.

2.3 South Norfolk Council [AS-034]

Table 2.3.1 Applicant's comments on South Norfolk District Council's relevant representation

ID	Relevant Representation	Applicant Comment
1	In general, the District Council is supportive of the project, recognising its importance in relation to the diversification of UK energy supplies; the contribution the projects will make to the achievement of the national renewable energy targets toward net zero; the reduction of the UK's reliance on imported energy and increased energy supply security; and potential contribution to the national and local economy. The economic benefits in terms of investment and job creation are welcomed. We are however concerned at the adverse visual effects the onshore substation would have on our District. Equally, the combined impacts of Hornsea	The Applicant thanks South Norfolk Council (SNC) for its support of the project and for their recognition of the need to diversify energy supply. The Applicant notes SNC's concerns regarding the combined visual impacts of Hornsea Three around Norwich Main and responds to this below.

ID	Relevant Representation	Applicant Comment
	Project Three substation and their proposed Energy Balancing Infrastructure; consent and proposed battery storage proposals which are located around Norwich Main, together with this proposed substation, will have on the District's rural landscape.	
2	The Environmental Impact Assessment has been conducted using appropriate and agreed methods and has been informed by relevant and up to date surveys, modelling, evidence gathering and desk studies. The scope and methodology of these has been agreed with key stakeholders and consultees throughout the process. Overall, the ES is comprehensive and of good quality and there are no substantive issues arising from it, subject to the following comments:	The Applicant acknowledges SNDC's comment regarding the Environmental Impact Assessment.
3	Impact on Heritage Assets The Council note that para 107 "The assets identified above were found to either not share intervisibility or had limited intervisibility with the onshore substation and associated infrastructure and the offshore infrastructure. This was considered to have little to limited change on their setting, and due to their distance from the above ground onshore and offshore project infrastructure, no significant impacts to heritage setting (and associated importance) were identified and no further action is considered to be required. This is further evidenced in Section 21.6 and Appendix 21.4 and 21.5. Paragraph 30 has screened out the setting of various assets having taken into account the LVIA wireframed on potential impact on setting. Three assets remain: Church of St Peter, Church of Holy Cross and Church of St Mary Magdalen. With regard to these assets, St Peter's Church in Swainsthorpe due to the height of the tower there is some intervisibility however with the distance involved, nature of proposed construction and the ability to appreciate the significance of the asset from many other viewpoints means that the impact on the setting of the assets is negligible or nonsignificant and therefore has been discounted in ES terms. In regard to the Church of the Holy Cross due to topography there may some intervisibility from the top of the tower, however with the distance involved	The Applicant acknowledges that SNDC are in agreement with the assessment of the heritage assets.

ID	Relevant Representation	Applicant Comment
	and there being no intervisibility at a lower level due to topography, there will be no significant impact on the setting. Lastly is the impact on the setting of The Church of St Mary Magdalen in Swardeston. Again, it is only possible intervisibility with the top of the church tower, but with the distance separation and the ability to appreciate the significance from many other viewpoints, there is considered to be no impact on the setting of the church. The Council agrees with the above assessment of the designated heritage assets.	
4	The Council consider that further clarification needs to be undertaken regarding the impact on the project on Ketteringham Hall Park which is a historic parkland and garden although not registered which is identified on Historic Environment record and can be considered a non-designated heritage asset.	The Applicant confirms that Ketteringham Hall Park is listed as a non-designated asset within the **ES Appendix 21.1 Archaeological Desk-Based Assessment** [APP-229]. Further consideration of the potential impact the Order Limits may have upon the historic park is considered in Section 21.6.1.2 of **ES Chapter 21 Onshore Archaeology and Cultural Heritage** [APP-107]. The ES considers physical impacts from the proposed development are likely to occur in areas of open cut trenching and within the trenchless crossing compound. Changes to the setting of the historic parkland are also likely to occur during the construction phase, although this is considered to be a temporary effect. Archaeological mitigation approaches such as recording of extant historic earthwork features and important hedgerows prior to construction, followed by their reinstatement to their pre-construction condition are detailed within the **Outline Written Scheme of Investigation (Onshore) (Revision B)** [document reference 9.21]. The **Outline Written Scheme of Investigation (Onshore) (Revision B)** [document reference 9.21] is secured by Requirement 18 (1) Archaeology of **the draft DCO (Revision C)** [document reference 3.1], which states that: “No phase of the onshore works may commence until a written scheme of archaeological investigation for that phase (which must accord with the outline written scheme of investigation (onshore)) has, after consultation with Norfolk County Council and the statutory historic body, been submitted to and approved by the relevant planning authority.” The construction methodology has been developed to minimise impacts on woodland areas and heritage assets. Trenchless techniques, e.g. HDD, is

ID	Relevant Representation	Applicant Comment
		proposed to specifically avoid woodland areas within Ketteringham Hall Park. **ES Chapter 4 Project Description** (Figures) [APP-117, Figure 4.10, Sheets 16 & 17] shows the location of trenchless crossings in Ketteringham Hall Park.
5	Landscape and visual impact The ES includes a Landscape and Visual Impact Assessment and this is fit for purpose; the viewpoints used within this are as agreed with the Council. It is considered that in landscape impact terms, the greatest effect is on the site of the proposed substation and this would be a moderate significance adverse but that this would diminish outside the site where the effects would not be significant. With regards to the visual impact, the most significant visual effects (major adverse) are from PRoWs, permissive bridleway and Gowthorpe Lane. The LVIA is based on a 'mitigation by design' approach, which means that landscape considerations have been accounted for as an integral part of the design process and therefore, appropriate landscape mitigation measures required to reduce the effect of the Proposed Development on landscape character and views have been incorporated into the design of the project and the assessment of effects, and it is assumed that this mitigation forms part of the final design. It is noted that additional planting to further screen the substation is proposed however, the planting will take a long time to establish. It is also considered that some of the degree of harm can be mitigated against through use of recessive colour for the building/s.	SNC's acceptance of the Landscape and Visual Impact Assessment ('LVIA') approach and methodology is noted by the Applicant. This reflects the draft Statement of Common Ground between the Applicant and SNC.
6	In respect of the impact of the cable route, The Arboricultural Survey Report survey identifies the trees and constraints within parts of the DCO boundary, but not all. The Council considers that the tree/hedge details for the whole corridor should be provided, this should also include veteran trees which maybe outside the corridor but could still be implicated. Currently there is not an assessment in line with the 1997 Hedgerow Regulations, in the absence of the information in terms of the 'importance' of hedgerows under the Hedgerows Regulations and assessment of trees implicated in the scheme, it is not possible to conclude on the impacts of the cable route.	The Applicant advises that an arboricultural desk-study covering the onshore cable corridor has been completed and is presented in **ES Appendix 20.15 Arboricultural Survey Report** [APP-228]. The objective of the desk-study was to identify known protected and high value trees such as those with a Tree Preservation Order (TPO), those in a Conservation Area and/or veteran and ancient trees. This desk-study was supplemented by ground level arboricultural surveys within the North Norfolk Area of Outstanding Natural Beauty (AONB) and the area around Norwich Main Substation. Both these areas were targeted due to the sensitivity of the landscape as a result of arboricultural impacts. It is worth

ID	Relevant Representation	Applicant Comment
		noting that in addition to the arboricultural desk-study and targeted arboricultural surveys, ecological work including site surveys to identify trees with bat roost potential (which veteran and ancient trees often have) were undertaken. The information from the arboricultural desk-study, targeted arboricultural surveys, and ecological surveys was used in the site selection process to refine the cable route, minimising possible impacts to veteran and ancient trees from the outset through embedded mitigation. Further arboricultural surveys will be undertaken prior to construction of the development. Requirement 11 (Provision of Landscaping) of the **draft DCO (Revision C)** [document reference 3.1] which requires the Applicant to submit a written landscape management plan (which accords with the outline landscape management plan) for that phase for approval by the relevant planning authority. Each landscaping scheme must include details of existing trees and hedges to be removed and details of existing trees and hedges to be retained, with measures for their protection during the construction period where applicable. This would take the form of a full arboricultural assessment. Important hedgerows and potentially important hedgerows are shown in the **Tree Preservation Order and Hedgerow Plan** [APP-017], which also identifies which of those will also require removal. Details of potentially important hedgerows and important hedgerows to be removed within the Order Limits are listed in the draft DCO [AS-009, Schedule 16]. The Article detailing the undertaker's powers to fell or lop trees and remove hedgerows is set out in the **draft DCO (Revision C)** [document reference 3.1]. Mitigation measures in relation to hedgerows are detailed in the ES **Chapter 20 Onshore Ecology and Ornithology** [APP-106. para. 262-265]. The proposed approach to reinstating hedgerows post-construction is detailed in the **Outline Ecological Management Plan (Revision B)** [document reference 9.19] and the Outline Landscape Management Plan (Revision B) [document reference 9.18], which is secured by Requirement 13 (Ecological Management Plan) and Requirement 11 (Provision of Landscaping) of the **draft DCO (Revision C)** [document reference 3.1].

ID	Relevant Representation	Applicant Comment
7	It is also noted as above that the cable route is passing through Ketteringham Hall Park and through some planted plantation belt historic feature “The Oval” so could potentially involve removal of some C19th trees, which if this were the case would have a harm on the Landscape character of the designed parkland.	The Applicant would like to signpost SNC to Section 26.12.1 of **ES Chapter 26 Landscape and Visual Impact** [APP-112, para. 518] which sets out how the cable routing has been designed to avoid crossing woodlands and areas or groups of trees, where possible. Where this is not possible, all significant woodlands, many smaller woodlands and areas of trees and scrub would be retained where they lie within the cable corridor, by utilising trenchless crossing techniques, e.g. HDD, as described in **ES Chapter 4 Project Description** [APP-090], shown in **ES Chapter 4 (Figures) - Project Description** [APP-117, on Figure 4.10] and described on in ES Appendix 4.1 Crossing Schedule [AS-022]. The Crossing Schedule indicates that, at Ketteringham Hall Park, this area of landscape would be crossed via trenchless crossing techniques, e.g. HDD, thus minimising the possibility of the removal of trees.
8	Noise and Pollution With regards to specified works to be undertaken issues relating to Control of Noise, Air Quality, Artificial Light, Waste Management, Pollution Prevention, Contamination Assessment and Mitigation and Working Hours are adequately covered by the Requirements in the Draft DCO. The Council is in general agreement but wishes to confirm that issues relating to hours of operation, siting of any standby generators, good practise procedures, prior notification of constructional noise, floodlighting, movement and storage of waste materials, public safety, dust control, emissions, telecommunication or television interference and decommissioning should be in place in the final documents."	The Applicant would like to signpost SNC to the **Outline Code of Construction Practice (Revision B)** [document reference 9.17], which sets out how noise, air quality and artificial light will be controlled, and pollution prevented. This is secured by Requirement 19 (Code of Construction Practice) of the **draft DCO (Revision C)** [document reference 3.1]. In relation to constructions hours, these are detailed and secured by Requirement 20 (Construction Hours) of the **draft DCO (Revision C)** [document reference 3.1]. In addition, the Applicant would like to signpost SNC to the Environmental Protection Statement of Engagement (Statutory Nuisance Statement) [APP-085]. Whilst the ES concludes that no such nuisance will occur, a provision has been included in the **Draft DCO (Revision C)** [document reference 3.1] at Article 7 which relates to defence to proceedings in respect of statutory nuisance. The Statement of Engagement considers Noise and Vibration, Air Quality and Artificial Lighting effects and signposts to the relevant mitigation management plans secured within the OCoCP.
9	The Council considers that all developments should take all reasonable opportunities to enhance biodiversity to achieve a net gain for nature. To achieve this the application should adhere to the mitigation hierarchy	The Applicant acknowledges SNC’s comment and would like to sign post SNC to the **Outline Biodiversity Net Gain Strategy** [APP-306] and **Initial Biodiversity Net Gain Assessmen**t [APP-219]. In addition, the **Outline Ecological Management Plan (Revision B)** [document reference 9.19]

ID	Relevant Representation	Applicant Comment
	(providing effective avoidance, minimisation and compensate measures) and deliver biodiversity net gains.	and **Outline Landscape Management Plan (Revision B)** [document reference 9.18] includes information on Biodiversity Net Gain. These plans are secured by Requirements 13 (Ecological Management Plan) and 11 (Provision of Landscaping) of the **draft DCO (Revision C)** [document reference 3.1] respectively. Further to this, Requirement 12 (Implementation and Maintenance of Landscaping) of the **draft DCO (Revision C)** [document reference 3.1] requires the applicant to carry out landscaping in accordance with the plan approved in Requirement 11. The Applicant will seek to ensure its enhancement proposals accord with contemporary BNG issues throughout this process. For example, if forthcoming nature recovery strategies target new sites, features or habitats as priorities for enhancement, SEP and DEP would aim to incorporate this within its BNG proposals wherever feasible.
10	The scope for terrestrial ecological surveys has been previously agreed and surveys of 90% of the route were undertaken between 2020-2021 by suitably qualified and experienced ecologist in line with best practice guidelines. The Council would also encourage the applicant to update the desk top study as our County Wildlife Sites were recently updated.	The Applicant acknowledges SNC's comment. Regarding County Wildlife Sites, it should be noted that an updated desk study would be considered prior to finalisation of the Ecological Management Plan secured through Requirement 13 of the **draft DCO (Revision C)** [document reference 3.1], and which will be submitted to the relevant planning authority for discharge.
11	The cable route has been designed to avoid impacts where possible and further micro-siting is expected at the detailed design. The Council would encourage the applicant to explore further opportunities to avoid/minimise impacts in partnership with other schemes in the area as the schemes develop and are delivered.	The Applicant acknowledges SNC's comment and will continue to explore further opportunities to avoid/minimise impacts in partnership with other schemes in the area.
12	The ES provides an outline for mitigation and the Council welcome the use of native species of local provenance and biodegradable tree guards. The proposed mitigation will be reviewed and adjusted as the design progresses. Consideration should be given to the use of moveable 'hedges' which could be placed within hedge gaps at night and removed the following day, to provide for continued connectivity. These have been proposed and will also be trailed by another linear scheme.	The Applicant acknowledges SNC's comment. Any mitigation will be detailed within the Ecological Management Plan which is secured through Requirement 13 (Ecological Management Plan) of the d**raft DCO (Revision C)** [document reference 3.1].

ID	Relevant Representation	Applicant Comment
13	Should reptile translocation be required, the translocation site will need to be identified, secured, and maintained for at least the lifetime of the scheme.	The Applicant agrees with this point regarding reptile translocation. However, the only reptile site at which translocation is proposed is at Hickling Lane near the Onshore Substation. Here the proposed translocation would consist of translocating reptiles from the parts of Hickling Lane within the construction footprint to parts of Hickling Lane (with similarly suitable habitat conditions) outside the construction footprint. In this respect, the donor site and the receptor site comprise the same unit of reptile habitat, with micro-scale translocation proposed inside this one site. This will be detailed in the final Ecological Management Plan, which is secured through Requirement 13 (Ecological Management Plan) of the **draft DCO (Revision C)** [document reference 3.1].
14	The applicant is committed to deliver biodiversity net gain (BNG) and an Initial Biodiversity Net Gain Assessment1 has been undertaken. At the present time it is anticipated that the scheme will deliver a 0.50% net loss in habitats, and a 3.02% net gain in hedge units. Because it is not possible to offset the loss of habitat units against the gain in hedge units additional work will be required to deliver net habitat gains to ensure the scheme complies with National Planning Policy. With regards to the delivery of BNG we would encourage consideration of the Local Nature Recovery Strategy which should be published by November 2023, and compliance with best practice guidelines to ensure that BNG is delivered post-construction.	The Applicant acknowledges SNC's comment. The Applicant will continue to develop the project Biodiversity Net Gain following the completion of detailed design work post-consent, and looks forward to continued engagement with the LPAs and Natural England on this.
15	Letters of No Impediment (LoNI) have been received from Natural England for bats and badgers and great crested newts will be licenced under the District Level Licensing Scheme. No other licences are anticipated to be required based on the information obtained to date although additional ecological surveys will be undertaken on the remaining 10% of the route to inform the detailed design. In line with best practice Reasonable Avoidance Measures should be employed to minimise impacts on great crested newts and we would encourage the design of a wildlife friendly surface water drainage scheme, with Sustainable Urbans Drainage Systems designed for the benefit of wildlife.	The Applicant agrees with the points made regarding Reasonable Avoidance Measures for GCN, and this will be updated in the **Outline Ecological Management Plan (Revision B)** [document 9.19]. Opportunities for wildlife friendly surface drainage schemes will be explored, where appropriate, during the development of detailed design.
16	Overall, following mitigation which will be secured via the DCO, the scheme is predicted to have negligible or minor adverse impacts on ecological	The Applicant acknowledges SNC's comment.

ID	Relevant Representation	Applicant Comment
	receptors i.e. the impacts would have minimal effect at the lower end of the scale, but could adversely affect an ecological receptor but would not adversely affect the integrity or conservation status at the other end. The ES has addressed inter-relationships between ecology, water and air, noise, and vibration.	
17	The Council acknowledge that there are national benefits in delivering the projects, however there are limited benefits at the local level. There is however harm identified at a local level, in particular by the construction of the proposed substation . The Council considers that significant weight should be had to the visual harms in the planning balance.	The Applicant is keen to continue to work with the local community to deliver benefits to the area. As noted within **Section 1.1** of the **Outline Skills and Employment Plan** [APP-310], the Applicant is a long-term partner in Norfolk and the East of England and has been an active member of the community for over a decade through its Sheringham Shoal and Dudgeon Offshore Wind Farms that it operates off the Norfolk coast [APP-310, para. 5]. Both existing wind farms have established community funds. Each fund allocates £100,000 of funds per year to Norfolk community groups including schools and non-governmental organisations seeking financial assistance for projects or initiatives that focus on renewable energy, marine environment and safety, sustainability or education [APP-310, para. 7]. The Outline Skills and Employment Plan is secured by Requirement 26 (Local skills and employment) of the **draft DCO (Revision C)** [document reference 3.1] which states that no phase of the onshore works may commence until a skills and employment plan (which accords with the outline skills and employment plan) for that phase has been submitted to and approved by the relevant planning authority. The Applicant notes SNC's comments regarding "…the visual harm…" of the onshore substation construction. In response, the Applicant refers to paragraphs 271 to 273 of **ES Chapter 26 LVIA** [APP-112], which outline the LVIA's approach to the assessment of potential visual effects during the construction and decommissioning phases of the onshore substation: The Applicant highlights the summary of potential impacts during the construction and decommissioning phases of the onshore substation, which are present in Annex 26.5 (See **Appendix 26.1 LVIA Annexes** [APP-275]).

ID	Relevant Representation	Applicant Comment
		The Applicant also confirms its position that the location of the onshore substation, in addition to the Projects' landscape proposals, makes for the most suitable site within its local context from a landscape and visual perspective. The combination of existing and surrounding woodland, tree belts and hedgerows naturally restricts potential visibility and effects to a relatively small area of landscape; there are relatively few sensitive visual receptors in close proximity to the substation who would have clear views to the substation; nearby residential receptors would not have clear views to the substation; and the substation would lie within an area already influenced by grid and other infrastructure, such as the Norwich Main substation, lines of pylons and overhead wires, the Norwich-Stowmarket main railway line and A140.
18	The Council wishes to continue to work pro-actively with the applicants as the application is progressed through to Examination to try to resolve some of the outstanding issues, particularly in relation to hedgerows and trees, and the specific wording of some of the requirements.	The Applicant acknowledges SNC's comment and looks forward to continue to work with SNC to seek to resolve any outstanding issues.

2.4 Great Yarmouth Borough Council [RR-037]

Table 2.4.1 Applicant's comments on Great Yarmouth Borough Council's relevant representation

ID	Relevant Representation	Applicant Comment
1	Thank you for notifying Great Yarmouth Borough Council on the acceptance for a Development Consent Order (DCO) in relation to the Sheringham Shoal & Dudgeon Extension Projects. Please accept this officer level representation, made in the response to Section 56 of the 2008 Planning Act. General Comments The Council strongly supports the aims and ambitions of both offshore windfarm extension projects, which are consistent with contributing towards national renewable energy targets and objectives. The port of Great Yarmouth remains the Operations & Maintenance (O&M) base for Equinor's existing Dudgeon Offshore Wind Farm, as well as being at the forefront of assembly for other windfarm projects including Galloper, East Anglia ONE and Scroby Sands, drawing upon over 50 years of Southern North Sea offshore energy expertise. Great Yarmouth is designated as a Centre for Offshore	The Applicant acknowledges and thanks Great Yarmouth Borough Council for its Relevant Representation. The project has been developed to reduce impacts on the environment. Embedded mitigation is incorporated in the scheme, details of which are set out within the Environmental Statement technical **Chapters 6 – 29** [APP-092 – APP-115] for example, the use of HDD to avoid sensitive features. Please also refer to **Chapter 5 EIA Methodology** [APP-091] for more information on the methodology that will be followed to reduce impacts.

ID	Relevant Representation	Applicant Comment
	Renewable Engineering (CORE), recognised for its deep water port, skills, supply chain and supported by strong leadership from both New Anglia Local Enterprise Partnership and Great Yarmouth Borough Council to deliver rapid growth within the offshore wind sector. In 2021 Great Yarmouth was awarded Town Deal funding by the UK Government to unlock further growth and inward investment in the energy sector through the development of a new O&M Campus and business incubator facilities around the port and South Denes area. In September 2022, planning permission was granted to provide both highway and marine infrastructure to support the future O&M campus. Construction of the campus facilities will commence in January 2023 and complete in January 2024. Great Yarmouth, therefore, remains poised to continue to offer significant opportunities in the growth of the clean energy sector. Specific Comments Broadly speaking the Council has no major objections to the proposed routing of the onshore cabling with respect of: the proposed landfall point at Weybourne; the proposed onshore cabling corridor; nor the proposed location of the onshore substation that has been offered by National Grid at Norwich Main Substation, as these all lie outside of the Council's administrative boundary. Notwithstanding this, every effort should be made to ensure that any proposed impact upon the environment are reduced or where this is not possible, suitable mitigation measures are put in place. To this effect, the Council supports Equinor's preferred approach which aims to develop both windfarm extensions and their associated infrastructure and grid connections in an integrated and wholistic manner, as such an approach will reduce the likely scale and impact of the combined construction works.	In addition, the following documents will be prepared prior to construction which will detail additional mitigation measures and construction methodologies; • Outline Code of Construction Practice (Revision B) [document reference 19.17], secured through draft DCO Requirement 19. • Outline Landscape Management Plan (Revision B) [document reference 9.18], secured through draft DCO Requirement 11. • Outline Ecological Management Plan (Revision B) [document reference 9.19], secured through draft DCO Requirement 13.

2.5 Norfolk County Council [RR-064]

Table 2.5.1 Applicant's comments on Norfolk County Council's relevant representation

ID	Relevant Representation	Applicant Comment
1	Norfolk County Council responded to an earlier consultation on the Preliminary Environmental Information Report (PEIR) in June 2021; and supported the principle of these Extension Projects subject to a number of detailed matters being resolved. The County Council recognises that these Projects directly support the Government's target of delivering 40 gigawatts (GW) of offshore	The Applicant notes and welcomes NCC's support for offshore wind infrastructure and recognition that the SEP and DEP projects will contribute towards meeting the UK's renewable energy targets.

ID	Relevant Representation	Applicant Comment
	wind energy by 2030 as set out in the Energy White Paper (2020); and The Ten Point Plan for a green industrial revolution (2020). These projects will contribute towards these targets, which includes powering every home in the UK from green energy and supporting up to 60,000 jobs. The County Council continues to work with both the offshore windfarm sector and National Grid to explore how these projects can support our own clean growth ambitions in line with the Government's vision for economic recovery that simultaneously addresses the challenge of climate change, offering opportunities for growth and job creation. The County Council's interest in these projects relates to the onshore infrastructure required, which includes onshore connection infrastructure (buried cable route – 60 km); and a new substation (6ha) at Norwich Main. Additionally, temporary infrastructure will be required during the onshore construction phase as work compounds will be installed along the cable route corridor. The development of the Sheringham Extension Project (SEP) and Dudgeon Extension Project (DEP) will make an important contribution towards meeting the UK's renewable energy targets. When operational the SEP and DEP would generate enough electricity to power 785,000 homes. These Projects would support the County Council's net zero commitments as well as creating local jobs and longer- term opportunities for developing skills in the offshore energy sector. While recognising the important contribution the above projects will make, the applicant, the Planning Inspectorate, and the Secretary of State (BEIS) need to be aware of the on-going issue regarding the requirement for improved access to new electricity infrastructure to support the planned housing and employment growth across Norfolk. The clean energy generated through these Projects will not, at present, directly benefit and feed into the local electricity distribution networks in Norfolk. As such there is a need for a joined-up/collaborative approach between the various infrastructure providers (i.e., Equinor; National Grid and UK Power Networks) to deliver power in those areas where it is needed in Norfolk. In addition, there is a there is a holding objection from the County Council as Lead Local Flood Authority in the absence of acceptable supporting information; and Highway Officers are still assessing the detailed technical matters surrounding construction traffic and may need to raise further technical responses to the DCO. Notwithstanding the above comments the County Council supports the principle of these Extension Projects subject to the	A key project objective is: 'to export electricity to the UK National Grid to support UK commitments for offshore wind generation and security of supply' [Planning Statement AS-031]. Whilst the infrastructure proposed will enable the generation of much needed renewable energy, National Grid determines the arrangements for the onward transmission infrastructure. However, the Applicant understands that there are feeder connections at Norwich Main which supply the local area with power and SEP and DEP will therefore support security of supply within the local area. The Applicant continues to work with NCC and in particular the Lead Local Flood Authority (LLFA) and Highways Officers to address concerns raised and is currently preparing a Statement of Common Ground.

ID	Relevant Representation	Applicant Comment
	detailed technical issues/comments appended to this response being resolved through the DCO process. The County Council will make further representations to this DCO application through its submission of a Local Impact Report at the Examination Stage; and if consented will be involved in the formal discharge of any planning conditions/requirements as they directly affect the Authority.	
2	The principal role of the County Council in responding to the above windfarm proposals, and the onshore infrastructure requirements, is in respect of the Authority's statutory role as: • Highways Authority • Minerals and Waste Planning Authority • Lead Local Flood Authority • Public Health Responsibilities	Noted – no response required
3	In addition, the County Council has an advisory environmental role and economic development function, which also needs to feed into any response made to the above windfarm proposals.	Noted – No response required.
4	Other statutory consultees include: Natural England Highways England Historic England Drainage Boards Marine Management Organisation Public Health England Maritime and Coastguard Agency Energy and utility companies with cable and pipeline interests Civil Aviation Authority Parish, Town, District and other County Councils	Noted – No response required.

ID	Relevant Representation	Applicant Comment
5	In relation to the previous comments submitted of the Section 42 consultation and the County Council raised the following points (June 2021): • The principle of the project is supported; • Consideration of feeding electricity into local transmission networks to facilitate planning housing and employment growth; • A requirement for an Employment and Skills Strategy; • Compensation for those affected by the cumulative impacts of construction, including local businesses and fishermen; • Concern over the cumulative impacts of the Sheringham Extension Project (SEP) and the Dudgeon Extension Project (DEP) being developed separately; • Concern over the onshore cable route, requiring this route to not fetter the highway improvement schemes in Norfolk, including the Norwich Western Link and A47 improvement schemes; • Historic Environment Team requiring additional geophysical surveys.	The **Consultation Report** [APP-029] sets out pre-.application consultation, including consultation carried out under Section 42 of the Planning Act 2008. The Applicants response to the comments received during the Section 42 consultation is set out within **Appendix 4** of the **Consultation Report** 'Applicant response in regard to S42 comments' [APP-033]. The Applicant and NCC continue to engage to resolve matters and are working towards the preparation of a Statement of Common Ground.
6	And the following points were raised from the main construction compound consultation: • The County Council supported the location of the main construction compound being at the greenfield site at Attleborough (A1067 Fakenham Road); • The Lead Local Flood Authority required the applicant to consider surface water drainage issues at the main compound site; • The Natural Environment team required a 10m stand-off between the compound and the trees to the southeast of the site.	See comment above under ID 5.
7	The above comments have largely been positively considered and addressed by the applicant or will be addressed through on-going DCO process.	
8	The SEP and DEP will feed directly into the National Grid at Norwich Main. The submitted DCO does not extend beyond the onshore cable routes and	Noted. The East Anglia Green (EAG) Project is separate from SEP and DEP and is being promoted by National Grid.

ID	Relevant Representation	Applicant Comment
	grid connection infrastructure at Norwich Main. There are separate proposals by National Grid to reinforce the electricity transmission network (400 kV overhead power lines) between Norwich Main substation and Tilbury substation in Essex, known as the East Anglia Green (EAG) Project. This project, which is still at the pre-application stage, is needed according to the National Grid to increase capacity into the existing network to cater for additional electricity generated principally from the offshore wind energy sector.	The Applicant advises that the East Anglia Green Energy Enablement (GREEN) Scoping Opinion was published on the Planning Inspectorate website 14/12/22, post the submission of the SEP and DEP DCO application. At the time of the SEP and DEP DCO application, East Anglia Green was a Tier 3 development (as defined in Section 5.8, **ES Chapter 5 EIA Methodology** [APP-091]). As such, the Applicant considered there to be insufficient information to assess cumulative environmental effects with SEP and DEP (The Planning Inspectorate, 2019). The Applicant considers that East Anglia Green would be in a more suitable position to assess cumulative effects with SEP and DEP, which as a Tier 1 development, has a higher degree of certainty.
9	The County Council in responding to the non-statutory consultation on the East Anglia Green (EAG) project (June 2022) indicated, inter alia: "Any new electricity infrastructure needs to benefit Norfolk as whole and be capable of supplying existing and planned growth in housing and employment (commercial development)."	Noted. See response to ID 8 above.
10	The County Council is in continued discussions with National Grid and UK Power Networks (Distribution Network Operator) to look into the potential to feed electricity into the local transmission networks as part of the EAG project, which will be taken forward through the National Significant Infrastructure Project (NSIP) process in 2023.	Noted – no response required.
11	Equinor, the Planning Inspectorate (PINS), and the Secretary of State need to be aware of these on-going issues regarding the need for improved access to new electricity infrastructure to support the planned housing and employment growth across the County; and recognise the need for joined-up/collaborative approach between the various infrastructure providers (i.e., Equinor; National Grid and UK Power Networks) to deliver power where it is needed in Norfolk.	Noted. As stated above, under ID 1, whilst the infrastructure proposed will enable the generation of much needed renewable energy, National Grid is responsible for the onward transmission infrastructure. However, the Applicant understands that there are feeder connections at Norwich Main which supply the local area with power and SEP and DEP will therefore support security of supply within the local area.
12	Equinor have indicated through their economic modelling that their two projects could create up 2,190 UK jobs and £124.5 million gross value added (GVA) per annum during construction. They estimate that 450 of these jobs would be in East Anglia and £23.7 million GVA generated in the Region	These figures and the underpinning assessment is set out within **ES Chapter 27 – Socio-Economics and Tourism** [APP-113].

ID	Relevant Representation	Applicant Comment
	annually assuming an East Anglia construction port is used. A further 230 jobs will be generated once operational of which 85 would be within East Anglia.	
13	As previously commented the economic benefits of the above projects are welcomed and officers are working with Equinor to develop an Employment and Skills Strategy. The County Council would wish to see the applicant develop through the DCO process a strategy to accompany the development and secure demonstrable benefits to both the local economy and workforce. Such a Strategy would need to be agreed with both the County Council and the District Councils affected, along with the New Anglia Local Enterprise Partnership.	An **Outline Skills and Employment Plan** [APP-310] has been submitted in support of the application and this is secured by Requirement 26 (Local skills and employment) of the **draft DCO (Revision C)** [document reference 3.1] which states that no phase of the onshore works may commence until a skills and employment plan (which accords with the outline skills and employment plan) for that phase has been submitted to and approved by the relevant planning authority.
14	The County Council would also like to see a local community benefit fund set up outside the planning process, as is being undertaken by other offshore windfarm promoters, designed to support / assist those wider communities affected by the projects.	The Applicant notes the comment in respect of community benefits and is keen to continue to work with the local community to deliver benefits to the area. As noted within the Project Background section of the **Outline Skills and Employment Plan** [APP-310], the Applicant is a long-term partner in Norfolk and the East of England and has been an active member of the community for over a decade through its Sheringham Shoal and Dudgeon Offshore Wind Farms that it operates off the Norfolk coast (paragraph 5). Both existing wind farms have established community funds. Each fund allocates £100,000 of funds per year to Norfolk community groups including schools and non-governmental organisations seeking financial assistance for projects or initiatives that focus on renewable energy, marine environment and safety, sustainability or education (paragraph 7).
15	Detailed discussions and negotiations will remain on-going throughout the DCO application process, particularly in respect of any temporary road closures; construction traffic management plans (CTMPs); and other travel related planning. Notwithstanding these ongoing discussions, officers have assessed the impact of construction traffic on receptors along 140 roads (over 300 miles of road network) including consideration of pedestrian delay, road safety, driver delay and abnormal (large) deliveries.	The Applicant has had productive discussions with NCC Highways and considers that all outstanding matters raised to date, have been addressed through clarifications or jointly agreed revisions to the **Outline Construction Traffic Management Plan (Revision B)** [document reference 9.16] submitted at Deadline 1 . The Applicant will continue to work with NCC and is progressing a Statement of Common Ground which will include a section on Traffic and Transport. The **Outline Construction Traffic Management Plan (Revision B)** [document reference 9.16] sets out measures to manage potential impacts
16	Resulting from the above, mitigation measures will be needed including reducing construction vehicle numbers on certain routes and the use of escort vehicles and/or provision of passing places along narrow roads. An Outline Traffic Management Plan (OTMP) will be submitted as part of the DCO and	

ID	Relevant Representation	Applicant Comment
	then completed when the contractor is appointed. The final mitigation will be agreed with the contractor.	of SEP and DEP construction traffic movements, including measures to manage: • vehicle numbers on certain routes; • vehicle movements along 'narrow roads', e.g. the use of escort vehicles and/or provision of passing; • the potential for cumulative impacts. The OCTMP is secured by Requirement 15 (Traffic and Transport) of the **draft DCO (Revision C)** [document reference 3.1] which states: 'No phase of the onshore works may commence until for that phase a construction traffic management plan (which must be in accordance with the outline construction traffic management plan), as appropriate for the relevant phase, has for that phase been submitted to and approved by the relevant planning authority in consultation with the relevant highway authority'.
17	A cumulative impact assessment has also been undertaken to assess impacts with other significant projects, notably other offshore windfarms and highways schemes (e.g., widening / dualling of the A47 between Easton to North Tuddenham). Roads that could be utilised by the other projects have been identified. Officers are satisfied that the potential for cumulative impacts can be managed through the respective projects' CTMPs.	
18	The County Council's highway officers are still carefully assessing the supporting documentation in respect of the above matters and will make appropriate comments under delegated officer powers and feed these back to PINS within the prescribed consultation period. This may include, where appropriate: (a) Raising any necessary holding highway objection in the event that highway safety is deemed to be compromised; and/or (b) Seeking Planning Conditions (Requirements) to be attached to the DCO in order to overcome any highway issue	
19	At present, two outline surface water drainage designs have been developed but neither has been selected as the preferred option as the applicant is not yet able to state where they are intending to discharge surface water to for disposal. Further information on the proposed surface water drainage will need to be provided for the Lead Local Flood Authority (LLFA) to review.	The Applicant wrote to the ExA, on 13 January 2023, [AS-036] to advise of its intent to make a non-material change to the DCO. The Applicant confirmed that a single preferred solution for surface water drainage from the Onshore Substation has been selected, comprising a shallow infiltration solution. The change application will remove the option to drain into the to the foul sewer The following supporting documents to the DCO are being updated and will be submitted at Deadline 2 as part of the change request application: • Annex 18.2.1: **Onshore Substation Drainage Study (Revision B)** [document reference 6.3.18.2.1]; and • **Outline Operational Drainage Strategy (onshore substation) (formally referred to as the Outline Operational Drainage Plan (onshore substation)) (Revision B)** [document reference 9.20].

ID	Relevant Representation	Applicant Comment
20	At this stage, the LLFA has considered the outline surface water drainage design as set out in the Outline Operational Drainage Plan; as well as the Flood Risk Assessment (FRA); Onshore Sub-station Drainage Study; and accompanying Hydraulic Modelling. At this time, further evidence and clarification of information is required to demonstrate: • That the proposed development is in accordance with National Planning Policy Framework (NPPF) with regard to the risk of flooding. There is currently insufficient information to demonstrate that surface water arising from the development would not result in an increase of flood risk to the proposed development at the Onshore Sub-Station or elsewhere. • There is a lack of confirmation of where the surface water drainage proposals for the onshore sub-station will drain, site specific greenfield runoff rates and volumes, the comparable post-development runoff rate and volumes proposed to prevent an increased risk of flooding elsewhere. • The hydraulic modelling on which the FRA, which influences the proposed development design, and its associated drainage design requires updating and clarification.	See response in ID19 above. In addition, the Applicant notes that during ETG meeting 7 with the LLFA on 06/12/2022, the discussion included consideration of the required updates to the hydraulic modelling. The results of this will be included within the updated supporting documentation listed below. In accordance with this confirmed approach the following supporting documents to the DCO are being updated and will be submitted at Deadline 2 (in addition to those listed in ID 19 response above): • Annex 18.2.2: **Onshore Substation Hydraulic Modelling Report (Revision B)** [document reference 6.3.18.2.2] (formally referred to as the Annex 18.2.2: Onshore Substation Hydraulic Modelling Technical Note); and • Addendum to the **Flood Risk Assessment (Revision A)** [document reference 12.61].
21	As such the LLFA has a holding objection to the onshore elements of this proposal.	Noted – no response required.
22	Reason: To prevent flooding in accordance with NPPF paragraph 167, 169 and 174 by ensuring the satisfactory management of local flood risk, surface water flow paths, storage, and disposal of surface water from the site in a range of rainfall	Noted – no response required.
23	The LLFA would remove its holding objection if the following issues are adequately addressed: 1. An updated FRA and Drainage Strategy that confirms the proposed surface water discharge location for the onshore sub-station. 2. The provision of the site-specific greenfield runoff rates and volumes, the comparable post-development runoff rate and volumes.	Once the change application is made to progress solely with the option to use shallow infiltration drainage at the Onshore Substation, it is understood that points 4 and 5 will be resolved. In response to items 1, 2 and 3, the change request application will be supported by updated information including. an updated Outline Operational Drainage Strategy and a hydraulic modelling report. This information will be submitted at Deadline 2.

ID	Relevant Representation	Applicant Comment
	3. An updated hydraulic model that appropriately applies the latest climate change allowances and provides an assessment of the change is flood risk. 4. Adequate consideration of the surface water flood risk associated with discharging to the foul sewer in Swainsthorpe and the residual risks. 5. A maintenance and management plan detailing the activities required and details of who will adopt and maintain all the surface water drainage features for the lifetime of the development.	
24	The LLFA may need to make further detailed comments on the above matters as part of the Examination process and through submission of the County Council's Local Impact Report; and if appropriate an agreed emergency flood plan for the for the onshore sub-station (construction and operation), landfall site (construction only) and the onshore cable route (construction only).	Noted.
25	Informatives: • The Norfolk Local Flood Risk Management Strategy was updated in 2021 with an addendum. • The Norfolk LLFA Statutory Consultee for Planning Guidance Document has been updated in 2022 (currently version 6) to take into account some of the recent National Planning Policy Framework (NPPF) updates and the Climate Change guidance updates. • The Planning Practice Guidance (PPG) for Flood risk and Coastal Change was updated in August 2022. These updates are not fully reflected in the FRA such as those in the PPG update. The LLFA has considered the impact these changes could have and has only provided comments relating to the proposed scheme where there is a potential moderate to significant impact.	Noted. The Applicant notes the references to updated policy and guidance documents. These will be considered in the relevant supporting documents to the DCO which are being updated, where necessary, and will be submitted at Deadline 2. A technical note responding to the PPG for Flood Risk and Coastal Change update is being prepared and will be submitted to accompany the Applicants response to Written Questions 1 at Deadline 1.
26	The FRA based on the Drainage Study identified the two most feasible surface water drainage options were either discharge to the Anglian Water Sewer in Swainsthorpe or to discharge to infiltration. However, no conclusion as to which option was preferred was reached in either the FRA or the Drainage Strategy. The LLFA acknowledges that while neither of these solutions are	See ID 19 above.

ID	Relevant Representation	Applicant Comment
	preferrable, the options available at this location are very limited and constrained.	
27	In Plates 2 to 5 (pages 69-72), the LLFA notes the surface water hydraulic modelling results are not consistent with the latest national guidance for climate change allowances. The LLFA requires for this modelling to be updated to incorporate the latest climate change allowances.	The Applicant notes that during ETG meeting 7 with the LLFA on 06/12/2022, the discussion included consideration of appropriate climate change allowances to apply. It was agreed, with the LLFA, that in the absence of information related to the Decommissioning Phase an allowance of 45% for climate change would be applied. This will be included within the updated modelling and supporting documentation, to be submitted at Deadline 2.
28	In section 18.2.8.1.4, Para 455-456 (pages 72-73) the applicant should ensure staff and users also sign up for Met Office Weather warnings too, as some areas of surface water flood risk in Norfolk do not coincide with the Environment Agency Flood warning areas.	Noted. Paragraph 463 of **Appendix 18.2 - Flood Risk Assessment** [AS-023] states that "…large parts of the onshore cable corridor are in rural undeveloped areas that are not covered by flood warnings. Furthermore, it is important to note that Environment Agency flood alerts and warnings are not issued in response to surface water flooding." Paragraph 464 and 465 of Appendix 18.2 – **Flood Risk Assessment** [AS-023] states that "As such the flood warning and evacuation plan will include independent checks (i.e. Met Office Weather Warnings) alongside any alerts or warnings issued by the Environment Agency. These checks will also account for risks outside of the alerts / warnings in areas that may be at risk from failure of defences (such as a breach). This will enable contractors and site managers to consider how this information will affect planned works, especially areas in close proximity to key watercourses. During construction, contractors and management should liaise with Norfolk County Council, as the LLFA, and the Environment Agency so they are aware of any forecast related to heavy rainfall events. The potential for flooding can then be assessed to enable work to stop, especially in areas in close proximity to key watercourses, and the site cleared of all personnel in this instance." On this basis, the Applicant can confirm this has already been taken into consideration within the assessment undertaken. This is also reflected in **Section 6.1.8 Flood Warning and Evacuation of the Outline Code of**

ID	Relevant Representation	Applicant Comment
		Construction Practice (Revision B) [document reference 9.17] secured under Requirement 19 of the **draft DCO (Revision C)** [document reference 3.1].
29	In section 18.2.8.1.4 (pages 72-73) where a Flood Plan is required, it should be reviewed and agreed with the Relevant Resilience and Emergency Planning teams in accordance with NPPF Para 167.	The need for a Flood Plan is highlighted in **Appendix 18.2 – Flood Risk Assessment [AS-023]** and Table 1-1 of the **Outline Code of Construction Practice (Revision B)** [document reference 9.17]. It is also considered in Section 6.1.8 Flood Warning and Evacuation of the **Outline Code of Construction Practice (Revision B)** [document reference 9.17], secured under Requirement 19 of the **draft DCO (Revision C)** [document reference 3.1].
30	In the hydraulic modelling report, the hydraulic modelling must be updated for the 1% and 3.3% future scenarios in accordance with the latest climate change allowance guidance.	See ID 27 above.
31	In relation to the hydraulic modelling, confirmation of either the finished ground level that was used in “Option 1” and “Option 2” for the platform or whether the existing ground levels were proposed to be used as it was not provided in the report.	The Applicant can confirm that the existing ground level has been utilised in the Option 1 scenario modelling. This will be summarised in Section 9.1 of the Onshore Substation Hydraulic Modelling Report (to be submitted at Deadline 2). The focus of the assessment at that time was to understand the potential interaction with the surface water flood extent to aid in further design iterations. The initial assessment of Option 2 also utilises the existing ground levels to continue to assess the potential interaction with the surface water flood extent. This will be set out in Section 9.2 of the Onshore Substation Hydraulic Modelling Report (to be submitted at Deadline 2) .
32	The LLFA requests clarification in relation to hydraulic modelling of “Option 2 with Embankments” on whether the footprint of the platform was extended to account for the slope of the embankment, along with clarification of the height of the embankments.	Section 9.3 and Figure 9-12 of the Onshore Substation Hydraulic Modelling Report (Option 2 with Embankments) confirms that the modelled footprint for the Onshore Substation platform includes the cut and fill areas for the embankments based on the cut and fill drawing. In this scenario the existing ground levels continue to be utilised to assess the potential interaction with the surface water flood extent. Option 2 with Embankments and Platform Level at 28.23m AOD (Section 9.5 of the Onshore Substation Hydraulic Modelling Report) includes the platform as a non-permeable feature, at a level of 28.23m AOD, to

ID	Relevant Representation	Applicant Comment
		understand the potential impact the Onshore Substation platform would have on the displacement of flood water. The **Onshore Substation Hydraulic Modelling Report** will be updated and submitted at Deadline 2,
33	The LLFA requires that the applicant provides confirmation of the change in flood risk through a series of figures depicting the areas where a change in maximum flood depth and extent are experienced between the baseline and the post development scenario.	A new section has been provided within the Onshore Substation Hydraulic Modelling Report, including the addition of depth and flood extent difference figures. This compares the Baseline scenario with the Option 2 with Embankments and NW Access Road scenario for the 1 in 100 year (plus 45% allowance for climate change) event. The Onshore Substation Hydraulic Modelling Report will be submitted at Deadline 2,
34	6.1.8, para 118-119 (pages 33-34) the applicant should ensure that staff and users also sign up for Met Office Weather warnings too as some areas of surface water flood risk in Norfolk do not coincide with the Environment Agency Flood warning areas.	See ID 28
35	6.1.8, para 120 (page 34) should a Flood Plan be required, the applicant should ensure that it is reviewed and agreed with the Relevant Resilience and Emergency Planning teams in accordance with NPPF Para 167.	The need for a Flood Plan is highlighted in **Appendix 18.2 - Flood Risk Assessment** [AS-023] and Table 1-1 of the **Outline Code of Construction Practice (Revision B)** [document reference 9.17]. It is also considered in Section 6.1.8 Flood Warning and Evacuation of the **Outline Code of Construction Practice (Revision B)** [document reference 9.17]. The requirement to engage with the relevant authorities in the production of the Code of Construction Practice is set out in Requirement 19 of the **draft DCO (Revision C)** [document reference 3.1].
36	The Drainage Study identified the two most feasible options were either discharge to the Anglian Water Sewer in Swainsthorpe or deep bore infiltration. However, no conclusion of which options was preferred was reached in the study.	See ID 19 above The following documents are being prepared to support the change request application that is targeted for submission at Deadline 2: • Annex 18.2.1: **Onshore Substation Drainage Study (Revision B)** [document reference 6.3.18.2.1]; and

ID	Relevant Representation	Applicant Comment
		• **Outline Operational Drainage Strategy (onshore substation)** (formally referred to as the **Outline Operational Drainage Plan (onshore substation)) (Revision B)** [document reference 9.20].
37	Further guidance on the information required by the LLFA from applicants can be found on Norfolk County Council's website.	Noted.
38	An Arboricultural Survey Report - Volume 3, Appendix 20.15 (Wild Frontier Ecology, September 2022) along with the ecology reports provided by Wild Frontier Ecology have provided an overview to inform the DCO application and have been referenced to refine the proposed cable route.	Noted
39	From an arboriculture perspective the County Council is satisfied that the correct procedures have been followed to inform the design and construction of the onshore cable route and associated access routes and infrastructure to reduce the impact on significant trees and woodland as far as practically possible.	Noted
40	Advice on possible arboricultural impacts, mitigation and compensation options has been provided in Table 4 and elaborated in Sections 6.2-6.5 of the Arboricultural Survey Report; however, the report has not provided a full tree survey of the DCO boundary but has looked initially at the Area of Outstanding Natural Beauty (AONB) and the Norwich Main substation and provided a desk study for the remaining cable route. A full tree survey and Arboricultural Impact Assessment of trees within the DCO boundary, including trees within 15m of the boundary, will be required prior to work on the onshore cables commencing. This will ensure that tree protection measures are secured through Tree Protection Plans and an Arboricultural Method Statement. A full tree survey will also highlight any additional veteran and ancient trees to allow consultation with an arboriculturist to devise suitable mitigation measures such as horizontal directional drilling and ensure that entry and exit pits for trenchless crossings are at least 15m from the stems of any retained trees and outside prescribed veteran tree buffer zones.	An arboricultural desk study covering the onshore cable corridor has been completed (APP-228). The objective of the desk study is to identify known protected and high value trees such as those with a Tree Preservation Order (TPO) in a Conservation Area and veteran/ancient trees. This desk study was supplemented by ground level arboricultural surveys within the North Norfolk Area of Outstanding Natural Beauty (AONB) and the area around Norwich Main Substation. Both these areas were targeted due to the sensitivity of the landscape due to arboricultural impacts. It is worth noting that in addition to the desk study and targeted ground level survey, the ecology work included ground work to identify trees with bat roost potential (which veteran and ancient trees often have) and the information from all these studies was used in the site selection process to refine the cable route, minimising possible impacts to veteran and ancient trees from the outset. Further arboricultural surveys will be undertaken prior to construction of the development. This is secured by Requirement 11 (Provision of Landscaping) of the **draft DCO (Revision C)** [document reference 3.1] which requires the Applicant to submit a written landscape management

ID	Relevant Representation	Applicant Comment
		plan (which accords with the outline landscape management plan) for that phase has been submitted to, and approved by, the relevant planning authority. Each landscaping scheme must include details of existing trees and hedges to be removed and details of existing trees and hedges to be retained, with measures for their protection during the construction period where applicable.
41	Post DCO consent, once the extent of tree and habitat loss are quantified, an appropriate detailed landscape scheme must be submitted as stated in the Outline Landscape Management Plan. This should take account of Biodiversity Net Gain as per the submitted documents Appendix 9.19.2 - Outline Biodiversity Net Gain Strategy and Environmental Statement (ES) Appendix 20.6 - Initial Biodiversity Net Gain Assessment Report (document reference 6.1.20.6).	Noted. An appropriate detailed landscape scheme will be submitted post DCO consent, as stated at paragraph 41 of the **Outline Landscape Management Plan (Revision B)** [document reference 9.18] (OLMP), which will accord with the principles set out in the illustrative landscape proposals presented within the OLMP at Appendix 1: Illustrative landscape Proposals for the Onshore Substation. Biodiversity Net Gain is secured in Ecological Management Plan (Requirement 13 of the **draft DCO (Revision C)** [document reference 3.1])
42	It should be noted that our response is necessarily limited in extent, due to the role that Norfolk County Council has in relation to NSIP's, with the relevant District Council(s) expected to have a more significant input, for example due to their role regarding the agreement and enforcement of planning requirements. Comments below refer to onshore ecology only.	Noted – no response required
43	Having reviewed Chapter 20 (Onshore Ecology & Ornithology) of the environmental statement, the County Council is satisfied it has been informed by adequate habitat and species surveys and data analysis. The ecological mitigation hierarchy appears to have been adhered to, with the embedded mitigation (as summarised in the Schedule of Mitigation & Mitigation Route map Document Ref. 6.5) welcomed. However, it is important to note that additional mitigation measures (as identified in Table 1: Offshore Mitigation Measures and Table 2: Onshore Mitigation Measures) will be required to be secured via DCO requirements. Of particular note is the DCO Schedule 2, Part 1, Requirement 13 for an Ecological Management Plan (EMP).	Noted – no response required
44	The Outline EMP (Ref. 9.19) appears fit for purpose, noting however, that a Final EMP (DCO requirement 13) will be required to be submitted and should	Noted. Note that a Code of Construction Practice (rather than a CEMP) will be submitted to secure construction environmental mitigation measures.

ID	Relevant Representation	Applicant Comment
	include details of all updated and pre-commencement surveys as necessary. The submission of an associated Construction Environmental Management Plan (CEMP) will also be required to be submitted.	Please see the **Outline Code of Construction Practice (Revision B)** [document reference 9.17]. This is secured by Requirement 19 (Code of Construction Practice) of the **draft DCO (Revision C)** [document reference 3.1] which states 'No phase of the onshore works may commence until a code of construction practice (which must accord with the outline code of construction practice) for that phase has been submitted to and approved by the relevant planning authority following consultation with Norfolk County Council, the Environment Agency, relevant statutory nature conservation bodies and, if applicable, the MMO'.
45	Regarding the Outline Code of Construction Practice (Ref. 9.17) (Requirement 19 of the Draft DCO), it should be noted that a range of detailed environmental management plans will be required to be produced as set out in Table 1-1, including for example, a Dust Management Plan, Invasive Non-native Species Management Plan and Artificial Light Emissions Management and Mitigation Plan.	Noted. These are set out within the **Outline Code of Construction Practice (Revision B)** [document reference 9.17], which will be secured by Requirement 19 (Code of Construction Practice) of the **draft DCO (Revision C)** [document reference 3.1]).
46	The Outline Biodiversity Net Gain (BNG) Strategy (Ref. 9.19.2) has been informed by an Initial BNG Assessment (ES Appendix 6.3.20.6). The Strategy states that the applicant has committed to deliver a positive BNG for the project, which is welcomed, however, although while not yet mandatory under the Environment Act for NSIP's, the achievement of a minimum 10% BNG figure is strongly encouraged.	The **Outline Biodiversity Net Gain Strategy** (APP-306) and **Initial Biodiversity Net Gain Assessment** (APP-219) states: • The target for SEP and DEP is to achieve the maximum feasible biodiversity net gain. No specific target is set [APP-306, para. 15] because of the extensive uncertainties involved (e.g. with landowners). However, pending landowner agreements, gains are considered feasible [APP-219, p7, para. 4]. • The Environment Act 2021 is due to set the minimum threshold at 10%, but this does not currently apply to NSIPs such as SEP and DEP [APP-306 para. 11-12]. • Although there is no legal requirement to provide BNG, SEP and DEP are committed to do so through the Outline Ecological Management Plan, which is secured by Requirement 13 (Outline Ecological Management Plan) of the **draft DCO (Revision C)** [document reference 3.1].

ID	Relevant Representation	Applicant Comment
		• BNG is not a legal requirement yet – it is expected to become law for Nationally Significant Infrastructure Projects (NSIPs) in 2025 [APP-306, para. 77]. As SEP and DEP are NSIPs they are going beyond the current requirements by providing a BNG assessment.
47	It is of concern to note that the Initial BNG Assessment indicates a net loss of 0.5% Habitat Units and a net loss of 0.98 River Units, with only the Hedgerow Units currently indicating a positive gain of 3.02% (as per Table 4 Summary of Biodiversity Metric).	The Applicant notes the respondents comment and would like to reiterate that the DCO-stage BNG documents are the first step in the iterative BNG calculation process (**Initial Biodiversity Net Gain Assessment** ([APP-219], paragraph 3). The initial calculations are not the final calculations. Identifying post-development enhancements in the level of detail necessary to inform accurate BNG calculations can only be done following consultation with landowners and others to agree particular enhancements. This can only be done pre-construction, once precise construction details are finalised (**Initial Biodiversity Net Gain Assessment** ([APP-219], paragraph 3)).
48	It is noted that only 90% of the area has been assessed to date, and that the BNG calculations will require updating as the construction parameters and detailed restoration proposals are finalised.	The Applicant notes that baseline habitat surveys covered c.90% of the area of the Order Limits; 10% was not surveyed due to landowner access restrictions (**Initial Biodiversity Net Gain Assessment** [APP-219], paragraph 2). However, the remaining 10% will be surveyed pre-construction and the information factored into the updated BNG calculations ([APP-306], paragraph 2). From the desk study data obtained for these un-surveyed areas, they appear to be predominantly arable habitat and equivalent to the rest of the **Order Limits** ([APP-219], paragraph 1); therefore, incorporating these new areas is not expected to substantially alter the calculations.
49	The Strategy states that BNG opportunities are to be developed further with stakeholder's post consent, with detailed and refined calculations provided on the final design. Norfolk County Council's Natural Environment Team would welcome the opportunity to engage in this process.	Noted, and the Applicant looks forward to further engagement on Biodiversity net gain following the completion of detailed design, post-consent.
50	There does not appear to be a requirement in the current Draft DCO to secure the submission of a BNG Strategy and therefore it is recommended that further consideration is given to its specific inclusion in the DCO.	The BNG Strategy is referenced in the **Outline Ecological Management Plan (Revision B)** [document reference 9.19] secured by Requirement 11 (Provision of Landscaping) and Requirement 13 (Ecological Management Plan) respectively in the **draft DCO (Revision C)** [document reference 3.1] .

ID	Relevant Representation	Applicant Comment
51	The Outline Landscape Management Plan (LMP) (Ref.9.18) (Requirement 11 of the Draft DCO) is a key document to facilitate the delivery of BNG targets and should therefore be developed with this in mind. Opportunities to enhance and create suitable habitats should be sought at every opportunity as the final version of the LMP is further refined.	Noted. The BNG Strategy is referenced in the **Outline Landscape Management Plan (Revision B)** [document reference 9.18] secured by Requirement 11 (Provision of Landscaping).
52	These comments are limited in nature due to Norfolk County Council's remit within the process. Detailed comments on Landscape and Visual, Planting and Landscape Plans should be sought from the relevant district councils.	Noted. The Applicant is currently engaging with NNDC, SNDC and BDC and preparing Statements of Common Ground with each of the District Councils.
53	Chapter 26 – Landscape and Visual Impact Assessment (LVIA) The County Council is satisfied that the methodology for the LVIA follows industry standard guidance and practices and is fit for purpose. Suitably data sources have been used for the desk top study aspects of the assessment and the viewpoints selected have been done so in coordination with relevant parties. It is noted that the LVIA is based on a "mitigation by design" approach and therefore there are no further measures proposed for mitigation. There are some long-term effects that will remain even once planting has established, that are therefore residual. Detailed views on these residual effects should be sought from District officers, however the County Council is willing to be part of any ongoing discussions.	Noted – no response required
54	The Historic Environment Service has been in regular communication with the applicant of this scheme for about three years and have had detailed discussions with them through expert topic group meetings.	Noted – no response required
55	In broad terms the documents relating to the below-ground archaeology and undesignated heritage assets to be submitted with the DCO application reflect what we have agreed with the applicant and in line with our expectations.	Noted – no response required
56	Chiefly though not exclusively these documents consist of. • An archaeological desk-based assessment • An aerial photographic, LiDAR Data and Historic Map analysis • Archaeological geophysical survey report, priority areas	Noted – no response required

ID	Relevant Representation	Applicant Comment
	• Report and assessment of Archaeological and Geoarchaeological Monitoring of site investigation works The Historic Environment Services has no comments on the above documents.	
57	The applicant has largely followed our advice to use windows within the agricultural cycle to carry further geophysical survey prior to and in tandem with the NSIP DCO application process.	Noted – no response required
58	It is noted that the Outline Onshore Written Scheme of Investigation (Ref. 9.21) has also been included in the documentation. The Historic environment Services' comments are as follows: Paragraph 77, third bullet point. The Historic Environment Service has moved away from the use of the term 'strip, map and sample excavations' as third can create the false impression of faster and less rigorous piece of work when compared to a 'set-piece (open-area) excavation'. We would like to see the term 'excavation' used for large scale mitigation taking place both prior to and during the construction programme.	Noted. The bullet points under Section 1.4 have been updated to reflect the mitigation approaches detailed in Section 7 of the **Outline Written Scheme of Investigation (Onshore) (Revision B)** [document reference 9.21] which refers to 'Archaeological Excavation' as the mitigation approach in areas where impacts to archaeology are unavoidable.
59	Norfolk County Council in its capacity as the Mineral and Waste Planning Authority has been involved in discussions with the proposer of the SEP and DEP; regarding mineral and waste safeguarding, both of sites and resources. Throughout the project preparation information has been exchanged between the parties regarding these safeguarding issues. The Mineral Planning Authority considers that the Environmental Report for the SEP and DEP correctly assesses the magnitude, sensitivity and significance of the effect of the projects on Mineral Safeguarding Areas within section 17.6.1.4. The further mitigation suggested in section 17.6.1.4.5 is considered likely to be effective. Therefore, Norfolk County Council in its capacity as the Mineral Planning Authority does not object to the proposed SEP and DEP provided that the proposer constructs the cable corridor in the manner set out in the Preliminary Environmental Information Report and continues to work with Norfolk County Council regarding the mitigation of impacts on the Mineral Safeguarding Areas.	Noted – no response required.

ID	Relevant Representation	Applicant Comment
60	The Mineral and Waste Planning Authority will continue ongoing discussions with the applicant as required and will ensure that any future issues are resolved through the Local Impact Report and through the DCO process.	Noted. The Applicant looks forward to continuing to work with NCC.
61	Public Health's comments are limited to Chapter 28 of the Environmental Statement on health. Public Health has previously discussed the health impact assessment methodology used to assess the impacts of the project on human health with the applicant and welcomes its usage. We believe the assessment methodology for the Health Impact Assessment is appropriate and based on best practice. Public Health agrees that there are unlikely to be any significant, long term adverse health impacts from the proposal compared to baseline conditions.	The Applicant thanks Public Health Norfolk County Council for the clear and concise comments regarding Chapter 28 of the Environmental Statement on health [APP-114]. The Expert Topic Group meeting with Public Health Norfolk County Council was very useful. The Applicant is pleased that there is agreement that the Health Impact Assessment is appropriate and based on best practice and that there are unlikely to be any significant, long term adverse health impacts from the proposal compared to baseline conditions.
62	Public health would like the applicant to include further mitigation measures to address any adverse impacts on mental health, especially given the potential length of construction works.	The Applicant notes the request, in paragraph 10.2, to 'include further mitigation measures to address any adverse impacts on mental health', especially with regards to the potential length of construction works. There are a number of points made in paragraph 10.2 of the Norfolk County Council Relevant Representation and the Applicant's reply is presented in rows 62-66. In paragraph 10.1 of the Relevant Representation, Public Health Norfolk County Council notes how its comments are limited to **ES Chapter 28 Health** [APP-114]. APP-114 refers to other project documents so in rows ID63 to ID66 below the Applicant sets out the mitigation measures against each of the issues raised by NCC. These cover the whole Project and are provided in the **Schedule of Mitigation and Mitigation Routemap** [APP-282].
63	The applicant should increase the involvement of local communities to plan for…	Commitments are in place to ensure that local communities are able to contribute to the planning of the Project and, when necessary, to raise complaints. The **Outline Code of Construction Practice (OCoCP) (Revision B)** [document reference 9.17], secured by Requirement 19 of the **draft DCO** (AS-009) will include a Stakeholder Communications Plan to ensure effective and open communication with local residents and businesses that may be affected by the construction works (para 26). The **Outline Project Environmental Management Plan (PEMP) (Revision B)** [document reference 9.10], sets out requirements for regular environmental

ID	Relevant Representation	Applicant Comment
		meetings and debriefs local to the site where representatives from the Project Team, the Principal Contractor, and key sub-contractors will consider matters such as the status of outstanding items, reports of environmental incidents or complaints and stakeholder engagement (para 68). With regards to complaints, the **OCoCP (Revision B)** [document reference 9.17] specifies that a Local Community Liaison Officer will respond to any public concerns, queries or complaints in a professional and diligent manner as set out by a project community and public relations procedure which will be submitted for comment to the relevant planning authority (paragraph 27); and the **Outline Project Environmental Management Plan (PEMP) (Revision B)** [document reference 9.10] states that the final PEMP will detail the procedure in place to report public complaints in relation to offshore works (paragraph 72).
64	how disruption of the natural environment and its impacts on mental health can be minimised; how current levels of physical activity can be maintained and improved through provision of information around alternative undisturbed routes on land, …	The Applicant recognises that these are subtly different requests, but the response is provided as one because the mitigation to reduce the disruption of the local environment is the same as mitigation to maintain current levels of physical activity. While direct links with mental health are rarely made in APP-282 there are provisions to ensure liaison that will contribute to reducing stress and anxiety associated with the construction programme: liaison with Norfolk County Council about proposed construction works on Public Rights of Way (measure 19.13); community liaison through the **OCoCP (Revision B)** [document reference 9.17, paragraph 26] and the **Outline PEMP (Revision B)** [document reference 9.10, paragraph 71] as noted above; procedures for addressing community complaints, as noted above, through **the OCoCP (Revision B)** [document reference 9.17, paragraph 27] and the **Outline PEMP (Revision B)** [document reference 9.10, paragraph 72]. This is in addition to commitments to reduce disruption from air quality, noise, traffic and visual impacts [APP-282, measure 19.4]. Paragraph 255 of APP-114 sets out additional recommended mitigation measures to help minimise the risk of any change in behaviour.

ID	Relevant Representation	Applicant Comment
65	how any perceived or real water pollution at sea will be managed; and …	**Chapter 7** of the Environmental Statement examines impacts on Marine Water and Sediment Quality [APP-093]. The corresponding mitigation measures are set out in measures 7.1 to 17.6 of Schedule of Mitigation and Mitigation Routemap [APP-282]. These include commitments to minimise deterioration to water quality across all construction and operation processes. Table 7-21 of APP-093 shows that the potential residual impacts during construction, operation and decommissioning phases of SEP and DEP are considered to be negligible (paragraph 177). APP-093 also notes that, given the outcomes of the assessment, no monitoring specifically targeting marine sediment and water quality parameters is proposed and that this is agreed by Natural England (paragraph 176). An **Offshore In Principle Monitoring Plan (IPMP)** [APP-289] is provided. The measures above address 'real' water pollution at sea. Public Health Norfolk County Council also asks about 'perceived' water pollution at sea. This will be picked up through the liaison and complaint mechanisms described above (as set out in the **Outline PEMP (Revision B)** [document reference 9.10] and the **OCoCP (Revision B)** [document reference 9.17]).
66	how information on electromagnetic fields are communicated to the public to reduce the stress, uncertainty, and associated mental health impacts in clear and non-technical ways.	There are no explicit plans to communicate information on electromagnetic fields (EMF) to the public. If required this can be addressed through the provisions for community liaison through the **OCoCP (Revision B)** [document reference 9.17, paragraph 26] and the **Outline PEMP (Revision B)** [document reference 9.10, paragraph 71] as noted above; and the procedures for addressing community complaints, as noted above, through the **OCoCP (Revision B)** [document reference 9.17, paragraph 27] and the **Outline PEMP (Revision B)** [document reference 9.10, paragraph 72]. EMF is assessed in APP-279. With regards to the offshore environment, the **Executive Summary** [APP-279] states that there are no formal limits for EMF exposure in the marine environment. The SEP and DEP offshore export circuits mitigate the impacts of EMF on marine life by burial techniques which reduce the fields, and the projects use armoured cables for mechanical protection, which additionally act to reduce the EMFs produced. The use of single 3-core

ID	Relevant Representation	Applicant Comment
		cables, compacting the circuit phases also reduces and localises the EMFs significantly. The mitigation techniques employed by the project should be sufficient to reduce the impacts of EMF on marine life, although more in-depth analysis may be required to quantify specific impacts to certain species [see also APP-282, measure 9.1]. With regards to the onshore environment, the **Executive Summary** [APP-279] states that calculations demonstrate the maximum magnetic fields from any of the options considered were 9% of the current exposure limits set, by the UK Government, to protect members of the public against EMF exposure.
67	Public Health has the following specific comments on Chapter 28 of the Environmental Statement on health:	Noted – no response required.
68	There is evidence to suggest that cold related deaths are unlikely to significantly decrease due to a warming climate as stated in paragraph 119.	It is not possible to respond to this in detail as it is not clear what evidence is being referred to. Paragraph 119 of the ES chapter on human health [APP-114] presents a statement from the Socio-Economic chapter [APP-113] regarding the impact of a changing climate on the health of the population. This states that effects from heat-related illness would be partially offset by a reduced risk of cold weather-related illness during winter. The Applicant notes that paragraph 119 of APP-114 refers to cold-related illness and not deaths. The predicted effects on health infrastructure are reported in the **Socio-Economic chapter** [APP-113]: paragraph 207 finds the magnitude of effect to be negligible within the context of the East Anglia study area because while there will be some disruption to local social and community infrastructure, including some added pressure on local health infrastructure, the overall level of disruption is anticipated to be minimal. Paragraph 209 [APP-113] goes on to say that as the sensitivity of the receptor is assessed as medium and the magnitude of effect is assessed as negligible, the significance of impact of SEP and DEP is therefore assessed as minor adverse which is not considered to be significant in EIA terms.
69	Paragraph 128 does not consider changing working patterns with increased numbers of people working from home.	Paragraph 128 of APP-114 shows variation along the onshore cable corridor in the numbers of households with no adults in employment, one person in the household with a long-term problem or disability, people aged

ID	Relevant Representation	Applicant Comment
		over 65 and retired people. These are taken as proxy for the time people spend at home during the day. The population profile, in APP-280, uses data from the 2011 census. Results from the 2021 census data were released post DCO submission. The conclusion, in paragraph 128 of AP-114, stands that near landfall and along the onshore cable corridor, a slightly higher proportion of people in general spend extended periods at home and that near the onshore substation people generally spend less (or approximately the same amount of) time at home than at the local, regional or national level.
70	Impacts of air quality should include adverse impacts on pregnant women in paragraph 185 as there is evidence that poor air quality adversely impacts birth weight.	Paragraph 185 of APP-114 lists the population groups that may be especially vulnerable to changes in air quality. Norfolk County Council notes that pregnant women should be included in this list as there is evidence that poor air quality adversely impacts birth weight. This is a fair comment. This inclusion does not change the findings of APP-114 with regards to air quality. APP-114 looks at health effects arising from changes to air quality in relation to dust and fine particulate from construction activities and emissions from construction vehicles and non-road mobile machinery (NRMM) (paragraph 184). In paragraph 198 the conclusion of the assessment for population health is given for air quality. It states that any change due to SEP and DEP will be a low magnitude of effect on a receptor of medium to high sensitivity. This represents an impact of minor adverse significance, i.e., not significant for the general population or vulnerable groups. Paragraph 198 goes on to list the vulnerable groups and states that any effects would be below all recognised statutory thresholds for health protection, and would be short-term, temporary and would cease on completion of the works. This conclusion takes account of mitigation commitments by the Applicant. Details of the air quality changes are set out in the **Environmental Statement 23** on air quality (APP-108). The mitigation measures for Air Quality are set out in measures 22.1 to 22.9 of APP-282. Measure 22.2 [APP-282] and includes a stakeholder communications plan and community engagement before work commences.

ID	Relevant Representation	Applicant Comment
71	Paragraph 186 states the key health outcomes affected by air quality are cardiovascular diseases and asthma. Lung cancer and type 2 diabetes are also key health outcomes related to air quality.	Paragraph 186 of APP-114 lists key health outcomes relevant to air quality. Norfolk County Council notes that lung cancer and type 2 diabetes are also key health outcomes related to air quality. This is a fair comment. This inclusion does not change the findings of APP-114 with regards to air quality. APP-114 looks at health effects arising from changes to air quality in relation to dust and fine particulate from construction activities and emissions from construction vehicles and non-road mobile machinery (NRMM) (para 184). In paragraph 198 the conclusion of the assessment for population health is given for air quality. It states that any change due to SEP and DEP will be a low magnitude of effect on a receptor of medium to high sensitivity. This represents an impact of minor adverse significance, i.e., not significant for the general population or vulnerable groups. Paragraph 198 goes on to list the vulnerable groups and states that any effects would be below all recognised statutory thresholds for health protection, and would be short-term, temporary and would cease on completion of the works. This conclusion takes account of mitigation commitments by the Applicant. Details of the air quality changes are set out in the Environmental Statement 23 on air quality (APP-108). The mitigation measures for Air Quality are set out in measures 22.1 to 22.9 of APP-282. Measure 22.2 [APP-282] and includes a stakeholder communications plan and community engagement before work commences.
72	Any potential contamination of water quality during construction (paragraph 216) may impact physical activity behaviours even if works are conducted out of season.	This is a fair comment, and it is a refinement to the statement in APP-114 that the likelihood of these effects would reduce outside of the main recreational seasons due to a reduction in potential receptors i.e. fewer bathers in the off-season. This observation provides a context to the relation between source-pathway-receptor (as described in Table 28-10 of APP-114). This does not change the findings of APP-114 with regards to water contamination. Paragraph 223 of APP-114 notes that SEP and DEP has avoided significant impacts for contamination, has proposed mitigation in place

ID	Relevant Representation	Applicant Comment
		where impacts are predicted, and will put in place measures to effectively manage and control contamination. The mitigation measures for Ground Conditions and Contamination are set out in measures 17.1 to 17.29 of APP-282. These include commitments to minimise impact to human health from exposure to contaminated soils and ground water (ref 17.5) and from exposure to contaminated soils, ground gas and vapours during construction (ref 17.6 to 17.12). The mitigation measures for Water Resources and Flood Risk are set out in measures 18.1 to 18.25 of APP-282. The **Outline PEMP (Revision B)** [document reference 9.10], sets out requirements for regular environmental meetings and debriefs local to the site where representatives from the Project Team, the Principal Contractor, and key sub-contractors will consider matters such as the status of outstanding items, reports of environmental incidents or complaints and stakeholder engagement (paragraph 70). The **Outline PEMP (Revision B)** [document reference 9.10]states that the final PEMP will detail the procedure in place to report public complaints in relation to offshore works. Paragraph 223 of APP-114 states that all effects would be short-term, temporary and would cease on completion of the works and that there would be no residual long-term change in population health outcomes.
73	Health outcomes related to reduced physical activity (paragraph 231) should include type 2 diabetes, unhealthy BMI, stroke and musculoskeletal conditions.	Paragraph 231 of APP-114 lists key health outcomes relevant to physical activity. Norfolk County Council notes that type 2 diabetes, unhealthy BMI, stroke and musculoskeletal conditions are also key health outcomes related to physical activity. This is a fair comment. This inclusion does not change the findings of APP-114 with regards to physical activity. APP-114 looks at health effects arising from changes to physical activity in relation to potential for physical activity to be temporarily affected by the temporary diversion of National Trails, Public Rights of Ways (PRoWs), cycle routes and long distance walking routes (herein referred to as 'routes') as well as some reduced access to the coast, as a result of the temporary disruption and/or restricted access (no greater than one week) to small portions of Weybourne Beach at landfall (paragraph 229).

ID	Relevant Representation	Applicant Comment
		In paragraph 252 [APP-114] the conclusion of the assessment for population health is given for physical activity. It states that any change due to SEP and DEP will be a low magnitude of effect on a receptor of medium to high sensitivity. This represents an impact of minor adverse significance, i.e., not significant for the general population or vulnerable groups because the only direct impact on access of physical activity would be in relation to diversion of routes which will be temporary, localised and reversible. Paragraph 253 states that all effects would be short-term, temporary, fully reversible and would cease on completion of the works. This conclusion takes account of mitigation commitments by the Applicant. Details of the changes to Land Use, Agriculture and Recreation are set out in the **Environmental Statement chapter 19** [APP-105]. The mitigation measures for Land Use, Agriculture and Recreation are set out in measures 19.1 to 19.18 of APP-282. Measure 19.13 [APP-282] relates to potential disruption to onshore coastal assets; measure 19.4 [APP-282] secures mitigation related to air quality, noise, traffic and visual impacts through the **Outline Code of Construction Practice (OCoCP) (Revision B)** [document reference 9.17]; measures 19.15-19.17 [APP-282] relate to impact on Public Right of Way across the planned area. Paragraph 255 of APP-114 sets out additional recommended mitigation measures to help minimise the risk of any change in behaviour.

2.6 Norfolk County Council as promoter of Norwich Western Link Road Scheme [RR-065]

Table 2.6.1 Applicant's comments on Norfolk County Council's as promoter of Norwich Western Link Road Scheme relevant representation

ID	Relevant Representation	Applicant Comment
1	This relevant representation is made by Norfolk County Council ("NCC") in its capacity as the promoter of the Norwich Western Link ("NWL") road scheme. The NWL is a proposed 3.9km length of new dual carriageway which would connect the A1270 Broadland Northway (formerly known as the Norwich Northern Distributor Road) to the A47 to the west of Norwich, completing a fully dualled orbital route around the city, in combination with the planned dualling of the A47 between North Tuddenham and Easton by National	The Applicant thanks Norfolk County Council in its capacity as the promoter of the Norwich Western Link (NWL) scheme for its representation. The Applicant has designed the SEP and DEP to future-proof SEP and DEP to ensure that all projects can be delivered with minimal disruption. Of note, as set out within the **Table 24-3** of **Chapter 24** of the

ID	Relevant Representation	Applicant Comment
	Highways, which is due to open in 2025. In 2023 NCC intends to submit a planning application for the NWL and to make statutory orders (a compulsory purchase order and side roads order) under the Highways Act 1980. If planning permission is granted and the statutory orders confirmed, NCC would start construction in 2024, with the NWL open for use in 2026. NCC notes (having observed a section 56 site notice affixed on land required for the NWL) that the proposed Order limits and Order land required for the onshore export cable element of the Sheringham and Dudgeon Extension Projects DCO ("SDEP DCO") overlap with part of the proposed alignment of, and proposed red line boundary for, the NWL (see Sheets 24 – 28 of the SDEP DCO Land Plans (APP-008)). See also, in particular, the Key Plan and Sheets 25 and 26 of the SDEP DCO Access to Works Plans (APP-014) which indicate that Equinor requires access for construction and early works which will have an impact on the proposed NWL; and the entry in Schedule 5 to the draft SDEP DCO (APP-024), which indicates that "approximately 100 metres of the Norwich Western Link Road as shown between points 25c and 25d on Sheet 25 of the Streets (to be temporarily stopped up) Plan" would be affected. Equinor, as promoter of the SDEP DCO, has engaged with NCC as promoter of the NWL, at a number of informal liaison meeting which has been helpful to discuss the obvious interface between these two linear infrastructure projects. The purpose of this relevant representation is to request that Equinor now engages formally with NCC to reach an agreed and coordinated position on how the following matters will be dealt with, in order to enable both the NWL and the SEDP projects to be brought forward in a coherent manner: • compatibility of scheme designs, strategy for managing overlapping work areas, and mechanisms for reciprocal design approvals and potential cost sharing; • construction methodology, including access and timescales; • strategy for communicating with landowners and occupiers affected by both projects; • approach to the acquisition of land and rights over land, where land / rights are required for both projects in the same area; • approach to the temporary stopping up of highways (including the NWL) and public rights of way; and • potential for transfer of benefit to NCC of certain elements of the development to be authorised by the SDEP DCO; To facilitate the above, NCC requires: • protective provisions to be included in the SDEP DCO ; • a co-operation agreement to be entered into to facilitate co-existence of the SDEP	Environmental Statement (Traffic and Transport, [APP-110]), trenchless crossings techniques will be used at the proposed Norwich Western Link Road. The applications that would authorise NWL have not yet been submitted. Notwithstanding, paragraph 148 confirms that the Norwich Western Link is considered within the cumulative impact assessment for traffic and transport. The Applicant and NCC meet regularly and benefit from constructive discussions and look to continue those discussions as the design of both schemes develop further Future meetings will include how the projects can be brought forward together; design of the schemes and strategy for managing interfaces; construction methodology; construction programme; engagement; land negotiations; highways works (including Public Rights of Way); and discussions surrounding survey information. The Applicant will engage with NCC in order to agree on suitable protections for the NWL.

ID	Relevant Representation	Applicant Comment
	and NWL projects . NCC reserves the right to make further representations as the DCO examination progresses.	

2.7 North Norfolk District Council [RR-069]

Table 2.7.1 Applicant's comments on North Norfolk District Council's relevant representation

ID	Relevant Representation	Applicant Comment
1	Sheringham and Dudgeon Extension Projects Application Ref: EN010109 Submission of Relevant Representation North Norfolk District Council (NNDC) has been notified by Equinor New Energy Limited on 05 Oct 2022 that their application for Development Consent Order (DCO) in respect of Sheringham Shoal Extension Project and Dudgeon Extension Project (SEP & DEP) has been accepted for examination by the Planning Inspectorate under the Planning Act 2008. This letter forms the Relevant Representation of NNDC and sets out a summary of the issues that are considered to be relevant to the nationally significant infrastructure project as it passes through the North Norfolk district.	The Applicant thanks North Norfolk District Council (NNDC) for its comments and responds to each of the issues raised in the Relevant Representation below.
2	Principle of Development North Norfolk District Council is fully supportive of the principle of renewable energy development in helping to tackle the challenges faced by climate change. NNDC recognises the national importance of having a balanced supply of electrical generation including increasing renewable energy supplies from offshore turbines in helping decarbonise the UK's energy sector. Whilst recognising the national importance of offshore wind, North Norfolk District Council believes it is essential to ensure that key design and construction decisions do not result in unacceptable or adverse impacts on residents or businesses within North Norfolk, acknowledging the important contribution that agriculture and tourism plays in the economic prosperity of the District underpinned by the nationally and internationally recognised coast, landscape and biodiversity interests as well as significant heritage assets that help define the unique character of the area.	The Applicant notes NNDC's support for renewable energy and also recognises the need to ensure that design and construction decisions do not result in unacceptable or adverse impacts on residents or businesses within North Norfolk. The design has been developed to reduce impacts as far as possible. **Environmental Statement (ES) Chapter Site Selection and Assessment of Alternatives** [APP-089] describes the design process and how pre-application engagement with stakeholders, communities and landowners has refined the SEP and DEP design including use of trenchless crossing techniques, e.g. Horizontal Directional Drilling (HDD). **The Planning Statement** [AS-031] assesses the proposals in the context of relevant planning policy (including both national and local). Section 7 of the **Planning Statement** [AS-031] summarises additional mitigation, i.e. mitigation which is not embedded in the design and how mitigation is

ID	Relevant Representation	Applicant Comment
		secured through the inclusion of Requirements within the **draft DCO (Revision C)** [document reference 3.1].
3	Keys Aspects of the Project Affecting North Norfolk North Norfolk District Council's jurisdiction extends inland from the Mean Low-Water mark along the coastline. The key design/construction decisions affecting North Norfolk include: • Method of bringing offshore cables onshore at Weybourne; • Working Corridor of onshore cable route; • Use of Horizontal Directional Drilling onshore; • Impact of construction traffic; • Landscape & Biodiversity Mitigation; • Phasing of the Project and Associated Construction Timetable(s).	The Applicant acknowledges key aspects of the Project identified by NNDC in its Relevant Representation and provides a response to each point below.
4	Community Benefits Method of bringing offshore cables onshore at Weybourne NNDC welcomes the bringing of the offshore cables onshore via the use of the horizontal directional drill (HDD) method which will help reduce the potential significant adverse impacts from open trench construction in the Weybourne area. It is important that this method is secured as part of any DCO.	**ES Chapter 3 Site Selection and Assessment of Alternatives** [APP-089] describes how the project design has been developed. Section 3.7 describes how consultation and feedback from consultees helped inform the chosen location of the landfall. Paragraph 14 lists the key project decisions that have been made by the Applicant as a result of the consultation process. This includes the use of long HDD at the landfall to avoid works such as open trenching on the beach and cliffs. In addition, the Applicants commitment to long HDD at the landfall results in the complete avoidance of the sensitive outcropping chalk feature in the nearshore portion of the Marine Conservation Zone (MCZ).
5	Working Corridor of onshore cable route NNDC noted the onshore construction parameters at PEIR stage. NNDC will work with Equinor New Energy Limited to ensure that all appropriate measures are secured within the DCO to minimise the impact of the onshore cable route including through the use of ducted systems to help reduce construction disturbance. Experience from other Offshore wind DCO applications indicates that both parties, working together positively, can secure the necessary measures to reduce adverse impacts during the construction phases through a Code of Construction Practice and agreeing Construction Hours.	The Applicant has sought to reduce impacts arising in respect of the onshore cable route and has proposed mitigation in the application that is secured within the **draft DCO (Revision C)** [document reference 3.1]. Of note, the **Outline Code of Construction Practice (Revision B)** [document reference 9.19] is secured by Requirement 19 (Code of construction practice) of the **draft DCO (Revision C)** [document reference 3.1], which states that 'no phase of the onshore works may commence until a code of construction practice (which must accord with the outline code of construction practice) for that phase has been submitted to and approved by the relevant planning authority…' In addition, Requirement 20 (Construction Hours) of the **draft DCO (Revision C)** [document reference 3.1], secures that the onshore works can only be undertaken within the certain hours (0700 hours and 1900

ID	Relevant Representation	Applicant Comment
		hours Monday to Friday, and 0700 hours to 1300 hours on Saturdays, with no activity on Sundays or bank holidays, except as specified in the requirement)
6	Use of Horizontal Directional Drilling (HDD) onshore NNDC welcomes the use of Horizontal Directional Drilling (HDD) techniques so as to avoid sensitive or designated sites so as to minimise any potential impacts upon them. NNDC will work with Equinor New Energy Limited to ensure that all appropriate measures are secured within the DCO to minimise the impact of the onshore cable route through use of HDD onshore at appropriate locations.	**ES Chapter 3 Site Selection and Assessment of Alternatives** [APP-089] describes how the project has been developed to avoid sensitive features. As set out within **ES Chapter 4 Project Description** [APP-090, para. 42], where sensitive features were unavoidable, for example, crossing large rivers, rail lines and traffic sensitive roads, these would be undertaken using trenchless crossing techniques, e.g. HDD. Figure 4.10 of the ES **Chapter 4 Figures - Project Description** [APP-117] shows the locations of trenchless crossings.
7	Impact of construction traffic Within North Norfolk it is assumed that the main traffic generators connected with Sheringham Shoal Extension Project and Dudgeon Extension Project will come from construction traffic associated with: • Bringing the offshore cables onshore at Weybourne; and • Construction of the cable corridor. North Norfolk has many small and narrow country roads with restricted widths and limited opportunities for larger vehicles to pass each other. Traffic levels vary but tourism during March to October (heighted during the summer months especially near coastal locations) means that the timing of any construction works will be critical to minimising adverse highway impacts. NNDC, through Norfolk County Council as Highway Authority, will work with Equinor New Energy Limited to ensure that all appropriate measures are secured within the DCO to minimise the traffic impact of the proposals.	Impacts of SEP and DEP construction traffic upon “narrow county roads with restrictive widths” is assessed within section 24.6.1.8 (Driver Delay (Highway Geometry) of the **ES Chapter 24 Traffic and Transport** [APP-110]. The assessment outlines that with the application of mitigation measures (detailed in Table 24-48 of the ES) the residual impacts of SEP and DEP construction traffic upon these roads would be no greater than minor adverse. Impacts of SEP and DEP construction traffic upon driver delay (capacity) is assessed within the section 24.6.1.7 (Driver Delay (Capacity) of the ES **Chapter 24Traffic and Transport** [APP-110]. The assessment includes specific consideration of roads which Norfolk County Council as the local highway authority have identified as being particularly sensitive to seasonal traffic. The assessment outlines that with the application of mitigation measures (section **24.6.1.7.2** of the ES) the residual impacts of SEP and DEP construction traffic would be no greater than minor adverse. Measures to manage SEP and DEP construction traffic movements (including via narrow roads and during the seasonal traffic periods) are set out within the **Outline Construction Traffic Management Plan (Revision B)** [document 9.16] submitted in support of the application. The OCTMP is secured by Requirement 15 (Traffic and Transport) of the **draft DCO (Revision C)** [document reference 3.1] which states: ‘No phase of the onshore works may commence until for that phase a construction

ID	Relevant Representation	Applicant Comment
		traffic management plan (which must be in accordance with the outline construction traffic management plan), as appropriate for the relevant phase, has for that phase been submitted to and approved by the relevant planning authority in consultation with the relevant highway authority'. The Applicant is progressing a Statement of Common Ground (SoCG) with Norfolk County Council (NCC) which will include a section on Traffic and Transport.
8	Landscape & Biodiversity Mitigation NNDC recognises that it will be important during the examination to ensure any likely adverse impacts relating to landscape and biodiversity interests are properly captured and appropriately managed and mitigated through the DCO requirements. Consideration will also need to be given to the timing of enhancement/mitigation works, particularly in view of the potential for the project to be split in to two phases. NNDC will work with Equinor New Energy Limited to ensure that all appropriate measures are secured within the DCO to minimise landscape and biodiversity impacts.	Impacts on landscape and biodiversity are assessed in: • **ES Chapter 20 Onshore Ecology and Ornithology** [APP-106]; • **ES Chapter 25 Seascape and Visual Impact Assessment** [APP-111]; and • **ES Chapter 26 Landscape and Visual Impact Assessment** [APP-112]. In addition, an **Outline Landscape Management Plan (Revision B)** [document reference 9.18] and **Outline Ecological Management Plan (Revision B)** [document reference 9.19] has been submitted in support of the application which are secured by Requirements 11 (Provision of Landscaping), 12 (Implementation and Maintenance of Landscaping) and 13 (Ecological Management Plan) of the **draft DCO (Revision C)** [document reference 3.1]. Of note: • Requirement 11 states: 'No phase of the onshore works may commence until a written landscape management plan (which accords with the outline landscape management plan) for that phase has been submitted to, and approved by, the relevant planning authority'.

ID	Relevant Representation	Applicant Comment
		• Requirement 13 states: 'No phase of the onshore works may commence until a written ecological management plan (which accords with the outline ecological management plan and the relevant recommendations of British Standards or Industry Guidance) for that phase reflecting the survey results and ecological mitigation, enhancement and biodiversity net gain measures included in the environmental statement has been submitted to and approved by the relevant planning authority in consultation with the relevant statutory nature conservation bodies and Environment Agency.
9	Phasing of the Project and Associated Construction Timetable(s) Clarity over Construction timetabling is a matter that NNDC would seek to be considered further, as part of the examination process, in order that any adverse impacts of construction in a single or two phase programme can be properly understood and appropriately managed for the benefit of residents and businesses within the District. Works are shortly about to commence for the Ørsted Hornsea Project 3 which has similar landfall location and similar grid connection location. It will be important to ensure that the SEP & DEP projects do not detrimentally affect any mitigation measures secured as part of the Hornsea 3 project. NNDC will work with Equinor New Energy Limited to ensure that all appropriate measures are secured within the DCO to minimise conflicts.	The **Scenarios Statemen**t [APP-314] sets out the rational for the requirement to retain separate and sequential development scenarios. ES **Chapter 5 EIA Methodology** [APP-091] describes the approach to the ES assessment. Of note, Section 5.5 describes how the assessment is based on a project design envelope approach, known as the 'Rochdale Envelope' approach. Paragraph 40 states that a range of parameters for each aspect of SEP and DEP have been defined and the worst-case scenario associated with each parameter and receptor has been used in each impact assessment. This helps to ensure that the EIA process has considered the maximum effects of SEP and/or DEP, whilst allowing for further optimisation and refinement at the time of construction. The project design envelope therefore provides the maximum extent of the consent sought. In terms of mitigation, and ensuring that the Project does not detrimentally affect any mitigation measures secured as part of Hornsea 3 or other sensitive features, Requirement 10 (Detailed design parameters onshore) of the **draft DCO (Revision C)** [document reference 3.1] requires the details of the onshore infrastructure to be submitted and approved to the relevant authority in advance of construction. Requirement 19 (Code of construction practice) states that no phase of the onshore works may commence until a code of construction practice has been submitted to and approved by the relevant planning authority. The **Outline Construction Traffic Management Plan (Revision B)** [document reference 9.16] submitted in support of the application (secured

ID	Relevant Representation	Applicant Comment
		by Requirement of the **draft DCO (Revision C)** [document reference 3.1]) provides details of measures to manage the potential for cumulative traffic and transport impacts, including caps on cumulative vehicles movements on sensitive highway links.
10	Community Benefits In respect of potential community benefits, NNDC recognises that the DCO process has to work within the sphere of planning law and under the notion that planning obligations should only be sought where they are necessary to make the development acceptable in planning terms; directly related to the development; and fairly and reasonable related in scale and kind to the development. NNDC recognises that, once built, the scheme is likely to be relatively benign. However, the authority believes that it is important that the proposals sufficiently address any harmful impacts associated with construction including potential damage to coastal areas, loss of trees and hedgerows along and associated with the cable corridor, damage to roads and verges from traffic together with consideration of harm to the economic prosperity of businesses affected by any extended or multi-phased construction activities. The Council believes it will therefore be important for the examination panel to carefully consider and understand the package of CIL compliant benefits being put forward by Equinor New Energy Limited as part of the consent process and how those benefits would be secured. Outside of the DCO process, North Norfolk District Council will seek to negotiate with Equinor New Energy Limited to secure a range of benefits for the wider community of North Norfolk.	The Applicant notes the comment in respect of community benefits and is keen to continue to work with the local community to deliver benefits to the area. As noted within Section 1.1 of the **Outline Skills and Employment Plan** [APP-310], the Applicant is a long-term partner in Norfolk and the East of England and has been an active member of the community for over a decade through its Sheringham Shoal and Dudgeon Offshore Wind Farms that it operates off the Norfolk coast [APP-310, para. 5]. Both existing wind farms have established community funds. Each fund allocates £100,000 of funds per year to Norfolk community groups including schools and non-governmental organisations seeking financial assistance for projects or initiatives that focus on renewable energy, marine environment and safety, sustainability or education. The Dudgeon Fund has also enabled the use of a cumulative fund underspend to create a new/additional Skills and Employability Fund for 2023 with extended age focus of 16-30 year olds. [The **Outline Skills and Community Plan** [APP-310] is secured by Requirement 26 (Local skills and employment) of the **draft DCO (Revision C)** [document reference 3.1] which states that no phase of the onshore works may commence until a skills and employment plan (which accords with the outline skills and employment plan) for that phase has been submitted to and approved by the relevant planning authority.

2.8 REAF CIC [RR-080]

Table 2.8.1 Applicant's comments on REAF CIC's relevant representation

ID	Relevant Representation	Applicant Comment
1	REAF CIC represents the fishing community of Norfolk, Suffolk and Essex and in this particular instance, our interests are:	Noted. The REAF CIC is included in the fisheries stakeholder database and contacts list for information dissemination.

ID	Relevant Representation	Applicant Comment
2	to help minimise potential conflicts when future wind farm and other developments are being considered. Data supplied by fishers should be treated as commercially sensitive.	The Applicant is committed to following the relevant FLOWW guidance and confirms that any disruption payment and cooperation agreement entered between the vessel owner and the Applicant will remain strictly confidential, including any data supplied by a vessel owner to evidence fishing activity. In addition, as stated in the **Outline FLCP** [APP-295] (Section 1.2.2.1), the Applicant will work with individual fishing organization / fisherman to establish confidentiality agreements for the purpose of sharing information with the objective of using it to work towards the objective of coexistence.
3	That planning and consenting decisions should take into account the safety implications of additional steaming times for fishing vessels resulting from navigational restrictions, and spatial fishing restrictions should respect good navigational practice.	The 6.3.13.1 **Environmental Statement Appendix 13.1 – Navigation Risk Assessment** [APP-198] and the **Environmental Statement Chapter 13 – Shipping Navigation** [APP-099] have assessed the impact of displacement/deviation for all vessel types engaged in transits from the wind farm sites. When considering the likely navigation safety consequence (negligible i.e. no risk to life or pollution) associated with displacement / deviation and the frequency (frequent- larger commercial vessels will be deviated every day) displacement impacts are assessed as being tolerable. For smaller vessels (e.g. fishing and recreation) internal navigation has also been considered during the operational phase and for those internal transits, the minimum spacing of 990m is considered as being sufficient to facilitate vessels types that have been previously observed to pass through other operational arrays, therefore lower the frequency of occurrence for these vessel types. Displacement of active commercial fishing is assessed within 6.1.12 **Environmental Statement Chapter 12 – Commercial Fisheries** [APP-098] and the worst-case scenarios are defined in Table 12-2 for restrictions on fishing activity. This includes 'exclusions' of fishing activity due to the presence of safety zones where approved.
4	That precautionary measures are taken when clearing unexploded ordnance when constructing new offshore wind farms to minimise more effectively damage to wildlife, including sea mammals, fish stocks and their natural	Low-order UXO clearance techniques, where the ordnance is disposed of or rendered safe without a high-order detonation is the preferred option for clearance of UXOs (see the **Draft Marine Mammal Mitigation Protocol (Revision B)** [document reference 9.4].

ID	Relevant Representation	Applicant Comment
	habitats. New techniques for disposal are available and these should be employed whenever possible.	UXO clearance will be subject to a separate marine licence post-consent. Therefore, further assessment will be undertaken once more accurate information on the number, location and type of UXO to be detonated is known.
5	That this consultation affecting the fishing industry should take into account that fishers are remote workers whose working hours often do not correspond with those of the regulators and developers.	Noted. The Applicant commits within the **Outline FLCP** [APP-295] to establishing a distribution system for ongoing liaison plans and dissemination of information, including survey schedules, construction schedules and planned operations and maintenance activities using a variety of media. In relation to offshore construction, the Applicant commits to distributing notices and information to the fishing community not less than 2 weeks prior to commencement of activities. Details on timescales of information provision will be added to the FLCP.

3 Comments on Town and Parish Council Relevant Representations

4. The Applicant’s comments on relevant representations received from town and parish councils are provided in this section.

3.1 Ashill Parish Council [RR-005]

Table 3.1.1 Applicant's comments on Ashill Parish Council's relevant representation

I.D.	Relevant Representation	Applicant Comment
1	My Parish Council has great concerns in regard to HGV traffic impacts, road closures and diversions all of which we have experienced over the work at Necton Norfolk	Based on the traffic impact assessment found in ES **Chapter 24 Traffic and Transport** [APP-110] with the application of mitigation methods set out in the same chapter the residual impact of traffic upon all receptors was assessed to be not significant. Specifically regarding Ashill, HGVs will not be routed through the village nor will there be road closures or diversions within Ashill. This is captured within Volume 2 of ES **Chapter 24 Traffic and Transport** [APP-134].
2	The environmental impact on rural areas with the proposed landfall, substation and cable corridor construction.	During the site selection process, SEP and DEPthe Applicant has sought to minimise impacts on local ecology and wildlife, for example through the avoidance of ecologically designated sites where possible. Further detail on this can be found in ES **Chapter 3: Site Selection and Assessment of Alternatives** [APP-089]. A suite of ecological surveys have been undertaken to determine the presence or absence of species and refine the within the footprint (or within respective study areas) of the SEP and DEP Order Limits. Potential impacts on local wildlife and specific species are assessed in ES **Chapter 20: Onshore Ecology and Ornithology** [APP-106]. Where appropriate, these surveys and impact assessments have determined the requirement for mitigation and management. The mitigation measures for potential onshore environmental impacts are secured within the **Outline Ecological Management Plan (Revision B)** [document 9.19]
3	There appears to be a lack of proper consideration of an alternative, more appropriate grid connection point.	Connection and Infrastructure Options Note (CION) Process is the mechanism used by National Grid to evaluate potential transmission options to identify the connection point in line with their obligation to develop and maintain an efficient, coordinated and economical system of the electricity transmission network. The grid connection point for SEP and DEP was determined by National Grid following the completion of the CION process. For more information regarding the grid connection point see

I.D.	Relevant Representation	Applicant Comment
		Sections 3.6 and **3.10** of ES **Chapter 3 Site Selection and Assessment of the Alternatives** [APP-089].

3.2 Barford and Wramplingham Parish Council [RR-006]

Table 3.2.1 Applicant's comments on Barford and Wramplingham Parish Council's relevant representation

I.D.	Relevant Representation	Applicant Comment
1	Barford and Wramplingham PC objects in the strongest way possible to this DCO application as follows: Lack of proper consideration by the Applicant of an alternative, more appropriate, grid connection point The Applicant claimed, continuously, and we consider unjustly, through the consultation process that it was unable to change the grid connection point set by National Grid. The most appropriate grid connection for this project is at the Walpole substation but the applicant failed to fully consider this option despite being requested to do so during the consultation phase.	The Connection and Infrastructure Options Note (CION) Process is the mechanism used by National Grid to evaluate potential transmission options to identify the connection point in line with their obligation to develop and maintain an efficient, coordinated and economical system of the electricity transmission network. The grid connection point for SEP and DEP was determined by National Grid following the completion of the CION process. For more information regarding the grid connection point see Sections 3.6 and 3.10 of ES **Chapter 3 Site Selection and Assessment of the Alternatives** [APP-089].
2	Barford and Wramplingham PC objects in the strongest way possible to this DCO application as follows: Need for the ExA to require the attendance of National Grid at the Hearings, to be interrogated on their actions by the ExA, in public, during the examination process National Grid should be asked to explain which alternative connection points were considered in reaching a decision about the grid connection for this project and the extent to which the impact on the environment and communities was taken into account.	Noted. The decision of which bodies to invite to attend the examination hearings is at the discretion of the Examining Authority.
3	Recognition, in relation to the work of the OTNR, that SEP/DEP is not an "in-flight" project.	Whilst SEP and DEP have not yet received consent, a project timeline has been created based on the UK Government's offshore wind and carbon reduction plans. The Applicant is supportive of the idea of an Offshore Transmission Network (OTN) however neither the regulatory nor technical framework exists at this current time to incorporate this into the projects. SEP and DEP are designated OTNR pathfinder projects, and as such the Applicant is committed to initiatives that encourage coordination in the

I.D.	Relevant Representation	Applicant Comment
		sector. The Applicant is working with governmental and industry bodies to identify barriers and solutions to offshore wind coordination.
4	The onshore in-combination, cumulative impacts of SEP/DEP's landfall, substation and cable corridor construction, are unacceptable when considered alongside the already consented Hornsea Three, Vanguard and Boreas projects, and other national infrastructure projects like the Norwich Western Link road There is enormous concern within the parish about the impact on use of roads, the environment, people's lives and livelihoods.	The cumulative impacts of the SEP and DEP project in conjunction with other projects, including the Hornsea Three, Vanguard and Boreas projects, was included as part of the environmental impact assessment. Further information regarding this can be found in Section 5.8 of ES **Chapter 5 EIA Methodology** [APP-091]. Issues that SEP and DEP are coordinating on with other projects include: • Preparation for of cable crossings to minimise disruption to transport networks. • Construction transport Access routes to alleviate traffic. • The Applicant will seek to work with other developers to achieve overarching benefits e.g. opportunities associated with biodiversity net gain. The Applicant will continue to coordinate with other infrastructure projects in the area to ensure that cumulative impacts are mitigated as far as possible. The list of plans and projects included in the cumulative impact assessment (CIA) is specific to each EIA topic and is detailed in each technical chapter (**Chapters 6 – 29**) [APP-092 – APP-115] having been developed through ongoing consultation with stakeholders. ES Chapters contain a Project Screening Table which describes the rationale for considering plans or projects further in the CIA or not. This rationale depends on factors including whether the plans or projects have been consented, the construction period, the distance from SEP and DEP and the level of confidence in the environmental information available for the plans or projects. Having also identified which residual impacts assessed for SEP and DEP alone have the potential for a cumulative impact with the other plans and projects, the ES chapters go on to assess the potential for cumulative impacts using the standard industry approach of using residual effects as

I.D.	Relevant Representation	Applicant Comment
		identified in the assessments of the other plans or projects. Please refer to the ES Chapters for details of each topic specific CIA.
5	That the SEP/DEP application should include – as a necessary cumulative impact – the proposed East Anglia Green project, upon the consenting of which it depends	Version 3 of Planning Inspectorate Advice Note Nine: Rochdale Envelope (PINS, 2018) and version 2 of Planning Inspectorate Advice Note Seventeen: Cumulative Effects Assessment (PINS, 2019a) provide guidance on plans and projects that should be considered in the CIA including: • Projects that are under construction; • Permitted application(s) not yet implemented; • Submitted application(s) not yet determined; • All refusals subject to appeal procedures not yet determined; • Projects on the National Infrastructure Planning programme of projects; and • Projects identified in the relevant development plan (and emerging development plans – with appropriate weight being given as they move closer to adoption) recognising that much information on any relevant proposals will be limited and the resulting degree of uncertainty in the assessment that is possible. As the 'East Anglia Green' project was only launched in January 2022 and its Scoping Opinion was published on the Planning Inspectorate website 14/12/22 (after the SEP and DEP application was submitted) it was not included as part of the cumulative impact assessment. The project did not meet any of the above criteria at the time of assessment. As with all projects in proximity to SEP and DEP, the Applicant will communicate and coordinate where possible to mitigate potential impacts. Whilst the East Anglia Green project was not included within the cumulative impact assessment as it was launched after the assessment was complete the Applicant will communicate with the project to ensure coordination as far as possible.

I.D.	Relevant Representation	Applicant Comment
6	The cumulative impact must be considered of the possible future construction of large battery storage facilities to improve the economic viability of the project, as has happened with the Hornsea Three project	As per Section 4.6 of the **ES Chapter 4 Project Description** [APP-090] battery storage is not included in the DCO application for this Project.
7	Unacceptable development scenarios are presented for single project and sequential development. We propose that scenarios 1a, 1b, 1c, 3 and 4 should not be permitted Orsted's Hornsea 3 project and Vattenfall's Vanguard and Boreas projects can bring into Norfolk 2.4 GW and 3.6 GW respectively. We cannot see the justification for the Applicant wanting to dig approximately the same width cable path through Norfolk for a mere 0.338 from SEP or 0.448 GW from DEP (scenarios 1a and 1b). Scenarios 1c, 3 and 4 involve digging up the cable path twice! The huge cost to the environment and disruption to people's lives and livelihoods of these scenarios cannot be justified.	As set out in Section 7 of the **Scenarios Statement** [APP-314] the preferred option is a development scenario with an integrated transmission system, providing transmission infrastructure which serves both of the wind farms, where both Projects are built concurrently, and the onshore infrastructure is integrated (i.e. scenario 4). The Applicant recognises that a concurrent development is beneficial for communities, the environment, and for the ultimate economics of the Project, in addition to the benefits this has for consumers. Given the different commercial ownerships of each Project, alternative development scenarios such as a separated grid option (i.e. transmission infrastructure which allows each Project to transmit electricity entirely separately) will allow SEP and DEP to be constructed in a phased approach, if necessary. Therefore, the DCO application seeks to consent a range of development scenarios in the same cable corridors to allow for separate development if required, and to accommodate either sequential or concurrent build of the two Projects. Potential solutions to avoid staged development include either Anticipatory Investment (AI) or combined Contract for Difference (CfD) bids. The principle of AI has been decided, with details still being discussed. Regarding opportunities for combined CfD bids, the Applicant is still awaiting an outcome from BEIS on whether the regulatory regime will be changed to make this possible. The Applicant is continuing to work with the relevant authorities, including OFGEM and BEIS, to overcome barriers and enable a concurrent construction scenario.
8	We believe that the Applicant has submitted incorrect ecology reports in support of its application	The ecology reports that were submitted as part of the DCO application are both accurate and appropriate. Habitat and species specific surveys were undertaken in 2020 and 2021, the findings of which are reported in separate standalone technical

I.D.	Relevant Representation	Applicant Comment
		appendices which accompany the **ES Chapter 20: Onshore Ecology and Ornithology** [APP-106]. The findings from all surveys that have been undertaken have been used to inform the ecological impact assessment and identify the requirement for any further surveys and/or mitigation measures. Details of the pre-construction surveys, mitigation measures and monitoring, are set out within the **Outline Ecological Management Plan (Revision B)** [document reference 9.19] and secured via the **draft DCO** Requirement 13 (Revision C) [document reference 3.1].
9	The Applicant has not provided a proper explanation of the carbon footprint for each possible project scenario	ES **Appendix 4.2 Greenhouse Gas Footprint Assessment** [APP-179] outlines the greenhouse gas footprint for the different SEP and DEP scenarios.
10	We have been informed at PC meetings that the Applicant has sought to prevent objections to the project via restrictive clauses in heads of terms contract documents with landowners	The Applicant has included standard wording within the draft Heads of Terms that have been issued to affected landowners which requires the relevant party not to object to the DCO application. Similar wording has recently been considered by the High Court in R (on the application of Suffolk Energy Action Solutions SPV Limited) v Secretary of State for Business, Energy and Industrial Strategy [2022] EWHC 2623 (Admin). In that case, the Court acknowledged that such wording was commonplace and had not prevented an adequate examination of the DCO application. The Applicant notes that several parties to whom Heads of Terms have been issued [including where those Heads of Terms have been signed] have indeed submitted relevant representations to the Examining Authority.
11	Barford and Wramplingham PC objects in the strongest way possible to this DCO application as follows: The Applicant should provide clarity with regard to community compensation	A community benefit fund will be set up if SEP and DEP are successful in being granted consent. At that point, the Applicant will consult with the community and stakeholders on an appropriate and complementary programme.

3.3 Bawdeswell Parish Council [RR-007]

Table 3.3.1 Applicant's comments on Bawdeswell Parish Council's relevant representation

I.D.	Relevant Representation	Applicant Comment
1	Bawdeswell Parish Council remain concerned about the impact the cabling will have on the environment. Equinor's comment that each 1km stretch of cable route in one direction will take approximately one month to complete and that each cable route will be fully reinstated and returned to its previous use, shows a worrying lack of knowledge of rural life. Once mature hedging is removed then, by common consent, any replacement will take 20 years to reach a comparable state.	Once construction is completed the land will be reinstated to previous condition, this includes the reinstatement of hedgerows. The period of time required to reinstate various habitats will differ and the length of monitoring will depend on the habitat type. The Applicant is committed to replacement planting of hedgerow and hedgerow trees and has committed to 10-year monitoring and maintenance period as per the **Outline Landscape Management Plan (Revision B)** [document reference 9.18] and **Outline Ecological Management Plan (Revision B**) [document reference 9.19].
2	Bawdeswell Parish Council remain concern that Equinor appears to attach no importance to the damage and disruption to our communities that will be caused by thousands of HGV's servicing the cabling trenches -travelling down roads that are unsuitable for this traffic -in our case the B1145 which has existing signage that it is unsuitable for long vehicles and will also will also disrupt and damage the way of life of other villages on its route including Cawston and Reepham.	As set out within the traffic impact assessment (**ES Chapter 24 Traffic and Transport** [APP-110]) with the application of mitigation methods, the residual impact of traffic upon all receptors was assessed to be not significant. No construction traffic is proposed to travel via the B1145 through Bawdeswell. There is a cumulative cap on traffic along the section of the B1145 from the B1149 to Cawston. These commitments will be managed and monitored through the measures that are detailed within the **Outline Construction Traffic Management Plan (Revision B)** [document reference 9.16].
3	All of which is entirely avoidable if the power is transmitted through an Offshore Transmission Network for which a convincing argument has been made on numerous occasions	The Applicant is supportive of the idea of an Offshore Transmission Network (OTN) however neither the regulatory nor technical framework exists at this current time to incorporate this into the Projects.
4	Bawdeswell Parish Council share the following concerns with other Parishes about the following: lack of proper consideration by the Applicant of an alternative, more appropriate, grid connection point	The Connection and Infrastructure Options Note (CION) Process is the mechanism used by National Grid to evaluate potential transmission options to identify the connection point in line with their obligation to develop and maintain an efficient, coordinated and economical system of the electricity transmission network. The grid connection point for SEP and DEP was determined by National Grid following the completion of the CION process.

I.D.	Relevant Representation	Applicant Comment
		More information regarding the grid connection point can be found in **Sections 3.6** and **3.10** of **ES Chapter 3 Site Selection and Assessment of the Alternatives** [APP-089].
5	Bawdeswell Parish Council share the following concerns with other Parishes about the following: need for the ExA to require the attendance of National Grid at the Hearings, to be interrogated on their actions by the ExA, in public, during the examination process	Noted. The decision of which bodies to invite to attend the examination hearings is at the discretion of the Examining Authority.
6	recognition, in relation to the work of the OTNR, that SEP/DEP is not an "in-flight" project	Whilst SEP and DEP applications have not yet received consent, a project timeline has been created based on the UK Government's offshore wind and carbon reduction plans. The Applicant is supportive of the idea of an Offshore Transmission Network (OTN) however neither the regulatory nor technical framework exists at this current time to incorporate this into the Projects. SEP and DEP are designated OTNR pathfinder projects, and as such The Applicant is committed to initiatives that encourage coordination in the sector. The Applicant is working with governmental and industry bodies to remove barriers and identify solutions to offshore wind coordination.
7	the onshore in-combination, cumulative impacts of SEP/DEP's landfall, substation and cable corridor construction, when considered alongside the already consented Hornsea Three, Vanguard and Boreas projects	The cumulative impacts of the SEP and DEP project in conjunction with other projects, including the Hornsea Three, Vanguard and Boreas projects, was included as part of the environmental impact assessment. Further information regarding this can be found in Section 5.8 of ES **Chapter 5 EIA Methodology** [APP-091]. Issues that SEP and DEP are coordinating and will coordinate on with other projects include: • Preparation for of cable crossings to minimise disruption to transport networks. • Construction traffic Access routes to alleviate traffic. • The Applicant will seek to work with other developers to achieve overarching benefits e.g. opportunities associated with biodiversity net gain.

I.D.	Relevant Representation	Applicant Comment
		The Applicant will continue to coordinate with other infrastructure projects in the area to ensure that cumulative impacts are mitigated as far as possible. The list of plans and projects included in the cumulative impact assessment (CIA) is specific to each EIA topic and is detailed in each technical chapter (**Chapters 6 – 29**) [APP-092 – APP-115] having been developed through ongoing consultation with stakeholders. ES Chapters contain a Project Screening Table which describes the rationale for considering plans or projects further in the CIA or not. This rationale depends on factors including whether the plans or projects have been consented, the construction period, the distance from SEP and DEP and the level of confidence in the environmental information available for the plans or projects. Having also identified which residual impacts assessed for SEP and DEP alone have the potential for a cumulative impact with the other plans and projects, the ES chapters go on to assess the potential for cumulative impacts using the standard industry approach of using residual effects as identified in the assessments of the other plans or projects. Please refer to the ES Chapters for details of each topic specific CIA.
8	that the SEP/DEP application should include – as a necessary cumulative impact – the proposed East Anglia Green project, upon the consenting of which it depends	Version 3 of Planning Inspectorate Advice Note Nine: Rochdale Envelope (PINS, 2018) and version 2 of Planning Inspectorate Advice Note Seventeen: Cumulative Effects Assessment (PINS, 2019a) provide guidance on plans and projects that should be considered in the CIA including: • Projects that are under construction; • Permitted application(s) not yet implemented; • Submitted application(s) not yet determined; • All refusals subject to appeal procedures not yet determined; • Projects on the National Infrastructure Planning programme of projects; and

I.D.	Relevant Representation	Applicant Comment
		• Projects identified in the relevant development plan (and emerging development plans – with appropriate weight being given as they move closer to adoption) recognising that much information on any relevant proposals will be limited and the resulting degree of uncertainty in the assessment that is possible. As the 'East Anglia Green' project was only launched in January 2022 and its Scoping Opinion was published on the Planning Inspectorate website 14/12/22 (after SEP and DEP submitted their DCO application) it was not included as part of the cumulative impact assessment. The project did not meet any of the above criteria at the time of assessment. As with all projects in proximity to SEP and DEP, the Applicant will communicate and coordinate where possible to mitigate potential impacts. Whilst the East Anglia Green project was not included within the cumulative impact assessment as it was launched after the assessment was complete the Applicant will communicate with the project to ensure coordination as far as possible.
9	the cumulative impact of the possible future construction of large battery storage facilities to improve the economic viability of the project, as has happened with the Hornsea Three project	As per Section 4.6 of the **ES Chapter 4 Project Description** [APP-090] battery storage is not included in the DCO application for SEP and DEP.

3.4 Cawston Parish Council [RR-019]

Table 3.4.1 Applicant's comments on Cawston Parish Council's relevant representation

I.D.	Relevant Representation	Applicant Comment
1	Cawston PC wishes to register as an Interested Party in the Equinor SEP/DEP examination. This will be the fourth such examination that we have participated in over recent years, after Hornsea 3 (H3), Norfolk Vanguard (NV) and Norfolk Boreas (NB). Councillors are volunteers, working in their spare time with limited resources, and we simply do not have the capacity to engage with another set of detailed documentation for SEP/DEP while we are still dealing with the developers of H3, NV and NB, who will be installing a comprehensive and controversial traffic	Noted.

I.D.	Relevant Representation	Applicant Comment
	management scheme in our village over the coming months. Thus on this occasion we rely on the ExA to act as champions for Norfolk residents (and particularly those of Cawston) who are impacted by this proposed scheme. We have every confidence that the ExA will conduct a thorough and impartial examination, arriving at a disinterested conclusion. However, based on three previous experiences we have no confidence whatsoever that the Secretary of State will respect the ExA conclusions. This is another factor in our decision to approach SEP/DEP with a light touch.	
2	Our concerns include (but are not limited to):- The cumulative impacts of this application in our area, taken together with H3, NB and NV and other local developments such as Docking Farm Solar.	The cumulative impacts of the SEP and DEP project in conjunction with other projects, including the Hornsea Three, Vanguard and Boreas projects, was included as part of the environmental impact assessment. Further information regarding this can be found in Section 5.8 of ES **Chapter 5 EIA Methodology** [APP-091]. Issues that SEP and DEP are coordinating on with other projects include: • Preparation of cable crossings to minimise disruption to transport networks. • Construction transport access routes to alleviate traffic. The Applicant will seek to work with other developers to achieve overarching benefits e.g. opportunities associated with biodiversity net gain. The Applicant will continue to coordinate with other infrastructure projects in the area to ensure that cumulative impacts are mitigated as far as possible. The list of plans and projects included in the cumulative impact assessment (CIA) is specific to each EIA topic and is detailed in each technical chapter (**Chapters 6 – 29**) [APP-092 – APP-115] having been developed through ongoing consultation with stakeholders. ES Chapters contain a Project Screening Table which describes the rationale for considering plans or projects further in the CIA or not. This rationale depends on factors including whether the plans or projects have been consented, the construction period, the distance from SEP and DEP and the level of

I.D.	Relevant Representation	Applicant Comment
		confidence in the environmental information available for the plans or projects. Having also identified which residual impacts assessed for SEP and DEP alone have the potential for a cumulative impact with the other plans and projects, the ES chapters go on to assess the potential for cumulative impacts using the standard industry approach of using residual effects as identified in the assessments of the other plans or projects. Please refer to the ES Chapters for details of each topic specific CIA. The Applicant will continue to coordinate with other infrastructure projects in the area, such as the Docking Farm Solar Project, to ensure that cumulative impacts are mitigated as far as possible
3	Our concerns include (but are not limited to):- There will be additional traffic and congestion on the local road network, including minor roads. Local businesses will also be impacted if deliveries become difficult and passing trade is diverted.	The Applicant has engaged with Cawston PC and is aware of the concerns in regard to traffic passing through the centre of the village. During the site selection process a construction route to the east of Cawston was adopted. This provides access to the onshore cable corridor from accesses ACC27 and ACC28 east of Cawston. These accesses are shown on Figure 24.6 (Sheet 8) of the ES Chapter 24 Figures – Traffic and Transport [APP-134]. This access strategy allows all HGV traffic to arrive and depart via the main B1149, thus avoiding minor roads and traffic needing to pass through the centre of Cawston. The Applicant has made a commitment to no HGV traffic travelling through Cawston. This commitment is contained within the **outline Construction Traffic Management Plan (OCTMP) (Revision B)** [document reference 9.16] which is secured via Requirement 15 of the **draft Development Consent Order (DCO) (Revision C)** [document reference 3.1]. **Section 24.6** of **ES Chapter 24 Traffic and Transport** [APP-110] presents an assessment of the impact of SEP and DEP traffic upon the B1149 to the east of Cawston and identifies that impacts would be no greater than minor adverse. The Applicant is also aware of concerns in relation to cumulative traffic impacts (especially with Hornsea Project Three and Norfolk Vanguard/Boreas) and has made a commitment to cap HGV traffic along

I.D.	Relevant Representation	Applicant Comment
		the B1145 to ensure that cumulative traffic flows do not exceed levels previously agreed for Norfolk Vanguard, Boreas and Hornsea Project Three. This commitment is contained within the OCTMP (Revision B) [document reference 9.16]which is secured via Requirement 15 of the **draft DCO (Revision C)** [document reference 3.1].
4	Our concerns include (but are not limited to):- have wider concerns about the impact of this scheme across the county when three similar construction projects are already consented; the proposed East Anglia Green project will also be a factor	The Applicant is communicating and coordinating with other projects in Norfolk to ensure that potential cumulative impacts are minimised. As set out above the Applicant has assessed the cumulative impact assessments of other projects in the area. Version 3 of Planning Inspectorate Advice Note Nine: Rochdale Envelope (PINS, 2018) and version 2 of Planning Inspectorate Advice Note Seventeen: Cumulative Effects Assessment (PINS, 2019a) provide guidance on plans and projects that should be considered in the CIA including: • Projects that are under construction; • Permitted application(s) not yet implemented; • Submitted application(s) not yet determined; • All refusals subject to appeal procedures not yet determined; • Projects on the National Infrastructure Planning programme of projects; and • Projects identified in the relevant development plan (and emerging development plans – with appropriate weight being given as they move closer to adoption) recognising that much information on any relevant proposals will be limited and the resulting degree of uncertainty in the assessment that is possible. As the 'East Anglia Green' project was only launched in January 2022 and its Scoping Opinion was published on the Planning Inspectorate website 14/12/22 (after the SEP and DEP application was submitted) it was not included as part of the cumulative impact assessment. The project did not meet any of the above criteria at the time of assessment. As with all

I.D.	Relevant Representation	Applicant Comment
		projects in proximity to SEP and DEP, the Applicant will communicate and coordinate where possible to mitigate potential impacts. Whilst the East Anglia Green project was not included within the cumulative impact assessment as it was launched after the assessment was complete the Applicant will communicate with the project to ensure coordination as far as possible.
5	Our concerns include (but are not limited to):- We suggest that insufficient consideration was given to alternative methods of delivery for this scheme, such as an offshore transmission network (OTN).	The Applicant is supportive of the idea of an Offshore Transmission Network (OTN) however neither the regulatory nor technical framework exists at this current time to incorporate this into the projects. SEP and DEP are designated OTNR pathfinder projects, and as such the Applicant is committed to initiatives that encourage coordination in the sector. The Applicant is working with governmental and industry bodies to identify barriers and solutions to offshore wind coordination.
6	Our concerns include (but are not limited to):- We request that the ExA gives due attention to this alternative, requiring the appearance of National Grid and its associated companies at the hearings to explain themselves.	Noted. The decision of which bodies to invite to attend the examination hearings is at the discretion of the Examining Authority.

3.5 East and West Beckham Parish Council [RR-028]

Table 3.5.1 Applicant's comments on East and West Beckham Parish Council's relevant representation

I.D.	Relevant Representation	Applicant Comment
1	Disruption to agriculture and damage to land structure.	As set out in ES **Chapter 19 Land Use, Agriculture and Recreation** [APP-105] during operation the impacts to agriculture will be limited. Where significant impacts have been assessed, they are localised and work would be undertaken to mitigate the impacts down to an acceptable level. Whilst land used for agriculture will be affected during the construction stage, the land will be reinstated post construction to a pre-construction state. Mitigation measures for soil resources relating to construction activities are outlined in **Section 19.7.1** of **ES Chapter 19 Land Use, Agriculture and Recreation** [APP-105]. These are also set out in the **Outline Code of Construction Practice (Revision B)** [document reference 9.17].
2	Environmental impact.	During the site selection process, the Applicant has sought to reduce impacts on local ecology and wildlife, for example through the avoidance of ecologically designated sites where possible.

I.D.	Relevant Representation	Applicant Comment
		Further detail on this can be found in the **ES Chapter 3**: **Site Selection and Assessment of Alternatives** [APP-089] A suite of ecological surveys have been undertaken to determine the presence or absence of species within the footprint (or within respective study areas) of the SEP and DEP Order limits. Potential impacts on local wildlife and specific species are assessed in **ES Chapter 20: Onshore Ecology and Ornithology** [APP-106]. Details of the pre, during and post construction mitigation measures for onshore ecology and ornithology receptors are presented within the Outline Ecological Management Plan (Revision B) [document reference 9.19] and secured via the **draft DCO** Requirement 13 (Revision C) [document reference 3.1].
3	Lack of proper consideration by the Applicant of an alternative, more appropriate, grid connection point.	The Connection and Infrastructure Options Note (CION) Process is the mechanism used by National Grid to evaluate potential transmission options to identify the connection point in line with their obligation to develop and maintain an efficient, coordinated and economical system of the electricity transmission network. The grid connection point SEP and DEP was determined by National Grid following the completion of the CION process. For more information regarding the grid connection point see **Sections 3.6** & **3.10** of **ES Chapter 3: Site Selection and Assessment of the Alternatives** [APP-089].
4	Need for the ExA to require the attendance of National Grid at the Hearings, to be interrogated on their actions by the ExA, in public, during the examination process.	Noted. The decision of which bodies to invite to attend the examination hearings is at the discretion of the Examining Authority.
5	Recognition, in relation to the work of the OTNR, that SEP/DEP is not an “in-flight” project.	Whilst SEP and DEP have not yet received consent a project timeline has been created based on the UK Government’s offshore wind and carbon reduction plans. The Applicant is supportive of the idea of an Offshore Transmission Network (OTN) however neither the regulatory nor technical framework exists at this current time to incorporate this into the Projects. SEP and DEP are designated OTNR pathfinder projects, and as such the Applicant is committed to initiatives to encourage coordination in the sector. The Applicant is working with governmental and industry bodies to identify barriers and solutions to offshore wind coordination.
6	The onshore in-combination, cumulative impacts of SEP/DEP’s landfall, substation and cable corridor construction, when considered alongside the already	The cumulative impacts of the SEP and DEP project in conjunction with other projects, including the Hornsea Three, Vanguard and Boreas projects, was included as part of the environmental impact assessment. Further information regarding this can be found in Section 5.8 of ES

I.D.	Relevant Representation	Applicant Comment
	consented Hornsea Three, Vanguard and Boreas projects.	**Chapter 5 EIA Methodology** (APP-091). Issues that SEP and DEP are coordinating on with these other projects include: • Preparation of cable crossings to minimise disruption to transport networks. • Construction traffic Access routes to alleviate traffic. The Applicant will seek to work with other developers to achieve overarching benefits e.g. opportunities associated with biodiversity net gain. The Applicant will continue to coordinate with other infrastructure projects in the area to ensure that cumulative impacts are mitigated as far as possible. The list of plans and projects included in the cumulative impact assessment (CIA) is specific to each EIA topic and is detailed in each technical chapter (**Chapters 6 – 29**) [APP-092 – APP-115] having been developed through ongoing consultation with stakeholders. ES Chapters contain a Project Screening Table which describes the rationale for considering plans or projects further in the CIA or not. This rationale depends on factors including whether the plans or projects have been consented, the construction period, the distance from SEP and DEP and the level of confidence in the environmental information available for the plans or projects. Having also identified which residual impacts assessed for SEP and DEP alone have the potential for a cumulative impact with the other plans and projects, the ES chapters go on to assess the potential for cumulative impacts using the standard industry approach of using residual effects as identified in the assessments of the other plans or projects. Please refer to the ES Chapters for details of each topic specific CIA.
7	That the SEP/DEP application should include – as a necessary cumulative impact – the proposed East Anglia Green project, upon the consenting of which it depends.	Version 3 of Planning Inspectorate Advice Note Nine: Rochdale Envelope (PINS, 2018) and version 2 of Planning Inspectorate Advice Note Seventeen: Cumulative Effects Assessment (PINS, 2019a) provide guidance on plans and projects that should be considered in the CIA including: • Projects that are under construction; • Permitted application(s) not yet implemented; • Submitted application(s) not yet determined; • All refusals subject to appeal procedures not yet determined; • Projects on the National Infrastructure Planning programme of projects; and

I.D.	Relevant Representation	Applicant Comment
		• Projects identified in the relevant development plan (and emerging development plans – with appropriate weight being given as they move closer to adoption) recognising that much information on any relevant proposals will be limited and the resulting degree of uncertainty in the assessment that is possible. As the 'East Anglia Green' project was only launched in January 2022 and its Scoping Opinion was published on the Planning Inspectorate website 14/12/22 (after the Applicant submitted the SEP and DEP DCO application) it was not included as part of the cumulative impact assessment. The project did not meet any of the above criteria at the time of assessment. As with all projects in proximity to SEP and DEP, the Applicant will communicate and coordinate where possible to mitigate potential impacts. Whilst the East Anglia Green project was not included within the cumulative impact assessment, the Applicant will communicate with the project to ensure coordination as far as possible.
8	The cumulative impact of the probable future construction of large battery storage facilities to improve the economic viability of the project, as has happened with the Hornsea Three project.	As per **Section 4.6** of the **ES Chapter 4: Project Description** [APP-090] battery storage is not included in the DCO application for this Project.

3.6 Garvestone, Reymerston and Thuxton Parish Council [RR-035]

Table 3.6.1 Applicant's comments on Garvestone, Reymerston and Thuxton Parish Council's relevant representation

I.D.	Relevant Representation	Applicant Comment
1	I am writing on behalf of Garvestone, Reymerston and Thuxton Parish Council who would like to register to be an interested party. The cable routes have not yet been detailed and therefore may or may not have a direct effect on their village.	Noted. The proposed onshore cable routes have been defined and are not routed through Garvestone, Reymerston and Thuxton Parish Council. The **Location Plan** (Onshore) [APP-006] contains more information regarding the location of the SEP and DEP onshore cable route.

3.7 Hempstead Parish Council [RR-039]

Table 3.7.1 Applicant's comments on Hempstead Parish Council's relevant representation

I.D.	Relevant Representation	Applicant Comment
1	Disruption to agriculture and damage to land structure.	As set out in **ES Chapter 19 Land Use, Agriculture and Recreation** [APP-105] during operation the impacts to agriculture will be limited. Where significant impacts have been assessed, they are localised and work would be undertaken to mitigate the impacts down to an acceptable level. Whilst land used for agriculture will be affected during the construction stage, the land will be reinstated post construction to a pre-construction state. Mitigation measures for soil resources relating to construction activities are outlined in **Section 19.7.1** of **ES Chapter 19 Land Use, Agriculture and Recreation** [APP-105]. These are also set out in the **Outline Code of Construction Practice (Revision B)** [document reference 9.17].
2	Environmental impact.	During the site selection process, the Applicant has sought to reduce impacts on local ecology and wildlife, for example through the avoidance of ecologically designated sites where possible. Further detail on this can be found in the **ES Chapter 3: Site Selection and Assessment of Alternatives** [APP-089] A suite of ecological surveys have been undertaken to determine the presence or absence of species within the footprint (or within respective study areas) of the SEP and DEP Order limits. Potential impacts on local wildlife and specific species are assessed in **ES Chapter 20: Onshore Ecology and Ornithology** [APP-106]. Details of the pre, during and post construction mitigation measures for onshore ecology and ornithology receptors are presented within the Outline Ecological Management Plan [APP-304] and secured via the **draft DCO** Requirement 13 (Revision C) [document reference 3.1].
3	Lack of proper consideration by the Applicant of an alternative, more appropriate, grid connection point.	The Connection and Infrastructure Options Note (CION) Process is the mechanism used by National Grid to evaluate potential transmission options to identify the connection point in line with their obligation to develop and maintain an efficient, coordinated and economical system of the electricity transmission network. The grid connection point SEP and DEP was determined by National Grid following the completion of the CION process. For more information regarding the grid connection point see

I.D.	Relevant Representation	Applicant Comment
		Sections 3.6 & **3.10** of **ES Chapter 3: Site Selection and Assessment of the Alternatives** [APP-089].
4	Need for the ExA to require the attendance of National Grid at the Hearings, to be interrogated on their actions by the ExA, in public, during the examination process.	Noted. The decision of which bodies to invite to attend the examination hearings is at the discretion of the Examining Authority.
5	Recognition, in relation to the work of the OTNR, that SEP/DEP is not an "in-flight" project.	Whilst SEP and DEP have not yet received consent, a project timeline has been created based on the UK Government's offshore wind and carbon reduction plans. The Applicant is supportive of the idea of an Offshore Transmission Network (OTN) however neither the regulatory nor technical framework exists at this current time to incorporate this into the Projects. SEP and DEP are designated OTNR pathfinder projects, and as such the Applicant is committed to initiatives to encourage coordination in the sector. The Applicant is working with governmental and industry bodies to identify barriers and solutions to offshore wind coordination.
6	The onshore in-combination, cumulative impacts of SEP/DEP's landfall, substation and cable corridor construction, when considered alongside the already consented Hornsea Three, Vanguard and Boreas projects.	The cumulative impacts of the SEP and DEP project in conjunction with other projects, including the Hornsea Three, Vanguard and Boreas projects, was included as part of the environmental impact assessment. Further information regarding this can be found in Section 5.8 of ES **Chapter 5 EIA Methodology** [APP-091]. Issues that SEP and DEP are coordinating on with these other projects include: • Preparation of cable crossings to minimise disruption to transport networks. • Construction traffic access routes to alleviate traffic. • The Applicant will seek to work with other developers to achieve overarching benefits e.g. opportunities associated with biodiversity net gain. The Applicant will continue to coordinate with other infrastructure projects in the area to ensure that cumulative impacts are mitigated as far as possible. The list of plans and projects included in the cumulative impact assessment (CIA) is specific to each EIA topic and is detailed in each technical chapter

I.D.	Relevant Representation	Applicant Comment
		(**Chapters 6 – 29**) [APP-092 – APP-115] having been developed through ongoing consultation with stakeholders. ES Chapters contain a Project Screening Table which describes the rationale for considering plans or projects further in the CIA or not. This rationale depends on factors including whether the plans or projects have been consented, the construction period, the distance from SEP and DEP and the level of confidence in the environmental information available for the plans or projects. Having also identified which residual impacts assessed for SEP and DEP alone have the potential for a cumulative impact with the other plans and projects, the ES chapters go on to assess the potential for cumulative impacts using the standard industry approach of using residual effects as identified in the assessments of the other plans or projects. Please refer to the ES Chapters for details of each topic specific CIA.
7	That the SEP/DEP application should include – as a necessary cumulative impact – the proposed East Anglia Green project, upon the consenting of which it depends.	Version 3 of Planning Inspectorate Advice Note Nine: Rochdale Envelope (PINS, 2018) and version 2 of Planning Inspectorate Advice Note Seventeen: Cumulative Effects Assessment (PINS, 2019a) provide guidance on plans and projects that should be considered in the CIA including: • Projects that are under construction; • Permitted application(s) not yet implemented; • Submitted application(s) not yet determined; • All refusals subject to appeal procedures not yet determined; • Projects on the National Infrastructure Planning programme of projects; and • Projects identified in the relevant development plan (and emerging development plans – with appropriate weight being given as they move closer to adoption) recognising that much information on any relevant proposals will be limited and the resulting degree of uncertainty in the assessment that is possible.

I.D.	Relevant Representation	Applicant Comment
		As the 'East Anglia Green' project was only launched in January 2022 and its Scoping Opinion was published on the Planning Inspectorate website 14/12/22 (after the Applicant submitted the SEP and DEP DCO application) it was not included as part of the cumulative impact assessment. The project did not meet any of the above criteria at the time of assessment. As with all projects in proximity to SEP and DEP, the Applicant will communicate and coordinate where possible to mitigate potential impacts. Whilst the East Anglia Green project was not included within the cumulative impact assessment, the Applicant will communicate with the project to ensure coordination as far as possible.
8	The cumulative impact of the probable future construction of large battery storage facilities to improve the economic viability of the project, as has happened with the Hornsea Three project.	As per **Section 4.6** of ES **Chapter 4: Project Description** [APP-090] battery storage is not included in the DCO application for this Project.

3.8 Hevingham Parish Council [RR-040]

Table 3.8.1 Applicant's comments on Hevingham Parish Council's relevant representation

I.D.	Relevant Representation	Applicant Comment
1	Hevingham Parish Councils principal submissions are: - consideration needs to be given to HGV traffic impacts (noise, vibration, emissions), road closures and diversions.	**Chapter 24: Traffic and Transport** [APP-110] of the ES sets out an assessment of the traffic and transport impacts of SEP and DEP construction traffic. This assessment includes consideration of the impact of HGVs, road closures and any associated diversions and assesses that there would be no significant impacts. **Chapter 24: Traffic and Transport** [APP-110] includes a comprehensive review of the existing environment, within a defined traffic and transport study area (which includes Hevingham Parish) and the associated impact assessment. This assessment includes consideration of the impact of HGVs, road closures and any associated diversions. The principal mitigation for traffic and transport impacts is contained within the **outline Construction Traffic Management Plan (OCTMP) (Revision B)** [document reference 9.16] which is secured via Requirement 15 of the **draft Development Consent Order (DCO) ((Revision C)** [document

I.D.	Relevant Representation	Applicant Comment
		reference 3.1]. The residual impacts are assessed as no greater than minor adverse. The potential impacts of HGV traffic on noise and vibration are assessed within ES Chapter 23: Noise and Vibration [APP-109]. On link 137 the construction of SEP or DEP in Isolation would result in a moderate adverse impact, as HGV flows are anticipated to increase road traffic noise. The principle mitigation for noise impacts is contained within the **Outline Code of Construction Plan (OCoCP) (Revision B)** [document reference 9.17], which is secured via Requirement 19 of the draft DCO (Revision C) [document reference 3.1]. The potential impacts of HGV related emissions are assessed within ES **Chapter 28: Health** [APP-114]. The impact of construction traffic emissions on human health was found to be non- significant. Additionally, the Applicant has committed that SEP and/or DEP HGV traffic will not use certain areas and/or villages, at the request of highway stakeholders and the local community. Details traffic management measures are set out within the OCTMP and secured by Requirement 15 of the **draft DCO (Revision C)** [document reference 3.1].
2	Consideration needs to be given to the environmental impacts (trees, hedgerows) etc.	Potential impacts on local wildlife and specific species are assessed in ES **Chapter 20: Onshore Ecology and Ornithology** [APP-106]. Where appropriate, these surveys and impact assessments have determined the requirement for mitigation and management. The site selection process has considered and sought to avoid sensitive areas, this process is detailed in **ES Chapter 3 Site Selection and Assessment of Alternatives** [APP-089]. Where this has not been possible, the projects have committed to use technical solutions to minimise the potential impacts. This includes but is not limited to the adoption of trenchless crossing methodologies at Weybourne Woods. Details relating to the pre, during and post construction mitigation measures for onshore ecology and ornithology receptors is presented within the **Outline Ecological Management Plan (Revision B)** [document

I.D.	Relevant Representation	Applicant Comment
		reference 9.19], which is secured through Requirement 13 of the **draft DCO (Revision C)** [document reference 3.1].
3	The lack of proper consideration by the Applicant of an alternative, more appropriate, grid connection point.	The Connection and Infrastructure Options Note (CION) Process is the mechanism used by National Grid to evaluate potential transmission options to identify the connection point in line with their obligation to develop and maintain an efficient, coordinated and economical system of the electricity transmission network. The grid connection point SEP and DEP was determined by National Grid following the completion of the CION process. For more information regarding the grid connection point see **Sections 3.6** and **3.10** of **ES Chapter 3: Site Selection and Assessment of the Alternatives** [APP-089].
4	There is a need for the ExA to require the attendance of National Grid at the Hearings, to be interrogated on their actions by the ExA, in public, during the examination process.	Noted. The decision of which bodies to invite to attend the examination hearings is at the discretion of the Examining Authority.
5	The onshore in-combination, cumulative impacts of SEP/DEP's landfall, substation and cable corridor construction, when considered alongside the already consented Hornsea Three, Vanguard and Boreas projects.	The cumulative impacts of the SEP and DEP project in conjunction with other projects, including the Hornsea Three, Vanguard and Boreas projects, was included as part of the environmental impact assessment. Further information regarding this can be found in **Section 5.8** of **ES Chapter 5 EIA Methodology** (APP-091). Issues that SEP and DEP are coordinating on with these other projects include: • Site selection of construction compounds. • Preparation of cable crossings to minimise disruption to transport networks. • Construction traffic access routes to alleviate traffic. The Applicant will seek to work with other developers to achieve overarching benefits e.g. opportunities associated with biodiversity net gain. The Applicant will continue to coordinate with other infrastructure projects in the area to ensure that cumulative impacts are mitigated as far as possible.

I.D.	Relevant Representation	Applicant Comment
		The list of plans and projects included in the cumulative impact assessment (CIA) is specific to each EIA topic and is detailed in each technical chapter (**Chapters 6 – 29**) [APP-092 – APP-115] having been developed through ongoing consultation with stakeholders. ES Chapters contain a Project Screening Table which describes the rationale for considering plans or projects further in the CIA or not. This rationale depends on factors including whether the plans or projects have been consented, the construction period, the distance from SEP and DEP and the level of confidence in the environmental information available for the plans or projects. Having also identified which residual impacts assessed for SEP and DEP alone have the potential for a cumulative impact with the other plans and projects, the ES chapters go on to assess the potential for cumulative impacts using the standard industry approach of using residual effects as identified in the assessments of the other plans or projects. Please refer to the ES Chapters for details of each topic specific CIA.
6	That the SEP/DEP application should include – as a necessary cumulative impact – the proposed East Anglia Green project, upon the consenting of which it depends.	Version 3 of Planning Inspectorate Advice Note Nine: Rochdale Envelope (PINS, 2018) and version 2 of Planning Inspectorate Advice Note Seventeen: Cumulative Effects Assessment (PINS, 2019a) provide guidance on plans and projects that should be considered in the CIA including: • Projects that are under construction; • Permitted application(s) not yet implemented; • Submitted application(s) not yet determined; • All refusals subject to appeal procedures not yet determined; • Projects on the National Infrastructure Planning programme of projects; and

I.D.	Relevant Representation	Applicant Comment
		• Projects identified in the relevant development plan (and emerging development plans – with appropriate weight being given as they move closer to adoption) recognising that much information on any relevant proposals will be limited and the resulting degree of uncertainty in the assessment that is possible. As the 'East Anglia Green' project's Scoping Opinion was published on the Planning Inspectorate website 14/12/22 (after the Applicant submitted the SEP and DEP DCO application) it was not included as part of the cumulative impact assessment. The project did not meet any of the above criteria at the time of assessment. As with all projects in proximity to SEP and DEP, the Applicant will communicate and coordinate where possible to mitigate potential impacts. Whilst the East Anglia Green project was not included within the cumulative impact assessment, the Applicant will engage with the project to ensure coordination as far as possible.
7	The cumulative impact of the possible future construction of large battery storage facilities to improve the economic viability of the project, as has happened with the Hornsea Three project.	As per **Section 4.6** of **ES Chapter 4: Project Description** [APP-090] battery storage is not included in the DCO application for this project.

3.9 Oulton Parish Council [RR-073]

Table 3.9.1 Applicant's comments on Oulton Parish Council's relevant representation

I.D.	Relevant Representation	Applicant Comment
1	Oulton parish is currently impacted by Orsted's now consented Hornsea Project Three Main Construction Compound, which will be in situ for many years – over the whole of the onshore cable trench construction period. In addition, Vattenfall has sited its Central Works Area (Cable Logistics Area) and another large construction compound for the Norfolk Vanguard and Boreas projects in and adjacent to the parish, along with a section of cable route which runs alongside the parish to the east. The construction traffic for all these projects will share, as their access route, the southern end of Oulton Street for many years, representing severe cumulative adverse	Noted. The Applicant has committed to coordinating with other developers in the area to mitigate as far as possible any potential cumulative impacts. This includes Hornsea Project Three, Vattenfall Vanguard and Boreas. The applicant's methodology of assessing the cumulative impacts of different projects can be found in **Section 5.8** of **ES Chapter 5: EIA Methodology** [APP-091].

I.D.	Relevant Representation	Applicant Comment
	impacts for Oulton. The Sheringham & Dudgeon Extension Project's proposed cable trench is routed through the northern, western and southern sections of the parish of Oulton, before crossing Vattenfall's Vanguard/Boreas cable route. A crossover of cable routes on this scale represents a significant additional impact of this proposal. The combined negative impacts of all these proposals on Oulton parish – north, south, east and west – is intolerable. In addition, there is the added cumulative impact of a recently consented large solar farm in this parish, which is about to be constructed on the same land as the proposed southern part of the SEP/DEP cable route. It is now known that Vattenfall's Norfolk Vanguard & Boreas will be constructed in three phases, giving rise to the potential for the simultaneous cumulative impacts of the construction of Vanguard/Boreas and SEP/DEP.	To reduce potential construction related impacts on Oulton the Applicant has committed to not routing HGV traffic through Oulton village. This commitment is contained within the **Outline Construction Traffic Management Plan (OCTMP) (Revision B)** [document reference 9.16]which is secured via Requirement 15 of the **draft Development Consent Order (DCO) (Revision C)** [document reference 3.1]. The Applicant is aware of concerns in relation to cumulative traffic impacts (particularly the interactions between Hornsea Project Three and Norfolk Vanguard/Boreas) along The Street and B1149. The Applicant has therefore also made a commitment to cap HGV traffic along the B1149 and The Street to ensure that cumulative traffic flows do not exceed levels previously agreed for Norfolk Vanguard, Boreas, and Hornsea Project Three. This commitment is contained within the **OCTMP (Revision B)** [document reference 9.16] which is secured via Requirement 15 of the **draft Development Consent Order (DCO) (Revision C)** [document reference 3.1]. Noting these commitments, **Section 24.7** of **ES Chapter 24 Traffic and Transport** [APP-110] identifies that would be no greater than minor adverse residual cumulative traffic and transport impacts.
2	Oulton Parish Council would therefore like to register its grave concerns about: a) HGV traffic impacts (noise, vibration, emissions) over many years	The Applicant has committed to not routing HGV traffic through Oulton village. This commitment is contained within the **Outline Construction Traffic Management Plan (OCTMP) (Revision B)** [document reference 9.16] which is secured via Requirement 15 of the draft **Development Consent Order (DCO) (Revision C)** [document reference 3.1]. The potential impacts of HGV traffic on noise and vibration are assessed within **ES Chapter 23: Noise and Vibration** [APP-109]. Construction traffic related noise is assessed within the **Road Traffic Noise Assessment** [APP-265]. The findings of the assessment in regard to the road links in the vicinity of Oulton are set out below. These findings are the predicted magnitude of effect during peak construction is a concurrent construction scenario. • Link 54 - B1149 from Spink's Lane to B1145: low

I.D.	Relevant Representation	Applicant Comment
		• Link 55 – Spink's Lane: negligible • Link 56 - B1149 from B1354 to Spink's Lane: low The potential impacts of HGV related emissions are assessed within **ES Chapter 28 Health** (document reference 6.1.28). The impact of construction traffic emissions on human health was found to be non-significant.
3	b) disruption caused by road closures and diversions,	Spink's Lane, Spa Lane, and the B1354 will all be crossed using a trenchless crossing technique preventing road closures and minimising disruption. Further information can be found in **ES Appendix 4.1: Crossing Schedule** [AS-022]. Where other roads are closed during this time, suitable diversions will be created which will be agreed with Norfolk County Council. Further information can be found in the **OCTMP (Revision B)** [document reference 9.16].
4	c) environmental impacts (loss of trees & hedgerows, permanent damage to field drainage)	During the design development process, the Applicant has sought to reduce impacts on local ecology and wildlife, for example through the avoidance of ecologically designated sites where possible. Further detail on this can be found in the **ES Chapter 3: Site Selection and Assessment of Alternatives** [APP-089]. Any trees or hedgerows that are removed due to construction will be reinstated. The Applicant is committed to the replacement planting of hedgerow and hedgerow trees and has committed to 10-year monitoring and maintenance period as per the **Outline Landscape Management Plan (Revision B)** [document reference 9.18] and **Outline Ecological Management Plan (Revision B)** [document reference 9.19]. There is considered to be no impact upon field drainage during the operational period of SEP and DEP, as all drainage would be reinstated and drainage requirements at the onshore substation would be compliant with any flood risk assessment. The Applicant refers to **ES Chapter 18 Water Resource and Flood Risk** [APP-104] and **ES Chapter 19 Land Use, Agriculture and Recreation** [APP-105] for further information.

I.D.	Relevant Representation	Applicant Comment
5	d) systems, destruction of the microbiology of excavated top-soils stored in heaps	Mitigation measures for soil resources relating to construction activities are outlined in Section 19.7.1 of **ES Chapter 19: Land Use, Agriculture and Recreation** (APP-105). These are also set out in the **Outline Code of Construction Practice (Revision B)** [document reference 9.17]. Measures set out in the MAFF (2000) 'Good Practice Guide for Handling Soils' and Defra (2009) 'Construction code of practice for the Sustainable Use of Soils on Construction Sites' would be adopted. Additionally, guidance from the IES (2020) 'Sustainable, healthy, and resilient: Practice-based approaches to land and soil management' would be used. a Soil Management Plan outlining the mitigation measures and best practise techniques will be produced, which contractors would be obliged to comply with.
6	e) and cumulative impacts with Hornsea 3, Vanguard/Boreas and the solar farm project.	The cumulative impacts of the SEP and DEP project in conjunction with other projects, including the Hornsea Three, Vanguard and Boreas projects, was included as part of the environmental impact assessment. Further information regarding this can be found in Section 5.8 of ES **Chapter 5 EIA Methodology** [APP-091]. Issues that SEP and DEP are coordinating on with these other projects include: • Preparation of cable crossings to minimise disruption to transport networks. • Construction traffic access routes to alleviate traffic. The Applicant will seek to work with other developers to achieve overarching benefits e.g. opportunities associated with biodiversity net gain. The Applicant will continue to coordinate with other infrastructure projects in the area to ensure that cumulative impacts are mitigated as far as possible. The list of plans and projects included in the cumulative impact assessment (CIA) is specific to each EIA topic and is detailed in each technical chapter (**Chapters 6 – 29**) [APP-092 – APP-115] having been developed through ongoing consultation with stakeholders. ES Chapters contain a Project Screening Table which describes the rationale for considering plans or

I.D.	Relevant Representation	Applicant Comment
		projects further in the CIA or not. This rationale depends on factors including whether the plans or projects have been consented, the construction period, the distance from SEP and DEP and the level of confidence in the environmental information available for the plans or projects. Having also identified which residual impacts assessed for SEP and DEP alone have the potential for a cumulative impact with the other plans and projects, the ES chapters also assess the potential for cumulative impacts using the standard industry approach of using residual effects as identified in the assessments of the other plans or projects. Please refer to the ES Chapters for details of each topic specific CIA. The Applicant will continue to coordinate with other infrastructure projects in the area, such as the Docking Farm Solar Project, to ensure that cumulative impacts are mitigated as far as possible and practicable.
7	The Council also needs to register its concerns about the following over-arching issues about the SEP/DEP application: 1.lack of proper consideration by the Applicant of an alternative, more appropriate, grid connection point (e.g. at Walpole)	The Connection and Infrastructure Options Note (CION) Process is the mechanism used by National Grid to evaluate potential transmission options to identify the connection point in line with their obligation to develop and maintain an efficient, coordinated, and economical system of the electricity transmission network. The grid connection point SEP and DEP was determined by National Grid following the completion of the CION process. For more information regarding the grid connection point see **Sections 3.6** and **3.10** of **ES Chapter 3: Site Selection and Assessment of the Alternatives** [APP-109].
8	2.need for the ExA to require the attendance of National Grid at the Hearings, to be questioned on their actions by the ExA, in public, during the examination process	Noted. The decision of which bodies to invite to attend the examination hearings is at the discretion of the Examining Authority.
9	3.recognition, in relation to the work of the OTNR, that SEP/DEP is not an “in-flight” project	Whilst SEP and DEP have not yet received consent, a project timeline has been created based on the UK Government’s offshore wind and carbon reduction plans. The Applicant is supportive of the idea of an Offshore Transmission Network (OTN) however neither the regulatory nor technical framework exists at this current time to incorporate this into the projects.

I.D.	Relevant Representation	Applicant Comment
		SEP and DEP are designated OTNR pathfinder projects, and as such the Applicant is committed to initiatives to encourage coordination in the sector. The Applicant is working with governmental and industry bodies to identify barriers and solutions to offshore wind coordination.
10	4.the onshore in-combination, cumulative impacts of SEP/DEP's landfall, substation and cable corridor construction, when considered alongside the already consented Hornsea Three, Vanguard and Boreas projects;	Please refer to the answer to point 6 regarding the potential cumulative impacts of SEP and DEP in conjunction with other projects in the area.
11	5.that the SEP/DEP application must include – as a necessary cumulative impact – the proposed East Anglia Green pylon upgrade, upon the consenting of which it depends for the export of the electricity it will produce	Version 3 of Planning Inspectorate Advice Note Nine: Rochdale Envelope (PINS, 2018) and version 2 of Planning Inspectorate Advice Note Seventeen: Cumulative Effects Assessment (PINS, 2019a) provide guidance on plans and projects that should be considered in the CIA including: • Projects that are under construction; • Permitted application(s) not yet implemented; • Submitted application(s) not yet determined; • All refusals subject to appeal procedures not yet determined; • Projects on the National Infrastructure Planning programme of projects; and • Projects identified in the relevant development plan (and emerging development plans – with appropriate weight being given as they move closer to adoption) recognising that much information on any relevant proposals will be limited and the resulting degree of uncertainty in the assessment that is possible. As the 'East Anglia Green' project was only launched in January 2022 and its Scoping Opinion was published on the Planning Inspectorate website 14/12/22 (after the Applicant submitted the SEP and DEP DCO application) it was not included as part of the cumulative impact assessment. The project did not meet any of the above criteria at the time of assessment. As with all projects in proximity to SEP and DEP, the Applicant will communicate and coordinate where possible to mitigate potential impacts.

I.D.	Relevant Representation	Applicant Comment
		Whilst the East Anglia Green project was not included within the cumulative impact assessment, the Applicant will communicate with the project to ensure coordination as far as possible.
12	6.the cumulative impact of the possible future construction of large battery storage facilities to improve the economic viability of the proposal, as has happened with the Hornsea Three project	As per **Section 4.6** of the **ES Chapter 4 Project Description** [APP-090] battery storage is not included in the DCO application for this project.

3.10 Reepham Town Council [RR-081]

Table 3.10.1 Applicant's comments on Reepham Town Council's relevant representation

I.D.	Relevant Representation	Applicant Comment
1	*The Town Council would like to ensure that proper procedure is followed. It has concerns regarding the increase of traffic in the locality, and would also like to ensure that proper process is followed.*	**Figure 24.1** of **Chapter 24** of the Environmental Statement (ES) (APP-134) details a comprehensive review of the existing environment, the traffic and transport study area (TTSA) and the associated impact assessment. The TTSA has been established through stakeholder engagement, determining the most probable routes for traffic, for both the transportation of material and employees. It can be identified from **Figure 24.1** (APP-134) that routes through Reepham do not form part of the delivery network. A strategy for managing the routing of traffic to the assessed delivery routes is contained within the **Outline Construction Traffic Management Plan (OCTMP) (Revision B)** [document reference 9.16] which is secured via Requirement 15 of the **draft Development Consent Order (DCO) (Revision C)** [document reference 3.1]. **Figure 1** of the **OCTMP (Revision B**) [document refence 9.16] details those routes to be used by HGVs and it can be identified from this figure that routes through Reepham are excluded, i.e. no HGVs would be permitted to route through Reepham. **Section 2.3** of the **OCTMP** sets out routing of HGVs will be controlled. As set out within the **Outline Code of Construction Practice (Revision B)** [document refence 9.17] a Stakeholder Communications Plan will be developed which will ensure that residents and businesses affected by the construction works are kept updated during the construction phase. The

I.D.	Relevant Representation	Applicant Comment
		Outline Code of Construction Practice is secured by Requirement 19 of the **draft DCO (Revision C)** [document reference 3.1].

3.11 Sandra Betts on Behalf of Norfolk Parishes Movement for an Offshore Transmission Network [RR-086]

Table 3.11.1 Applicant's comments on Sandra Betts on Behalf of Norfolk Parishes Movement for an Offshore Transmission Network relevant representation

I.D.	Relevant Representation	Applicant Comment
1	The Norfolk Parishes Movement (NPM) for an OTN wishes to be registered as an Interested Party in the PINS Examination of Equinor's SEP/DEP application. The Norfolk Parishes Movement is a single-issue grouping of 95 Parish and Town Councils throughout Norfolk, which has come together over the past 4 years to promote the rapid evolution of an offshore transmission network for offshore wind. Equinor's proposal represents the third 60 km cable corridor, with landfall and inland substation, proposing to cut through the Norfolk countryside. Many parishes in our group are situated directly on or adjacent to the cable corridor for SEP/DEP and are therefore directly impacted by its construction. Many more are situated on the path of the cable corridors for the Hornsea Three and Norfolk Vanguard/Boreas projects. Some communities are directly affected by TWO of these cable routes; every Parish is adversely affected by the cumulative impacts of ALL THREE, including the onshore substations. The NPM wishes to raise concerns about:	Noted. Please see the Applicant's more detailed response below.
2	1. lack of proper consideration by the Applicant of an alternative, more appropriate, grid connection point.	The Connection and Infrastructure Options Note (CION) Process is the mechanism used by National Grid to evaluate potential transmission options to identify the connection point in line with their obligation to develop and maintain an efficient, coordinated and economical system of the electricity transmission network. The grid connection point for SEP and DEP was determined by National Grid following the completion of the CION process. The CION process stipulates that it is the decision of National Grid rather than the applicant to decide where the grid connection point will be.

I.D.	Relevant Representation	Applicant Comment
		For more information regarding the grid connection point see **Sections 3.6** & **3.10** of **ES Chapter 3 Site Selection and Assessment of the Alternatives** [APP-089].
3	2. need for the ExA to require the attendance of National Grid at the Hearings, to be interrogated on their actions by the ExA, IN PUBLIC, during the examination process.	Noted. The decision of which bodies to invite to attend the examination hearings is at the discretion of the examination authority.
4	3. recognition, in relation to the work of the OTNR, that SEP/DEP is NOT an "in-flight" project.	Whilst SEP and DEP have not yet received consent, a project timeline has been created based on the UK Government's offshore wind and carbon reduction plans. The Applicant is supportive of the idea of an Offshore Transmission Network (OTN) however neither the regulatory nor technical framework exists at this current time to incorporate this into the Projects. SEP and DEP are designated OTNR pathfinder projects, and as such the Applicant is committed to initiatives to encourage coordination in the sector. The Applicant is working with governmental and industry bodies, including OFGEM and BEIS, to identify barriers and solutions to offshore wind coordination.
5	4. the onshore in-combination, cumulative impacts of SEP/DEP's landfall, substation and cable corridor construction, when considered alongside the already consented Hornsea Three, Vanguard and Boreas projects.	The scope of the cumulative impact assessment (CIA) (in terms of relevant issues and projects) has been established with stakeholders (including other developers) during the EIA process. The cumulative impacts of SEP and DEP in conjunction with other projects, including the Hornsea Three, Vanguard and Boreas, and A47 improvement projects, is included in the Environmental Statement (ES). Further information regarding this can be found in **Section 5.8** of **ES Chapter 5 EIA Methodology** [APP-091]. The list of plans and projects included in the CIA is specific to each EIA topic and is detailed in each technical chapter (**Chapters 6 – 29**) [APP-092 – APP-115], having been developed through ongoing consultation with stakeholders. ES Chapters contain a Project Screening Table which describes the rationale for considering plans or projects further in the CIA or not. This rationale depends on factors including whether the plans or projects have been consented, the construction period, the distance from SEP and DEP and the level of confidence in the environmental information available for the plans or projects.

I.D.	Relevant Representation	Applicant Comment
		Having also identified which residual impacts assessed for SEP and DEP alone have the potential for a cumulative impact with the other plans and projects, the ES chapters go on to assess the potential for cumulative impacts using the standard industry approach of using residual effects as identified in the assessments of the other plans or projects. Please refer to the ES Chapters for details of each topic specific CIA.
6	5. that the SEP/DEP application should include – as a necessary cumulative impact – the proposed East Anglia Green project, upon the consenting of which it depends.	East Anglia Green is not linked to SEP and DEP nor are the two projects dependent on the others consent. East Anglia Green is not required in order for National Grid to provide the necessary grid capacity to connect SEP and DEP. Version 3 of Planning Inspectorate Advice Note Nine: Rochdale Envelope (PINS, 2018) and version 2 of Planning Inspectorate Advice Note Seventeen: Cumulative Effects Assessment (PINS, 2019a) provide guidance on plans and projects that should be considered in the CIA including: • Projects that are under construction; • Permitted application(s) not yet implemented; • Submitted application(s) not yet determined; • All refusals subject to appeal procedures not yet determined; • Projects on the National Infrastructure Planning programme of projects; and • Projects identified in the relevant development plan (and emerging development plans – with appropriate weight being given as they move closer to adoption) recognising that much information on any relevant proposals will be limited and the resulting degree of uncertainty in the assessment that is possible. As the 'East Anglia Green' project was only launched in January 2022 and its Scoping Opinion was published on the Planning Inspectorate website 14/12/22 (after the application for SEP and DEP was submitted), the East

I.D.	Relevant Representation	Applicant Comment
		Anglia Green project was not included as part of the cumulative impact assessment. The project did not meet any of the above criteria at the time of assessment. As with all projects in proximity to SEP and DEP, the Applicant will communicate and coordinate where possible to mitigate potential impacts. In addition, the Applicant will communicate with the project to ensure coordination where possible and practicable.
7	6. the cumulative impact of the possible future construction of large battery storage facilities to improve the economic viability of the project, as has happened with the Hornsea Three project.	As per **Section 4.6** of **ES Chapter 4 Project Description** [APP-090] battery storage is not included in the DCO application for this project.

3.12 Tacolneston Parish Council [RR-113]

Table 3.12.1 Applicant's comments on Tacolneston Parish Council's relevant representation

I.D.	Relevant Representation	Applicant Comment
1	I am writing on behalf of Tacolneston Parish Council to register our objections to this proposal. The construction of the pylon network could lead to significant disruption to our rural village road network. The location of the village school and park on the main trunk road mean that any increased traffic flow, particularly by heavy vehicles could impact ,on road safety. The pylons will also lead to a significant long term detrimental impact upon the landscape and rural character of Tacolneston Parish and so damage the local rural economy. Tacolneston is a beautiful Norfolk village set in an open, gently rolling, attractive rural landscape. The village has a Conservation Area (https://www.southnorfolkandbroadland.gov.uk/conservation-areas-2/conservation-6) characterised by an unusually large cluster of distinctive thatched houses, manors and stunning woodland. Our Conservation Area consists of buildings, habitat and uniquely, open landscape perspectives offering views over the Tas valley, visible from the main trunk road, byroads and footpaths. These will be negatively impacted by the proposed pylons. There are 29 listed buildings in the northern part of the village and 35 in the Parish in all. The beautiful landscape underpins a visitor economy that	An overhead pylon network is not included as part of the project envelope for SEP and DEP. The energy generated by the projects will be transmitted using below ground cables both offshore and onshore. For more information regarding the project related infrastructure see **ES Chapter 4: Project Description** [APP-090]. **Chapter 24: Traffic and Transport** [APP-110] of the ES presents an assessment of the traffic and transport impacts of SEP and DEP construction traffic. This assessment includes consideration of the impact of HGVs, road closures and any associated diversions and assesses that there would be no significant impacts. The principal mitigation for traffic and transport impacts is contained within the **outline Construction Traffic Management Plan (OCTMP) (Revision B)** [document reference 9.16] which is secured via Requirement 15 of the **draft Development Consent Order (DCO) (Revision C)** [document reference 3.1]. The residual impacts are assessed as no greater than minor adverse.

I.D.	Relevant Representation	Applicant Comment
	importantly to the livelihoods of many villagers and to the local economies of surrounding parishes. The Tas Valley Way is a long-distance footpath that passes close to the Parish to the east, along the River Tas. The pylons will also be visible along parts of this footpath route and further undermine the landscape attractiveness, amenity value and visitor economy. The independent Open Walks website [Redacted] explains: 'This walk runs from Cringleford, near Norwich, to Attleborough, visiting a series of pretty villages with historic churches along the way. These include Intwood, Swardeston, Mulbarton, Hapton, New Buckenham and Old Buckenham ... Each church reveals something of the individual local character - of the countryside, the people, and the history of the settlements ... The walk also passes through some delightful Norfolk countryside which includes a long waterside section along the River Tas.' The thirteenth century church in Tacolneston is a Grade I listed building.	
2	Firstly, we consider that there has been a lack of proper consideration by the Applicant of an alternative, more appropriate, grid connection point.	The Connection and Infrastructure Options Note (CION) Process is the mechanism used by National Grid to evaluate potential transmission options to identify the connection point in line with their obligation to develop and maintain an efficient, coordinated and economical system of the electricity transmission network. The grid connection point SEP and DEP was determined by National Grid following the completion of the CION process. For more information regarding the grid connection point see **Sections 3.6** and **3.10** of **ES Chapter 3: Site Selection and Assessment of the Alternatives** [APP-089].
3	Secondly, we believe that the Examining Authority should require the attendance of the National Grid at the hearings to allow for public scrutiny.	Noted. The decision of which bodies to invite to attend the examination hearings is at the discretion of the Examining Authority.
4	Thirdly, we ask that recognition, in relation to the work of the Offshore Transmission Network Review, that SEP/DEP is not yet an 'inflight project' without further review.	Whilst SEP and DEP have not yet received consent, a project timeline has been created based on the UK Government's offshore wind and carbon reduction plans. The Applicant is supportive of the idea of an Offshore Transmission Network (OTN) however neither the regulatory nor technical framework exists at this current time to incorporate this into the projects. SEP and DEP are designated OTNR pathfinder projects, and as such the Applicant is committed to initiatives to encourage coordination in the sector.

I.D.	Relevant Representation	Applicant Comment
		The Applicant is working with governmental and industry bodies to identify barriers and solutions to offshore wind coordination.
5	Fourthly, we request consideration of the onshore in-combination, cumulative impacts of SEP/DEP's landfall, substation and cable corridor construction, alongside the already consented Hornsea Three, Vanguard and Boreas projects.	The cumulative impacts of the SEP and DEP project in conjunction with other projects, including the Hornsea Three, Vanguard and Boreas projects, was included as part of the environmental impact assessment. Further information regarding this can be found in **Section 5.8** of ES **Chapter 5 EIA Methodology** [APP-091]. Issues that SEP and DEP are coordinating on with these other projects include: • Preparation of cable crossings to minimise disruption to transport networks. • Construction traffic access routes to alleviate traffic. The Applicant will seek to work with other developers to achieve overarching benefits e.g. opportunities associated with biodiversity net gain. The Applicant will continue to coordinate with other infrastructure projects in the area where practicable to ensure that cumulative impacts are mitigated as far as possible. The list of plans and projects included in the cumulative impact assessment (CIA) is specific to each EIA topic and is detailed in each technical chapter (**Chapters 6 – 29**) [APP-092 – APP-115] having been developed through ongoing consultation with stakeholders. ES Chapters contain a Project Screening Table which describes the rationale for considering plans or projects further in the CIA or not. This rationale depends on factors including whether the plans or projects have been consented, the construction period, the distance from SEP and DEP and the level of confidence in the environmental information available for the plans or projects. Having also identified which residual impacts assessed for SEP and DEP alone have the potential for a cumulative impact with the other plans and projects, the ES chapters also assess the potential for cumulative impacts using the standard industry approach of using residual effects as identified

I.D.	Relevant Representation	Applicant Comment
		in the assessments of the other plans or projects. Please refer to the ES Chapters for details of each topic specific CIA.
6	Fifthly, we ask that the SEP/DEP application should include the cumulative impact of the proposed East Anglia Green Project.	Version 3 of Planning Inspectorate Advice Note Nine: Rochdale Envelope (PINS, 2018) and version 2 of Planning Inspectorate Advice Note Seventeen: Cumulative Effects Assessment (PINS, 2019a) provide guidance on plans and projects that should be considered in the CIA including: • Projects that are under construction; • Permitted application(s) not yet implemented; • Submitted application(s) not yet determined; • All refusals subject to appeal procedures not yet determined; • Projects on the National Infrastructure Planning programme of projects; and • Projects identified in the relevant development plan (and emerging development plans – with appropriate weight being given as they move closer to adoption) recognising that much information on any relevant proposals will be limited and the resulting degree of uncertainty in the assessment that is possible. As the 'East Anglia Green' project was only launched in January 2022 and its Scoping Opinion was published on the Planning Inspectorate website 14/12/22 (after the Applicant submitted the SEP and DEP DCO application) it was not included as part of the cumulative impact assessment. The project did not meet any of the above criteria at the time of assessment. As with all projects in proximity to SEP and DEP, the Applicant will communicate and coordinate where possible to mitigate potential impacts. Whilst the East Anglia Green project was not included within the cumulative impact assessment, the Applicant will engage with the project to ensure coordination as far as possible.

I.D.	Relevant Representation	Applicant Comment
7	Finally, we would like the cumulative impact of the possible future construction of large battery storage facilities to improve the economic viability of the project, as has happened with the Hornsea Three project.	As per **Section 4.6** of the **ES Chapter 4 Project Description** [APP-090] battery storage is not included in the DCO application for this Project.

3.13 Weston Longville Parish Council [RR-121]

Table 3.13.1 Applicant's comments on Weston Longville Parish Council's relevant representation

I.D.	Relevant Representation	Applicant Comment
1	I wish to register Weston Longville Parish Council as an interested party as the planned cable route runs directly through the middle of the Weston Longville Parish. We are a small Parish and this major construction project will have a major impact on residents and the local environment. These include but are not limited to:	Noted.
2	The impact of the heavy construction accessing the cable route on unsuitable single carriageway roads, including noise, damage to verges and hedgerows, and wildlife disturbance The volume of construction traffic increasing as it accesses the planned construction compound on the edge of the Parish. The increase in contractor traffic commuting to work at the compound by using the Parish road network which is already overloaded as a rat run from A47 to the Broadland Northway.	With regard to various topics, the Applicant would respond as follows: Traffic Matters **Chapter 24 of the Environmental Statement (ES) Traffic and Transport** [APP-110] provides an assessment of the impacts of SEP and DEP construction traffic. The ES concludes that with the application of mitigation measures (as required), the residual traffic and transport impacts would be no greater than minor adverse. **Section 24.6.1.8** of the **ES Chapter 24: Traffic and Transport** [APP-110] provides an assessment of the SEP and DEP construction traffic upon roads that are assessed to be constrained width for two HGVs passing. Where this constraint is identified, a range of mitigation measures are outlined are outlined in Table 24-48 of the **ES Chapter 24: Traffic and Transport** [APP-110]. These measures are captured within Section 4.4 of the **Outline Construction Traffic Management Plan (OCTMP) (Revision B)** [document reference 9.16] and include: • Road/ junction widening; • Formalising existing informal passing places; or • Using mobile traffic management, such as an escort vehicle.

I.D.	Relevant Representation	Applicant Comment
		Section 4.4 of the **OCTMP** outlines that the final measures and details will be agreed with the Norfolk County Council (NCC) through the development of the OCTMP prior to commencement of the authorised project. The **OCTMP (Revision B)** [document reference 9.16] is secured via Requirement 15 of **the draft DCO (Revision C)** [document reference 3.1]. **Section 4.12** of the **OCTMP (Revision B)** [document reference 9.16] provides details of measures to ensure that any damage to the highway (including verges) as a consequence of SEP and DEP is monitored and repaired. The Applicant would like to highlight that the **OCTMP (Revision B)** [document reference 9.16] includes a commitment to not route SEP and/or DEP HGV traffic via Weston Longville. The Applicant however wishes to highlight an error with the **OCTMP (Revision B)** [document reference 9.16] which incorrectly shows HGVs being permitted through Weston Longville. The Applicant can confirm that this error will be corrected in a revision to the OCTMP to be submitted to the examination at Deadline 1 and that no HGV traffic will be permitted to route via Weston Longville. Noise **Section 23.6.1.4** of **Chapter 23 of the Environmental Statement (ES) Noise and Vibration** [APP-109] provides an assessment of the impacts of SEP and DEP construction traffic noise. The ES concludes that with the application of mitigation measures (as required), the residual construction traffic noise impacts would be no greater than minor adverse i.e. not significant [para 201 of APP-109]. The revised **OCTMP (Revision B)** [document reference 9.16] will show that HGV traffic are not permitted to route via Weston Longville; this will reduce road traffic noise impacts on the links passing through the village to below those predicted in the ES. Hedgerow and Wildlife The Applicant is committed to replacement planting of hedgerow and hedgerow trees and has committed to 10-year monitoring and maintenance period as per the **Outline Landscape Management Plan (OLMP) (Revision B)** [document reference 9.18] and **Outline Ecological Management Plan (OEMP) (Revision B)** [document reference 9.19], which is secured through DCO Requirements 11 and 13 respectively.

I.D.	Relevant Representation	Applicant Comment
		Further information on the onshore ecological management and mitigation measures is set out within the **OEMP (Revision B)** [document reference 9.19].
3	Environmental damage to trees, hedgerows and wildlife in the Wensum valley SEC	During the design development process, SEP and DEP has sought to minimise impacts on local ecology and wildlife. This includes but is not limited to the avoidance of ecologically designated sites where possible. Further detail on this can be found in the **ES Chapter 3 Site Selection and Assessment of Alternatives** [APP-089]. The potential impacts to the River Wensum SSSI are considered in Section 20.6 of ES Chapter 20 Onshore Ecology and Ornithology [APP-106]. The Applicant has committed to cross this designated water body using trenchless techniques to minimise the potential for any impacts. The Applicant is committed to replacement planting of hedgerow and hedgerow trees and has committed to 10-year monitoring and maintenance period as per the **OLMP (Revision B)** [document reference 9.18] and **OEMP (Revision B)** [document reference 9.19].
4	All this at the same time as the New Western Link cuts through the Parish.	The potential cumulative impacts of the Norwich Western Link (NWL) and SEP and DEP have been assessed following the methodology set out within **ES Chapter 5 EIA Methodology** [APP-091]. As set out within **ES Chapter 20 Onshore Ecology and Ornithology** [APP-106] the NWL project will be subject to a planning process requiring appropriate mitigation measures to be implemented therefore limiting the potential for cumulative effects to occur. To reduce transport related impacts the Applicant has committed to install cables using trenchless techniques where they cross the proposed route of the NWL road. This is set out within **ES Chapter 24 Traffic and Transport** [APP-110].
5	In addition to the above concerns we also believe that not enough consideration has been given to this project alongside all the other planned and future cable requirements. The Orsted Hornsea 3 project also runs through our Parish on a similar but not parallel route, and initial work has already started. The combined effect of that project with this one will have a major impact on a large area of the Parish. We believe that there must be a coordinated approach of this and all future	Cumulative impacts Please see Point 8 for information regarding our cumulative impact assessment. Offshore Ring Main The Applicant is supportive of the idea of an Offshore Transmission Network (OTN) however neither the regulatory nor technical framework exists at this current time to incorporate this into the Project.

I.D.	Relevant Representation	Applicant Comment
	projects so that there is only one on shore cable route to connect to the National Grid. This can only be achieved by an off shore ring main. To that end we believe there has not been proper consideration by the applicant of an alternative more appropriate grid connection point.	SEP and DEP are designated OTNR pathfinder projects, and as such the Applicant is committed to initiatives to encourage coordination in the sector. The Applicant is working with governmental and industry bodies to identify barriers and solutions to offshore wind coordination. Alternative Grid Connection The Connection and Infrastructure Options Note (CION) Process is the mechanism used by National Grid to evaluate potential transmission options to identify the connection point in line with their obligation to develop and maintain an efficient, coordinated and economical system of the electricity transmission network. The grid connection point for SEP and DEP was determined by National Grid following the completion of the CION process. For more information regarding the grid connection point see **Sections 3.6** and **3.10** of **ES Chapter 3 Site Selection and Assessment of the Alternatives** [APP-089].
6	National Grid need to be required to attend the Hearings to be interrogated on their actions in the Examination process	Noted. The decision of which bodies are invited to attend the examination hearings is at the discretion of the Examining Authority.
7	It must be recognised in the examination process in relation to the work of the OTNR that SEP and DEP is not an “inflight” project	Whilst SEP and DEP have not yet received consent, a project timeline has been created based on the UK Government’s offshore wind and carbon reduction plans. The Applicant is supportive of the idea of an Offshore Transmission Network (OTN) however neither the regulatory nor technical framework exists at this current time to incorporate this into the Project. SEP and DEP are designated OTNR pathfinder projects, and as such the Applicant is committed to initiatives to encourage coordination in the sector. The Applicant is working with governmental and industry bodies, including OFGEM and BEIS, to identify barriers and solutions to offshore wind coordination.
8	This project should include a cumulative impact assessment of the onshore impacts of SEP/DEP’s landfall, substation and cable corridor construction, when considered alongside the already consented Hornsea Three, Vanguard and Boreas projects.	The cumulative impacts of the SEP and DEP project in conjunction with other projects, including the Hornsea Three, Vanguard and Boreas projects, was included as part of the environmental impact assessment. Further information regarding this can be found in Section 5.8 of ES **Chapter 5 EIA Methodology** (APP-091). Issues that SEP and DEP are coordinating on with these other projects include: • Preparation of cable crossings to minimise disruption to transport networks. • Construction traffic access routes to alleviate traffic.

I.D.	Relevant Representation	Applicant Comment
		The Applicant will seek to work with other developers to achieve overarching benefits e.g. opportunities associated with biodiversity net gain. The Applicant will continue to coordinate with other infrastructure projects in the area to ensure that cumulative impacts are mitigated as far as possible. The list of plans and projects included in the cumulative impact assessment (CIA) is specific to each EIA topic and is detailed in each technical chapter (**Chapters 6 – 29**) [APP-092 – APP-115] having been developed through ongoing consultation with stakeholders. ES Chapters contain a Project Screening Table which describes the rationale for considering plans or projects further in the CIA or not. This rationale depends on factors including whether the plans or projects have been consented, the construction period, the distance from SEP and DEP and the level of confidence in the environmental information available for the plans or projects. Having also identified which residual impacts assessed for SEP and DEP alone have the potential for a cumulative impact with the other plans and projects, the ES chapters also assess the potential for cumulative impacts using the standard industry approach of using residual effects as identified in the assessments of the other plans or projects. Please refer to the ES Chapters for details of each topic specific CIA.
9	It should also include the cumulative impact of the possible future construction of large battery storage facilities to improve the economic viability of the project, as has happened with the Hornsea Three project.	As per **Section 4.6** of the **ES Chapter 4 Project Description** [APP-090] battery storage is not included in the DCO application for SEP and DEP.

3.14 Weybourne Parish Council [RR-122]

Table 3.14.1 Applicant's comments on Weybourne Parish Council's relevant representation

I.D.	Relevant Representation	Applicant Comment
1	Weybourne Parish Council wishes to raise the following principal issues relating to Equinor's SEP/DEP DCO application: Overarching • Lack of proper consideration by the Applicant of an alternative grid connection point	The Connection and Infrastructure Options Note (CION) Process is the mechanism used by National Grid to evaluate potential transmission options to identify the connection point in line with their obligation to develop and maintain an efficient, coordinated and economical system of the electricity transmission network. The grid connection point SEP and

I.D.	Relevant Representation	Applicant Comment
		DEP was determined by National Grid following the completion of the CION process. For more information regarding the grid connection point see **Sections 3.6** and **3.10** of **ES Chapter 3 Site Selection and Assessment of the Alternatives** [APP-089].
2	Need for the ExA to require the attendance of National Grid at the Hearings, to be interrogated by the ExA on their actions, in public, during the examination process	Noted. The decision of which bodies attend the examination hearings is at the discretion of the Examining Authority.
3	Recognition, in relation to the work of the OTNR, that SEP/DEP is not an "in-flight" project	Whilst SEP and DEP have not yet received consent a project timeline has been created based on the UK Government's offshore wind and carbon reduction plans. The Applicant is supportive of the idea of an Offshore Transmission Network (OTN) however neither the regulatory nor technical framework exists at this current time to incorporate this into the projects. SEP and DEP are designated OTNR pathfinder projects, and as such the Applicant is committed to initiatives to encourage coordination in the sector. The Applicant is working with governmental and industry bodies, including OFGEM and BEIS, to identify barriers and solutions to offshore wind coordination.
4	The onshore cumulative impacts of SEP/DEP's landfall, substation and cable corridor construction, when considered alongside the already consented Hornsea Three, Vanguard and Boreas projects	The scope of the cumulative impact assessment (CIA) (in terms of relevant issues and projects) has been established with consultees (including other developers) during the EIA process. The cumulative impacts of SEP and DEP in conjunction with other projects, including the Hornsea Three, Vanguard and Boreas, and A47 improvement projects, is included in the Environmental Statement (ES). Further information regarding this can be found in **Section 5.8** of **ES Chapter 5 EIA Methodology** [APP-091]. The list of plans and projects included in the CIA is specific to each EIA topic and is detailed in each technical chapter (**Chapters 6 – 29**) [APP-092 – APP-115], having been developed through ongoing consultation with stakeholders. ES Chapters contain a Project Screening Table which describes the rationale for considering plans or projects further in the CIA or not. This rationale depends on factors including whether the plans or projects have been consented, the construction period, the distance from

I.D.	Relevant Representation	Applicant Comment
		SEP and DEP and the level of confidence in the environmental information available for the plans or projects. Having also identified which residual impacts assessed for SEP and DEP alone have the potential for a cumulative impact with the other plans and projects, the ES chapters go on to assess the potential for cumulative impacts using the standard industry approach of using residual effects as identified in the assessments of the other plans or projects. Please refer to the ES Chapters for details of each topic specific CIA.
5	The cumulative impact of the proposed East Anglia Green project	Version 3 of Planning Inspectorate Advice Note Nine: Rochdale Envelope (PINS, 2018) and version 2 of Planning Inspectorate Advice Note Seventeen: Cumulative Effects Assessment (PINS, 2019a) provide guidance on plans and projects that should be considered in the CIA including: • Projects that are under construction; • Permitted application(s) not yet implemented; • Submitted application(s) not yet determined; • All refusals subject to appeal procedures not yet determined; • Projects on the National Infrastructure Planning programme of projects; and • Projects identified in the relevant development plan (and emerging development plans – with appropriate weight being given as they move closer to adoption) recognising that much information on any relevant proposals will be limited and the resulting degree of uncertainty in the assessment that is possible. As the 'East Anglia Green' project was only launched in January 2022 and its Scoping Opinion was published on the Planning Inspectorate website 14/12/22 (after SEP and DEP submitted their DCO application) it was not included as part of the cumulative impact assessment. The project did not meet any of the above criteria at the time of assessment. As with all

I.D.	Relevant Representation	Applicant Comment
		projects in proximity to SEP and DEP, the Applicant will communicate and coordinate where possible to mitigate potential impacts. However, notwithstanding, the Applicant will communicate with the project to ensure coordination as far as possible.
6	HVAC technology will have a greater footprint and impact on habitat and biodiversity than HVDC; Equinor should commit to HVDC	For longer cable systems HVAC technology usually requires the introduction of a cable relay station or booster station along the onshore cable corridor. The inclusion of this element often represents a greater footprint compared to options that do not require the booster station. SEP and DEP can be delivered using HVAC technology without the need for a booster station (due to the relatively short length of cables offshore) and as such there is no significant difference in terms of environmental impact when comparing the buried cable systems alone. See Section 4.6 in ES **Chapter 4 Project Description** [APP-090] for further information regarding the choice of cabling. A HVDC Cable System will require a Convertor Station to change the current to AC before being feed into the National Grid, Convertor Stations are approximately 75% taller than an HVAC Substation with a similar footprint
7	Sequential development of the SEP/DEP project is unacceptable	As set out in Section 7 of the **Scenarios Statement** [APP-314] the preferred option is a development scenario with an integrated transmission system, providing transmission infrastructure which serves both of the wind farms, where both Projects are built concurrently, and the onshore infrastructure is integrated (i.e. scenario 4). The Applicant recognises that a concurrent development is beneficial for communities, the environment, and for the ultimate economics of the Project, in addition to the benefits this has for consumers. Given the different commercial ownerships of each Project, and the current limitation that prevent the projects to apply to CfD together alternative development scenarios such as a separated grid option (i.e. transmission infrastructure which allows each Project to transmit electricity entirely separately) will allow SEP and DEP to be constructed in a phased approach, if necessary. Therefore, the DCO application seeks to consent a range of development scenarios in the same overall corridors to allow for

I.D.	Relevant Representation	Applicant Comment
		separate development if required, and to accommodate either sequential or concurrent build of the two Projects. Potential solutions to avoid staged development include either Anticipatory Investment (AI) or combined Contract for Difference (CfD) bids. The principle of AI has been decided, with details still being discussed. Regarding opportunities for combined CfD bids, the Applicant is still awaiting an outcome from BEIS on whether the regulatory regime will be changed to make this possible. The Applicant is continuing to work with the relevant authorities, including OFGEM and BEIS, to overcome barriers and enable a concurrent construction scenario.
8	Requirement for targeted community compensation. Areas that are disproportionately affected (e.g. Weybourne and Cawston) should receive a greater “slice of the cake”. Such funding should be used for projects to benefit the community without restrictions applied by Equinor or the grant management body Local to Weybourne	A community benefit fund will be set up if SEP and DEP are successful in being granted consent. At this point the Applicant will consult with the community and stakeholders on an appropriate and complementary programme.
9	Requirement to use HDD for bringing cables onshore.	The Applicant has committed to using HDD to bring the cables onshore. For more information see **Section 4.5** of **ES Chapter 4 Project Description** [APP-090].
10	Weybourne depends on tourism, especially in April-October, while walkers, birdwatchers and anglers bring in vital revenue to local businesses in the low season.	The Applicant has made several commitments to reduce impacts on tourism within the area: • A Horizontal Directional Drill (HDD) at the landfall to minimise impacts to the beach and to keep access restrictions to an absolute minimum • Locating the landfall on private land, with access through the Muckleburgh estate only and no access via Beach lane. • No compound for the onshore cable works will be located at the landfall • Weybourne Woods will be crossed using HDD to avoid closing Sandy Hill Lane and to reduce impacts to recreational users of the woods • A commitment to avoid closing any of the roads leading in and out of Weybourne

I.D.	Relevant Representation	Applicant Comment
		Enhanced measures have been set out within the **outline Construction Traffic Management Plan (CTMP)**, such as a Community liaison officer to help effectively manage deliveries during local planned events - see **Outline Construction Traffic Management Plan (Revision B)** [document reference 9.16] which is secured in the DCO through requirement 15.
11	Weybourne is a working fishing village, with the fishermen launching from the beach.	The potential impacts to commercial fisheries has been assessed within ES **Appendix 14.1 Commercial Fisheries Technical Report** [APP-197]. A Fisheries Liaison Officer has been appointed by SEP and DEP who is managing communications with local fishers. A **Fisheries Liaison and Co-existence Plan** [APP-295] has been drafted in consultation with relevant stakeholders which sets out a plan for continued and ongoing consultation and engagement. This is secured through the conditions of the deemed marine licences (DMLs).
12	Landowners report adverse impacts to agricultural land from previous wind farm construction: damage to underground watercourses and drainage, and soil compaction, reducing the viability of farming.	As set out in **ES Chapter 19 Land Use, Agriculture and Recreation** [APP-105] during operation the impacts to agriculture will be limited. Where significant impacts have been assessed, they are localised and work would be undertaken to mitigate the impacts down to an acceptable level. Whilst land used for agriculture will be affected during the construction stage, the land will be reinstated post construction to a pre-construction state. Mitigation measures for drainage relating to construction activities are outlined in **Section 19.7.1** of **ES Chapter 19 Land Use, Agriculture and Recreatio**n [APP-105]. Pre-construction drainage will be installed to manage water coming from existing underground land drainage pipes which will be affected by the installation of the new cables. Following installation of the cables, the post construction drainage program will commence to ensure that soils affected by the cable corridor are left in a condition that enables a return within the affected fields to full agricultural production. Mitigation measures for soil resources relating to construction activities are outlined in **Section 19.7.1** of E**S Chapter 19 Land Use, Agriculture and Recreation** [APP-105]. These are also set out in the **Outline Code of Construction Practice (Revision B)** [document reference 9.17].

I.D.	Relevant Representation	Applicant Comment
13	The roads in Weybourne are unsuitable for HGVs and exceptional loads. The A149 becomes extremely busy during the tourist season, congestion builds up very rapidly. There are no pavements along the A149 through most of the village, but the road is regularly used by pedestrians.	**Section 24.5** of **ES Chapter 24 Traffic and Transport** [APP-110] contains a characterisation of the existing environment in relation to traffic and transport to enable the potential impacts of SEP and DEP traffic to be determined. The sensitivity of the A149 through Weybourne (link 9) is assessed to be of 'high' sensitivity. The identified sensitivities have been fundamental in determining the potential impacts of SEP and DEP traffic demand and mitigation strategy as set out in **Section 24.6** of **ES Chapter 24 Traffic and Transport** [APP-110].
14	Beach Lane is a County Wildlife Site. Its close proximity to the landfall site makes it vulnerable. The pond/reedbed is an important and locally scarce habitat.	Since the publication of the PEIR, further refinements have been made to the DCO boundary. These refinements have also been informed by the ecological surveys undertaken to avoid where possible any sensitive ecologically identified areas. Beach Lane is now predominately outwith the DCO boundary, with the exception of its northern part. For a plan displaying the project boundary and its proximity to the County Wildlife Site see the **Statutory/Non-Statutory Nature Conservation Sites (Onshore)** [APP-020]. The pond and reedbed within the CWS is not within the DCO boundary as can be seen in the **Works Plans (Onshore)** [APP-011].
15	The PEIR has not included the importance of the Weybourne/ Muckleburgh area for migrating birds. This is an important landfall/take-off site for migratory birds, which birds can use for resting/foraging on arrival or prior to leaving. There are few other similar features on the North Norfolk coast.	Justification as to the rationale for the surveys undertaken is presented within **ES Chapter 20 Onshore Ecology and Ornithology** [APP-106]. A suite of over-wintering and breeding bird surveys have been undertaken in 2020 and 2021, the findings of which have been used to inform the ecological impact assessment presented in the **ES Chapter 20 Onshore Ecology and Ornithology** [APP-106]. Details relating to the pre, during and post construction mitigation measures for onshore ecology and ornithology receptors is presented (and will be secured through DCO Requirement 13) within the **Outline Ecological Management Plan (Revision B)** [document reference 9.19].
16	Spring Beck is a chalk stream, an internationally rare habitat. Equinor must be required to use HDD under Spring Beck.	The Applicant has committed to crossing Spring Beck using a trenchless crossing technique to minimise the impacts to this habitat. See the **Crossing Schedule** [AS-022] for further information.

I.D.	Relevant Representation	Applicant Comment
17	Trenchless technology must be used to cross all highways.	The Applicant has committed to the trenchless crossing of all A and B roads. See the **Crossing Schedule** [AS-022] for further information.
18	Requirement to maintain the integrity of Weybourne Woods to avoid habitat fragmentation; habitat loss must be mitigated.	HDD will be used to cross Weybourne Woods. This will be undertaken in two parts, each 400 metres in length. The midway point has been the subject of an arboricultural survey, which has been used to locate a drilling compound within an existing gap in the wood that can be accessed via the firebreak within the woodland. This site was chosen due to a low density of trees, with limited ecological value, and as set out within the Arboricultural Survey Report [APP-228], about half of the trees within the compound area are dead or dying. Using HDD through Weybourne Woods will avoid an open cut installation through the woodland resulting in more widespread tree loss and a greater impact to ecological receptors. See **ES Chapter 4 Project Description** [APP-090] for further information.
19	Equinor must be required to reinstate wildlife corridors without delay.	Once construction is completed the land will be reinstated to its previous condition, this includes the reinstatement of hedgerows. The period of time required to reinstate various habitats will differ and the length of monitoring will depend on the habitat type. It is proposed that a 10 year management plan will be in place for hedgerows/trees and other sensitive habitats. For more information regarding the plans for reinstatement see Section 4.1 of the **Outline Ecological Management Plan** (Revision B) [document reference 9.19].
20	The PEIR addresses the issue of cumulative impact only in terms of increased noise/traffic etc due to the overlap of projects, and assesses this as minor/negligible. For the community, the impact of the repeated disruption is significant. Weybourne has already suffered Sheringham Shoal and Dudgeon, with Hornsea 3 imminent. SEP and DEP will therefore be the 4th and 5th sets of cables going through our beautiful “tranquil” village, which lies in an AONB.	The methodology of the cumulative impact assessment is set out in in **Section 5.8** of **ES Chapter 5 EIA Methodology** [APP-091]. The Applicant recognises the potential issues that may impact Weybourne and has set out measures to mitigate these as set out above in this response. The Applicant’s preferred approach is a concurrent construction scenario that will result in both sets of cables being installed simultaneously.

4 Comments on Statutory Consultees Relevant Representations

5. The Applicant’s comments on relevant representations received from statutory consultees are provided in this section.

4.1 Addleshaw Goddard on behalf of Network Rail Infrastructure [RR-002]

Table 4.1.1 Applicant's comments on Addleshaw Goddard on behalf of Network Rail Infrastructure Limited relevant representation

I.D.	Relevant Representation	Applicant Comment
1	APPLICATION BY EQUINOR LIMITED FOR AN ORDER GRANTING DEVELOPMENT CONSENT FOR THE SHERINGHAM AND DUDGEON EXTENSION PROJECTS PLANNING INSPECTORATE REFERENCE: EN010109 SECTION 56-PLANNING ACT 2008: RELEVANT REPRESENTATION OF NETWORK RAIL INFRASTRUCTURE LIMITED This is the section 56 representation of Network Rail Infrastructure Limited (Network Rail) provided in respect of Equinor New Energy Limited's (Applicant) application for a Development Consent Order (Order) which seeks powers to develop two offshore wind farms known at the Sheringham Shoal Extension Scheme and the Dudgeon Extension Scheme (Scheme). Network Rail is a statutory undertaker and owns, operates and maintains the majority of the rail infrastructure of Great Britain. The Book of Reference (BoR) identifies nine plots (Plots) as land owned by Network Rail in respect of which compulsory acquisition powers to acquire new rights are sought. The compulsory acquisition powers sought are described in the BoR as being rights for purposes of construction, installation, operation, maintenance and decommissioning of the authorised development and for temporary possession (Compulsory Powers). Network Rail notes that the Compulsory Powers are sought in relation to operational railway land forming part of the operational railway being the North Norfolk, the Breckland and the Great Eastern railway lines (together the Railway Lines). Network Rail objects to the inclusion of the Plots in the Order and to the acquisition of Compulsory Powers in respect of them. Network Rail considers that there is no compelling case in the public interest for the acquisition of the Compulsory Powers and Network Rail considers that the Secretary of State, in applying section 127 of the Planning Act 2008, cannot conclude that new rights and restrictions over the railway land can be created without serious detriment to Network Rail's undertaking; no other land is available to Network Rail which means that the detriment can be made good by them. In order for Network Rail to be in a position to withdraw its objection, Network Rail requires: (a) agreements with the	Network Rail's comments are noted. Detailed discussions regarding adequate protection of Network Rail's assets are ongoing. Information on interactions with SEP and DEP is being shared with Network Rail to facilitate the ongoing discussions and to progress negotiations in relation to both the protective provisions and the relevant agreements with Network Rail. The Applicant hopes to conclude those negotiations in advance of the Examination closing.

I.D.	Relevant Representation	Applicant Comment
	Applicant that regulate: (i) the manner in which rights over the Plots and any other railway property are acquired and the relevant works are carried out including terms which protect Network Rail's statutory undertaking and agreement that compulsory acquisition powers will not be exercised in relation to such land; and (ii) the carrying out of works in the vicinity of the operational railway network to safeguard Network Rail's statutory undertaking; and (b) the inclusion of protective provisions in the DCO for its benefit. Network Rail welcomes the fact that there are protective provisions for its benefit in the Order and, if necessary, will provide detailed comments on, and amendments to, the protective provisions when it submits its detailed Written Representation. Network Rail requests that the Examining Authority treats Network Rail as an Interested Party for the purposes of the Examination, and reserves the right to produce additional and further grounds of concern when further details of the Scheme and its effects on Network Rail's land are available.	

4.2 Cadent Gas Limited [RR-018]

Table 4.2.1 Applicant's comments on Cadent Gas Limited relevant representation

I.D.	Relevant Representation	Applicant Comment
1	Representation by Cadent Gas Limited (Cadent) to the Sheringham and Dudgeon Extension Projects Development Consent Order (DCO) Cadent is a licensed gas transporter under the Gas Act 1986, with a statutory responsibility to operate and maintain the gas distribution networks in North London, Central and North West England. Cadent's primary duties are to operate, maintain and develop its networks in an economic, efficient and coordinated way. Cadent wishes to make a relevant representation to the Sheringham and Dudgeon Extension Projects DCO in order to protect its position in light of infrastructure which is within or in close proximity to the proposed DCO boundary. Cadent's rights to retain its apparatus in situ and rights of access to inspect, maintain, renew and repair such apparatus located within or in close proximity to the order limits should be maintained at all times and access to inspect such apparatus must not be restricted. The documentation and plans submitted for the above proposed scheme	Cadent Gas's comments are noted. Detailed discussions regarding adequate protection of Cadent Gas's assets are ongoing. Information on interactions with SEP and DEP is being shared with Cadent Gas to facilitate the ongoing discussions and negotiations in relation to the protective provisions. The Applicant hopes to conclude those negotiations in advance of the Examination closing.

I.D.	Relevant Representation	Applicant Comment
	have been reviewed in relation to impacts on Cadent's existing apparatus located within this area, and Cadent has identified that it will require adequate protective provisions to be included within the DCO to ensure that its apparatus and land interests are adequately protected and to include compliance with relevant safety standards. Cadent has low, medium pressure, intermediate and high pressure gas pipelines and associated apparatus located within the order limits which may be affected by works proposed. As a responsible statutory undertaker, Cadent's primary concern is to meet its statutory obligations and ensure that any development does not impact in any adverse way upon those statutory obligations. Adequate protective provisions for the protection of Cadent's statutory undertaking are therefore required and are in discussion between parties but not yet agreed. Cadent wishes to reserve the right to make further representations as part of the examination process but in the meantime will seek to engage with the promoter with a view to reaching a satisfactory agreement.	

4.3 Corporation of Trinity House of Deptford Strond [RP-025]

Table 4.3.1 Applicant's comments on Corporation of Trinity House of Deptford Strond's relevant representation

I.D.	Relevant Representation	Applicant Comment
1	Dear Sir / Madam, We refer to the above application for development consent. Trinity House is the General Lighthouse Authority for England, Wales, the Channel Islands and Gibraltar with powers principally derived from the Merchant Shipping Act 1995 (as amended). The role of Trinity House as a General Lighthouse Authority under the Act includes the superintendence and management of all lighthouses, buoys and beacons within its area of jurisdiction. Trinity House wishes to be registered as an interested party due to the impact the developments may have on navigation within Trinity House's area of jurisdiction. Trinity House is likely to have further comments to make on the application and the draft Order(s) throughout the application process. Please address all correspondence regarding this matter to myself and to Mr Steve Vanstone . Yours faithfully, Russell Dunham ACII Legal Advisor	The Respondent's comment is noted.

4.4 East of England Ambulance Service NHS Trust [RP-029]

Table 4.4.1 Applicant's comments on East of England Ambulance Service NHS Trust relevant representation

I.D.	Relevant Representation	Applicant Comment
1	The East of England Ambulance Service NHS Trust (EEAST) consider that the Project (Sheringham and Dudgeon Extension Projects) is likely to have a significant impact on its operations, service capacity and resources (staff, vehicle fleet & estate assets) requiring appropriate mitigation and management measures to be identified and secured through either a planning obligation or Deed of Covenant. Such measures are likely to incorporate: • Developer funding & new ambulance facilities provision to increase the capacity, response capability & project preparedness for EEAST's staff, vehicle fleet & estate assets; • Establishing appropriate Terms of Reference, Membership & a Communications Strategy for a Transport, Community Safety, Health & Wellbeing Working Group – to include EEAST as an emergency service provider, along with its health and blue light partners such as the local Integrated Care System, Norfolk Constabulary and Norfolk Fire & Rescue. A written submission (Relevant Representation) to follow under separate cover.	The Applicant acknowledges The East of England Ambulance Service NHS Trust's (EEAST's) comment and met with EEAST on 14th February 2023 to discuss the SEP & DEP projects. Responses to the written submission are set out below.
2	Insufficient scoping work has been undertaken to date - to determine a suitable study area, baseline assessment & approach to identify the likely environmental, social and cumulative effects of the development on EEAST's operations.	The Applicant acknowledges EEAST's comment. In accordance with Regulation 10 of the 2017 EIA Regulations, a Scoping Report (Equinor, 2019) was prepared by the Applicant in support of a request for a Scoping Opinion from the Secretary of State. To comply with Regulation 10 of the 2017 EIA Regulations, the Scoping Report provided: • Plans sufficient to identify the area required for the construction, operation and maintenance, and decommissioning of SEP and DEP; • A brief description of the nature and purpose of the proposed project, and of its possible effect on the environment; and

I.D.	Relevant Representation	Applicant Comment
		• Other information on the characteristics of the proposed project and the environmental features likely to be affected by the proposed project, sufficient to define those potential characteristics, impacts and features to be considered further in the EIA and those which need not be considered further. On 8 October 2019, the Applicant requested the Secretary of State to adopt this Scoping Opinion in respect of SEP and DEP pursuant to Regulation 10(8) of the 2017 EIA Regulations. On receipt of the Scoping Report, PINS on behalf of the Secretary of State for Business, Energy, and Industrial Strategy (BEIS) consulted on the SEP and DEP Scoping Report and issued a Scoping Opinion on 18 November 2019. In October 2019, the Applicant met with numerous stakeholders informally to discuss their feedback on the SEP and DEP Scoping Report as detailed in the Scoping Opinion. Comments received through the scoping process were considered by the Applicant and used to inform the selection of survey methodologies for the EIA. This included consideration through the Evidence Plan and Expert Topic Groups (ETGs). This is further detailed in Section 4.9 of this **Consultation Report** [APP-029]. The Applicant has had regard to responses captured in the Scoping Opinion. On 29 April 2021 the Applicant submitted the Preliminary Environmental Information Report (PEIR) for consultation under Sections 42 and 47 of the 2008 Act. This consultation period ended 10 June 2021 and feedback received through this consultation has been taken into consideration and incorporated into the ES where appropriate. During the meeting with EEAST on 14th February, the Applicant presented the scope of the project together with key embedded mitigation and construction working practices.

I.D.	Relevant Representation	Applicant Comment
3	Insufficient measures are proposed to avoid, reduce, mitigate and compensate for the likely Scheme impact on EEAST's operations (summarised below) during the construction phase of the development.	The Applicant acknowledges EEAST's comment. Responses to the summarised issues are set out below.
4	Omission to include suitable DCO Requirements &/or Heads of Terms of Agreement, either via a Section 106 planning obligation or Deed of Obligation - to provide funding and new facilities provision, as required, to increase the capacity, response capability and Project Preparedness for EEAST's staff, vehicle fleet and estate assets to mitigate and manage the impacts arising.	The Applicant met with EEAST on 14th February 2023 and following discussions, EEAST confirmed that funding and new facility provision was not needed given the scale of impact of the SEP & DEP projects on the EEAST operations.
5	Omission to include suitable Terms of Reference, Membership or a Communications Strategy for a Transport, Community Safety, Health and Wellbeing Working Group to be set up - to inform and assist the management of relevant aspects of the construction, operational and decommissioning phases of the Projects requiring a coordinated response from health & blue light partners, including EEAST, NHS Norfolk and Waveney Integrated Care Board, Norfolk and Suffolk Constabulary and Norfolk Fire and & Rescue Service.	The Applicant draws your attention to Section 2.4 of the **Outline Code of Construction Practice (Revision B)** [document reference 9.17] 'Local Community Liaison'. Of note, paragraph 27 states that a Stakeholder Communications Plan will be developed which will set out how effective and open communication with local residents and businesses that may be affected by the construction works will take place. Following the meeting with EEAST on 14th February, the Applicant understands the respondent is satisfied with the above provisions and there is no longer a request to include suitable Terms of Reference, Membership or a Communications Strategy for a Transport, Community Safety, Health and Wellbeing Working Group to be set up.
6	EEAST, together with the Norfolk and Waveney ICB, Norfolk Constabulary and Norfolk Fire & Rescue Service, is therefore keen to work with Equinor New Energy Ltd (ENEL) to address these omissions and agree and secure suitable mitigation and management measures either as a DCO Requirement and/or a Section 106 planning obligation (or Deed of Obligation) and reflect this position within a Statement of Common Ground by commencement of (or at an early stage during) the forthcoming Examination.	The Applicant acknowledges the EEAST's comment and welcomed the opportunity to engage with these issues on the 14th February 2023. As stated above in the response to ID 4, the Applicant understands there is no longer a request for a DCO Requirement and/or a Section 106 planning obligation (or Deed of Obligation). EEAST acknowledged the mitigation measures and management measures put in place for the construction of the SEP and DEP projects and both parties agreed this will be captured in a Statement of Common Ground to be submitted to the Examination Authority at Deadline 3.
7	EEAST is commissioned by Suffolk and North East Essex Integrated Care System (ICS) on behalf of all ICSs to provide emergency and urgent care services throughout Bedfordshire, Cambridgeshire, Essex, Hertfordshire,	The Applicant acknowledges the EEAST's comment.

I.D.	Relevant Representation	Applicant Comment
	Norfolk and Suffolk, and transports patients to 17 acute hospitals amongst other healthcare settings, including within the Broadland DC, North Norfolk DC, Norwich CC and South Norfolk DC areas covering the location of the 'on – shore' Order Limits of the Sheringham and Dudgeon Scheme.	
Construction Workforce, Hours of Work & Traffic		
8	The applicants Environmental Statement (ES) Volume 1, Chapter 27 – Socio-Economics & Tourism, August 2022, (Document Reference 614) states that a construction workforce of 670 is envisaged for implementing SEP and DEP.	The Applicant would like to signpost EEAST to the **Outline Code of Construction Practice (Revision B)** [document reference 9.17], which sets out the approach to environmental mitigation during the construction phase. This is secured by Requirement 19 (Code of Construction Practice) of the **draft DCO (Revision C)** [document reference 3.1]]. The respondent's representation was discussed during the meeting on the 14th February 2023. EEAST acknowledged the reassurances given with regards to the mitigation and management measures associated with the Construction Workforce, Hours of Work & Traffic and confirmed they are satisfied these are appropriate to limit the impact of the SEP & DEP projects on the EEAST operations.
9	Approximately 330 workers (50%) are likely to be non-East Anglia based and would require accommodation.	
10	Onshore construction within the area defined as 'landward of mean low water' would take place between 0700 hours & 1900 hours Monday to Friday, and 0700 hours to 1300 hours on Saturdays with no activity on Sundays or bank holidays.	
11	Outside of these hours onshore construction work may be required for essential activities such as: • Continuous periods of operation, such as concrete pouring, Horizontal Directional Drilling (HDD) & pulling cables through ducts; • Delivery of abnormal indivisible loads that may otherwise cause congestion on the local road network.	
12	For offshore construction activities (seaward of mean low water) 24 hours/ day and 7 days/ week working patterns are envisaged.	
13	It is assumed that an Outline Construction Environmental Management Plan would be a DCO Requirement to inform the approach to the construction phase.	
14	The applicants Environmental Statement (ES) Volume 1, Chapter 24 – Traffic & Transport, August 2022, (Document Reference 6124) outlines the potential impacts arising from the onshore construction phase from traffic.	The Applicant has undertaken an extensive programme of stakeholder engagement with Norfolk County Council (NCC) and National Highways who have a statutory duty under the Traffic Management Act to ensure the

I.D.	Relevant Representation	Applicant Comment
15	The approach is based on an assessment of the volume of traffic associated with construction activities and magnitude of effect. Whilst peak and total traffic flows are not presented for each month of the construction phase (unlike some other NSIP Schemes) forecasts are provided for an identified number of highway links based on an uplift on their Annual Average Daily Traffic (AADT) flows.	expeditious movement of traffic on their road network. Following submission of the DCO, the Applicant continues to engage with NCC and National Highways and is in the process of agreeing Statements of Common Ground. In accordance with the relevant guidelines for the assessment of traffic and transport impacts (Guidelines for the Environmental Assessment of Road Traffic, (GEART)) published in January 1993 by the Institute of Environmental Assessment) consideration of the forecast changes in peak and average daily traffic flows across the traffic and transport study area (TTSA) are presented within Table 24-19 and Table 24-20 of Chapter 24 of the Environmental Statement (ES) [APP-110]. Table 24-19 and Table 24-20 of ES Chapter 24 Traffic and Transport [APP-110] outline the forecast increases in peak and average increases in construction traffic for SEP and/or DEP and SEP and DEP respectively. These forecast changes in daily traffic flows have been used to inform an assessment of the traffic and transport impacts for SEP and/or DEP. The Applicant would clarify that peak and total traffic flows are provided for each week of construction duration within Annex 11 and Annex 12 of the Transport Assessment [APP-269].
16	It is evident from the 153 x highway links assessed, that a significant number of links (including existing sensitive links) exceed the screening threshold Guidelines for the Environmental Assessment of Road Traffic (GEART) when forecast traffic flows from the concurrent SEP/ DEP schemes are factored in.	Recognising the large onshore traffic and transport study area (140 links, approximately 350 miles) for SEP and/or DEP it is necessary to take a proportional approach to identify where there is potential for significant effects and therefore define the scale of the assessment. This is done using the GEART screening thresholds (known as Rule 1 and 2) outlined at paragraph 74 of ES Chapter 24 Traffic and Transport [APP-110]. Where links are forecast to experience increases in traffic flows above the GEART screening thresholds, further assessment of potentially significant impacts is undertaken. It can be identified from ES Chapter 24 Traffic and Transport [APP-110] that with the application of additional mitigation measures, the residual impacts upon all receptors are assessed to be not significant.
17	A selected summary from the ES findings is outlined below: • 63 of the 153 links assessed exceed the GEART threshold; • Link ID 84 The Broadway/unnamed Road, is impacted in the peak hours by 97 HGV's & 185 traffic movements overall, leading to an increase of 4560%; • Link ID 128 (Mangreen Lane) is impacted in the peak hours by 287 HGVS's & 667 traffic movements overall, leading to an increase of 2316%;	

I.D.	Relevant Representation	Applicant Comment
	• Link ID's 147-149 (Breck Road/Weston Green Road/Unnamed Road) are impacted by 79 HGV's & up to 178 traffic movements overall, leading to an increase of 1494%.	With regard to the specific selected links the Applicant would respond as follows: The numbers quoted by EEAST have been extrapolated from Table 24-20 of ES Chapter 24 Traffic and Transport [APP-110] which sets out the primary assessment of SEP and DEP traffic flows before mitigation. It is noteworthy that the figures quoted by EEAST relate to the highest percentage change per link and is a function of the low background HGV flows along these links. However, these figures should be viewed with caution as a percentage increase becomes an increasingly 'crude' indicator of magnitude of impact when baseline flows are very low. Noting this, a more detailed assessment has been undertaken with ES Chapter 24 Traffic and Transport [APP-110] [APP-110], the findings of which are summarised below: **Link 84** Table 24-20 of ES Chapter 24 Traffic and Transport [APP-110] identifies a background of two HGVs and 28 light vehicle (LV) trips per day and that there could be an increase of up to 97 HGV trips and 88 LV trips per day during peak construction (concurrent scenario). Table 24-26 and Table 24-33 of ES Chapter 24 Traffic and Transport [APP-110] details that for the impacts of severance and amenity, potentially significant impacts may occur and outlines mitigation to limit the hourly LV and daily HGV demand to 15 and 23 trips respectively. The residual impact significance is assessed as no greater than minor adverse. This commitment to reduce traffic flows via link 84 is contained within the **OCTMP (Revision B)** [document reference 9.16] which is secured via Requirement 15 (Traffic and Transport) of the **draft DCO (Revision C)** [document reference 3.1]. **Link 128** Table 24-20 of ES Chapter 24 Traffic and Transport [APP-110] identifies a background of 12 HGV and 321 LV trips and that there could be an

I.D.	Relevant Representation	Applicant Comment
		increase of up to 287 HGV and 380 LV trips per day during peak construction (concurrent scenario). It can be identified from ES Chapter 24 Traffic and Transport [APP-110] that following a detailed assessment of severance and amenity effects on the baseline environment the residual impact upon all receptors is assessed to be not significant. **Link 147 - 149** Table 24-20 of ES Chapter 24 Traffic and Transport [APP-110] identifies a background of five HGV trips and 62 LV trips and that there could be a peak construction increase of up to 79 HGV trips per day and 56, 99 and 0 LV trips via links 147, 148 and 149 respectively (concurrent scenario). For link 147 Table 24-32 of ES Chapter 24 Traffic and Transport [APP-110] summarises the primary impact assessment for the impacts of amenity, potentially significant impacts may occur. Table 24-33 of ES Chapter 24 Traffic and Transport [APP-110] sets out mitigation measures are proposed to limit the daily demand to not exceed forecast average demand, i.e. a reduction to 20 HGV trips per day and 19 LV trips per day. The residual impact is assessed as no greater than minor adverse. This commitment is contained within the **OCTMP (Revision B)** [document reference 9.16] which is secured via Requirement 15 (Traffic and Transport) of the **draft DCO (Revision C)** [document reference 3.1]. For link 149 Table 24-26 and Table 24-32 of ES Chapter 24 Traffic and Transport [APP-110] outlines that for the impacts of severance and amenity, potentially significant impacts may occur and Table 24-33 of ES Chapter 24 Traffic and Transport [APP-110] summarises mitigation measures are proposed to limit the daily demand to not exceed forecast average demand, i.e. a reduction to 20 HGV trips per day. The residual impact is assessed as no greater than minor adverse. This commitment is contained within the **OCTMP (Revision B)** [document reference 9.16] which is secured via Requirement 15 (Traffic and Transport) of the **draft DCO (Revision C)** [document reference 3.1]. With regard to link 148, it can be identified from Figure 24.6 of **ES Chapter 24 Traffic and Transport** [APP-134] that link 148 provides a route to access

I.D.	Relevant Representation	Applicant Comment
		ACC39, ACC40 and ACC41. It can be further identified from Figure 24.6 that to route to these accesses (located on link 148) traffic would need to travel via either link 147 from the west or link 149 from the east. The mitigation measures outlined above to limit traffic flows via these links would therefore equally be applicable to limiting traffic flows via link 148 and therefore the residual impact is assessed as no greater than minor adverse.
18	The ES states that the implementation of SEP/DEP would also lead to driver delay caused by capacity constraints, highway constraints and road closures of up to 2 weeks in duration.	The Applicant would clarify that ES Chapter 24 Traffic and Transport [APP-110] does not state that *"the implementation of SEP/DEP would also lead to driver delay caused by capacity constraints, highway constraints and road closures of up to 2 weeks in duration".* ES Chapter 24 Traffic and Transport [APP-110] includes an assessment of three potential impacts that could lead to delays to drivers. These include: • Impact 5: Driver Delay (Capacity) - delays induced by the highway networks' lack of spare capacity to accommodate additional traffic flow; • Impact 6: Driver Delay (Highway Constraints) – delays induced by constrained road space forcing vehicles to slow or stop to traverse the highway network; and • Impact 7: Driver Delay (Road Closures) – delays to diverted traffic re-routing on the highway network due to road closures necessitated by 'open cut' trench cable road crossings. It can be identified from **ES Chapter 24 Traffic and Transport** [APP-110] that with the application of additional mitigation measures, the residual driver delay impacts are assessed to be not significant. As outlined at I.D. 14 and 15 the relevant highway authorities will take a view on the assessed impact significance in accordance with their duty under the Traffic Management Act.
19	In view of this mitigation is proposed via an Outline Construction Traffic Management Plan which envisages the following approach; • Caps on the number of vehicles that can use up to 13 x links; • Provision of passing places & escort vehicles;	The Applicant acknowledges the EEAST's comment. The respondent's representation was discussed during the meeting on the 14th February 2023. EEAST acknowledged the reassurances given with regards to the mitigation and management measures associated with the

I.D.	Relevant Representation	Applicant Comment
	• Minibus transit & car sharing.	Construction Traffic and confirmed they are satisfied these are appropriate to limit the impact of the SEP & DEP projects on the EEAST operations.
20	This position is noted and referred to further below - in the light of the Project impact on EEAST's operations.	Please refer to the Applicant's responses below.
Abnormal Indivisible Loads (AILs)		
21	The applicant's Environmental Statement Volume 3, Appendix 24.2 Abnormal Indivisible Load (AIL) Study, August 2022 (Document reference 6.3.24.2) considers the feasibility of delivering substation transformers to the Norwich Main Substation in Norfolk.	Abnormal load is a generic term applied when a vehicle or load exceeds the maximum standard parameters set out in The Road Vehicles Construction and Use Regulations 1986 for height, width and weight. This term covers a broad range of vehicles, ranging from limited load projections permitted for standard vehicles to Special Order Vehicles designed specifically for the purpose of moving loads well in excess of standard vehicle parameters. The transformers for SEP and DEP substation will require Special Order AILs. In addition, there may also be a requirement for non-Special Order AILs associated with large items of plant, cable drums, etc. An AIL study [APP-270] considering the impacts of transporting up to two transformers has been undertaken by Wynns Ltd (consulting engineers specialising in the transportation of AILs) to inform the management measures required for the transportation of AILs for SEP and DEP. The AIL study [APP-270] highlights that the route is negotiable with local accommodation works along the route, including, overrunning of kerbs, removal of signs, traffic signals and bollards and pruning of tress, etc. At the time of drafting the **AIL study** [APP-270], National Highways were not able to structurally confirm the route as there are two structures of concern (Scarning Bridge and a small 1.5m span culvert located between Kings Lynn and Swaffham). Following submission of the DCO application, further engagement with National Highways has identified that the culvert can be passed by contraflowing and plating of the culvert (assuming it is not repaired by National Highways prior to moving). Notwithstanding, ES **Chapter 24 Traffic and Transport** [APP-110] and the **AIL Study** [APP-270] also outlined alternative routes that would allow the load to avoid
22	The Report states that the delivery of transformers would require Special Order movements of above 150te gross loads, and the potential transport weight of the transformers required at the new substation is considered at this stage to be 224te nett.	
23	Whilst the scope of the Report is principally focused on 'route planning feasibility' from Kings Lynn Port to Norwich, which remains unresolved at present due to highway structure and land constraints, it is evident that AIL's are likely to be a key highway network impact requiring appropriate mitigation and management.	
24	It is noted that the Transport Chapter of the ES does not seem to address the issue of AIL's, and information is therefore required on the forecasted number, type, route selection, timing and duration of these highway related impacts.	

I.D.	Relevant Representation	Applicant Comment
		Scarning Bridge and that temporary bridging could be employed to span over the culvert. With regard to non-Special Order AILs associated with large items of plant, cable drums, etc, the total forecast HGV trips (assessed within ES **Chapter 24 Traffic and Transport** [APP-110]) include for the transportation of cable drums and a percentage allowance has also been applied to account for transportation of plant. These numbers of non-Special Order AILs are therefore included within the assessment of all effects presented in ES **Chapter 24 Traffic and Transport** [APP-110]. To ensure that delays are managed and minimised, prior to the movement of any abnormal load the contractor would be required to submit notifications to the relevant authorities (police, highway authorities and bridge / structure owners) through ESDAL (Electronic Service Delivery for Abnormal Loads). As part of this process, relevant Police Force would carry out a risk-assessment and decide whether any action is required with regard to either the route or time of the proposed movement, including the safety of other road users or congestion likely to be caused. The ESDAL process would detail which of the proposed routes would be used and ensure the timing of AIL movements would be co-ordinated and potential impacts would not be significant. This commitment is contained within the OCTMP [APP-301] which is secured via Requirement 15 (Traffic and Transport) of the **draft DCO (Revision C)** [document reference 3.1]. The respondent's representation was discussed during the meeting on the 14th February 2023. EEAST acknowledged the reassurances given with regards to the mitigation and management measures associated with AILs and confirmed they are satisfied these are appropriate to limit the impact of the SEP & DEP projects on the EEAST operations.
Major Accidents and Disasters		

I.D.	Relevant Representation	Applicant Comment
25	The applicants Environmental Statement (ES) Volume 1, Chapter 4 – Project Description, August 2022, (Document Reference 614) includes a section on Major Accidents & Disasters.	The Applicant acknowledges the EEAST's comment.
26	The ES cites the Control of Major Accident Hazards (COMAH) Regulations 2015 (as amended) which defines a major accident as "an occurrence (including in particular, a major emission, fire or explosion) resulting from uncontrolled developments in the course of operation of any establishment and leading to serious danger to human health or the environment, immediate or delayed, inside or outside the establishment and involving one or more dangerous substances".	The Applicant acknowledges the EEAST's comment.
27	A disaster is not defined in the ES.	The Applicant acknowledges the EEAST's comment. For EIA purposes, a disaster is typically defined as a natural hazard (e.g. earthquake) or a man-made/external hazard (e.g. act of terrorism) with the potential to cause an event or situation that meets the definition of a major accident.
28	The ES states that offshore wind developments have an intrinsically low risk of causing major accidents, wherein turbine performance is constantly monitored, with any issues quickly detected and addressed through pre-prepared Safety Management Action Plans.	The Applicant acknowledges the EEAST's comments. Paragraph 370 of ES **Chapter 4 – Project Description** [APP-090] states '*The Applicant recognises the importance of the highest performance levels of health and safety to be incorporated into the Projects. There is a commitment to adhere to a high level of process safety, from design to operations and for all staff, contractors and suppliers to have a high level of safety awareness and knowledge of safety and safe behaviour. The Applicant will enact a Code of Conduct for suppliers, contractors and subcontractors. They must all comply with the Code as well as health and safety legislation. The Applicant will ensure that employees have undergone necessary health and safety training'.* The Code of Conduct and Health & Safety measures referred to are not matters secured as specific Requirements of the **draft DCO (Revision C)** (document reference 3.1). The **draft DCO (Revision C)** (document reference 3.1) includes a number of requirements that require management plans to be approved and implemented post-consent. These contain a variety of best practice measures that will have health and safety benefits.
29	Offshore cables would be buried where feasible to minimise any 'snagging risk' from vessels. Offshore and onshore cables are designed to 'trip out' automatically should any failure in insulation be detected and are considered to pose little risk to the public.	
30	Whilst the risk of substation fires are considered to be historically low, the highest appropriate levels of fire protection and resilience are to be specified for the onshore substation to minimise fire risk.	
31	Lubricants, fuel and cleaning equipment required by the Projects would be stored in suitable facilities designed to meet the relevant regulations and policy guidance.	
32	A small number of construction and operational phase worker fatalities are acknowledged by the offshore wind industry, which has been minimised by	

I.D.	Relevant Representation	Applicant Comment
	the use of controlled construction sites onshore, and vessel safety zones offshore.	The Applicant will ensure through its procurement process that all contractors will comply with the supplier Code of Conduct that will be put in place, as well as them being required to comply with all health and safety legislation. The respondent's representation was discussed during the meeting on the 14th February 2023. EEAST acknowledged the reassurances given with regards to the mitigation and management measures associated with the Major Accidents and Disasters and confirmed they are satisfied these are appropriate to limit the impact of the SEP & DEP projects on the EEAST operations.
33	A Code of Conduct would be enacted for suppliers, contractors and subcontractors, with necessary health & safety training provided.	
34	Although not stated, it is assumed that the relevant Code of Conduct and Health & Safety measures would be secured as Requirements of the DCO.	
Human Health		
35	The applicant's Environmental Statement (ES) Chapter 28 – Health, August 2022 (Document reference 6.1.28) states that the topic of health has been assessed in the light of policy guidance contained in the following documents; • Overarching NPS for Energy (EN-1); • NPS for Renewable Energy Infrastructure (EN-3); • NPS for Electricity Networks Infrastructure (EN-5).	**ES Chapter 28 Health** [APP-114] describes the potential impacts of the proposed Sheringham Shoal Offshore Wind Farm Extension Project (SEP) and Dudgeon Offshore Wind Farm Extension Project (DEP) on human health. The chapter provides an overview of the existing environment for the proposed onshore and offshore development area, followed by an assessment of the potential impacts and associated mitigation for the construction, operation, and decommissioning phases of SEP and DEP (para 1). Paragraph 36 of APP-114 states that the assessment of potential impacts upon health has been made with specific reference to the relevant NPS. These are the principal decision making documents for Nationally Significant Infrastructure Projects (NSIPs). Those relevant to SEP and DEP are: • Overarching NPS for Energy (EN-1) (Department of Energy and Climate Change(DECC) 2011); • NPS for Renewable Energy Infrastructure (EN-3) (DECC 2011); and • NPS for Electricity Networks Infrastructure (EN-5) (DECC 2011).

I.D.	Relevant Representation	Applicant Comment
		Draft versions of NPS EN-1, EN-3 and EN-5 were published in September 2021. A review of these draft versions has been undertaken in the context of ES Chapter 28 Health [APP-114, para 38]. In addition to the NPS, other documents are applicable to the assessment of human health. A summary of the key national policy considerations outside of the NPS is provided in Table 28-7 of APP-114 [APP-114, para 42].
36	In light of the above, the remit of 'health effects' covered in the ES has focused on noise, air quality, ground & water contamination, physical activity, journey times and reduced access, employment, socio-economics and tourism.	The determinants of health that are scoped in, and therefore assessed in APP-114, are summarised in para 10 as follows: Construction phase health assessment: noise; air quality; ground & water contamination; physical activity; journey times and reduced access; employment. Operational phase health assessment: noise; EMFs; employment. The wider societal benefits of SEA and DEP are also considered.
37	The ES states that the impacts would not be significant in EIA terms, and 'minor beneficial' for population health overall.	APP-114 states that all potential adverse impacts on health were determined to be not significant in EIA terms, provided that the mitigation measures (both embedded and additional) detailed in the relevant technical chapters referenced in APP-114, are in place or are implemented [APP-114, para 348]. APP-114 examines each determinant of health separately for the general population and for vulnerable groups. It then considers the cumulative effects, both inter- and intra-project. Table 28-24 summarises these potential effects and shows that the cumulative residual impacts are mostly not significant. The cumulative residual impact for employment and for wider societal benefits are moderate beneficial (significant) [APP-114, pp116-117].
Potential Impacts on EEAST Service Areas & Capacity – Project Environmental & Social Effects		
38	Review of the Equinor New Energy Ltd (Applicant's) environmental statement and related DCO documentation, indicates that the Projects potential effects (impacts) on EEAST's operational capacity, efficiency and	The Applicant acknowledges the EEAST's comment and welcomed the opportunity for dialogue during the meeting on the 14th February 2023..

I.D.	Relevant Representation	Applicant Comment
	resources (namely staff, vehicle fleet and estate assets) have not been baselined, sufficiently assessed or mitigated to date.	The respondent's representation was discussed during the meeting. EEAST acknowledged the reassurances given with regards to the mitigation and management measures associated with the potential Environmental and Social Effects and confirmed they are satisfied these are appropriate to limit the impact of the SEP & DEP projects on the EEAST operations. Both parties agreed this will be captured in a Statement of Common Ground to be submitted to the Examination Authority at Deadline 3. As stated above in the response to ID 4, the Applicant understands there is no longer a request for a DCO Requirement and/or a Section 106 planning obligation (or Deed of Obligation The Applicant looks forward to continuing the discussions with EEAST through the Examination and post DCO Award.
39	EEAST is therefore keen to work with the Applicant to ensure this omission is addressed by further information being prepared to inform a robust DCO Application for examination.	
40	In particular, EEAST wishes to agree and secure suitable mitigation and management measures as part of the DCO Requirements and/ or via a Section 106 planning obligation (or Deed of Obligation) and reflect this position within a Statement of Common Ground by commencement (or at an early stage) of the forthcoming Examination.	
EEAST Principal Areas of Interest & Concern – Information for Inclusion Within Scope of the DCO Application Documents & Related Mitigation & Management Measures		
41	The principal areas of Project interest which are likely to significantly impact on EEAST's operational capacity, efficiency and resources requiring necessary and appropriate mitigation and management measures are outlined below - in light of the information and assumptions presented in the DCO Application.	These principal areas are addressed in the rows below.
Highways, Traffic, Transport & AIL's		
42	It is evident that a major level of onshore construction works incorporating cable corridors, trenchless crossings, haul roads and works compounds, requiring localised road widening measures, road closures and route diversions - along with significant HGV (and an unspecified number of additional/ AIL led) traffic movements are envisaged.	Please refer to the Applicants response to I.D. 14 to 18 and 21 to 22. The respondent's representation was discussed during the meeting on the 14th February 2023. EEAST acknowledged the reassurances given with regards to the mitigation and management measures associated with Highways, Traffic, Transport & AIL's and confirmed they are satisfied these are appropriate to limit the impact of the SEP & DEP projects on the EEAST operations.
43	This would take place as part of an extensive 4 to 8 - year construction phase program, required to implement the Sherringham and Dudgeon Offshore Windfarm Extension Projects.	
44	Information to determine the effects arising from the construction phase of the Projects and the likely impact on EEAST's operational capacity,	

I.D.	Relevant Representation	Applicant Comment
	efficiency and resources (including the likely highway disruption and delay) is currently absent from the DCO documentation and its related mitigation measures.	As stated above in the response to ID 4, the Applicant understands there is no longer a request for a DCO Requirement and/or a Section 106 planning obligation (or Deed of Obligation).
45	This information therefore needs to be presented and assessed, with any necessary mitigation and management measures secured and implemented through DCO Requirements, and/ or via a Section 106 planning obligation or Deed of Obligation, as part of any Development Consent Order approval.	
Major Accidents & Disasters		
46	It is evident that a significant level and duration of construction phase work reliant on the use of sea-based construction vessels, large-scale heavy lift plant and specialist machinery/ equipment, producing noise, heat, vibration and dust (with work carried out during potentially adverse weather conditions) is likely to present construction site hazards and dangers both at sea and on land.	The Applicant acknowledges this comment. Both On and Offshore Construction fall under CDM 2015 which requires designers, principal designers, principal contractors and contractors to take account of the principles in carrying out their duties. All activities will be risk assessed, with the principles of prevention to avoid risks where possible, evaluate those risks that cannot be avoided and put in place proportionate measures that control them at source.
47	Working on sea platforms, coastal, cliff edge and uneven ground, with moving machinery lifting and transporting materials, and working at depth, including the potential for trench collapse, for example, underlines the risks associated with the construction related activities – requiring both urgent and other medical interventions and transport conveyance (including specialised airborne tasking/ conveyance) to be appropriately planned for and provided.	The Applicant acknowledges this comment. As set out in CDM 2015-Regulation 30: Where necessary in the interests of the health or safety of a person on a construction site, suitable and sufficient arrangements for dealing with any foreseeable emergency must be made and, where necessary, implemented, and those arrangements must include procedures for any necessary evacuation of the site or any part of it.
48	Indeed, HSE's construction publications (for Great Britain) indicate that work related incidents involving serious injury and fatalities, are statistically significantly higher for the construction industry as compared to the 'all industry' rate.	The Applicant acknowledges this comment.

I.D.	Relevant Representation	Applicant Comment
49	Information to determine the effect of the construction phase and its impact on EEAST's operational capacity, efficiency and resources is currently absent from the DCO documentation, and its related mitigation measures however.	Discussions regarding Road Closures will be held with Norfolk County Council and information will be passed down to the emergency services.
50	In the event of a construction phase accident, appropriate procedures would need to be put in place for emergency access, on-site triage, medical assessment and patient identification, stabilisation and transfer to an appropriate healthcare setting.	The Applicant acknowledges this comment. As set out in CDM 2015-Regulation 30 and task specific Emergency Plans will be required. Not limited to but as an example of mitigation: Emergency & Evacuation Plans, defibrillators will be located at compounds throughout the route with locations to local units held in site packs, health checks as a minimum plant operator, emergency routes to hospital with site packs.
51	The processes and procedures developed by Equinor, and any outsourced construction organisations, should refer to legislation and technical guidance which places a duty on Equinor to have its own response and medical mitigation to take the patient to a place of 'normal access' and handover to EEAST crews.	The Applicant acknowledges this comment.
52	EEAST would expect any trench collapse to fall under the confined space regulations and Equinor, the construction company and/or contractor(s) should have access to a confined space trained team that could extricate a casualty safely.	Any deep excavation works will have an Approved Temporary Works Design that shall be independently checked, issued with a design check certificate and the contractor shall have Temporary Works Co-ordinators and Supervisors as part of their Safe Systems of Work. Assessments will be made on these designs whether confined spaces will apply and the design will consider all emergency procedures, this will form part of the working site pack, this will also apply for all other aspects of temporary works such as crane pads, scaffolding, steel and form work etc.
53	Plans and contingencies for facilitating emergency access, on-site triage, medical assessment, patient identification, stabilisation, clinical information, safe and efficient handover to EEAST responders, whilst sustaining operationally optimal attendance times (noting the likely delay factors above) which in urgent cases may require Helicopter Emergency Medical Services (HEMS) and/or Air-Sea Rescue access eg National Lifeboat Institution (RNLI), is therefore considered to be necessary.	The Applicant acknowledges this comment.

I.D.	Relevant Representation	Applicant Comment
54	The incidence and impact of major accidents (and disasters) on EEAST and its HEMS partner operational capacity, efficiency and resources, including EEAST hazardous area response teams – HART, (which may also require co-ordination and joint tasking with the Maritime & Coastguard Agency) needs to be presented and assessed, with any necessary mitigation and management measures secured and implemented through DCO Requirements, and/ or via a Section 106 planning obligation or Deed of Obligation, as part of any Development Consent Order approval.	The respondent's representation was discussed during the meeting on the 14th February 2023. EEAST acknowledged the reassurances given with regards to the mitigation and management measures associated with Major Accidents and Disasters and confirmed they are satisfied these are appropriate to limit the impact of the SEP & DEP projects on the EEAST operations. As stated above in the response to ID 4, the Applicant understands there is no longer a request for a DCO Requirement and/or a Section 106 planning obligation (or Deed of Obligation).
Population Increase, Health & Wellbeing		
55	It is evident that during the anticipated 4 to 8 - year construction period, a significant number of construction workers are required to implement the components of the Scheme.	**Chapter 27 - Socio-Economics and Tourism** [APP-113] quantifies the scale of the total non-home based construction workforce. Further justification for the assumption that inform this quantification are provided in response to ExA Q1.22.2.2 and repeated here for ease of reference. It is estimated that an additional 330 non-home based construction workers will require accommodation in East Suffolk. A significant proportion of additional non-home based workers will also be located on accommodation vessels offshore. It is possible that a small proportion of these non-home based workers could require emergency health care services while working in East Anglia. However the evidence suggests that site accidents have reduced over time, as shown in HSE's annual construction statistics which show a long term downwards trend in construction related injuries (HSE, 2021, Construction statistics in Great Britain). Given the limited scale of the workforce and the low probability of health and safety incidents, the additional demand for emergency services is expected to be negligible.
56	Information to determine the nature of the construction workforce, their home origin, health status, clinical dependencies, location of any temporary accommodation, which are factors likely to directly impact on EEAST's operational capacity, efficiency and resources, including its co-ordinated response with healthcare and blue light partners, is currently insufficiently dealt with in the DCO documentation.	
57	This information therefore needs to be presented and assessed, with any necessary mitigation and management measures secured and implemented through DCO Requirements, and/ or via a Section 106 planning obligation or Deed of Obligation, as part of any Development Consent Order approval.	The respondent's representation was discussed during the meeting on the 14th February 2023. EEAST acknowledged the reassurances given with regards to the mitigation and management measures associated with Population Increase, Health & Wellbeing and confirmed they are satisfied these are appropriate to limit the impact of the SEP & DEP projects on the EEAST operations.

I.D.	Relevant Representation	Applicant Comment
		As stated above in the response to ID 4, the Applicant understands there is no longer a request for a DCO Requirement and/or a Section 106 planning obligation (or Deed of Obligation).
Joint Working with EEAST, Health & Wellbeing Blue Light Partners - Transport, Community Safety, Health & Wellbeing Working Group		
58	In the light of the above, EEAST recommend that appropriate Terms of Reference, Membership and a Communications Strategy for a Transport, Community Safety, Health and Wellbeing Working Group is established, potentially in advance of the Examination.	The Applicant draws your attention to Section 2.4 of the **Outline Code of Construction Practice** [APP-302] 'Local Community Liaison'. Paragraph 26 states that a Stakeholder Communications Plan will be developed which will set out how effective and open communication with local residents and businesses that may be affected by the construction works will take place. Following the meeting with EEAST on 14th February, the Applicant understands the respondent is satisfied with the above provisions and there is no longer a request to include suitable Terms of Reference, Membership or a Communications Strategy for a Transport, Community Safety, Health and Wellbeing Working Group to be set up.
59	This would help to inform and assist the management of relevant aspects of the Projects requiring a coordinated response from 'health and blue light partners', incorporating representatives from EEAST, NHS Norfolk and Waveney ICS, Norfolk & Suffolk Constabulary and Norfolk Fire and Rescue Service as well as organisations such as Royal National Lifeboat Institution.	
Concluding Remarks		
60	EEAST welcomes the opportunity to respond to the Sheringham & Dudgeon Offshore Wind Farm Extension Projects which has been Accepted for Examination, and following review of the DCO documentation raises a non-statutory HOLDING OBJECTION, due to its omission to address EEAST's principal areas of interest and concern outlined above.	The Applicant acknowledges the EEAST's comment and welcomed the opportunity to engage with these issues at the meeting on the 14th February 2023. The respondent's representation was discussed during the meeting on the 14th February 2023. EEAST acknowledged the reassurances given with regards to the mitigation and management measures associated with the Respondents concerns and confirmed they are satisfied these are appropriate to limit the impact of the SEP & DEP projects on the EEAST operations. Both parties agreed this will be captured in a Statement of Common Ground to be submitted to the Examination Authority at Deadline 3. As stated above in the response to ID 4, the Applicant understands there is no longer a request for a DCO Requirement and/or a Section 106 planning obligation (or Deed of Obligation).
61	EEAST considers that the Projects are likely to give rise to significant effects on its operational capacity, efficiency and resources (incorporating its staff, vehicle fleet and estate assets) which have not been baselined or sufficiently assessed by the Sherringham & Dudgeon Extension Projects to date.	
62	The Projects are therefore considered to adversely affect EEAST's ability to meet and deliver its targets and priorities (statutory duties) as a key healthcare and emergency services provider	
63	Identified impacts arising from the development should therefore be addressed by employing appropriate mitigation and management measures - to be secured and implemented through DCO Requirements, and/ or via a	

I.D.	Relevant Representation	Applicant Comment
	Section 106 planning obligation or Deed of Obligation, as part of any Development Consent Order approval.	The Applicant looks forward to continuing to work with the EEAST during the examination and post DCO Award.
64	This approach ought to be reflected in a Statement of Common Ground to clarify the position reached and inform the forthcoming Examination process.	
65	The measures ought to include a process to assist EEAST and its health and blue light partners to plan for and implement co-ordinated responses to construction phase (and any operational and decommissioning phase) Scheme impacts and incidents, to optimise patient outcomes.	
66	We trust this is of assistance, and look forward to working with Equinor to satisfactorily address the points raised, which would enable EEAST to lift its holding objection.	

4.5 Eastern Inshore Fisheries and Conservation Authority [RR-031]

Table 4.5.1 Applicant's comments on Eastern Inshore Fisheries and Conservation Authority relevant representation

I.D.	Relevant Representation	Applicant Comment
1	Eastern IFCA provide a response in relation to the export cable route, where it overlaps with the EIFCA district (0-6nm from the coast), and the proposed potential MEEB. In relation to the export cable route: Eastern IFCA have agreed a byelaw which prohibits bottom towed gears from the majority of the MCZ to protect subtidal chalk features where they outcrop and where they are veneered, based on the potential for veneered chalk features to become exposed. The Applicant propose cable works which have the potential to interact with these subtidal chalk features that Eastern IFCA aim to protect through this byelaw (Closed Area Byelaw 2021). The Closed Area Byelaw 2021 will also protect subtidal mixed, sand and coarse sediment features from mobile fishing gears which will be directly impacted by cable works.	The Applicant notes that the byelaw will prohibit bottom towed gears from the majority of the MCZ. The Applicant has as far as possible taken the shortest export cable route through the MCZ to minimise the potential for disturbance. In addition, the Applicant has minimised the requirement for and committed to remove, if required, any installed external cable protection within the MCZ to mitigate habitat loss impacts during the operational phase.

I.D.	Relevant Representation	Applicant Comment
2	Restrictions to potting grounds and displacement of activities during cable works is of key concern. Further consultation and dialogue with industry is needed to understand the extent to which inshore potters may be impacted by cable works and ways this could be mitigated (e.g., through considering seasonal patterns in activities). Eastern IFCA's agreed Closed Area Byelaw 2021, once in force, will prohibit bottom towed gears from the section of cable corridor that overlaps with the MCZ but there is potential for displacement of such gears which operate outside of the MCZ.	The impact of offshore cable construction activities leading to reduction in access to, or exclusion from, established fishing areas for the UK potting fleet was assessed to be significant in EIA terms, requiring additional mitigation to reduce the residual impact to minor significance (Section 12.6 and Table 12.16 of **Chapter 12 Commercial Fisheries** [APP-098]). This additional mitigation commits to following the procedures as outlined in the FLOWW guidance (2014 and 2015), including with respect to any justifiable disturbance payment. In addition, the Applicant commits to developing a **Fisheries Liaison and Coexistence Plan** (FLCP), which will follow the **Outline FLCP** [APP-295] submitted with the DCO application. The Applicant highlights that the **Outline FLCP** [APP-295] details a Coexistence Strategy which, amongst other measures, commits to continuing consultation and liaison with the fishing industry with the aim of assisting the fishing industry to safely resume their fishing activities within the operational sites and along the offshore export cable corridor.
3	Whilst the Applicant has assessed the potential impacts of electro-magnetic fields, Eastern IFCA maintain that not enough is known about electro-magnetic field impacts on marine fauna. We do not consider this can be addressed by a single developer; instead, there is a responsibility for the marine cable industry to investigate and conduct research to reduce uncertainty.	The assessment of EMF impacts on fish receptors in Section 9.6.2.8 of **Chapter 9 Fish and Shellfish Ecology** [APP-095] has considered numerous studies and was informed by the project specific EMF assessment (Tripp, 2021). The Applicant acknowledges that there is some uncertainty with regard to the EMF effects on marine fauna and would be supportive of strategic research involving Government, wind farm developers and the marine cables industry.
4	In relation to the proposed MEEB: • The evidence to suggest that the proposed area has supported Native Oyster beds in the past is limited. There is evidence to suggest that a specific set of conditions are required for beds to establish and be maintained and can be quickly lost if environmental conditions change. A feasibility study is needed.	The Applicant acknowledges that there is limited evidence that the initial restoration site search area identified in Figure 8.1 of the **In-Principle CSCB MCZ MEEB Plan (Revision B)** [document reference 5.7.1] supported native oyster beds in the past, however oyster beds are understood to have occurred historically throughout the region [see Annex C of APP-083]. The Applicant proposes to undertake a pilot/feasibility study in Q1 2024 if MEEB is deemed to be required by the Secretary of State (SoS).

I.D.	Relevant Representation	Applicant Comment
5	• Discussion with Kent and Essex IFCA who have a similar Native Oyster restoration project within an MCZ have highlighted that the likelihood of restoration efforts achieving densities high enough to maintain a sustainable Oyster fishery is extremely low and, if ever achieved, would take a very long time.	As stated in the **In-Principle CSCB MCZ MEEB Plan (Revision B)** [document reference 5.7.1] "it is expected to take a considerable length of time for the oyster bed to become sufficiently established to potentially support a commercial fishery (i.e. +25 years), indeed if this happens at all." Although it should be noted that it is not the intended purpose of the MEEB to support a commercial fishery.
6	• The biosecurity risk associated with diseases such as Bonamia could have implications for other shellfish fisheries in the area and needs to be considered in greater detail.	Biosecurity of the cultch and oyster sources will be a key consideration in the selection process to ensure no pathogens or INNS are spread with the cultch material or oysters. The **In-Principle CSCB MCZ MEEB Plan (Revision B)** [document reference 5.7.1] includes outline biosecurity control measures including the requirement to manage the potential risks associated with Bonamia. The MEEB Implementation and Monitoring Plan to be produced post-consent will incorporate mitigation protocols to secure biosecurity measures once the source of cultch and oyster are confirmed.
7	• The management measures proposed in Appendix 1 predict that fisheries restrictions will not be required. However, this requires further consideration; if there is potential for restrictions to be put in place Eastern IFCA would not support the project because of the negative impacts it would have on fisheries and the apparent low likelihood that the bed will provide fishing opportunities in the future. Eastern IFCA's preference would be for co-location within the windfarm array where inshore fisheries would not be impacted.	Within **Section 8.5.3** of the **In-Principle CSCB MCZ MEEB Plan (Revision B)** [document reference 5.7.1], it is noted that static potting is not deemed to be a key issue for oyster restoration, provided the intensity of potting on the reef remains sufficiently low. Should monitoring of the oyster bed indicate that potting activity is hindering the oyster restoration efforts, the Applicant would seek to work with the MEEB steering group, EIFCA and relevant fishers to identify a suitable and acceptable course of action. The selection of the initial restoration site search area (Figure 8.1 of the **In-Principle CSCB MCZ MEEB Plan (Revision B)** [document reference 5.7.1]) within the MCZ was chosen because it aligns with the Defra Best Practice Guidance For Developing Compensatory Measures in relation to Marine Protected Areas (Defra, 2021) through delivering compensation in the same location where the impact is occurring. Additionally, this location was identified by Natural England as a potential historic oyster bed location (although it is now recognised, following information received from EIFCA, that this area may instead relate to historic fisheries shell deposit grounds). If MEEB is deemed to be required by the SoS, the Applicant would progress restoration efforts within the MCZ as the preferred measure

I.D.	Relevant Representation	Applicant Comment
		however if this was deemed not to be feasible then an alternative location within the SEP or DEP wind farm sites would be considered in consultation with the MEEB steering group and would be subject to approval by the SoS.

4.6 Environment Agency [RR-032]

Table 4.6.1 Applicant's comments on Environment Agency relevant representation

I.D.	Relevant Representation	Applicant Comment
1	Please find enclosed our relevant representation for the Sheringham and Dudgeon Extension project. Due to the word limit for this portal we will submit our full Representation by email. The Role of the Environment Agency The Environment Agency is a statutory consultee on all applications for development consent orders. We have a responsibility for protecting and improving the environment, as well as contributing to sustainable development. We have three main roles: (i) We are an environmental regulator – we take a risk-based approach and target our effort to maintain and improve environmental standards and to minimise unnecessary burdens on business. We issue a range of permits and consents. (ii) We are an environmental operator – we are a national organisation that operates locally. We work with people and communities across England to protect and improve the environment in and integrated way. We provide a vital incident response capability. (iii) We are an environmental advisor – we compile and assess the best available evidence and use this to report on the state of the environment. We use our own monitoring information and that of others to inform this activity. We provide technical information and advice to national and local governments to support their roles in policy and decision-making. One of our specific functions is as a Flood Risk Management Authority. We have a general supervisory duty relating to specific flood risk management matters in respect of flood risk arising from Main Rivers or the sea, and other watercourses.	The Applicant acknowledges the Environment Agency's comments. See responses to the comments summarised in the rows below.

I.D.	Relevant Representation	Applicant Comment
	Overview and issues of concern Our relevant representation outlines where we consider further work, clarification or mitigation is required to ensure that the proposal has no detrimental impact on the environment including flood risk. Our main concern is in respect of flood risk which we believe must be addressed prior to a Development Consent Order being granted. Specifically, this concerns the proposed crossing of an ordinary watercourse near Little Barningham. In other instances it may be acceptable for additional information to be provided later, either during the examination period or by Requirement. - Groundwater and contaminated land - Biodiversity and ecology - Legal Matters Please do not hesitate to contact me if you require any further information. We look forward to continuing to work with the Applicant to resolve the matters outlined within our relevant representation to ensure the best environmental outcome for the project. Yours faithfully Barbara Moss-Taylor Planning Specialist Environment Agency	
2	Table 18.14 This table contains an assessment of the magnitude of effect resulting from trenched crossings of ordinary watercourses and appears to focus on impacts from habitat change. This assessment does not appear to assess the magnitude of flood risk effects resulting from trenched crossings of ordinary watercourses that are in Fluvial Flood Zones 2 and 3a.	The Applicant would like to clarify that the impact of watercourse crossings during the construction phase presented in of **ES Chapter 18 Water Resources and Flood Risk** [APP-104, Section 18.6.1.1] is only intended to consider changes to the hydrology, geomorphology, water quality and, by extension, habitat quality of the surface drainage network. Flood risk impacts associated with watercourse crossings are instead considered alongside other potential impacts on flood risk receptors in ES **Chapter 18 Water Resources and Flood Risk** [APP-104, Section 18.6.1.4]. This includes a discussion in Paragraphs 144 and 150, and further details with regards to individual receptors are provided in Table 18-24 and Table 18-25. However, the Applicant acknowledges that the text in Paragraph 150, which explains that flood risk impacts during construction have been derived as a function of the number of watercourse crossings and the area of land affected within a given catchment, does not make explicit reference

I.D.	Relevant Representation	Applicant Comment
		to Table 18-14, and notes that the inclusion of this reference would have made the impact assessment clearer.
3	Paragraph 98 This states that ordinary watercourses will be crossed using trenched techniques except for certain circumstances where trenchless techniques may be used. The Environment Agency does have an interest in ordinary watercourses where there is associated fluvial Flood Zones 2 and 3a."	The Applicant can confirm that a meeting was held with the Environment Agency on 12th January 2023, to discuss the crossing of ordinary watercourses in Flood Zone 2 and 3a and specifically the ordinary watercourse to the south of Little Barningham, as noted in I.D.4.
4	Figure 18.5 This identifies the proposed crossing method at each location. There is a crossing of an ordinary watercourse southwest of Little Barningham where it appears that open cut trenched techniques are proposed. As noted in our comments for Table 18.14, the assessment used to determine a trenched crossing at this location didn't include an assessment of flood risk impacts. Immediately upstream of this crossing location are a number of properties in fluvial Flood Zone 3a and we also note that this area is within the flood alert area for The River Bure, Spixworth Beck and surrounding Becks.	As noted in the response to I.D.3, the Applicant held a meeting with the Environment Agency on 12th January 2023 with regards to the ordinary watercourse to the south of Little Barningham and the flood extent in this location. The Applicant can confirm that a review of flood risk in this location has been undertaken, as discussed with the Environment Agency, and a Technical Note summarising the outcomes of this review will be submitted at Deadline 2 .
5	Appendix 18.2 - Flood Risk Assessment Paragraph 408 – 412 These paragraphs suggest the site-specific risk assessments will be carried out at the detailed design stage.	The **Flood Risk Assessment (Part 1 of 8) - Revision B** [AS-023, para. 408 – 412] confirm that the Applicant proposes to undertake site-specific investigations at watercourse crossing locations where trenched techniques are proposed once consent for Project implementation has been granted. This is on the basis that the input of the Principal Contractor will be required to assess each of the watercourse crossing locations and subsequently identify an appropriate detailed methodology for each location. The Applicant notes that this is also confirmed the **Outline Code of Construction Practice (Revision B)** [document reference 9.17] which will be secured via Requirement 19 of the DCO.
6	Issue, impact and solution There is a potential increase of flood risk to several homes arising from the use of trenched techniques at this crossing. Based on the current proposal,	It is understood that this comment links to the concerns raised in I.D.4 above, with regards to the proposed crossing of the ordinary watercourse to the south of Little Barningham (east of Matlaske Road).

I.D.	Relevant Representation	Applicant Comment
	an assessment of the flood risk impacts of this trenched crossing is required in the Flood Risk Assessment for the Environment Agency to review and agree to before the conclusion of the examination process. Alternatively, we recommend that this crossing is undertaken using trenchless techniques (HDD) to avoid flood risk impacts, which should negate the need for an assessment. We have suggested this solution the Applicant's representative and await their response.	As such, the Applicant notes that a meeting was held with the Environment Agency on 12th January 2023 with regards to the above ordinary watercourse and the flood extent in this location. The Applicant can confirm that a review of flood risk in this location has been undertaken, as discussed with the Environment Agency, and a Technical Note summarising the outcomes of this review will be submitted at Deadline 2.
7	Paragraph 126 & 127 126 refers to the breach data (product 8) from the Coastal Wells flood model 2018. As part of the product 8 package a location map is provided which shows that the breach locations are at other locations along the North Norfolk coast and are not relevant to Weybourne. As such it is unclear why paragraph 127 of the FRA goes on to use this breach data. To assess the residual risk the FRA should refer to the undefended scenario instead of the breach scenario. Also please note that the Coastal Wells model 2018 has only assessed the tidal higher central allowance for climate change. It is highly likely that this proposal should be assessing tidal climate change to the upper end allowance in the FRA. This can be done by adding 0.34m to the climate change levels from this model to account for the additional increases in sea level up to 2122.	The Applicant notes that as part of the assessment of flood risk presented in the **Flood Risk Assessment (Part 1 of 8) - Revision B** [AS-023], all of the data provided by the Environment Agency has been reviewed to ensure that its relevance to the Project(s) is understood. Whilst a summary of the breach information has been provided within Paragraphs 126 and 127, the Applicant notes that this is part of the baseline discussion. The Applicant acknowledges that the review of the breach information confirmed it was not of specific relevance to the landfall location. As such the assessment does not rely on this data. The Applicant notes that in the **Flood Risk Assessment (Part 1 of 8) - Revision B** [AS-023, Para. 129], it was concluded that the use of trenchless techniques (e.g. HDD) mitigates the potential impact of flooding in this location. Therefore, the potential risk from coastal / tidal flooding was not considered further in the assessment.
8	Paragraphs 71-74 Reference is made to four private abstractions for domestic purposes located within the cable corridor. Source Protection Zones (SPZs) and the associated position statements apply to all groundwater abstractions for the purposes of drinking water. Sources with abstraction rates of more than 250 m3/day have SPZs delineated. For smaller abstractions, a minimum SPZ1of 50m radius should be used. Please refer to the information Manual for the production of Groundwater Source Protection Zones (publishing.service.gov.uk).To	**ES Chapter 17 Ground Conditions and Contamination** [APP-103, Section 17.5.2, para. 74] acknowledges that an SPZ1 is present at and within 50m of a private potable abstraction. The LA has been contacted to determine if the groundwater supplies are still active abstractions.

I.D.	Relevant Representation	Applicant Comment
	determine whether the groundwater abstractions are used for private supply, the Local Authority Environmental Health Team should be contacted and / or a visit made to confirm groundwater use.	
9	Paragraphs 119 We agree that soil sampling in areas of suspected contamination, as identified, should be carried out prior to the onset of ground works.	Noted.
10	Table 18-13 There is no recognition that the Spring Beck is a chalk stream rising out of the chalk aquifer. Upper reaches have been subject to small natural flood management (NFM) scheme using leaky dams, scrapes etc. The cable crossing is in the headwaters of the Spring Beck, so there are potential impacts on the NFM scheme. While most of the Spring Beck is highly modified, the headwater section where the NFM scheme is located is potentially the most sensitive. This should be factored into any further assessments and re-evaluated to medium sensitivity for certain impacts.	The Applicant recognises that Spring Beck is a chalk river, and that the upper reaches of the watercourse have been subject to a small NFM scheme. Although **ES Chapter 18 Water Resources and Flood Risk** [APP-104, Section 18.6.1.1] does not specifically identify that a trenchless crossing will be required for Spring Beck, the data presented in Crossing Schedule – Revision B [AS-022] and summarised in the ES chapter [APP-104, Table 18-15] confirms that Spring Beck would be crossed using a trenchless technique (crossing reference NNDC-DKX-WC-001). This would minimise interaction with the watercourse and reduce the likelihood of adverse impacts on the chalk river and associated NFM scheme. As stated in **ES Chapter 18 Water Resources and Flood Risk** [APP-104, Table 18.1], the Applicant has committed to undertake site-specific hydrogeological risk assessments to inform the design of the trenchless crossings of sensitive surface water receptors such as Spring Beck prior to the commencement of construction activities. The results of these risk assessments will be used to inform the design of a site-specific crossing methodology for each location, which will identify the strata through which the cable infrastructure would be installed, assess the level of risk posed to the watercourse, floodplain and associated groundwaters, and provide details of any site-specific mitigation measures required to prevent adverse impacts. This would therefore avoid potential impacts on Spring Beck and the associated NFM scheme. In addition, the **Outline Code of Construction Practice (Revision B)** [document reference 9.17] outlines a suite of measures that will be adopted to prevent the ingress of fine sediment and other potential contaminants

I.D.	Relevant Representation	Applicant Comment
		into sensitive watercourses such as Spring Beck during the construction phase. This includes a suite of measures to minimise impacts associated with watercourse crossings and manage the risks associated with bentonite breakouts from trenchless crossings. The Applicant is confident that these measures will prevent adverse impacts on Spring Beck and that any additional assessment requirements will be captured within the proposed site-specific hydrogeological risk assessment.
11	Water Framework Directive Compliance Assessment Section 18.1.6.6 Within the discussion of invasive non-native species (INNS) there is no mention of signal crayfish which carry crayfish plague and spread this to the native white clawed crayfish (WCC) populations. In Norfolk WCC populations are found in the rivers Glaven, Tud and Yare, but given the mobility of the signal crayfish, including passage over land it is important that biosecurity measures are practiced throughout river catchments. This risk can be managed by extra attention the biosecurity measure 'Check, Clean, Dry' for equipment and clothing between watercourses.	The Applicant acknowledges that signal crayfish are not specifically referenced in **ES Appendix 18.1 Water Framework Directive Compliance Assessment** [APP-208, Section 18.1.6.6]. However, Paragraph 93 provides a brief outline of the mitigation measures to prevent the spread of INNS that are described in detail in the **Outline Ecological Management Plan (Revision B)** [document reference 9.19]. Section 3.3.8 of this document sets out the biosecurity measures in accordance with the GB Non-Native Species Secretariat "Check, Clean, Dry" guidance (https://www.nonnativespecies.org/what-can-i-do/check-clean-dry/). The Applicant is therefore confident that it has identified appropriate measures to prevent the spread of crayfish plague during construction. It is also highlighted that all major rivers and watercourses which either were found to support American signal crayfish or otherwise may provide suitable habitat for them, are due to be crossed using HDD, meaning there will be no working directly within the channel. In the extremely unlikely event that any equipment does need to enter the watercourse (e.g. in the event of a bentonite breakout at one of the river crossings), appropriate precautions as advised will be taken to mitigate the risks of spreading crayfish plague and INNS.
12	Table 20-15 There is now sufficient information to scope in the National Grid cable network project East Anglia, and in particular impacts on the River Tas .	The Applicant acknowledges the comment and advises that the East Anglia Green Energy Enablement (GREEN) Scoping Opinion was published on the Planning Inspectorate website 14/12/22, post the submission of the SEP and DEP DCO application.

I.D.	Relevant Representation	Applicant Comment
		At the time of the SEP and DEP DCO application, East Anglia Green was a Tier 3 development. As such, the Applicant considered there to be insufficient information to assess cumulative environmental effects with SEP and DEP (The Planning Inspectorate, 2019). The Applicant considers that East Anglia Green would be in a more suitable position to assess cumulative effects with SEP and DEP, which as a Tier 1 development, has a higher degree of certainty. Should SEP and DEP construction be completed prior to the commencement of East Anglia Green, effects arising from SEP and DEP should be considered as part of their baseline assessment.
13	Appendix 20.9 - White Clawed Crayfish Survey Report More recent surveys conducted by Norfolk Rivers Trust on the River Tud have produced a positive result for WCC (3 females). There have also been Positive results for WCC in the River Tiffey which were not previously known to be present in this river. Remaining WCC in the Tud are extremely vulnerable due to the presence of signal crayfish in the watercourse. To address this, we recommend that extra vigilance regarding biosecurity is used when moving between and within river catchments. If not already done, we request that the eDNA results for WCC are shared with the Norfolk Biodiversity Information Service (NBIS) and request that a copy of the report is also shared with the Environment Agency.	The Applicant agrees that mitigation measures to address the risk of spreading crayfish plague should be included in section 2.38 of the **Outline Ecological Management Plan (Revision B)** [document reference 9.19] and the Outline Ecological Management Plan will be updated to reflect this. The Applicant will, ensure that the survey data reported in the **ES Appendix 20.9 White Clawed Crayfish Survey Report** [APP-222] is shared with NBIS.
14	Appendix 20.6 - Initial Biodiversity Net Gain Assessment Executive Summary It should be noted that rivers Tud, Tiffey and Yare are also classed as chalk streams. Section 4.3 There are likely to be changes in the finer detail of the BNG calculations as the latest version of the metric (currently 3.1) is applied. Section 4.4	Noted. The Applicant confirms that habitats of 'High distinctiveness' (per UKHab definitions) would be surveyed within <12 months of completion of the final Biodiversity Net Gain (BNG) calculations. These calculations are expected to be completed in September 2024, meaning such habitats would be targeted for surveys in summer 2024.

I.D.	Relevant Representation	Applicant Comment
	We agree that there should not be an expectation to re-survey every year, except where there are habitats of high distinctiveness.	
15	We would like to encourage the developer to be as ambitious as they can with the delivery of BNG and standalone ecological enhancements.	Noted.
16	Legal matters The Applicant's representatives have contacted us recently to request disapplication of the Environmental Permitting Regulations in respect of flood risk activity permits required for the crossings of main rivers. These matters have been referred to our lawyers and we expect to reach a settled position during the period of examination. We will keep the Examining Authority informed of the progress of these discussions.	Noted. The Applicant will continue to engage with the Environment Agency's lawyers with a view to reaching an agreed position on the proposed disapplication of the Environmental Permitting Regulations and proposed protective provisions for the Environment Agency before the close of Examination.

4.7 Frontier Power Limited [RR-034]

Table 4.7.1 Applicant's comments on Frontier Power Limited relevant representation

I.D.	Relevant Representation	Applicant Comment
1	Frontier Power Limited (FPL) manages the Blue Transmission Sheringham Shoal Limited BTSSL 132,000KV high voltage transmission export cables that connect the offshore windfarm to the UK grid. The licence to own and operate the offshore transmission assets was granted on the 26th June 2013. Sheringham Shoal wind farm transmission assets are located in the North Sea off the Norfolk Coast. The Sheringham Shoal wind farm has a generating capacity of 316MW. The transmission assets include two offshore substations connected via two offshore cables of approx. 22km and two 22km onshore export cables to the onshore Sale substation, near Cawston, Norwich. Our interest is ensuring the continued licensed operation and HSE relating to these cables to maintain the existing export from the current offshore windfarm.	The Applicant thanks FPL for its response and notes that their interest in ensuring the continued operation of its assets. The Applicant is pursuing a crossing agreement with FPL to offer protection for FPL assets.

4.8 Historic England [RR-041]

Table 4.8.1 Applicant's comments on Historic England's relevant representation

I.D.	Relevant Representation	Applicant Comment
Onshore		
1	ES Volume 1, Chapter 21 (Onshore Archaeology and Cultural Heritage) describes data and information sources and identification of known heritage assets. We also note the attention given to further investigation and data gathering, as could be progressed post-consent (vis. geoarchaeological and palaeoenvironmental potential) and the inclusion of an outline Onshore WSI (Doc Ref: 9.21). Regarding the identification of designated heritage assets within the 1km study area, we will provide further comment in our Written Representation. We will also provide further comment, as may be necessary, regarding the heritage settings assessment and any cumulative impacts associated with the proposed onshore substation and associated buildings.	Noted
Offshore		
2	The Historic Buildings and Monuments Commission for England (Historic England) is a statutory consultee in relation to the historic environment, the lead body for the heritage sector and the Government's principal adviser on the historic environment. We summarise our representation regarding this proposed project as follows. We are aware that whilst SEP and DEP are the subject of this DCO application, it is possible that either one or both projects could be developed, and if both are developed, that construction may be undertaken either concurrently or sequentially. 1. Environmental Statement (ES), Volume 1, Chapter 14 (Offshore Archaeology and Cultural Heritage), describes the adoption of the design envelope approach and has identified, as the worst-case scenario forty-three 18MW Gravity Based Structure (GBS). However, we cannot advise as to the risks to either the known or unknown historic environment, as it is not apparent what depth of seabed excavation and seabed levelling will be required to safely install GBSs across the proposed development areas.	Noted. Detail regarding the placement of foundations (and the requirements for seabed preparation) is currently unknown and will be developed further through detailed design post-consent. This will include detailed consideration of foundation types and layouts, in consultation with Historic England, to avoid heritage assets wherever possible and will be based upon the results of further investigation (post-application/post-consent), including geoarchaeological assessment, the archaeological assessment of high resolution geophysical data post-consent, and ground-truthing where necessary to determine the nature and extent of remains on the sea bed. As noted in Table 4.13 of **Chapter 4 Project Description** [APP-090], the depth of seabed excavation required for GBS seabed preparation is up to 5m.
3	2. Chapter 14 describes site-specific geophysical surveys conducted for this extension project. However, it is mentioned that there are survey data gaps	Noted.

I.D.	Relevant Representation	Applicant Comment
	in the proposed development areas. In our Written Representation we will offer advice as to whether the present assessment is sufficient to characterise the areas identified for development. We note that the Applicant has included an Outline Written Scheme of Investigation: Offshore (Doc Ref: 9.11), which should set out the methodological approach for data capture across the entire development area as should be acquired post-consent, if permission is obtained. In our Written Representation we will provide further advice regarding the substance of the Outline Written Scheme of Investigation (WSI):	The Applicant confirms that the **Outline Written Scheme of Investigation: Offshore** [APP-298] includes a recommendation that, prior to the acquisition of pre-construction geophysical data, a review of all the data is undertaken by a suitably qualified and experienced archaeological contractor. This will clarify the suitability of existing data and will include the identification of any data gaps. This will help to inform the acquisition of preconstruction geophysical data.
4	3. The Applicant describes the use of historic datasets and geophysical data acquired for this project. However, it is apparent that geotechnical survey work was only conducted within the proposed electricity export cable corridor. It is therefore important that the Outline WSI provides for analysis to be conducted on geotechnical materials obtained from the proposed array areas. We will provide further advice as may be necessary in our Written Representation.	Noted. Geoarchaeological assessment of geotechnical data acquired for the project forms part of the commitment by the project team to additional mitigation and investigations. We can confirm that the **Outline Written Scheme of Investigation: Offshore** [APP-298] provided for this analysis.
5	4. The Applicant has used geophysical data acquired for this project to determine the presence of anomalies and other seabed features of possible archaeological interest, as well as the presence of charted wrecks. Furthermore, it is important that the Applicant acknowledges the risk that this project could encounter previously unknown historic and archaeological sites. There are also archaeological interests associated with the proposed landfall location for the electricity export cables at Weybourne for which we will provide further comment. We will also advise further if the WSI should be subject to review with the relevant local authority, as relevant to any intertidal area as might be impacted by this proposed project.	Noted.
6	5. Embedded mitigation measures are described inclusive of Archaeological Exclusion Zones, further investigation where avoidance is not possible and implementation of a Protocol for Archaeological Discoveries. Regarding potential impacts, we recognise the identification of project phases inclusive of Construction, Operation and Decommissioning. We concur with the statements provided regarding potential monitoring requirements and we	Noted.

I.D.	Relevant Representation	Applicant Comment
	will provide further comment regarding the assessment summary in our Written Representation.	

4.9 Independent Oil and Gas [RR-044]

Table 4.9.1 Applicant's comments on Independent Oil and Gas relevant representation

I.D.	Relevant Representation	Applicant Comment
1	IOG North Sea Limited, a subsidiary of IOG plc, is the Licence Administrator and Operator, and a Licence Beneficiary, of UKCS Production Licences P1736 and P2260 (blocks 48/22 and 48/23), containing the Blythe and Elgood gas fields, respectively. The Blythe development includes a normally unmanned offshore production platform with a single production well drilled from the platform. A single subsea well has been developed on the Elgood field, to the north-west of the Blythe installation, and is tied back to the Blythe platform via a 9.1km 6" subsea gas flowline and umbilical. Gas export from the Blythe platform is via a 24.5km 12" gas export pipeline that connects to the Thames (Southwark) 24" gas export pipeline to the south of the Dudgeon Extension Project (North). IOG wishes to build upon the existing good relationship between IOG and Equinor New Energy Limited (Equinor), and wishes to reassert itself as a regional stakeholder and a neighbour to the existing Dudgeon wind farm and the Dudgeon Extension Project. Whilst we welcome the ongoing engagement for our mutual benefit, there are a number of specific considerations that IOG would like to highlight as areas of interest or uncertainty with the proposed Dudgeon Extension Project. These are outlined below, and although not exhaustive, frame the overall risk themes that IOG wishes to manage in collaboration with Equinor throughout the project. Multiple helicopter approach paths are required to allow access to the Blythe platform in varying weather conditions, and for emergency response. We would appreciate consultation between IOG and Equinor, and potentially direct with IOG's helicopter providers, to ensure our access remains unobstructed. Both the Blythe and Elgood assets are regularly serviced by supply and emergency response / stand-by vessels, therefore, careful coordination is required to ensure IOG can access the Blythe platform and the Elgood well 500m safety zone at all times. Periodic pipeline and seabed	The Applicant notes Independent Oil and Gas North Sea Limited's (IOG) representation. Potential impacts on the IOG assets are assessed in ES **Chapter 16 – Petroleum Industry and Other Marine Users** [APP-102]. Consultation to date has been constructive and the parties share an ambition for collaboration over the lifetime of the Projects. The Applicant has invited IOG to enter a Statement of Common Ground where the specific concerns and mitigations can be agreed.

I.D.	Relevant Representation	Applicant Comment
	surveys are required outside of these safety zones and therefore, coordination is also required to ensure that these operations can continue unimpeded. Line of sight communication is currently in place between the Blythe platform and the Bacton gas terminal. We would appreciate confirmation that this line of communication remains in place and unobstructed by any individual wind turbines of the Dudgeon Extension Project. IOG would be open to discussing alternative communication systems, such as the use of existing optical fibre, that may already be planned by Equinor for its own communication requirements. The appropriate crossing agreements will be required between IOG and Equinor should any of our asset infrastructure be crossed, for instance, inter-turbine (array) cables across gas export pipelines and umbilicals. Any activity undertaken within the Blythe platform 500m safety zone, the Elgood well 500m safety zone, or within the safety zones of the gas export pipelines, will also require an appropriate proximity agreement prior to works execution. IOG looks forward to continuing its discussions with Equinor.	

4.10 Jacobs UK Limited on behalf of Anglian Water Services Ltd [RR-045]

Table 4.10.1 Applicant's comments on Jacobs UK Limited on behalf of Anglian Water Services Ltd relevant representation

I.D.	Relevant Representation	Applicant Comment
1	Anglian Water Services Limited as the statutory body responsible for water services within the application area. The proposed scheme will affect assets belonging to Anglian Water and therefore Protective Provisions in respect of these assets are required. There has been consultation between the Applicant and Anglian Water regarding the wording of the DCO, with particular reference to the Protective Provisions set out in Schedule 14 Part 1 – 'Protection of Electricity, Gas, Water and Sewerage Undertakers' and the Discharge of Requirements set out in Schedule 2. Anglian Water seeks to be a consultee under Schedule 2 Part 1 - Requirements in respect of the Operational Drainage Plan. We note that such provision has been included within the Draft DCO and therefore Anglian Water is content with this	Anglian Water Services Ltd's comments are noted. Detailed discussions regarding adequate protection of Anglian Water Services Ltd's assets is ongoing. Information on interactions with SEP and DEP is being shared with Anglian Water Services Ltd to facilitate and progress negotiations in relation to the protective provisions. The Applicant hopes to conclude those negotiations in advance of the Examination closing. With regards to Requirement 17 (Operational Drainage Plan) of the draft DCO, and the need for a Statement of Common Ground, the Applicant refers to its letter to the Planning Inspectorate dated 13 January 2023 (AS-

I.D.	Relevant Representation	Applicant Comment
	wording in the Draft DCO to stand. Unfortunately, at the current time, the protective provisions are not agreed and Anglian Water has significant concerns regarding their content. We hope that following further discussions in this regard a revised Schedule 14, Part 1 that is specific to Anglian Water can be submitted to the Examining Authority. It is hoped that the Protective Provsions can be agreed and that all matters between Anglian Water and the Applicant can be summaries in a Statement of Common Ground in due course.	036) providing notification of the Applicant's intention to submit a change request. Change 2 which is set out in that letter relates to the drainage solution at the onshore substation and confirms the Applicant's intention to proceed with shallow infiltration as the sole surface water drainage approach at the onshore substation. Therefore, the option to connect to the Anglian Water foul sewer will not be progressed further and the draft DCO will be amended accordingly once that change request has been formally submitted. Anglian Water has been separately informed of the Applicant's commitment to make this change.

4.11 Maritime and Coastguard Agency [RR-054]

Table 4.11.1 Applicant's comments on Maritime and Coastguard Agency relevant representation

I.D.	Relevant Representation	Applicant Comment
1	*MCA will be responding to the ExA on matters concerning the safety of maritime navigation and maritime Search and Rescue. MCA will provide comments on the Navigation Risk Assessment, Shipping & Navigation chapter of the EIA Report, and the content of the DCO and DML. The main issues for MCA are concerning vessel routeing, vessels' ability for continued safe passage, that risks to all vessels and craft are at an acceptable level, and the project is not at the detriment to the provision of Search and Rescue, and other emergency response.*	Respondent's comment is noted

4.12 Marine Management Organisation [RR-053]

Table 4.12.1 Applicant's comments on Marine Management Organisation relevant representation

ID	Relevant Representation	Applicant Comment
Major Comments		
1	The MMO note that 39 days has been given to submit Relevant Representations, opposed to longer review periods provided for other projects of this nature. Given the size, scale, and complexity of the project, the MMO do not consider that this time frame was appropriate and	Noted.

ID	Relevant Representation	Applicant Comment
	insufficient time to enable the MMO to conduct and in-depth and thorough review of the documents submitted to PINS. In-line of projects of a similar scale (e.g. East Anglia One North) a time-scale of 56 days would have been more appropriate. Due to the time constraints the MMO would like to highlight that if any new issues are raised during examination, that were not highlighted within our relevant representation, this will likely be due to the complexity of the case and the short turnaround time of this response.	
2	The MMO has concerns about the timeframes for submission of documents. The MMO advise that a 6-month lead period (prior to the commencement of activities) rather than 4-month, would be more appropriate to allow sufficient time to review the submissions and resolve any issues; the submissions may require multiple rounds of consultation and the shorter the lead time, the higher the risk that there will be delays to the Applicant's project delivery timeframe. In addition to this the MMO has requested the removal of a determination timescale. These matters are expanded in sections 3.8.62 – 3.8.67.	Noted. The Applicant has updated the **Draft DCO (Revision C)** [document reference 3.1] at Deadline 1 with a revised timescales for the Site Integrity Plan from 4 to 6 months.
3	The MMO has concerns on the use of materiality within the DCOs. This has been expanded in sections 3.8.75 – 3.8.79.	Please see the response at ID 133 and 134 below.
4	The Applicant should demonstrate that they have considered whether the project adheres to all the relevant marine plans and policies in the area. The MMO recommends that this is presented in a single, coherent document instead of a number of separate references throughout the submission. The relevant marine plan policies that should be met can be identified using the Explore Marine Plans tool and policy information on the following website: https://www.gov.uk/guidance/explore-marine-plans Once a comprehensive marine plan assessment has been provided, the MMO will provide comment on this.	The Applicant has submitted a **Marine Plan Policy Review** (document reference 13.6) at Deadline 1 using the MMO template.
Minor Comments		
5	As far as the MMO are aware, no direct notification was received from the applicant regarding the Section 56 notice via email or by post. While the	The Applicant notes that a section 56 notice was sent by email to the marine consents MMO email on 21 October 2022.

ID	Relevant Representation	Applicant Comment
	MMO were aware a general notice had been submitted to PINS, it is usually standard practice to receive a direct notification from the applicant, declaring the deadline for submission.	
DCO and DMLs		
6	The MMO were given the opportunity to view and provide comments on the draft DCO and DML on the 9 May 2022, prior to submission to PINS. This advice was provided to the applicants on the 20 June 2022. The MMO note that there has been significant changes made to the DCO and while a number of concerns raised in our response to the applicant on the 20 June 2022 have been addressed, the MMO have flagged where any new or outstanding issues remain.	This is noted.
7	The MMO note that a revised DCO was submitted to PINS on the 27 October 2022. The MMO was not notified of the updated submission, or that an updated submission was planned prior to examination. The MMO has carried out the majority of its review using the DML submitted to PINS as part of the application submission but where possible references made are for the most up to date DCO. The MMO would also like to highlight that no notification was received regarding this change.	This is noted.
8	The MMO has reviewed the DCO, including the four DML's within the DCO (schedules 10-13). The following comments unless otherwise stated are relevant to all four DML's but the MMO would still recommend all are checked for potential discrepancies between wording etc.	This is noted. The Applicant has undertaken a review of the dMLs for consistency and made appropriate amendments, see **draft DCO (Revision C)** [document reference 3.1].
The MMO General comments on the DCO		
9	Part 6 (31) "Deemed marine licence under the 2009 Act". The MMO note that due to the separate ownership of the projects by SEL and DEL, individual DMLs relating to SEP and DEP would potentially be granted to the separate companies. Considering the scenarios above, where some aspects of the construction of the project would be shared, the MMO would like further clarification on how separate ownership of the DMLs would impact responsibility for undertaking joint project works, and post consent submissions.	Please see response to FWQ 1.11.3.2.

ID	Relevant Representation	Applicant Comment
DCO Authorised Development comments - Schedule 1		
10	Part 1 Article 1 “Work No. 1A— in the event of scenario 1, scenario 2, scenario 3 or scenario 4, an offshore wind turbine generating station with a gross electrical output capacity of more than 100 megawatts”. The MMO is still reviewing this requirement with regards to the wording “over 100 megawatts” and will provide an update at the next deadline	This is noted.
11	“In connection with such Work Nos. 1A to 7A and to the extent that they do not otherwise form part of any such work, further associated development comprising such other works as may be necessary or expedient for the purposes of or in connection with the relevant part of the authorised development and which fall within the scope of the work assessed by the environmental statement, including— (a) scour protection around the foundations of the offshore structures; (b) cable protection measures such as the placement of rock and/or concrete mattresses, with or without frond devices; (c) the removal of material from the seabed required for the construction of Work Nos. 1A to 5A and 7A and the disposal of inert material of natural origin within the Order limits produced during construction drilling, seabed preparation for foundation works, cable installation preparation such as sandwave clearance, boulder clearance and pre-trenching and excavation of horizontal directional drilling exit pits; (d) removal of static fishing equipment; and (e) temporary landing places, moorings or other means of accommodating vessels in the construction or maintenance of the authorised project;” For scour protection the MMO highlights that scour protection has been used to stabilise the use of jack-up barges in similar offshore wind farm locations and the MMO would like further clarification if the Applicant will be intending to do similar within the Project. In addition to this the MMO would like clarity on where the disposal volumes for drill arisings in connection with any foundation drilling are within the draft DCO (dDCO)/DML. The MMO believes that drill arising should be explicitly	In relation to scour protection, there will be no requirement for stabilizing scour protection for the jack-up vessel In relation to drill arisings volumes, the **draft DCO (Revision C)** [document reference 3.1] has now been amended to include the relevant figures.

ID	Relevant Representation	Applicant Comment
	stated within the dDCO/DML and the following section should be included in the above Article: (f) disposal of drill arisings in connection with any foundation drilling up to a total of XX cubic metres.	
12	Part 2 Article 1 – Ancillary works - "Works within the Order limits which have been subject to an environmental assessment recorded in the environmental statement comprising— (a) temporary landing places, moorings or other means of accommodating vessels in the construction or maintenance of the authorised development; (b) temporary or permanent buoys, beacons, fenders and other navigational warning or ship impact protection works; and (c) temporary works for the benefit or protection of land or structures affected by the authorised development." The MMO recommends including a provision for permitting the temporary deposit and removal of any equipment required to undertake the monitoring and mitigation activities outlined in the DML/ Post consent plans.	The Applicant does not consider that any such additional provision is required.
DCO Requirements comments - Schedule 2		
13	Part 1 Requirement 4.—(1) Within Work No. 1A, the wind turbine generator foundations must not have:— (a) a total combined seabed footprint (including scour protection) exceeding 483,491 square metres; (b) a total combined amount of scour protection exceeding 429,770 square metres; or (c) a total combined volume of scour protection exceeding 1,074,770 cubic metres. (2) Within Work No. 1B, the wind turbine generator foundations must not have:—	Volumes of scour protection for each individual foundation option are provided in ES **Chapter 4 Project Description** [APP-090]. The assessments in ES Chapters 6-9 do not consider the volumes of scour protection since the focus is correctly on the spatial footprint of seabed disturbance and habitat loss. Therefore, the Applicant considers that the inclusion of the total volume of scour protection within the DMLs is appropriate and that further breakdown of these is not required.

ID	Relevant Representation	Applicant Comment
	(a) a total combined seabed footprint (including scour protection) exceeding 610,726 square metres; (b) a total combined amount of scour protection exceeding 542,867 square metres; or (c) a total combined volume of scour protection exceeding 1,357,168 cubic metres. The MMO requests that the maximum volume of scour protection per turbine and per each structure is presented within the dDCO and DML as well as the total combined volume.	
14	Part 1 Requirement 9 – "The authorised project must not commence until notification has been submitted to the relevant planning authority as to whether the undertaker intends to commence scenario 1, scenario 2, scenario 3 or scenario 4. (2) The Sheringham Shoal Extension Project onshore works must not be commenced until a written scheme setting out the phases of construction of the Sheringham Shoal Extension onshore works has been submitted to and approved by the relevant planning authority, which scheme may subsequently be amended from time to time as notified to the relevant planning authority. (3) The Dudgeon Extension Project onshore works must not be commenced until a written scheme setting out the phases of construction of the Dudgeon Extension onshore works has been submitted to and approved by the relevant planning authority, which scheme may subsequently be amended from time to time as notified to the relevant planning authority. (4) Each scheme must be implemented as notified under sub-paragraphs (2), (3) and (4)." The MMO would like clarification on how far in advance of construction starting will the scenario be decided, and once a scenario is decided is it likely that the chosen scenario could change? If so, how would this impact the reporting requirements for the scenario decision. This should be clarified and secured within both the DCO and the DMLs.	Please see response to FWQ 1.6.1.

ID	Relevant Representation	Applicant Comment
15	The MMO has concerns about the timeframes for submission of documents. The MMO advise that a 6-month lead period (prior to the commencement of activities) rather than 4-months, would be more appropriate to allow sufficient time to review the submissions and resolve any issues; the submissions may require multiple rounds of consultation and the shorter the lead time, the higher the risk that there will be delays to the Applicant's project delivery timeframe. In addition to this the MMO has requested the removal of a determination timescale. These matters are expanded in sections 3.8.62 – 3.8.67.	This is noted.
16	The MMO has concerns on the use of materiality within the DMLs. This has been expanded in sections 3.8.75 – 3.8.79.	This is noted.
17	The MMO has provided the below comments on the interpretation's sections within the DMLs (Part 1(1)(1)). Where appropriate these are the same for all 4 DMLs, and where consideration is required within the DCO. "authorised project" – There is a lack of consistency within the DML's as to how they are referred to. Throughout the DML's there are references to "this licence" as well as "marine licence". The MMO recommend that this is amended to make more consistent across all schedules of the DML.	This has been amended, please see [**DCO Rev C**]
18	"cable crossing" means the crossing of existing subsea cables and pipelines by the array, inter-array or export cables authorised by the Order and forming part of the authorised project together with physical protection measures including cable protection;" The MMO would like to understand whether this is for all cable crossings? In addition, please can the Applicant clarify if cable protection is needed to be included within this interpretation since cable protection is a separate interpretation.	The definition is intended to apply to all cable crossings. The cross reference to cable protection is included within the cable crossing definition to make clear that cable protection (as defined) is included where reference to cable crossings are made in the DMLs.
19	"Cromer Shoal Chalk Beds MCZ" – There is a slight typographic error in schedule 12. "der" should be "order".	This has been amended, please see **draft DCO (Revision C)** [document reference 3.1].
20	"Draft Marine Mammal Mitigation Protocol" – The explanation for the definition is missing the word 'mammal' in schedule 11 and should be updated to match the other DML's.	This has been amended, please see **draft DCO (Revision C)** [document reference 3.1].

ID	Relevant Representation	Applicant Comment
21	"Dudgeon Extension Project offshore works" – In schedule 12 the definition is missing the hyphen after "means". This punctuation is present in the other DML's.	This has been amended, please see **draft DCO (Revision C)** [document reference 3.1].
22	"Dudgeon Extension Project onshore works" (b) – The wording is not the same for all four DML's. For example the wording for schedule 10 is different from that of schedules 11-13. The MMO recommend schedule 10 is update for consistency and to match the other DML's. The "-" is also missing in schedule 12.	This has been amended, please see **draft DCO (Revision C)** [document reference 3.1].
23	"gravity base structure foundation" means a structure principally of steel, concrete, or steel and concrete which rests on the seabed either due to its own weight with or without added ballast, skirts or other additional fixings, and associated equipment including scour protection, J-tubes, corrosion protection systems, access platforms and equipment and separate topside connection structures or integrated transition pieces" The MMO note that the wording is not consistent across the four DML's and the wording differs. Schedules 11-13 are the same but schedule 10 missing 'structure' out of the sentence. The MMO recommend schedule 10 is update for consistency and to match the other DML's. The MMO would like clarity on whether any additional information is required for this interpretation such as: transition piece, fenders and maintenance equipment, boat access systems, access ladders and access and rest platform(s) and equipment.	The Applicant does not consider any additional wording is required for this definition.
24	""HDD" or "horizontal direction drilling" refers to a boring technique involving drilling in an arc between two points;" The MMO asks if further information can be set out such as ""horizontal directional drilling" means a trenchless technique for installing an underground duct between two points without the need to excavate vertical shafts"	This has been amended, please see **draft DCO (Revision C)** [document reference 3.1].
25	The definition order is not the same between the four schedules. For example "interlink cable" is above "intrusive activities" in schedules 11-13 but in	This has been amended, please see **draft DCO (Revision C)** [document reference 3.1].

ID	Relevant Representation	Applicant Comment
	schedule 10 it is below “integrated offshore works” The order should be the same across all four DML’s.	
26	“intrusive activities” – The MMO note that schedule 13 appears to have a minor punctuation error and there is an additional semicolon after “wet storage areas”. The MMO recommend this is removed.	This has been amended, please see **draft DCO (Revision C)** [document reference 3.1].
27	“jacket foundation” means a lattice type structure constructed of steel, which may include scour protection and additional equipment such as J-tubes, corrosion protection systems and access platforms;” The MMO would like clarity on whether any additional information is required for this interpretation such as: transition piece, fenders and maintenance equipment, boat access systems, access ladders and access and rest platform(s) and equipment.	The Applicant does not consider any additional wording is required for this definition.
28	“maintain” – The MMO recommend that the definition of ‘maintain’ is amended to remove references to ‘adjust’ and ‘alter’. The current definition is not in-line with the MMO’s interpretation of maintain/maintenance; ‘upkeep or repair an existing structure or asset wholly within its existing three-dimensional boundaries’.	The Applicant considers its definition to be appropriate and necessary. Furthermore, there is precedent in the deemed marine licences of the East Anglia One North Offshore Wind Farm Order 2022, the East Anglia Two Offshore Wind Farm Order 2022, the Norfolk Vanguard Offshore Wind Farm Order 2022 and the Norfolk Boreas Offshore Wind Farm Order 2021 for the definition of “maintain” to include “adjust” and “alter”.
29	The MMO recommend that a definition is included for the Marine Case Management System (“MCMS”), furthermore, reference should be made to MCMS for submissions of post consent documentation or notifications within the four DML’s.	MCMS is already a definition in the draft Order. The Applicant has amended the **draft DCO (Revision C)** [document reference 3.1] to reflect the wording in Hornsea Project Four’s latest draft DCO.
30	“mean high water springs” – There is inconsistency between the word order of “mean high water springs” across the DCO’s. For example schedule 10 states “mean high water springs or MHWS” while in schedules 11-13 it is “MHWS or mean high water springs”. The MMO recommend schedule 10 is amended to reflect the word order of schedules 11-13.	This has been amended, please see **draft DCO (Revision C)** [document reference 3.1].
31	“mean low water springs”– As with the MMO’s comment for MHWS’s (3.7.16 of this response), the same error in word order is true for “mean low water	This has been amended, please see **draft DCO (Revision C)** [document reference 3.1].

ID	Relevant Representation	Applicant Comment
	springs" for schedule 10. The MMO's advice is the same for MHWS and recommend that schedule 10 is amended to reflect schedules 11-13.	
32	""monopile foundation" means a steel pile driven or drilled into the seabed and associated equipment including scour protection, J-tubes, corrosion protection systems and access platforms and equipment;" The MMO would like clarity on whether any additional information is required for this interpretation such as: transition piece, fenders and maintenance equipment, boat access systems, access ladders and access and rest platform(s) and equipment.	The Applicant does not consider any additional wording is required for this definition.
33	"offshore works plans" – The MMO note that this word has been defined only within schedule 11 but does not appear to be used anywhere within any of the DML's. The MMO recommend that this is removed if it is not required..	This term has been removed, please see **draft DCO (Revision C)** [document reference 3.1].
34	"onshore works" – There is a slight discrepancy in wording between the schedules 10 and 11. Schedule 11 contains the additional wording "works no's" before "8B to 22B", but this wording does not appear in schedule 10.	This term has been amended, please see **draft DCO (Revision C)** [document reference 3.1].
35	There is no current interpretation for "operation". The MMO recommends one is included.	There is no precedent in the deemed marine licences of the East Anglia One North Offshore Wind Farm Order 2022, the East Anglia Two Offshore Wind Farm Order 2022 the Norfolk Vanguard Offshore Wind Farm Order 2022 and the Norfolk Boreas Offshore Wind Farm Order 2021 for a definition of "operation" to be included and the Applicant does not think it necessary to include this as a defined term in the draft Order.
36	"order" will eventually need amending to include the year.	This is noted.
37	"order land" – The MMO note that there is currently no definition for "land plans" within part 1(1). The MMO recommend this is included.	This definition has been added to Part 1(1) of Schedules 10 to 13, please see **draft DCO (Revision C)** [document reference 3.1].
38	"order limits" –There appears to be a small reference error in schedule 11. The MMO think this should be paragraph 5 rather than 4. Additionally, the MMO note that there is no definition for "land plans".	This has been amended, please see **draft DCO (Revision C)** [document reference 3.1].
39	"outline marine traffic management plan" – In schedules 10 and 12 this starts with the word "the" which has been omitted from schedules 11 and 13. The	This has been amended, please see **draft DCO (Revision C)** [document reference 3.1].

ID	Relevant Representation	Applicant Comment
	MMO recommend it is either kept or removed for all schedules to remain consistent.	
40	“phase” – Schedule 10 contains additional wording to state “part 2 of this licence”. The MMO recommend that this wording is also included in schedules 11-13 as it provides clarity as to what it is the provision is referring to.	This has been added to the definition, please see **draft DCO (Revision C)** [document reference 3.1].
41	“scenario 1” – There appears to be minor formatting differences between the DML’s. For example schedule 10 does not include a hyphen after “following ways” but there is one included in schedules 11-13. The MMO recommend this is either removed from schedules 11-13 or included in schedule 10, as there should be consistency across all the DML’s.	This has been amended, please see **draft DCO (Revision C)** [document reference 3.1].
42	“scenario 3” – Schedule 11 is missing the word “sequential” from the definition as this is included in schedules 11-13.	This has been amended, please see **draft DCO (Revision C)** [document reference 3.1].
43	“Sheringham Shoal Extension Project onshore works” – There appears to be a discrepancy between DML’s. Schedule 12 not in line with 10,11 and 13 – The MMO suggest it should be 'onshore works, 8A to 22A' rather than 'onshore works operated 18A to 22A'.	This has been amended, please see **draft DCO (Revision C)** [document reference 3.1].
44	“Sheringham Shoal Extension Project scenario 4(b)” – This list appears to be missing works number 6A from the list. The MMO recommend the DML’s are checked to make sure no references to works numbers are accidently omitted.	This has been amended, please see **draft DCO (Revision C)** [document reference 3.1].
45	“Statutory historic body” – The MMO question whether this is correct or if it should be Historic England, rather than “Historic Buildings and Monuments Commission”?	This has been amended, please see **draft DCO (Revision C)** [document reference 3.1].
46	“suction bucket” – The definition for this wording differs across the schedules. For example, schedule 10 states: “suction bucket” means a steel cylindrical structure attached to the legs of a jacket foundation which partially or fully penetrates the seabed and remains in place using its own weight and hydrostatic pressure differential”. While schedules 11-13 is slightly different and makes reference to a “monopile foundation”. The MMO recommend that the wording is the same across all schedules.	This has been amended, please see **draft DCO (Revision C)** [document reference 3.1].

ID	Relevant Representation	Applicant Comment
47	"wind turbine generator" – There is a minor formatting difference between the DML's. Schedules 10, 12 and 13 contain the word "and" after "project", however, this isn't included in schedule 11. It also appears that schedule 12 is missing part of the wording found in the other schedules ("and forming part of the authorised project"). The MMO recommend that this is amended so that the wording is the same across all four DML's.	This has been amended, please see **draft DCO (Revision C)** [document reference 3.1].
48	Part 1(1)(4)(a) – The MMO notes the applicant has included an address for the Centre for Environment, Fisheries and Aquaculture Science ("CEFAS") as an address for correspondence. The MMO would like to remind the applicant that no documents should be sent directly to CEFAS, due to the commercial agreement between Cefas and the MMO. Correspondence with Cefas should be undertaken through the MMO, as CEFAS act as the scientific advisors for the MMO. The MMO requests this reference be removed.	References to the Centre for Environment, Fisheries and Aquaculture Science have been removed from Schedules 10 to 13, please see **draft DCO (Revision C)** [document reference 3.1].
49	The MMO recommend that under licensed activities any deposits or removals required for mitigation and monitoring should be included (e.g. noise monitoring equipment or bubble curtains). This is to ensure the avoidance of any future uncertainty about whether a project needs a separate consent to deposit/remove such items required for mitigation.	Please see response in row 12 above.
50	Part 1 (3)(a) – The MMO note a slight formatting discrepancy between the DML's. The word "GMT" is not in brackets for schedule 12 but is for schedules 10,11 and 13. The MMO recommend schedule 12 is updated to be in line with the other schedules.	This has been amended, please see **draft DCO (Revision C)** [document reference 3.1].
51	Part 1 (4) - The MMO notes that the dDCO states that the substances or articles authorised for deposit at sea include plastics and synthetics as well as marine coatings and other chemicals. We recommend that depositing such materials and substances at sea should be avoided, where possible.	This comment is noted.
52	Part 1 (5) – The MMO note that there is a minor difference in formatting across the schedules. Schedules 10 and 11 are the same but both schedules 12 and 13 contain the additional word "below" at the end of the sentence. The MMO recommend that this wording is included in schedules 10 and 11 for consistency.	This has been amended, please see **draft DCO (Revision C)** [document reference 3.1].

ID	Relevant Representation	Applicant Comment
53	Part 1 (5) – The MMO note that the coordinates in schedule 13 appear to contain several errors where coordinates are incomplete (e.g. Row 176 and row 182 are missing the "15" from the latitude column). The MMO recommend that the DML's are checked to ensure all coordinates are correct and that the onus is on the Applicant to ensure the coordinates accurately reflect the works area of the project.	This has been amended, please see **draft DCO (Revision C)** [document reference 3.1].
54	Part 1 (7) - The MMO request the inclusion of a provision within the DML that notification to the MMO of incorrect notification is required. The MMO suggest the following wording is included: Should the undertaker become aware that any of the information on which the granting of this licence was based was materially false or misleading, the undertaker must notify the MMO of this fact in writing as soon as is reasonably practicable. The undertaker must explain in writing what information was materially false or misleading and must provide to the MMO the correct information. With respect to any condition which requires the licensed activities to be carried out in accordance with the plans, protocols or statements approved under this licence, the plans, protocols or statements so approved are taken to include amendments that may be approved in writing by the MMO subsequent to the first approval of those plans, protocols or statements provided it has been demonstrated to the satisfaction of the MMO that the subject matter of the relevant amendments do not give rise to any materially new or materially different environmental effects to those assessed in the environmental information.	With regards to the MMO's wording relating to the MMO's suggested wording has been added to the **draft DCO (Revision C)** [document reference 3.1]. With regards to the MMO's proposed wording for amendments and variations, the Applicant notes that amendments and variations are already covered in Part 1(8) and 1(9) of Schedule 10 – 13.
55	Part 1 (7) – The MMO have commented on this previously, when reviewing the first iteration of the dDCO. The MMO's position is that this provision should simply state that section 72 of the 2009 Act is applicable to the licence and this amendment should also be reflected in Article 5 (benefit of order) in the DCO. The MMO recommend a full stop is inserted after "licence" on line 2 and the remainder of the provision be deleted – this recommendation is in line with other DCO/DMLs.	The current wording included in the **draft DCO (Revision C)** [document reference 3.1]is precedented in other offshore wind DCOs including most recently the East Anglia One North Offshore Wind Farm Order 2022 and the East Anglia Two Offshore Wind Farm Order 2022. It is also included in the deadline 7 version of the Hornsea Project Four Offshore Wind Farm draft DCO. The wording included in the draft DCO is appropriate.

ID	Relevant Representation	Applicant Comment
	The MMO reserves the right to comment further and in more detail in relation to this provision and the provision in the DCO.	
56	Part 1 (2)(f) – The MMO consider the term “inert material of natural origin” to be vague as it isn’t clear what inert material of natural origin is or could be.	The Applicant does not think a definition of this term is required as the phrase is clear on its face.
57	**Part 2 “Conditions”**	
58	Part 2 (1)(1) – There appears to be a very minor punctuation error in schedule 12 as there appears to be an extra hyphen after the (1).	This has been amended, please see **draft DCO (Revision C)** [document reference 3.1].
59	Part 2 (4)(1) of schedules 10 and 11 and part 2 (3)(1) of schedules 12 and 13 – There is currently no time frame in which notification has to be sent to the MMO.	Please see response in row 14 above.
60	Part 2 (3)(1)(c) – In schedule 11 the (c) is italicised whereas others in the list (and in other schedules are not). The MMO believes this is just a minor error but for consistency it should be the same as the rest of the list.	This has been amended, please see **draft DCO (Revision C)** [document reference 3.1].
61	Part 2 (2)(1)(b) - There is a slight discrepancy in formatting between the schedules. For example, schedule 10 has an “or” at the end of the line after “d” but schedule 11 does not. Schedule 11 then as an “or” at the end of line (b) while schedules 10 does not.	This has been amended, please see **draft DCO (Revision C)** [document reference 3.1].
62	Part 2 (3)(1)(e) of schedule 10– There is a discrepancy in numerical formatting across the DML’s. For example the number “1000” is written as “1,000” in schedule 10. The MMO recommend that this format is amended to be in line with schedules 11, 12 and 13 (no comma) and the DML’s checked for consistency. Part 2 (4)(1) of schedules 10 and 11 and part 2 (3)(1) of schedules 12 and 13 – “(1) The authorised project must not be commenced until a notification has been submitted to the MMO as to whether the undertaker intends to commence scenario 1, scenario 2, scenario 3 or scenario 4. (2) The authorised project must not be commenced until a written scheme setting out, with regards to the relevant scenario notified under sub-paragraph (1), the phases of construction of the authorised project has been submitted to and approved in writing by the MMO.	Numbering formats have been corrected, please see **draft DCO (Revision C)** [document reference 3.1]. Please see response in row 14 above.

ID	Relevant Representation	Applicant Comment
	(3) The scheme must be implemented as approved." The MMO consider this provision to be vague in that "notification to the MMO" does not provide a timescale of when this is to be provided to the MMO and how (e.g. via MCMS). The MMO has set out its opinion on timescales in paragraph (3.8.62 – 3.8.67) of this response. The MMO would like clarification on how far in advance of construction starting will the scenario be decided, and once a scenario is decided is it likely that the chosen scenario could change? If so how would this impact the reporting requirements for the scenario decision. This should be clarified and secured within both the DCO and the DMLs.	
63	Part 2 (5)(2) of schedules 10 and 11 and part (4)(2) of schedules 12 and 13 – The MMO does not consider this provision to be entirely clear, specifically which entity the "its" is referring to. It needs to be clearer if this is referring to the undertaker or the operator. If it refers to the undertaker this should be explicit.	It has been clarified that "its" is referring to the vessels under the undertaker's control but for the avoidance of doubt this also includes operators of vessels which are under the undertaker's control pursuant to paragraph 5(1) of schedules 10 and 11 and 4(1) of schedules 12 and 13.
64	Part 2 (6) of schedules 10 and 11 and part 2 (5) of schedules 12 and 13 - The MMO suggest that in order that neither party unreasonably withholds agreement, it is recommend that the following phrase is added to the end of the provision: - ", such agreement not to be unreasonably withheld or delayed".	This has been amended, please see **draft DCO (Revision C)** [document reference 3.1].
65	Part 2 (6)(1)(b) – The MMO note that schedule 13 appears to be missing the (1) from between "paragraph" and "(a)". The MMO also recommend the following revision to the wording in all schedules: "within 28 days of receipt of a copy of this licence and any subsequent amendments or revisions to it, those persons referred to in paragraph (a) must confirm receipt in writing to the MMO."	The drafting has been amended to refer to sub-paragraph (1)(a), please see **draft DCO (Revision C)** [document reference 3.1]. This has been amended, please see **draft DCO (Revision C)** [document reference 3.1].
66	Part 2 (5)(3)(c) of schedules 10 and 11 and part 2 (6)(3)(c) of schedules 12 and 13 – The MMO do not consider this provision to be very clear. The current wording does not make it clear if this provision intends to cover all vessels used or if this a reference to all vessels under the control of the undertaker, or are their potentially additional vessels not falling under the	This has been amended, please see **draft DCO (Revision C)** [document reference 3.1].

ID	Relevant Representation	Applicant Comment
	undertaker's control from which authorised deposits or removals are to be made.	
67	Part 2 (6)(7) of schedules 12 and 13 and Part 2 (7)(7) of schedule 10 and 11 – The MMO suggest the following amendments to this provision: "the undertaker must- (a) inform the Kingfisher Information Service of Seafish by email to kingfisher@seafish.co.uk of details of the vessel route, timings and locations relating to the construction of the authorised project or relevant part- (i) at least 14 days prior to the commencement of offshore activities, for inclusion n the Kingfisher Fortnightly Bulletin and offshore hazard awareness data; and (ii) on completion of construction of all offshore activities; (b) within five days of informing Kingfisher Information Service of Seafish above, confirmation must be provided to the MMO."	The Applicant does not think the proposed changes are required. The current drafting reflects what is in the East Anglia One North Offshore Wind Farm Order 2022, the East Anglia Two Offshore Wind Farm Order 2022, the Norfolk Vanguard Offshore Wind Farm Order 2022 and the Norfolk Boreas Offshore Wind Farm Order 2021.
68	Part 2 (7) of schedules 10 and 11 and part (6) of schedules 12 and 13 – In the first version of the draft DCO sent to the MMO on the 9 May 2022 there was a section for notification to UKHO (Part 2 (8)(10)). The DML now has a notification to UKHO for completion (e.g. Schedule 10 Part 2 (7)(10) but not one for commencement. The MMO recommends that this is reinstated and the provision should also include that copies of notifications to be sent to the MMO.	The wording in condition 7(10) of Schedules 10 and 11 and 6(1) of Schedules 12 and 13 has been amended to refer to notification to the UKHO of commencement as well as completion. Please note that the drafting change was only made in order to follow the wording as set out in a document dated 17 June 2022 provided to us by the MMO which contained preferred wording for the DCO DML Navigation Conditions.
69	Part 2 (7)(1)(b) of schedules 10 and 11 and part 2 (6)(1)(b) of schedules 12 and 13 – The MMO note that the formatting across the DML's is inconsistent. Schedule 12 "1(a) must confirm" is referred to as just "(a)" in schedules 10,11 and 13.	The dMLS have been reviewed for consistency and amendments made as required, please see **draft DCO (Revision C)** [document reference 3.1].
70	Part 2 (7)(3) of schedules 10 and 11 and part 2 (6)(3) of schedules 12 and 13 – The MMO recommend the inclusion of the wording "and any subsequent amendments or revisions to it" after "copies to this licence".	The Applicant does not think the proposed changes are required. The current drafting reflects what is in the East Anglia One North Offshore Wind Farm Order 2022, the East Anglia Two Offshore Wind Farm Order 2022, the Norfolk Vanguard Offshore Wind Farm Order 2022 and the Norfolk Boreas Offshore Wind Farm Order 2021.

ID	Relevant Representation	Applicant Comment
71	Part 2 (7)(3) – In schedule 12 this provision notes that reports must be provided to Trinity House ("TH") on the availability of aids to navigation in accordance with the frequencies set out in the aids to navigation management plan agreed pursuant to condition 12(1)(f)(vii), but the reference is to the reporting and recording of wreck or wreck material. The MMO consider this to be a minor error and instead the reference should probably be 12(1)(h), like in schedule 13.	This has been amended, please see **draft DCO (Revision C)** [document reference 3.1].
72	Part 2 (7)(3)(c) of schedules 10 and 1 and part 2 (6)(3)(c) for schedules 12 and 13 - The MMO request clarity on what is meant by "transport managers" which appears in this provision but is not defined within part 1(1).	The term "transport manager" is used in offshore wind farm DCOs, for example the East Anglia One North Offshore Wind Farm Order 2022, the East Anglia Two Offshore Wind Farm Order 2022, the Norfolk Vanguard Offshore Wind Farm Order 2022 and the Norfolk Boreas Offshore Wind Farm Order 2021. This is an industry-wide term and information is readily available about its meaning, for example here: https://www.gov.uk/government/publications/whats-involved-in-being-a-road-transport-manager/being-a-road-transport-manager-skills-and-knowledge-you-need
73	Part 2 (7)(3)(c) of schedules 10 and 1 and part 2 (6)(3)(c) for schedules 12 and 13 – The MMO request clarity on whether this provision is intended to cover all vessels used under the control of the undertaker or are their potentially additional vessels not falling under the undertaker's control from which authorised deposits or removals are to be made. The MMO recommend this should be made clear within the provision.	This drafting is intended to cover all vessels making deposits or removals under the undertaker's control. The Applicant considers the drafting is clear on its face and does not intend to make any further changes. This drafting also reflects what is in the East Anglia One North Offshore Wind Farm Order 2022, the East Anglia Two Offshore Wind Farm Order 2022, the Norfolk Vanguard Offshore Wind Farm Order 2022 and the Norfolk Boreas Offshore Wind Farm Order 2021.
74	Part 2 (7)(3)(c) of schedule 11 and part 6(3)(c) for schedule 13 The MMO require a copy of the licence to be onboard each vessel and is a standard condition on all marine licences where vessels are required. The MMO note that this has been amended to "and" for schedules 10 and 12 but not schedules 11 and 13. They should be amended from "or" to "and" in the following places: schedule 11: Part 2 (7)(3)(c); schedule 13: Part 2 (6)(3)(c).	This has been amended, please see **draft DCO (Revision C)** [document reference 3.1].
75	Part 2 (7)(7) of schedules 10 and 11 and part 2 (6)(7) of schedules 12 and 13 – The MMO recommend the following amendments are made to provide clarity for this provision: "7) the undertaker must-	se see response in row 67 above.

ID	Relevant Representation	Applicant Comment
	(a) inform the Kingfisher Information Service of Seafish by email to kingfisher@seafish.co.uk of details of the vessel route, timings and locations relating to the construction of the authorised project or relevant part- (i) at least 14 days prior to the commencement of offshore activities, for inclusion n the Kingfisher Fortnightly Bulletin and offshore hazard awareness data; and (ii) on completion of construction of all offshore activities; (b) within five days of informing Kingfisher Information Service of Seafish above, confirmation must be provided to the MMO."	
76	Part 2 (7)(9) of schedules 10 and 11 and part 2 (6)(9) of schedules 12 and 13 – No definition has been provided for "VHF" within the definitions (within part 1(1) of the DML's). The MMO recommend this is included.	A new definition for VHF has been added to Part 1(1) in schedules 10 to 13, please see **draft DCO (Revision C)** [document reference 3.1].
77	Part 2 (7)(9) of schedules 10 and 11 and part 2 (6)(9) of schedules 12 and 13 – There appears to be discrepancy between the DML's for this provision. Schedule 12 states "unless otherwise agreed" whilst schedules 10, 11 & 13 states "or otherwise agreed". The MMO recommend schedule 12 is updated to be the same as the other DML's.	This inconsistency has been corrected, please see **draft DCO (Revision C)** [document reference 3.1].
78	Part 2 (7)(11) of schedules 10 and 11 and part 2 (6)(11) of schedules 12 and 13 – The MMO note that only schedule 12 has the word "the" before "UKHO" and recommend that this is removed.	This inconsistency has been corrected, please see **draft DCO (Revision C)** [document reference 3.1].
79	Part 2 (7)(11) of schedules 10 and 11 and part 2 (6)(11) of schedules 12 and 13 – The MMO suggest that it should be specified that contact should be made through MCMS.	Part 1(1)(4) already states that 'Unless otherwise stated or agreed with the MMO, all notifications must be sent by the undertaker to the MMO using MCMS' so the Applicant does not consider the proposed change is necessary.
80	Part 2 (7)(12) of schedules 10 and 11 and part 2 (6)(12) of schedules 12 and 13 – It is not clear in this provision how mariners will be notified, the MMO recommend additional wording is included e.g "in accordance with (7)(9)(for schedules 10 and 11) or (6)(9)(for schedules 12 and 13) .	The Applicant does not consider referring to the paragraphs as suggested is necessary. The wording of Part 2 (7)(12) of schedules 10 and 11 and part 2 (6)(12) of schedules 12 and 13 reflects what is in the East Anglia One North Offshore Wind Farm Order 2022, the East Anglia Two Offshore Wind Farm Order 2022, the Norfolk Vanguard Offshore Wind Farm Order

ID	Relevant Representation	Applicant Comment
		2022 and the Norfolk Boreas Offshore Wind Farm Order 2021and the latest draft Order for the Hornsea Project Four Offshore Wind Farm.
81	Part 2 (10)(1) of schedules 10 and 11 and part 2 (9)(1) of schedules 12 and 13 – The MMO recommend the wording of this provision is considered further by the Applicant. The MMO suggest deleting “in writing by the Air Navigation Order 2016(hh)” and to insert “by the Air Navigation Order 2016(hh)” after “safety” and after “directed” insert “in writing”.	The Applicant does not think referring to the paragraphs as suggested would be suitable from a legal drafting perspective. The wording of Part 2 (10)(1) of schedules 10 and 11 and part 2 (9)(1) of schedules 12 and 13 reflects what is in the East Anglia One North Offshore Wind Farm Order 2022, the East Anglia Two Offshore Wind Farm Order 2022, the Norfolk Vanguard Offshore Wind Farm Order 2022 and the Norfolk Boreas Offshore Wind Farm Order 2021 and the latest draft Order for the Hornsea Project Four Offshore Wind Farm. For these reasons the Applicant does not propose to make a change.
82	Part 2 (10)(2) of schedules 10 and 11 and part 2 (9)(2) of schedules 12 and 13 – There should be a comma inserted after “in writing” at line 3. Additional the MMO note that there is no time frame specified for notification of any changes to information provided at 10(2)(a)-(e)(for schedules 10 and 11) or 9(2)(a)-(e) (for schedules 12 and 13), or following the completion of construction of the authorised project.	The Applicant does not think referring to the paragraphs as suggested would be suitable from a legal drafting perspective. The wording of Part 2 (10)(2) of schedules 10 and 11 and part 2 (9)(2) of schedules 12 and 13 reflects what is in the East Anglia One North Offshore Wind Farm Order 2022, the East Anglia Two Offshore Wind Farm Order 2022, the Norfolk Vanguard Offshore Wind Farm Order 2022 and the Norfolk Boreas Offshore Wind Farm Order 2021 and the latest draft Order for the Hornsea Project Four Offshore Wind Farm. For these reasons the Applicant does not propose to make a change.
83	Part 2 (11)(1) of schedules 10 and 11 and part 2 (10)(1) of schedules 12 and 13 – The MMO suggest that if a citation or date can be provided in relation to the International Convention for the Prevention of Pollution from Ships this detail should be included as a footnote.	The relevant wording in conditions 11 of Schedule 10 and 11 and condition 10 in Schedules 12 and 13 of the **draft DCO (Revision C)** [document reference 3.1] have been updated.
84	Part 2 (11)(5) of schedules 10 and 11 and part 2 (10)(5) of schedules 12 and 13 – The MMO recommended in our previous review of the DML prior to submission to PINS submission that both TH and the Maritime and Coastguard Agency (“MCA”) are included within this provision. The MMO note that TH has been included but the MCA has not. The MMO recommend that MCA are included or justification as to why not provided.	Can the MMO please clarify which paragraph this comment was meant to be in relation to? Part 2 (11)(5) of schedules 10 and 11 and part 2 (10)(5) of schedules 12 and 13 do not include reference to TH.

ID	Relevant Representation	Applicant Comment
85	Part 2 (11)(5) of schedules 10 and 11 and part 2 (10)(5) of schedules 12 and 13 – The MMO recommend a definition is included for “inert origin” and that this is included in part 1(1) all of the DML’s.	Please see response in row 56 above.
86	Part 2 (11)(7) and (1) of schedules 10 and 11 and part 2 (10)(7) and (10) of schedules 12 and 13 – The MMO request clarity as to the reason for the difference between the misplaced or lost rock and dropped object from being different. For example in DCO’s they can be combined to form one provision and suggest this may also be suitable for this project, e.g.: “(1) In the event that any rock material is misplaced or lost below MHWS, the relevant undertaker must report the loss to the District Marine MMO Local Enforcement Office and MMO Marine Licensing Team using the dropped object procedure and via return of a completed Marine Licence Dropped Incident Report (MLDIR1), as soon as possible , and in any event within 48 hours of becoming aware of an incident and if the MMO reasonably considers such material to constitute a navigation or environmental hazard (dependent on the size and nature of the material) the relevant undertaker must use reasonable endeavours to locate the material and recover it. (2) On receipt of the MLDIR1, the MMO may require, acting reasonably, the relevant undertaker to carry out relevant surveys. The relevant undertaker must carry out surveys in accordance with the MMO's reasonable requirements and must report the results of such surveys to the MMO. (3) On receipt of such survey results, the MMO may, acting reasonably, require the relevant undertaker to remove specific obstructions from the seabed. The relevant undertaker must carry out removals of specific obstructions from the seabed in accordance with the MMO's reasonable requirements and at its own expense. (4) Where the relevant undertaker has been unable to locate or recover material pursuant to discharging its duties under sub-paragraphs (1) to (3) it must demonstrate to the MMO that reasonable attempts have been made to locate, remove or move any such material.”	The Applicant does not think the proposed changes are required. The current drafting reflects what is in the East Anglia One North Offshore Wind Farm Order 2022, the East Anglia Two Offshore Wind Farm Order 2022, the Norfolk Vanguard Offshore Wind Farm Order 2022 and the Norfolk Boreas Offshore Wind Farm Order 2021 as well as the latest draft of the Hornsea Project Four Order.
87	Part 2 (12) of schedules 10 and 11 and part 2 (11) of schedules 12 and 13 – The MMO do not consider this provision to be necessary as section 86 of the	This condition has been included in other offshore wind DMLs (including most recently the East Anglia One North Offshore Wind Farm Order 2022

ID	Relevant Representation	Applicant Comment
	2009 Act provides a defence for action taken in an emergency in breach of any licence conditions. The MMO require justification or rationale from the applicant as to why this provision is considered necessary.	and the East Anglia Two Offshore Wind Farm Order 2022). There isn't an overlap with section 86 as the condition is about notifying the MMO where an emergency deposit has taken place and not about whether or not that is a defence to a charge.
88	Part 2 (12)(1)(b) of schedules 12 and 13 - The MMO note that these conditions are worded and formatted differently e.g., schedule 12 appears to be missing the (iii) before 'proposed pre-construction surveys' and the wording is different. It is important to check if this is supposed to be the same as schedule 13 or if the omission is intentional e.g., due to differences in what is being consented between projects.	This formatting error has been corrected, please see **draft DCO (Revision C)** [document reference 3.1].
89	Part 2 (12)(1)(b) of schedules 12 and 13 – Furthermore, because of the (iii) being missed off the (i) underneath "(unless otherwise agreed in writing with the MMO)" there are minor consistency errors. The MMO recommend (iii) should be (aa), and then (aa) should be (bb) and (bb) should be (cc). Schedule 12 also appears to be missing (iv) which is in Schedule 13 but this could be because of programme design differences.	This has been amended, please see **draft DCO (Revision C)** [document reference 3.1].
90	Part 2 (12)(1)(c)(i)(bb) – Schedule 13 appears to be missing the "5" from "exceeds 5 percent".	This has been amended, please see **draft DCO (Revision C)** [document reference 3.1].
91	Part 2 (12)(1)(d) - Schedule 12 contains additional wording. "Offshore" has been included in "outline project environmental management plan" (schedules 10,11 and 13 do not contain this, nor does the definition). The MMO recommend that it is removed.	This has been amended, please see **draft DCO (Revision C)** [document reference 3.1].
92	Part 2 (12)(1)(e) – The wording between schedules 12 and 13 for this provision is different. For schedule 12 it states that "a cable specification, installation and monitoring plan for the installation of cables within the Cromer Shoal Chalk Beds Marine Conservation Zone (in accordance with the outline Cromer Shoal Chalk Beds Marine Conservation Zone cable specification, installation and monitoring plan)", while schedule 13 states that "a Cromer	This has been amended, please see **draft DCO (Revision C)** [document reference 3.1].

ID	Relevant Representation	Applicant Comment
	Shoal Chalk Beds Marine Conservation Zone cable specification, installation and monitoring plan (in accordance with the outline Cromer Shoal Chalk Beds Marine Conservation Zone cable specification, installation and monitoring plan". The MMO would like to highlight that it is important that the definitions across the DML's are consistent and recommend that the DML's are checked to make sure the wording is the same across the DML's where there is any repetition.	
93	Part 2 (13)(1)(a)(i) – Schedule 10 says "mast" while in schedule 11 it is "masts" – It is important that the provision reflects the quantity of masts required and the necessary provision should be amended to reflect this.	This has been amended, please see **draft DCO (Revision C)** [document reference 3.1].
94	Part 2 (13)(b)(iii) – The MMO note that schedules 10 states "in accordance with sub-paragraph (1)(e)" but this is not included within the same conditions in schedules 11-13.	This has been amended, please see **draft DCO (Revision C)** [document reference 3.1].
95	Part 2 (13)(i) of schedules 10 and 11 and part 2 (12)(i) of schedules 12 and 13 – The MMO note that there appears to be a minor punctuation error in schedule 10, the capital letter at the start of the sentence should be lower case.	This has been amended, please see **draft DCO (Revision C)** [document reference 3.1].
96	Part 2 (13)(d)(iv) of schedules 10 and 11 and part 2(12)(d)(iv) of schedules 12 and 13 – The MMO recommend that a definition is provided in Part 1(1) for "fisheries liaison officer"	There is no precedent in the deemed marine licences of the East Anglia One North Offshore Wind Farm Order 2022, the East Anglia Two Offshore Wind Farm Order 2022, the Norfolk Vanguard Offshore Wind Farm Order 2022 and the Norfolk Boreas Offshore Wind Farm Order 2021 for a definition of "fisheries liaison officer" to be included and the Applicant does not think it necessary to include this as a defined term in the draft Order.
97	Part 2 (15)(3) – Schedule 12 the MMO recommend the inclusion of "in writing" after "submitted", as recommended in our advice provided with the DML submitted to the MMO for review prior to submission to PINS.	Can the MMO please clarify which paragraph this comment was meant to be in relation to ? There is no Part 2 (15)(3) in Schedule 12.
98	Part 2 (15)(2) of schedules 10 and 11 and part 2 (14)(2) of schedules 12 and 13 –The MMO strongly considers that it is inappropriate to put timeframes on	Please see the response to FWQ 1.11.6.1.

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	complex technical decisions of this nature. This is considered further in section 3.8.62 – 3.8.67 of this response.	
99	Part 2 (17)(1)(a) of schedules 10 and 11 and part 2 (16)(1)(a) of schedules 12 and 13 - This provision should extend to sub -contractors. Alongside the name and function of agents or contractors the MMO request further details to be submitted. These include the company number (if applicable), registered office address (where they are a limited company) and for all other legal entities their head office address. Having these additional details would ensure that we have the appropriate details to allow the MMO to contact the agents formally should this ever be required.	The Applicant does not consider that this condition should refer to sub-contractors. Sub-contractors are not directly appointed by the undertaker. The Applicant notes that the additional details requested are already included within condition 17(1)(a) of schedules 10 and 11 and 16(1)(a) of schedules 12 and 13.
100	Part 2 (17)(4)(b) of schedules 10 and 11 and part 2 (16)(4)(b) of schedules 12 and 13 – The MMO note that following initial advice on the DCO this provision has been amended to remove 'S44ed5' but it still contains 'IHO Order 1a'. The MMO recommend that this is word is defined in part 1(1) of the DML's.	A new definition of IHO Order 1a has been included in the definitions for Schedules 10 to 13.
101	Part 2 (17)(4)(c) – The MMO note that there appears to be additional wording in schedule 12. It appears to be a minor error but the MMO recommend the words "In principle monitoring plan" should be removed.	This has been amended, please see **draft DCO (Revision C)** [document reference 3.1].
102	Part 2 (17)(4)(d) – It is noted that in schedule 12 the end of the sentence is missing punctuation.	This has been amended, please see **draft DCO (Revision C)** [document reference 3.1].
103	Part 2 (18)(1) – The MMO note that both schedules 12 and 13 contain different references to places within the respective DML's. For schedule 12 the reference to 12(1)(b)(iii) does not exist. The MMO thinks this should be 12(1)(b) like in schedule 13.	This has been amended, please see **draft DCO (Revision C)** [document reference 3.1].
104	Part 2 (18)(5) Schedule 13 contains the additional number '19' before the '(4)' which is not included in the other Schedules. The MMO recommend that this is checked for accuracy.	This has been amended, please see **draft DCO (Revision C)** [document reference 3.1].
105	Part 2 (19) – Schedules 11 and 12 appear to be missing the words "and surveys" from the sentence. The MMO recommends that they are amended to be the same as schedules 10 and 13.	This has been amended, please see **draft DCO (Revision C)** [document reference 3.1].

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106	Part 2 (19)(1) – The MMO note that this seems to be mixed up with part 2 (18)(1) for schedules 12 and 13. The MMO suggest that they have accidently been swapped around or is the provision to discharge 12(1)(b)(iii) required as surely this would be discharged under 12(1)(b).	This has been amended, please see **draft DCO (Revision C)** [document reference 3.1].
107	Part 2 (19)(1) – It appears that schedule 12 is missing "in writing" from the wording as this appears within the same provisions in schedules 10,11 and 13.	This has been amended, please see **draft DCO (Revision C)** [document reference 3.1].
108	Part 2 (19)(3)(b) There is a discrepancy between schedules 12 and 13 - schedule 12 says "a full sea floor coverage…" while schedule 13 says "one full sea floor coverage…". The MMO recommend schedule 13 is amended to say "a".	This has been amended, please see **draft DCO (Revision C)** [document reference 3.1].
109	Part 2 (19)(3)(c) - Schedule 13 references part 12(1)(i) which is the marine mammal mitigation protocol document. The MMO thinks is a minor referencing error and instead should be the same as schedule 12 which is 12(1)(k).	This has been amended, please see **draft DCO (Revision C)** [document reference 3.1].
110	Part 2 (19)(3)(e) - Schedule 13 references part 2 (13)(2) which is the Site Integrity Plan ("SIP") condition. The MMO suggest that this should instead be the same as schedule 12 which is part 2 (12)(1)(i).	This has been amended, please see **draft DCO (Revision C)** [document reference 3.1].
111	Part 2 (19)(5) Schedule 13 references part 2 (13)(1)(f) which does not exist. This appears to be a minor referencing error and the MMO think this should instead be the same as schedule 12 which is part 2 (12)(1)(e).	This has been amended, please see **draft DCO (Revision C)** [document reference 3.1].
112	Part 2 (20)(3)(b) of schedules 10 and 11 and part 2 (19)(3)(b) – There are slight formatting differences between the DML's. Schedules 10 has a space between "MGN" and "654" while in respective conditions in schedules 11-13 they are joined together to form one word.	This has been amended, please see **draft DCO (Revision C)** [document reference 3.1].
113	Part 2 (20)(5) of schedules 10 and 11 and part 2 (19)(5) of schedules 12 and 13 – The wording is inconsistent across the DML's. The MMO note that schedules 10 and 11 are the same but 12 and 13 are both different from all others. The MMO recommend that the wording for this provision is the same across all DML's.	The dMLs have been reviewed for consistency and amendments made as required, please see **draft DCO (Revision C)** [document reference 3.1].

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114	Part 2 (20)(1) of schedules 10 and 11 and part 2 (19)(1) of schedules 12 and 13 – The MMO note that there are minor formatting discrepancies with this provision across the different schedules. In schedule 12 it is written as “four months” while in schedules 10, 11 and 13 it is down as “4 months”.	This has been amended, please see **draft DCO (Revision C)** [document reference 3.1].
115	Part 2 (21)(1) – It is noted that schedule 12 still contains hyphen for coordinates, the MMO note that revision b of the DML has sought to remove these from the DML. Part 2 (22)(1)(a) - For schedule 11 the MMO recommend that the word 'parameters' should be at the end of (b) rather than (a) - It is correct in Schedule 10.	This has been amended, please see **draft DCO (Revision C)** [document reference 3.1].
116	The DCO contains 4 DMLs consisting of two for the generation assets (Schedules 10 and 11) and two for the transmission assets (Schedules 12 and 13). Splitting the assets into two separate DMLs ensures smooth transitions during the transfer of benefit. If a transfer of benefit were to happen, it is unclear what mechanisms would be in place to ensure two different asset holders working in the same area would collaborate together, especially with regard to in-combination effects. This is considered a potential risk to the project by the MMO. The MMO is therefore considering requesting the inclusion of a collaboration condition to go within the DML. The MMO will confirm this within it’s next written response.	Please see response to point 9 above.
117	Throughout the conditions within all DMLs there is a requirement for the Applicant to submit all pre-construction documentation at least four months prior to the commencement of the construction works. The MMO does not agree that a four month timescale provides sufficient time for the post consent documentation to be considered prior to the start of commencement of works. The MMO believes that a four month pre-construction submission date is unrealistic and even counterproductive, as the pre-construction sign-off process is not always straight forward.	Please see the response to FWQ 1.11.6.1.
118	The four month timescale was deemed appropriate for round 1 developments, which were smaller, closer to shore and with fewer complex environmental concerns. The documents in question require in depth analysis	Please see the response to FWQ 1.11.6.1.

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	by both MMO staff and statutory consultees and as such, there needs to be as much time as practically possible to allow this process to take place.	
119	It is very common that documents submitted under these type of conditions require multiple rounds of consultation to address stakeholder concerns. This process alone can be very time consuming and the proposed four month submission time would not account for any additional time that the Applicant may require to update documents throughout the process. The MMO further notes that some documents require additional assessment processes, for example a Southern North Sea ("SNS") Special Area of Conservation ("SAC") SIP may require post consent Habitats Regulations Assessment ("HRA") considerations to be made. The MMO appreciates that the Applicant could be working within tight time schedules post consent, and as such, we advise that a more suitable timescale is provided to reduce risks that could lead to project delays.	Please see the response to FWQ 1.11.6.1.
120	For example, the timescale of one in depth plan (such as SNS SIP) could potentially follow this path: a) Up to 4 weeks to acknowledge and review the document within the MMO. b) Up to 6 weeks for external consultation with stakeholders on this documentation. c) Up to 4 weeks once consultation is closed to allow for the MMO to review the responses and possibly ask for additional information from the Applicant. At this stage the MMO and the Applicant could be in discussion to agree on an approach to the responses. d) Up to four weeks to allow for the Applicant to undertake any actions resulting from any MMO request for further information. Depending on the level of detail, and Applicant resources, this could represent a further significant time period. e) Once actions are completed and information is returned to the MMO, the MMO could need to undertake new consultations.	Please see the response to FWQ 1.11.6.1.
121	It is noted from the above that, even if the discharge of documentation were to follow the current estimated timescales, and no further communication was	Please see the response to FWQ 1.11.6.1.

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	required from the Applicant (which is highly unlikely) the current estimated turnaround equates to 18 weeks, which is longer than the 16 weeks suggested by the Applicant. It should also be noted that the above timescale applies to only one document, when in reality, the number of in-depth discharge requirements could far exceed 30 in total.	
122	The MMO considers it is important to address the practicalities of these types of signoff as well as the specific wording held within the consent. If the works are submitted 4 months prior to the construction start date then there is risk that the Applicant will have already begun preparing for construction. If sign off cannot be achieved within the 4 month window then there is a risk that the Applicant will face cost implications of this, for instance the costs from vessels sitting idle and the potential need to resource storage areas for wind farm infrastructure components that should have been installed. By amending the submission timescale to 6 months there is more time to undertake the required process with less risk of needing an extension or the Applicant facing delays.	Please see the response to FWQ 1.11.6.1.
123	The DMLs include a specified determination period within which the MMO must determine whether or not to issue consent under this condition. The MMO strongly considers it inappropriate to put timeframes on decisions of such a nature. The MMO would not willingly seek to constrain our ability to make an appropriate and timely decision on post consent sign-off of plans and documentation.	Please see the response to FWQ 1.11.6.1.
124	Under such tight restrictions if the evidence obtained does not provide the MMO with confidence that risks have been dealt with robustly, the determination may result in a refusal of the application for discharge. The undertaker would then have to restart the process and provide updated documentation in this instance.	Please see the response to FWQ 1.11.6.1.
125	The time it takes the MMO to make such determinations depends on the quality of the application made, and the complexity of the issues and the amount of consultation the MMO is required to undertake with other organisations to seek resolutions.	Please see the response to FWQ 1.11.6.1.

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126	The MMO's position remains that it is inappropriate to apply a strict timeframe to the approvals the MMO is required to give under the conditions of the DML given this would create disparity between licences issued under the DCO process and those issued directly by the MMO, as marine licences issued by the MMO are not subject to set determination periods.	Please see the response to FWQ 1.11.6.1.
127	Whilst the MMO acknowledges that the Applicant may wish to create some certainty around when it can expect the MMO to determine any applications for an approval required under the conditions of a licence, and whilst the MMO acknowledges that delays can be problematic for developers and that they can have financial implications, the MMO stresses that it does not delay determining whether to grant or refuse such approvals unnecessarily.	Please see the response to FWQ 1.11.6.1.
128	The MMO makes these determinations in as timely manner as it is able to do so. The MMO's view is that it is for the developer to ensure that it applies for any such approval in sufficient time as to allow the MMO to properly determine whether to grant or refuse the approval application. Please note this is applicable to any provision where a timescale of which the MMO is required to approve a document has been applied.	Please see the response to FWQ 1.11.6.1.
129	Further to this point, the MMO would like to highlight that this issue was also raised during the examination for Sizewell C, the nuclear power plant development. The secretary of state agreed with the MMO on this matter for the DCO for Sizewell C, and no timeframes for response by the MMO were included in the DMLs.	Please see the response to FWQ 1.11.6.1.
130	The MMO strongly considers that the activities authorised under the dDCO and DML should be limited to those that are assessed within the Environmental Impact Assessment ("EIA"), and so the statement within the DML "Such agreement may only be given where it has been demonstrated to the satisfaction of the MMO that it is unlikely to give rise to any materially new or materially different environmental effects from those assessed in the environmental statement" should be updated to clarify this.	The Applicant does not consider that the wording needs updating. The wording included at paragraph 9 of Part 1 of Schedules 10, 11, 12 and 13 of the **draft DCO (Revision C)** [document reference 3.1]is well precedented in previous offshore wind DCOs including most recently in the East Anglia One North Offshore Wind Farm Order 2022, the East Anglia Two Offshore Wind Farm Order 2022, the Norfolk Boreas Offshore Wind Farm Order 2021 and the Norfolk Vanguard Offshore Wind Farm Order 2022.
131	The intention behind EIA is to protect the environment by ensuring that in deciding whether to grant a development consent for a project, and in deciding what conditions to attach to that consent, the decision has full	The Applicant does not consider that the wording needs updating. The wording included at paragraph 9 of Part 1 of Schedules 10, 11, 12 and 13 of the **draft DCO (Revision C)** [document reference 3.1]is well

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	knowledge of what the likely significant environmental effects of the project/development will be. That knowledge then guides the consent process and what conditions, if any, to attach to the consent. Additionally, there is considerable public consultation under the EIA process because the process recognises the importance of local knowledge in environmental decision making.	precedented in previous offshore wind DCOs including most recently in the East Anglia One North Offshore Wind Farm Order 2022, the East Anglia Two Offshore Wind Farm Order 2022, the Norfolk Boreas Offshore Wind Farm Order 2021 and the Norfolk Vanguard Offshore Wind Farm Order 2022.
132	The EIA legislation was designed to apply to those plans/projects which could be sufficiently detailed and particularised at the application stage, to allow the consenting decision to be taken in the full knowledge of what the likely significant effects of that plan or project would be. In such circumstances, it would be unnecessary to create a legal obligation under the order which requires the activities to remain within what was assessed under the EIA, because the consent authorises the detailed and well particularised project, assessed in the EIA to be carried out, and therefore, providing the development is constructed as per the consent, those works would, by default, remain within the parameters of the EIA.	The Applicant does not consider that the wording needs updating. The wording included at paragraph 9 of Part 1 of Schedules 10, 11, 12 and 13 of the **draft DCO (Revision C)** [document reference 3.1]is well precedented in previous offshore wind DCOs including most recently in the East Anglia One North Offshore Wind Farm Order 2022, the East Anglia Two Offshore Wind Farm Order 2022, the Norfolk Boreas Offshore Wind Farm Order 2021 and the Norfolk Vanguard Offshore Wind Farm Order 2022.
133	If the Applicant is wanting to retain some flexibility and is proposing that the works that can be carried out should be restricted to those which “do not give rise to materially new or materially different environmental effects” to those assessed in the EIA. The concern with this is that the inclusion of the word “materially” here would allow the undertaker to carry out works whose effects are outside of the likely significant effects assessed in the EIA, providing they do not do so materially, i.e. in any significant way, greatly, or considerably. This is not what the purpose of the EIA process is, and it runs contrary to the purpose of EIA. The other issue with this is that whilst the undertaker is responsible for producing the environmental information and statement on which the EIA decision is based, the appropriate authority is responsible for the EIA consent decision, the inclusion of the word materially essentially means that the undertaker makes the decision as to what is and what is not material. Under EIA it is for the appropriate authority to determine what the likely significant effects will be and how those should be mitigated.	The Applicant does not consider that the wording needs updating. The wording included at paragraph 9 of Part 1 of Schedules 10, 11, 12 and 13 of the **draft DCO (Revision C)** [document reference 3.1]is well precedented in previous offshore wind DCOs including most recently in the East Anglia One North Offshore Wind Farm Order 2022, the East Anglia Two Offshore Wind Farm Order 2022, the Norfolk Boreas Offshore Wind Farm Order 2021 and the Norfolk Vanguard Offshore Wind Farm Order 2022.

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134	On this basis, the MMO does not consider that it is appropriate to use the word “material” in these circumstances.	The Applicant does not consider that the wording needs updating. The wording included at paragraph 9 of Part 1 of Schedules 10, 11, 12 and 13 of the **draft DCO (Revision C)** [document reference 3.1]is well precedented in previous offshore wind DCOs including most recently in the East Anglia One North Offshore Wind Farm Order 2022, the East Anglia Two Offshore Wind Farm Order 2022, the Norfolk Boreas Offshore Wind Farm Order 2021 and the Norfolk Vanguard Offshore Wind Farm Order 2022.
ES Chapter 2 Policy and Legislative Context		
135	The MMO welcomes the inclusion of the East Inshore and East Offshore Marine Plans, including reference to the relevant policies to the project. The MMO notes that the chapter states “Where necessary and appropriate topic chapters consider relevant EIEOMP policies further.” As noted in section 2.1.5 of this response, the MMO request that consideration of these policies is presented in a single, coherent document instead of a number of separate references throughout the submission. The relevant marine plan policies that should be met can be identified using the Explore Marine Plans tool and policy information on the following website: https://www.gov.uk/guidance/explore-marine-plans The MMO will provide further review of this once a singular assessment has been presented. The MMO can provide an example of a Marine Plan Assessment if requested by the Applicant.	See response at ID 4 of this table.
Benthic Ecology and Sediment Contamination		
136	In providing this response the MMO has reviewed the following documents: a) 2.2, C282-EQ-Z-GA-00006 - Location Plan (Offshore), August 2022, b) 2.7, C282-EQ-Z-GA-00009- Work Plans (Offshore), c) 6.1.1, C282-RH-Z-GA-00020 - ES Volume 1, Chapter 1 – Introduction, d) 6.1.3, C282-RH-Z-GA-00023 - ES Volume 1, Chapter 3 - Site Selection & Assessment of Alternatives, e) 6.1.4, C282-RH-Z-GA-00024 - ES Volume 1, Chapter 4 - Project	Noted.

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	Description, f) 6.1.8, C282-RH-Z-GA-00028 – ES Volume 1, Chapter 8 – Benthic Ecology	
137	During the Seabed ETG #5 meeting the MMO discussed with the applicant sampling requirements including the need for the applicant to use a validated lab. The applicant confirmed that they have used Fugro, who are not currently validated by the MMO for sediment analysis. The MMO still have outstanding concerns with this which are discussed further in this representation.	The Applicant clarifies that the MMO request for the Applicant to use an MMO accredited lab for contaminants analysis and for a higher number of samples to be collected, is only relevant to the MMO's marine licensing process for disposal of material to sea. This is not required when determining risks to water quality from other marine activities as part of the EIA.
138	The level of contaminants in the sediments and the coarseness of the sediments were used to predict the magnitude of effect. Based on the information that has been presented in Table 7-12, no samples exceed Cefas Action Level 1, however please see paragraph 11. The applicant has also compared contaminant levels to other guidelines such as the Canadian Sediment Quality Guidelines ("CSQG") 'Threshold Effect Levels', for which exceedances were observed in six samples for arsenic. The applicant argues that the levels observed do not exceed those observed within the scientific literature for the region. Whilst this argument is logical, the sample values may not be comparable with those in the literature if different methods have been used. Given that no sample for arsenic exceeds the Cefas Action Levels, arsenic does not seem to present a concern, however, my concerns with a non-validated laboratory being used remain salient.	It should be noted that the contaminants analysis undertaken by Fugro and subsequent interpretation provided in ES **Chapter 7 Marine Water and Sediment Quality** [APP-093] together with the contaminants analysis undertaken for SOW and DOW indicates that levels of contaminants in the offshore sites are low and typical of the region. In order to obtain a licence for sediment disposal, a lab with MMO accreditation is required to undertake contaminants analysis. The Applicant recognises that Fugro are not an MMO accredited lab and therefore the Applicant proposes to undertake additional contaminants sampling and analysis (by an accredited lab) during the pre-construction stage for the purposes of licensing for dredge disposal material at sea. A sample plan request is being submitted to the MMO imminently to agree contaminant survey and analyte requirements which will be aligned with the OSPAR requirements.
139	The applicant compares selected Polycyclic Aromatic Hydrocarbons ("PAH") congener concentrations to 'OSPAR Background Assessment Concentration ("BAC")' and 'United States Environmental Protection Agency's ("US EPA's") Effects Range-Low ("ERL")', finding that these were not exceeded. As for the assessment of arsenic levels, the chemical analysis methods underpinning the sample contaminants data may not be suitable for them to be compared to these additional guidelines. Additionally, for the US EPA's ERL and the CSQG, geology and species for threshold effects will not be the same as the OSPAR region. These factors limit the confidence that can be assigned to the sediment data and the conclusions that they inform.	It should be noted that a full benthic survey design to characterise the whole project area (PB8164-RHD-ZZ-OF-NT-Z-0009 DEP and SEP Benthic Survey Design) was submitted to the MMO for review on 22 July 2020. This superseded the Benthic Habitats and Sample Planning – Cable Corridors report (2020-1009-002) shared on 21 April 2020. At the time, the Applicant noted that there was confidence that the sampling plan was sufficient to characterise the seabed (including for contaminants), benthic habitats and communities present.
140	A site characterisation survey was undertaken in the SEP and DEP wind farm sites and offshore cable corridors by Fugro between the 10th and 19th	It was also agreed, following a comment from the MMO (see ref 1.8 of Table 'Responses to Questions Raised at the Second Seabed ETG meeting, 02 June 2020' in the collated Seabed Expert Topic Group Meeting Minutes (**Consultation Report Appendix 1 - Evidence Plan** (APP-030))

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	August 2020. It is noted that only seven of ten intended samples were analysed for contaminants, that the sampling conducted greatly underrepresents the volumes proposed to be disturbed based on worst-case scenario design under OSPAR guidelines, but that the 98 seabed samples collected and analysed for particle size showed that the working area is sufficiently coarse (mostly medium sand to fine gravels with less than 10% mud in all samples) to not warrant additional contaminant analysis and that the area is likely low risk.	to include Tributylin (TBT) within the contaminants analysis. The Applicant noted that a subset of stations (10) would be sampled using a Day grab and these samples would be analysed for chemical contamination, including the presence of organotins (e.g. TBT).
141	The volumes of disturbed sediment associated with the worst case scenario as presented in Table 7-2 for construction include 729,477 meter cubed ("m^3") for seabed preparation, 24,742m^3 for drill arisings, 195,900m^3 for displaced sediments during export cable installation, and 774,200m^3 for displaced sediment during infield and interlink cable installation, giving a total of 1,724,319m^3. Associated sediment depths ranged from 1m for export cable installation to 45m and 60m for drill arisings. The volume of sediment to be disturbed presented in the ES indeed indicates that the seven samples collected for contaminants analyses underrepresent the volumes of sediment to be disturbed according to OSPAR guidelines for volumes of dredged material, where 7-15 samples are requested for 100,000-500,000m3 of material.	
142	From Chapter 6, Table 6-5 indicates 98 grab samples 'and particle size at selected sites'. Table 2.1 from each of the benthic characterisation reports indicate 93 stations included for particle size analysis ("PSA"). Table 7-10 provides a summary of sediment PSA by area, with the 'dominant sediment type' including medium sand, medium to coarse sand (some in this area with high gravel content), sandy gravel, and within the export cable corridor ranging from outcropping chalk, gravelly sand/gravel and sand, gravelly sand or gravel, sand, and offshore medium sand to coarse gravel. Mud content was noted as mostly less than 10% in samples, although three samples were noted as containing higher percentages of mud (13-22%). 'Mud' has been confirmed by the applicant to include particles less than 63 micrometres, as this was raised in consultation in 2021. The results in Figure 7.4 for Sheringham Offshore Windfarm and Dudgeon Offshore Windfarm post-	

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	construction also show few sites with higher percentage fine sediments in the wider area sampled. The information presented suggests, as previously noted by the MMO, that due to the sufficiently coarse nature of the area, the amount of sampling conducted for contaminants is acceptable	
143	The MMO have reviewed the location of the seven samples analysed for contaminants in Figure 7.5 (included in Annex 1). The three stations with failed grab attempts have left gaps in sampling for contaminants in the northwest portion of SEP, the southeast component of the DEP (no samples at all in this area) and part of the offshore cable corridor. However, the applicant indicates that the unsuccessful sampling was due to rocks in the grab jaws and insufficient sediment recovered, which they propose indicates that these areas consist of coarse material.	
144	The seven grab samples taken for chemical analysis during the benthic surveys of SEP and DEP wind farm sites and offshore cable corridors were frozen and transferred to Fugro for analysis of metals, PAHs, total hydrocarbons (“THC”), and organotins. I note that the water quality section 7.5.1 indicates issues with “Polybrominated Diphenyl Ethers (“PBDEs”) and Polychlorinated biphenyls (“PCBs”), but these were not included for sediment contaminant analyses. Also elevated inorganic nitrogen from diffuse sources (field runoff from arable land) was indicated in section 7.5.1 for water quality, but there hasn’t been indication of whether organochlorine pesticides were considered for contaminants analysis or a reason for their exclusion. Adequate justification for exclusion should be provided, although due to the coarse nature of the sediments, the risk is likely to be low.	
145	The applicant acknowledged that of the PAHs analysed, two required for analysis and assessment to support the MMO decision for licencing disposal of dredge material to sea were not included (perylene and benzo(e)pyrene). However, they indicated that with low concentrations in other PAH parameters, it was not anticipated that these would exhibit a different trend. Each of the metal analytes typically considered by Cefas for dredging/disposal on the MMO’s list were included in Table 7-12 for	

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	comparison with Cefas Action Levels as were organotins (dibutyltin and tributyltin).	
146	For reporting data to OSPAR, the PSA data should come from the same samples as used for contaminants analyses. Here, PSA samples were collected separately.	
147	The limited confidence of the contaminant data subsequently limits the confidence that can be ascribed to the conclusions.	
Fish and Shellfish Ecology		
148	For the assessment of impacts of construction on fish, a calculation of total spawning habitat has been used in an effort to quantify the percentage of spawning area affected. The MMO do not support the calculation of total spawning habitat, as this approach can over or underrepresent spawning grounds and is solely based on substrate suitability. The MMO have provided a summary of the reasons below why we do not support the calculation of total spawning habitat: 1) Spawning areas can change over time or become recolonised. 2) Whilst spawning and nursery ground maps are used to provide the most recent and appropriate information to identify spawning areas, they do not fully define/consider/identify the following: a) All potential areas of spawning b) Any habituation that may occur i.e., identify areas where higher densities of spawning are present c) Specific substrate requirements e.g., substrates which are most suitable within the wider broadscale sediments d) More suitable topography e.g., ridges/edges of sandbanks where sandeel may spawn or furrows where herring may spawn e) Environmental factors that may influence spawning intensity such as temperature, oxygenation, natural disturbance, anthropogenic disturbance etc. f) Calculations of specific spawning areas are based on peak spawning times	The Applicant agrees that this approach can over or underrepresent spawning grounds because it is solely based on substrate suitability. However, as described in **Chapter 9 Fish and Shellfish Ecology** (APP-095) percentage calculations of potentially suitable spawning habitat / habitat within the offshore sites based on the methods used for herring and sandeel (**Sections 9.5.2.3.1** and **9.5.2.3.2** respectively of **Chapter 9 Fish and Shellfish Ecology** (APP-095)) were only intended to provide site context given the differing geographical areas of the SEP and DEP offshore sites. Furthermore, the MMO have confirmed that, despite this observation, the conclusions of the assessments of temporary habitat loss / disturbance impacts on herring and sandeel during all phases on herring and sandeel are agreed – see the **Draft SoCG: MMO** (document reference 12.11).

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	i.e., the number of days of a spawning period rather than considering the entire spawning season.	
149	The ES acknowledges that the DEP and SEP project area overlaps historic herring spawning ground and that suitable herring spawning substrate (gravel and sandy gravel) are found in the local area and overlapping the SEP and DEP arrays. However, based on the available evidence, it is likely that if herring spawning is occurring in the project area, it may be at low levels. The nearest known 'active' spawning ground for herring (based on recent International Herring Larvae Survey data) is that of the Banks herring population at Flamborough Head. Consequently, there is insufficient evidence on spawning activity at the DEP and SEP sites to justify any mitigation to limit disturbance to herring spawning habitat.	The Applicant agrees there is an absence of evidence that herring spawn in the vicinity of SEP and DEP and that if herring spawning activity was occurring in the vicinity of the wind farm sites it would likely be at low levels. It should also be noted that whilst relatively old, herring spawning surveys undertaken for the existing SOW and DOW concluded that herring spawning did not occur within the study areas (Brown and May Marine, 2009; Brown and May Marine, 2010). Based on the available evidence outlined above, the area is considered to be unlikely to be a hotspot for herring spawning. Given that the underwater noise modelling impact ranges do not overlap with known herring spawning grounds to the northwest, the Applicant considers that mitigation e.g. in the form of piling restrictions is not required for SEP and DEP.
150	The MMO note that impacts of habitat loss/disturbance on herring have been assessed as minor adverse which we generally agree with. However, the MMO have outstanding concerns regarding localised impacts to fish species as a prey source for marine predators. The MMO note that the SEP and DEP arrays also overlap areas of 'medium' to 'high' sandeel habitat (Figure 9.5 in Document Ref. C282-RH-Z-GA-00052). As sandeel spawn in the areas that they inhabit, loss and disturbance to their habitat arising from construction activities has the potential to cause significant impacts at a population level. The assessment of the impact of habitat loss and disturbance has been concluded as minor adverse for sandeel and, given the wider areas of 'high' suitability sandeel habitat to the north and east of the DEP and SEP sites, the MMO are content with the conclusion that significant impacts at a population level are not likely to occur. However, the MMO still have outstanding concerns regarding localised impacts to sandeel as a prey source for marine predators.	The Applicant welcomes that the MMO agree with the assessment conclusion of potential habitat loss/disturbance impacts on herring and are content with the conclusions for sandeel for the same impact. The Applicant notes the MMO's concerns about localised impacts to fish species as a prey source for marine predators. These are assessed in Section 11.6.1.2 and 11.6.1.4 of **Chapter 11 Offshore Ornithology** (APP-097) and Section 10.6.1.8 and 10.6.2.7 of **Chapter 10 Marine Mammals** (APP-096). These assessments largely rely on the assessments within the respective chapters which have an effect on prey species however due to the small scale, localised and temporary nature of impacts on prey species and overall negligible to minor adverse impact on prey species, effects on offshore ornithology and marine mammal receptors would not manifest in a manner which is likely to be detectable at the population level. It is also worth emphasising that the evidence indicates that the most effective measure for increasing the prey available to seabirds (and to an extent harbour porpoise which also prey on sandeels), would be to reduce fishing pressure on sandeel stocks in order to maintain sandeel total stock biomass above the "one-third for the birds" threshold (Cury et al. 2011, Hill et al. 2020). The Applicant advocates for provision of such strategic
151	The MMO consider additional consideration should be given to the potential impacts of localised reductions in prey abundance due to decreased herring and sandeel populations in the vicinity of the DEP and SEP sites during the construction programme. The ES recognises that many marine predators rely	

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	on sandeels, and that sandeels and clupeids (herring and sprat) play an important role in the North Sea's food web as prey for birds, marine mammals and piscivorous fish. The above is important as the DEP and SEP sites are located within the vicinity of the Flamborough and Filey Coast Special Protection Area (SPA) and the North Norfolk Coast SPA and Greater Wash SPA for which kittiwake and Sandwich terns (respectively) are Annex II features. The DEP and SEP sites are also within the Southern North Sea Harbour Porpoise Special Area of Conservation (SAC). It is likely that these Annex II predatory receptors will rely on fish, including sandeel and clupeids, as prey species in the local area and may experience reduced foraging success and/or incur greater energy expenditure travelling to new feeding grounds as a result of localised impacts to fish populations, especially those receptors with relatively small and/or coastal restricted foraging areas.	measures towards achieving energy security and net zero for the UK, but recognises that such strategic measures can only be achieved by Government action (see the **Strategic and Collaborative Approaches to Compensation and Measures of Equivalent Environmental Benefit** (APP-084) and **HRA Derogation and Compensatory Measures Update** (document reference 13.7) note submitted at Deadline 1). There is strong evidence that allowing sandeel stocks to recover from their current depleted state would greatly increase seabird populations within a few years, and for sandeel-dependent seabirds would give much greater gain than the precautionary estimates of the cumulative impact of the offshore wind industry; for example, Ecopath/Ecosim modelling by Natural England predicts a 42% increase in seabird numbers in the North Sea within 15 years of closure of the North Sea sandeel fishery (Bayes and Kharadi 2022, Natural England 2023).
152	The project will consist mainly of piling, but also result from other activities such as cable installation and clearance of Unexploded Ordinance ("UXO"). Under a worst-case scenario all wind turbine generator foundations would be installed using percussive/impact piling. If monopile foundations are used, the maximum hammer energy used to install the piles would be 5500 kilojoules ("kJ") and would create the highest noise levels, but installation using this method would likely be the quickest. Installation of foundations using jackets with pin piles would require a lower hammer energy (3000kJ) however more piles would be required, resulting in a total piling duration of 684 hours. Assessment of relevant fish receptors have been grouped by acoustic sensitivity based on criteria set out in Popper et al. (2014). Thresholds and ranges for mortality and mortal injury, recoverable injury, TTS and behavioural disturbances have been modelled for both stationary and fleeing receptors. In addition, modelling of the impacts of sequential and concurrent piling at different locations for SEP and DEP, including the deepest points (those with greatest noise propagation potential) has been carried out. Herring have been identified as being at high risk for behavioural impacts due to their swim bladder, which is involved with hearing, resulting in higher acoustic sensitivity. Additionally, herring may not be able to 'flee' piling activities due to their sediment-specific spawning requirements, further	The Applicant confirms that as agreed at the marine mammal ETG 3 on 20 July 2021 and reflected within the **Draft SoCG: MMO** (document reference 12.11) UXO clearance will be a separate Marine Licence and not part of DCO submission. However, assessments based on a potential worst-case scenario for UXO have been provided for information purposes in the ES chapter. Updated assessments informed by pre-construction UXO surveys will be provided as part of a future Marine Licence application. The Applicant notes that the criteria used to determine the sensitivity of herring to behavioural impacts is based upon qualitative criteria that summarise the effect of the noise as having either a high, moderate or low effect on an individual in either the near-field (tens of metres), intermediate-field (hundreds of metres), or far-field (thousands of metres). Herring, which have a swim bladder involved in hearing (primarily pressure detection), are assigned as being of high sensitivity in the near- and intermediate-field and moderate sensitivity in the far field.

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	increasing their vulnerability. Sandeels are also considered stationary receptors due to their high substrate specificity. However, due to their lack of a swim bladder, sandeels are considered less acoustically sensitive. Other sources of underwater noise such as the detonation of UXO have potential to cause significant impacts to fish. The MMO note that if UXO clearance is required as part of seabed preparation works, a separate marine licence will be required. The MMO are satisfied with a separate licence for UXO clearance activities and would expect an assessment of impacts to fish arising from UXO clearance to be presented as and when the UXO marine licence application is submitted.	
153	With the exception of herring, the MMO generally agree with the Applicant's assessment conclusion that impacts to fisheries and fish ecology arising from noise and vibration will be minor adverse. However, the MMO consider further details need to be provided with respect to the spatial extent of behavioural impacts for herring.	See Applicant's responses at ID 154 of this table.
154	Underwater noise modelling outputs have been provided in Figure 9.8 (C282-RH-Z-GA-00052) which show the impact range noise contours for behavioural disturbance, using the 135 decibel ("dB") threshold, as was recommended in previous advice. However, it is unclear from the information provided if the modelling has been based on a concurrent piling scenario, or if it has been based on a simpler modelling exercise using two individual piling scenarios for the 135dB threshold, (i.e., one at Dudgeon North East and one at Sheringham North) and the outputs/noise contours for each of these scenarios were then overlapped. If the latter has been done, then Figure 9.8 does not provide an accurate representation of the worst-case scenario for the maximum impact range based on concurrent piling. The MMO would like clarification on the outputs shown in Figure 9.8, and, if appropriate, provide additional modelling of concurrent piling using the 135dB threshold.	The Applicant considers that underwater noise modelling of 135 dB SEL was correctly performed from single rather than concurrent positions. This response appears to be based on a misconception of the threshold and long-standing principles for single-strike thresholds. Concurrent/simultaneous modelling should be undertaken for duration/exposure-based criteria: a receptor will accumulate noise exposure over an extended period of time. The 135 dB SEL threshold is an 'instantaneous' disturbance threshold and the millisecond-pass of a pulse from two separate sources at a single point in space where a receptor happens to be is highly unlikely, and not considered in impact assessments. Therefore, the Applicant does not consider that additional noise modelling is required. The worst-case scenario has been assessed.
155	The MMO note that four 'representative' locations over SEP and DEP have been chosen to model the effects of underwater noise. Other than choosing two of the deepest locations, no rationale has been given for the selection of these locations. Given the potential sensitivity of the high intensity spawning	The choice of locations was based on those with the greatest potential impact, namely the deepest water which will lead to the greatest impact ranges, and a broad geographical spread. Although the northwest DEP location may be slightly closer to the herring spawning grounds, it is

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	grounds for herring to the northwest of DEP, the MMO suggest the most north- westerly point of DEP should be chosen as a modelling location.	considered that the SEP north and DEP northeast locations together provide a reasonable indication of the distribution of noise towards the NW. Sandbanks and therefore shallower water in the northwest of DEP would reduce the noise propagation in that area.
156	Under the worst-case scenario, the total amount of suspended sediment expected to be produced during construction of SEP and DEP is 1,544,802m^3. Elevated SSCs can affect fish in several ways including disruptions to respiration and heart rate (Redding and Schreck,1982), and reduction in foraging effort by visual predators (Henley et al., 2000). Feeding may also be further impeded by the smothering of benthic foraging ground by the settlement of sediment (Henley et al., 2000). There is also the potential for contaminants in the sediment to be re-mobilised, however sampling undertaken has showed that contaminant levels in the SEP and DEP development area are low. The seabed at the development site comprises predominantly medium and coarse-grained sand. If disturbed, this is predicted to remain in the area localised to the array site and export cable corridor and fall from suspension rapidly. The sediment at both sites also comprises some finer sand and a small proportion of mud, this is predicted to remain in the water column and result in moderately elevated suspended sediment concentrations ("SSCs") for up to half a tidal cycle. Due to the relatively high background levels of SSC (10-30 milligrams per liter ("mg/L") and noting that winter storms can further increase these levels, fish receptors including eggs and larvae are expected to be well-adapted to cope with the estimated small increases in SSC. The MMO note that impacts to fish receptors including eggs and larvae have been assessed as minor adverse. The MMO agree with this assessment.	The Applicant welcomes that the MMO agree with the assessment on eggs and larvae.
157	The worst-case scenario proposed for DEP and SEP would be a total of two High Voltage Alternative Current export cables with a combined length of 102km. The ES recognises that magnetic fields generated as part of the electromagnetic field ("EMF") can be detected by a number of marine organisms including elasmobranchs, diadromous fish species and other fish species such as cod and plaice. According to the ES, predicted magnetic fields based on Tripp (2021) were found to be greatest at the seabed,	Noted. The Applicant clarifies that no loose rock will be used as cable protection within the CSCB MCZ. The Applicant has committed to using removable external cable protection systems within the MCZ. Regarding cable burial depth see ID 160 of this table.

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	reducing rapidly with horizontal and vertical distance from the source. The maximum possible exposure at the cable surface ranged between 1217 and 1653 microtesla ("µT"), with this reducing to 26.5µT at the seabed surface when the cable was buried to a depth of 1m. Where cable burial in the seabed for the DEP and SEP projects is not possible, loose rock dumps or removable external cable protection systems will be used to cover the cables. The predicted EMF value of 26.5µT at the seabed (assuming burial at 1m depth) is expected to be below the background measurements of 50µT for the SNS. Therefore, the assessment of the impacts to fish receptors has been concluded to be minor adverse. This is due to the low to medium sensitivity of the relevant fish receptors and the low levels of EMF expected to be produced. The MMO generally agree with this assessment, however, do have outstanding concerns regarding mitigation for cable burial depth.	
158	Regarding commercial fisheries receptors, shellfish dominate the landings by weight and value in both the local and regional area. Smaller quantities of finfish are landed including sole (Solea solea) and plaice (Pleuronectes platessa) by Dutch registered vessels and whiting (Merlangius merlangus) by French registered vessels. The main gear types used are beam trawlers and pulse trawlers targeting plaice and sole, demersal otter trawls targeting whiting, cod and haddock, and pelagic trawling for herring, anchovy, mackerel and sprat.	No response required.
159	As noted in section 4.3.8, it does not appear that appropriate underwater noise modelling has been carried out to demonstrate the maximum range of impact for behavioural effects on fish from concurrent piling. The MMO recommend that the cumulative impact assessment is revisited, once the revised modelling has been carried out, in order to determine whether the 135db noise contour from piling at DEP and SEP is likely to overlap with any other projects in the area that may also be carrying out piling in the marine environment.	See the response at ID 154 of this table, the Applicant does not consider that additional noise modelling is required. The worst-case scenario has been assessed.
160	The MMO note that Applicant has committed to the following 'best-practise' mitigation measures:	

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	a) Cables will be buried to reduce EMF at depths of between 0.5m and 1.5m and (up to 1m for export cables) excluding in areas of sand waves. Three-core cables will also be used, compacting the circuit phases which reduces and localises EMF. b) Construction will take place over a 24-hour period reducing the overall duration of the works and impacts to fish receptors. c) Soft-start and ramp-up will take place 20 minutes prior to maximum hammer energy during piling activities. This potentially allows mobile fish receptors to distance themselves from the source of impact, before the greatest hammer energy is reached.	The Applicant will make all reasonable endeavours to bury infield cables to 1.5m in the wind farm sites however depending on ground conditions, shallower burial depths may result. **Appendix 9.7.1 - Interim Cable Burial Study** (APP-292) and **Appendix 9.7.2 - Export Cable Burial Risk Assessment** (APP-293) of the **Outline Cromer Shoal Chalk Beds (CSCB) Marine Conservation Zone (MCZ) Cable Specification, Installation and Monitoring Plan (CSIMP)** (APP-291) provide further details on export cable burial within the MCZ. The Applicant notes that offshore construction practices will be intermittent in nature and that whilst there is provision for 24-hour construction this does not necessarily mean there will be 24-hour noise input. However, the Applicant acknowledges that 24-hour construction may mean that there are fewer quiet periods during the Projects' construction than if e.g. 12-hour working practices were to be in place which could result in localised 'avoidance' impacts on a more consistent basis but overall shorter time-span by a variety of marine receptors including fishes.
161	The MMO support the mitigation measures proposed which are typical 'best-practise' for construction activities within the marine environment. However, the MMO have the following minor additional comments to make: a) The MMO request that the Applicant aims for a minimum cable burial depth of 1.5m (subject to local geology and obstructions) to minimise the effects of EMF, as recommended in the Department of Energy and Climate Change report (2011). b) 24-hour construction will reduce the overall duration of the works and impacts to fish receptors in terms of the number of consecutive spawning seasons that will be affected. Conversely, 24-hour construction will mean that there are no quiet periods of 'downtime' during the project's construction. This is likely to result in localised 'avoidance' impacts by a variety of marine receptors including fishes, and this should be acknowledged in the ES.	
162	The MMO would like to caveat that we are unable to determine whether additional mitigation is required (e.g., a seasonal piling restriction during the herring spawning season) until additional clarification and/or underwater noise modelling has been presented.	See the Applicant's response at ID 154 and 159 of this table.
163	Brown shrimp have been shown to be present and are a commercially important species. However, they are not considered with regard to increased suspended sediment. Literature has suggested that particle size was found to be a major influencing factor on the degree of burial achieved by C. crangon (Pinn & Ansell 1993).	Brown shrimp is not explicitly referenced in Section 9.6.1.2 of ES **Chapter 9 Fish and Shellfish Ecology**, however, this species is considered to have a low sensitivity to increases in suspended sediment concentrations since brown shrimp inhabit areas with high quantities of suspended sediment (Addison et al., 2003) and are therefore likely to be broadly

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		tolerant to the increases anticipated to occur during construction activities. That is, whilst suspended sediment concentrations as a result of SEP and DEP would increase above background levels, it is predicted that they will still be less than 10mg/l, localised and short-lived. It is recognised that temporary changes in suspended sediment concentrations could have localised effects on brown shrimp burial ability (Pinn & Ansell 1993), however, since medium to long-term changes to substratum type is not anticipated from the SEP and DEP construction activities, a magnitude of impact of low and an overall impact significance of minor adverse is predicted for this species.
164	Cockles have been reported as key commercial species in the area, however cockles have not been taken forward in the assessment (Table 9-16: Summary of the Principal Fish and Shellfish Species in the Local Study Area to be taken forward for Assessment). The MMO would expect cockles to be taken forward for the assessment.	As noted in the **Fish and Shellfish Ecology Technical Report** (APP-095), MMO data show that cockles were only landed in some years between 2009 and 2019 in the area local to SEP and DEP (ICES rectangles 34F1 and 35F1) and were not landed from 2016 to 2018, however almost 11 tonnes were landed in 2019. Cockles make a very small contribution to total landings in these areas whereas they are the most important fishery in terms of quantity landed in the region to the west (35F0 and 34F0) that incorporates The Wash. No cockles were present in any of the IBTS data or the historic site surveys. The ecology of cockles and data show that they are restricted to coastal intertidal areas and therefore it is not considered that they are required to be included in the assessment.
165	The MMO recommend including a map of fishing effort and landings data for shellfisheries and other projects would be beneficial to better visualise the inter-related impacts and effects on the physical and biological environment.	These have been provided in Figure 4 and Figure 5 of in **Appendix 1** [document reference 12.3.1].
166	The MMO note that the disturbance payments may require fishers to remove gear from the water or store it to ensure that the mitigation measure does not increase the overall potting effort. While the MMO agree with this approach in principle, this might not mitigate against an increase in effort in another area using different gear. However, the MMO defer to the Eastern Inshore Fisheries and Conservation Authority, who are in the best position to provide any information on spatiotemporal shellfisheries fleet dynamics, or provide contact details of fishers.	Noted. It is highlighted that the Applicant will agree specific requirements of cooperation agreements with individual vessel owners, and that these agreements will remain confidential. The principle of disruption payments made in relation to mitigating temporary loss of access to fishing grounds will be to remove that effort so that displacement of that effort is minimised. The Applicant remains open to options for minimising displacement and understands that specific solutions may vary depending on what is acceptable to individual vessel owners.

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Marine Mammal Ecology		
167	The MMO note that there appears to be a minor spelling error in paragraph 272. Should be 'harbour seal' not 'harbour se'	Noted.
168	It is noted that the cumulative impact assessment screening identified that there is the potential for cumulative impacts on marine mammals as a result of disturbance from underwater noise during piling and other construction activities, including vessels at SEP and DEP. Other potential impacts, including Permanent Threshold Shift ("PTS") from underwater noise and Temporary Threshold Shift ("TTS") from underwater noise, were screened out of the cumulative impact assessment. All operational impacts have also been screened out of assessment. There does not appear to be a justification for scoping out PTS and TTS from underwater noise or operational impacts.	Section 10.3.2.1 in **Appendix 10.3 - Marine Mammal Cumulative Impact Assessment (CIA) Screening** [APP-193] outlines the justification for screening out Permanent Threshold Shift (PTS) from the cumulative underwater noise assessments: *"if there is the potential for any PTS, from any project, suitable mitigation would be put in place to reduce any risk to marine mammals. Other activities such as dredging, drilling, rock placement, vessel activity, operational windfarms, oil and gas installations or wave and tidal sites will emit broadband noise in lower frequencies and PTS from these activities is very unlikely. Therefore, the potential risk of PTS in marine mammals from cumulative impacts has been screened out from further consideration in the CIA."* Section 10.3.2.2 in **Appendix 10.3 Marine Mammal CIA Screening** [APP-193] outlines, where relevant, the justification for screening out Temporary Threshold Shift (TTS) caused by underwater noise from the cumulative assessments: *"Where there is little information on the potential disturbance ranges for marine mammals, TTS has been used to indicate possible fleeing response (see Section 10.6.1.4 of Chapter 10 Marine Mammal Ecology [APP-096]). It is acknowledged that disturbance is likely to have greater impact ranges than for TTS.* *The risk of TTS will be within disturbance ranges for marine mammals. The effects of TTS in marine mammals are temporary. TTS / fleeing response has been screened in to the CIA, where there is a lack of further relevant information for disturbance."* As outlined in Section 10.3.4.1.3 in **Appendix 10.3 Marine Mammal CIA Screening** [APP-193], operational offshore wind farms (OWFs) were screened out based on the Department for Business, Energy and Industrial

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		Strategy (BEIS) Review of Consents (RoC) Habitats Regulations Assessment (HRA) for the Southern North Sea Special Area of Conservation (SAC), which concluded that there would be no potential for significant impact from the operation of OWFs, alongside the construction of OWFs (BEIS, 2020).
169	Paragraph 709 of Chapter 10 states that *"The approach to the assessment for cumulative disturbance from underwater noise for harbour porpoise has been based on the approach for the assessment of disturbance in Section 10.6.1.2, including the current advice from the Statutory Nature Conservation Bodies ("SNCBs") (JNCC et al., 2020) on the assessment of impacts on the SNS SAC. The potential disturbance from underwater noise during piling for other marine mammal species has been assessed based on the worst-case maximum area modelled for SEP and DEP for each species, using TTS / fleeing response as a proxy for disturbance, where no further information of potential disturbance impact ranges are available".* The MMO do not consider it appropriate to use the TTS-onset thresholds as a proxy for disturbance. TTS occurs at much higher sound exposures, and so will underestimate the risk of disturbance	There are currently no agreed thresholds or criteria for the behavioural response and disturbance of marine mammals, therefore it is not possible to conduct underwater noise modelling to predict disturbance ranges. The proposed approach to use Temporary Threshold Shift (TTS) as a proxy for fleeing response / disturbance was presented in paragraph 158 of the Marine Mammal Method Statement (dated 21/05/20): *"TTS onset can be used to determine the onset of disturbance (Southall et al., 2007). It is proposed that the potential onset of disturbance in grey seal and harbour seal will be based on the NOAA (NMFS, 2018) and Southall et al. (2019) metrics and criteria for TTS."* This approach was also presented and discussed at 2nd Marine Mammal Expert Topic Group (ETG) Meeting on 18th June 2020: *Slide 24: "Approach to Assessing – Underwater Noise During Piling Underwater noise modelling will be undertaken to determine the maximum potential impact ranges and areas for PTS and TTS / fleeing response from single strike (maximum and starting hammer energy) and cumulative exposure (based on Southall et al., 2019 criteria)."* In the MMO's response to the Marine Mammal Expert Topic Group 2 and Marine Mammal Method Statement (see **Appendix 1 of the Consultation Report - Evidence Plan** (APP-030)): Question 1.12. Does the ETG agree with the approach for assessing the potential impacts from underwater noise on marine mammals during UXO clearance, piling, operational turbines and from other construction/maintenance activities?

ID	Relevant Representation	Applicant Comment
		MMO response: "*Based on the information provided to date, the MMO believe the proposed general approach for assessing the potential impacts from underwater noise on marine mammals during the construction activities (as noted above) is appropriate*". Marine Mammals Method Statement – additional comments: MMO response: *"2.1 Overall, the MMO believe that an appropriate evidence base has been proposed to be used in the assessment, and the data sources identified are also appropriate.* *2.2 Based on the information provided at this stage, the MMO believe that standard practices are proposed, and the evidence/modelling being proposed is consistent with that submitted for operations of a similar nature."* It is acknowledged that there is potential for advice and information to develop and change since the Marine Mammal Method Statement and ETG2 in 2020. See response at ID 179 of this table below for further information on dose-response curves for species with suitable data available.
170	It is noted that the maximum PTS injury ranges in marine mammals of 8.3 km for Low Frequency ("LF") cetaceans and 4.9 km for Very High Frequency ("VHF") cetaceans were predicted using the impulsive SELcum (cumulative sound exposure) criteria (Southall et al., 2019) at the South East ("SE") location of DEP. TTS ranges of 25 km and 19 km were predicted for LF cetaceans and VHF cetaceans, respectively. For fish, a maximum range of 19 km (stationary receptor) was predicted for TTS using the Popper et al. (2014) criteria at the same location. The MMO consider that the predictions look plausible based on the modelling assumptions provided in the report, specifically the source levels, piling profile and marine mammal fleeing speeds.	Noted
171	It is important that the predictions made in the ES are verified through construction noise monitoring.	In the event that piled foundations are used, provision for underwater noise monitoring of the first four piles is secured through the DMLs.

ID	Relevant Representation	Applicant Comment
172	To aid comparison of predicted versus measured data, the noise modelling report should include a plot showing the predicted received levels versus range for both monopiles and pin piles, for representative hammer strikes.	This is not standard, and may lead to unrepresentative comparisons. There is an attempt to select “worst case” locations for modelling, with ranges identified at these locations, but if these locations are not measured during on-site verification, then the comparison *may* be unrealistic. However, the possibility of including plots of single-strike maximum and minimum (1st strike) energies at fixed dB intervals can be investigated.
173	The predictions of the simultaneous piling are provided in section 5.3 of the report. Contour plots and summary tables of results are provided for each scenario. This modelling is based on a fleeing receptor for marine mammals (and both a stationary and fleeing receptor for fish). However, apart from the flee speeds, the report does not provide any detail on the fleeing assumptions or receptor movements. The MMO consider that it would be helpful if the report could include an explanation as to how the simultaneous piling assessment was conducted. For example, the model used to simulate fleeing behaviour should be clearly described, including the following parameters, which all affect the amount of noise an animal may be estimated to be exposed to: the time (e.g. onset of activity) or noise level at which animals are assumed to begin responding; the direction in which they flee (especially in the case of scenarios assuming multiple location/simultaneous piling when the assumptions might be less obvious); whether there is a maximum distance or minimum sound level at which animals will cease to respond; whether animals are assumed to continue fleeing, remain stationary, or return toward the noise source/s during temporary cessations in noise-generating activity.	A relatively simple fleeing model is used. Two effective situations are run to build each scenario: firstly, a receptor begins from the position of one of the piles and flees away from this in the combined two-source sound field, 360 degrees. The model is re-run with the receptor starting from the second piling location, and these results are combined with the final contour being the greatest outline of the two impact ranges. Receptor responds immediately to piling and continues at this speed for the duration of piling. If a receptor reaches land, it stops there and continues to build exposure. As the majority of noise exposure occurs when the receptor is closest to the piling, the exact behaviour at long-range is less critical to the final result than may initially appear. During temporary cessations (i.e. between piles), the receptor stops, considered a reasonable mid-way presumption between continuing to swim away and an instant return to towards the previous noise source.
174	Table 5-75 of the report (included below), for example, summaries the impact areas for Scenario 1. For PTS (highlighted by the blue box on the table below), there is an increase in the total in-combination area from two monopiles being installed simultaneously for LF cetaceans, phocid pinnipeds (seals) and VHF cetaceans (i.e. harbour porpoise). For TTS (orange box), the total in- combination area is smaller than the sum of the worst case monopiles at SEP E and DEP SE for LF and VHF cetaceans. For example, the total in- combination area for LF cetaceans is 1,600 km^2, although 720 km^2 (worst case monopile SEP E) + 1100 km^2 (worst case monopile DEP SE)	There will be an overlap in affected areas of course, although the increase in exposure that will occur is accounted for.

ID	Relevant Representation	Applicant Comment
	= 1,820 km^2. The smaller in-combination area is likely a result of some overlap between the affected areas.	
175	Section 6 ("Other noise sources") and Section 6.1 ("Noise making activities") state that "The calculation of underwater noise transmission loss for the non-impulsive sources is based on an empirical analysis of the noise measurements taken on transects around these sources by Subacoustech. The predictions use the following principle fitted to the measured data, where R is the range from the source, N is the transmission loss and α is the absorption loss: Source level ("SL") – N log R – αR". The MMO would like confirmation from Subacoustech that that the equation is N log R – αR (and not N log R + αR).	Assumption is correct. The N log R and αR terms are both attenuative and are subtracted from SL.
176	Table 6-2 of the report provides an appropriate summary of the estimated unweighted source levels and transmission losses for the different construction (continuous) noise sources considered. Figure 6-1 shows the 1/3 octave frequency bands used as a basis for the Southall et al. (2019) weightings used in the simple modelling. The MMO understand that propagation loss is a function of the environment but would welcome an explanation from Subacoustech as to why the propagation loss varies quite significantly between the different sources, particularly when the source spectra (as per Figure 6-1) are not that different.	There are a large number of factors that may have an effect on N, and the results are based entirely on empirical data for confidence in results for these relatively low-noise sources. As well as frequency, it may be to do with the size and shape of the noise source, its acoustic directionality, topography of the seabed immediately around the source and position of the hydrophone relative to the source. Subacoustech recognises that this can lead to margins of error in the transference of this data to other locations or models of equipment, but the relatively low noise impact they have and conclusions are not reasonably expected to change significantly.
177	Regarding Figure 4-1 and Figure 4-2 it states that they "present a small selection of measured impact piling noise data plotted against outputs from INSPIRE covering both SPLpeak and SELss data. The plots show data points from measured data (in blue plotted alongside modelled data (in orange) using INSPIRE version 5.1, matching the pile size, blow energy and range from the measured data". The MMO thank Subacoustech for providing outputs for the single strike SEL as this was requested during the PEIR consultation in June 2021. It would be helpful if additional information could be provided here for context, such as details of the pile size and hammer energy etc. Without this information, these figures are not overly informative.	These figures are simply examples of INSPIRE outputs against representative modelling transects. They use modelling parameters as close to the real-life data as possible. As INSPIRE is semi-empirical, a reasonably close match would be expected. Subacoustech will look to include these parameters in the future. They are of course highly unlikely to represent the worst case parameters, as empirical data for these is rarely available.
178	Paragraph 287 states that *"The maximum predicted impact range for PTS from cumulative exposure (SELcum) during installation of monopile or pin-pile with maximum hammer energy without any mitigation is up to 4.9km for*	This statement is based on shortest distance between the two sites of 10.7km from south-east corner of SEP to west corner of the DEP South array area. Therefore, up to 4.9km for harbour porpoise and 8.3km for

ID	Relevant Representation	Applicant Comment
	harbour porpoise and 8.3km for minke whale for the monopile worst-case with a maximum hammer energy of 5,500kJ (Table 10-24). Therefore, there would be no overlap between the two Projects and the assessments for SEP or DEP in isolation are appropriate". It is the MMO's understanding that there will be some overlap between the two projects for LF cetaceans (as highlighted in section 5.3 of the underwater noise modelling report).	minke whale for the monopile worst-case with a maximum hammer energy of 5,500kJ would not overlap between the two Projects. However, it is acknowledged that the modelling of simultaneous piling at the two sites in Section 5.3 of **Appendix 10.2 Underwater Noise Modelling Report** [APP-192] indicates overlap in the maximum predicted impact ranges between the two Projects. Although as outlined in Section 5.3 of **Appendix 10.2 Underwater Noise Modelling Report** [APP-192], SEL_{cum} (cumulative Sound Exposure Level) modelling for piling from multiple sources has the ability to increase impact ranges and areas significantly.
179	With regard to paragraph 308 it states that *"There are currently no agreed thresholds or criteria for the behavioural response and disturbance of marine mammals, therefore it is not possible to conduct underwater noise modelling to predict impact ranges".* While the MMO agree that there are currently no agreed behavioural thresholds for marine mammals one approach is to use species-specific dose-response curves to assess disturbance from piling. Dose response curves should be based on current, appropriate, peer-reviewed literature. Generally, noise contours at 5 dB intervals are generated by noise modelling and overlaid on species density surfaces to predict the number of animals potentially disturbed.	Dose-response curves will be provided in a Marine Mammals Technical Note to be submitted at an early point of the Examination for harbour porpoise, harbour seal and grey seal, which have appropriate dose-response data published in the scientific literature. The results of the dose-response curve assessment indicates that for harbour porpoise, the magnitude is negligible for SEP and DEP in isolation and for SEP and DEP. Assuming a medium sensitivity, the significance of effect is concluded as minor adverse. This is the same conclusion reached in ES **Chapter 10 Marine Mammal Ecology** [APP-096], based on assessments for TTS / fleeing response. For harbour seal the dose-response curve determined low magnitude, with minor adverse significance of effect for SEP and DEP in isolation, and for SEP and DEP, which is also comparable to the assessment based on TTS / fleeing response in ES **Chapter 10 Marine Mammal Ecology** [APP-096]. For grey seal the dose-response curve determined low magnitude, with minor adverse significance of effect for SEP and DEP in isolation, and medium magnitude, with moderate adverse significance of effect for SEP and DEP. The assessments for TTS / fleeing response in ES **Chapter 10 Marine Mammal Ecology** [APP-096], were minor adverse for SEP and DEP in isolation and for SEP and DEP. However, it is important to note, the

ID	Relevant Representation	Applicant Comment
		dose-response assessment of animals disturbed by simultaneous[1] piling in SEP and DEP conservatively sums the maximum number of animals disturbed by each project in isolation and does not take into account the overlap in disturbance areas of the two projects if piling simultaneously.
180	Paragraph 309 states that *"For marine mammals a fleeing response is assumed to occur at the same noise levels as TTS. Therefore, the potential impact range and areas for TTS presented in Table 10-25, with the estimated number and percentage of reference populations in Section 10.6.1.1.3 providing an indication of possible fleeing response".* Please note that the MMO do not consider it appropriate to use the TTS-onset thresholds as a proxy for disturbance. TTS occurs at much higher sound exposures, and so will underestimate the risk of disturbance.	Noted – see responses above at ID 169 ID 179 of this table.
181	With regard to paragraph 399 (and elsewhere in the chapter) it states that *"The results of the underwater noise modelling (Table 10-60) indicate that any marine mammal would have to be less than 100m (precautionary maximum range) from the continuous noise source for 24 hours, to be exposed to noise levels that could induce PTS or TTS, with the exception of harbour porpoise and the predicted impact ranges for TTS of 1km for rock placement and 0.2km for dredging, based on the Southall et al. (2019) non-impulsive thresholds and criteria for SELcum".* Please note that as the noise modelling incorporated a fleeing animal receptor, the results indicate that any marine mammal would be at risk of PTS or TTS if they were less than 100 m from the continuous noise at the start of the activity (and not necessarily at 100 m for 24 hours as the report suggests).	Noted.
Commercial Fisheries		
182	Assessments of impacts on commercial fisheries and Navigation are accurately reflected within the Non-Technical Environmental Assessment and also identifies the potential need for mitigation to alleviate the potential impacts on long fishers.	Noted

[1] A scenario where two piles are installed at the same time at different locations.

ID	Relevant Representation	Applicant Comment
183	The MMO welcomes the inclusion of the Outline Fisheries Liaison and Co-existence plan. At present we have no comment on this document but maintain a watching brief following comments from navigation authorities.	
184	There appears to be a minor error with the text as the end of the sentence reads "Error! Reference source not found"	
Shipping and Navigation		
185	The MMO defers to the Maritime and Coastguard Agency and Trinity House on matters of shipping and navigation. The MMO will continue to be part of the discussions relating to securing any mitigation, monitoring or other conditions.	Noted
Marine Archaeology		
186	The MMO defers to the Historic England on matters of shipping and navigation. The MMO will continue to be part of the discussions relating to securing any mitigation, monitoring or other conditions.	The Applicant considers that all of the necessary mitigation is secured through the **draft DCO (Revision C)** [document reference 3.1] and will continue to liaise with Historic England and the MMO as required through the examination process.
Seascape Landscape and Visual Resources		
187	The MMO defers to Natural England as the SNCB on matters of Seascape, Landscape and Visual Resources. The MMO will continue to be part of the discussions relating to securing any mitigation and monitoring or development of any plans/conditions on this matter.	Noted
Outline Fisheries Liaison and Coexistence Plan		
188	The MMO welcomes that a Fisheries Liaison Officer ("FLO") is already appointed and has ongoing communication with the industry. The FLO should be utilised to maximise effective communication between affected parties especially with any trawlers and any activities in this area, could have significantly increased health and safety risks to the crew and the vessels, due to the snagging of nets if rock armour is deposited within areas historical fishing activity.	Noted. The Fisheries Liaison and Coexistence Plan will include fishing gear snagging and loss procedures and any required claim procedures thereafter. In addition, all fishermen operating at the SEP and DEP offshore sites will be given access to the Applicant's Marine Operations Handbook (Captains Handbook) WR9087. The Marine Operations Handbook outlines all requisite information essential for conducting safe and joint operations, specifically:

ID	Relevant Representation	Applicant Comment
		• Introduction to the SEP and DEP projects and O&M operating strategy; • Layout of field complete with latitude/longitude for plotting; • Wind turbine coordinates; • Cable corridor plans; • Unexploded ordnance survey findings; • Aids to Navigation markings; • Procedure for entering field array; • Marine operational requirements; • Communications plan; • Joint operations in proximity; • Details of safety zones and restrictions; and • Emergency procedures and communications. In addition to the above, the Applicant will add locations of external cable protection.
189	At certain times of the year, the removal of fixed fishing gear can take longer due to adverse weather conditions. It is recommended that the FLO notify fishers of the intended works as early as possible to ensure gear can be moved and does not cause and obstruction to the works or loss / damage to the fishing gear.	The **Outline FLCP** (APP-295) commits to including a distribution system for ongoing liaison plans and dissemination of information, including survey schedules, construction schedules and planned operations and maintenance activities using a variety of media. The Applicant commits to sharing this information with the fishing industry in a timely manner, with sufficient notice to allow gear clearance. In relation to offshore construction, the Applicant commits to distributing notices and information to the fishing community not less than 2 weeks prior to commencement of activities. Details on timescales of information provision will be added to the outline FLCP.
190	Advice should be sought via the FLO when the timetable of works is known so that the local industry can provide real-time advice.	The **Outline FLCP** (APP-295) documents the roles and responsibilities of the FLO, this includes (but is not limited to): • To disseminate project related activities which could potentially interact with fisheries stakeholders; and

ID	Relevant Representation	Applicant Comment
		• Be available to receive and relay back to the Applicant all relevant concerns from the fisheries stakeholders in respect of the various activities associated with the project.
In-Principle Site Integrity Plan for the Southern North Sea Special Area of Conservation		
191	The MMO defers to Natural England on mitigation matters in relation to Habitats regulation assessment, and defers to Natural England at this stage for what should be included within the Outline SIP document.	Noted.
Disposal Site Characterisation Report		
192	The disposal site will require designation prior to the commencement of works. The code for site disposal will then either need to be included within the DML, or provision of this post consent will need to be secured through the DML.	See the Applicant's response at ID 137 of this table. Given that updated contaminants analysis will not have been undertaken within the timeframe of the Examination, the Applicant understands that disposal site designation will require to be undertaken either in the determination or post-consent phase. The Applicant has submitted a **Disposal Site Characterisation Report (Revision B)** (document reference 9.13) at Deadline 1 to address very minor errors in disposal quantities however the Applicant does not propose to provide any further updates to this during the Examination given that it will require to be updated following the additional contaminants sampling and analysis.
193	The MMO will be required to undertake the designation process in consultation with Cefas.	
194	However, the MMO reiterates its above concerns regarding the use of an unvalidated laboratory for contaminants. The Fugro lab is only validated for Particle Size Analysis, and not for the other determinands analysis presented to the MMO. Fugro is not validated for the contaminants analyses to be able to provide confident, robust evidence on which to base a decision (e.g. comparing contaminant levels with the Cefas Action Levels). Methods used could be dissimilar or methods may be potentially comparable with MMO-validated laboratories, but if it is not an MMO-validated laboratory there are also concerns regarding reproducibility and accuracy with respect to the data provided.	
195	Further information on which labs are MMO validated for analysis can be found at the below link: https://www.gov.uk/guidance/marine-licensing-sediment-analysis-and-sample- plans#laboratory-validation	

ID	Relevant Representation	Applicant Comment
196	As stated above in section 4.2.9 of this response, adequate justification for exclusion of PBDEs, PCBs, and organochlorine pesticides should be provided, although due to the coarse nature of the sediments, the risk is likely to be low.	
197	We strongly recommend that the Applicant engage with the MMO throughout the process in order to ensure the assessment is as smooth as possible and agreements can be reached through a Statement of Common Ground.	

4.13 National Grid Electricity Transmission [RR-058]

Table 4.13.1 Applicant's comments on National Grid Electricity Transmission relevant representation

I.D.	Relevant Representation	Applicant Comment
1	Relevant Representation of National Grid Electricity Transmission Plc in respect of the Sheringham and Dudgeon Extension Projects DCO (the "Project"). This relevant representation is submitted on behalf of National Grid Electricity Transmission Plc ("National Grid") in respect of the Project, and in particular National Grid's infrastructure and land which is within or in close proximity to the proposed Order Limits. National Grid will require appropriate protection for retained apparatus including compliance with relevant standards for works proposed within close proximity of its apparatus. National Grid's rights of access to inspect, maintain, renew and repair such apparatus must also be maintained at all times and access to inspect and maintain such apparatus must not be restricted. Further, where the Applicant intends to acquire land or rights, or interfere with any of National Grid's interests in land or National Grid's apparatus, National Grid will require appropriate protection and further discussion is required on the impact to its apparatus and rights. Further detail is set out below. National Grid infrastructure within/in close proximity to the proposed Order Limits National Grid owns or operates the following infrastructure within or in close proximity to the proposed Order Limits for the Project: National Grid has a substation and a number of high voltage electricity overhead transmission lines within or in close proximity to the proposed Order Limits. The	National Grid Electricity Transmission's comments are noted. Detailed discussions regarding adequate protection of National Grid Electricity Transmission's assets are ongoing. Information on interactions with SEP and DEP are being shared with National Grid Electricity Transmission to facilitate the ongoing discussions and negotiations in relation to the protective provisions and any other agreements that may be required. The Applicant hopes to conclude those negotiations in advance of the Examination closing.

I.D.	Relevant Representation	Applicant Comment
	substation and overhead lines form an essential part of the electricity transmission network in England and Wales. The details of the electricity assets are as follows: Substation • Norwich Main Substation Overhead Lines • 4VV 400kV Norwich Main to Walpole 1 and 2 • 4YM 400kV Bramford to Norwich Main 1 and 2 • PGG 132kV Norwich Main to Norwich Trowse 3 • PHC 132kV Norwich Main to Norwich Trowse 1 Protection of National Grid Assets As a responsible statutory undertaker, National Grid's primary concern is to meet its statutory obligations and ensure that any development does not impact in any adverse way upon those statutory obligations. As such, National Grid has a duty to protect its position in relation to infrastructure and land which is within or in close proximity to the draft Order Limits. As noted, National Grid's rights to retain its apparatus in situ and rights of access to inspect, maintain, renew and repair such apparatus located within or in close proximity to the Order Limits should be maintained at all times and access to inspect and maintain such apparatus must not be restricted. National Grid will require protective provisions to be included within the draft Development Consent Order (the "Order") for the Project to ensure that its interests are adequately protected and to ensure compliance with relevant safety standards. National Grid is liaising with the Applicant in relation to such protective provisions, along with any supplementary agreements which may be required. The Applicant is aware of the number of projects already programmed in and around the Norwich Main substation and the requirement for full programming and access collaboration to ensure the secure and safe operation of the site at all times. NGET also wishes to draw attention to the proximity of the proposed works to the Network Rail assets and the need for the Applicant to have taken that significant physical constraint into account when considering both the interface with existing NGET assets and its own connection into the substation. National Grid requests that the Applicant continues to engage with it to provide explanation and reassurances as to how the Applicant's works pursuant to the Order (if made) will ensure protection for those National Grid assets which will remain in situ, along with facilitating all future access and other rights as are necessary to allow National Grid to properly discharge its statutory obligations. National Grid will continue to liaise with the Applicant in this regard with a view to concluding matters as	

I.D.	Relevant Representation	Applicant Comment
	soon as possible during the DCO Examination and will keep the Examining Authority updated in relation to these discussions. Compulsory Acquisition Powers in respect of the Project As noted, where the Applicant intends to acquire land or rights, or interfere with any of National Grid's interests in land, National Grid will require further discussion with the Applicant. National Grid reserves the right to make further representations as part of the Examination process in relation to specific interactions with its assets but in the meantime will continue to liaise with the Applicant with a view to reaching a satisfactory agreement. Connection The Project proposes a connection to Norwich Main Substation. In relation to this connection, National Grid is working with the Applicant to enter into a connection agreement and other commercial arrangements at the relevant time. Further updates will be provided in the Statement of Common Ground.	

4.14 National Grid Gas PLC [RR-059]

Table 4.14.1 Applicant's comments on National Grid Gas PLC relevant representation

I.D.	Relevant Representation	Applicant Comment
1	Relevant Representation of National Grid Gas Plc in respect of the Sheringham and Dudgeon Extension Projects DCO (the "Project"). This relevant representation is submitted on behalf of National Grid Gas Plc ("National Grid") in respect of the Project, and in particular National Grid's infrastructure and land which is within or in close proximity to the proposed Order Limits. National Grid will require appropriate protection for retained apparatus including compliance with relevant standards for works proposed within close proximity of its apparatus. National Grid's rights of access to inspect, maintain, renew and repair such apparatus must also be maintained at all times and access to inspect and maintain such apparatus must not be restricted. Further, where the Applicant intends to acquire land or rights, or interfere with any of National Grid's interests in land or National Grid's apparatus, National Grid will require appropriate protection and further discussion is required on the impact to its apparatus and rights. Further detail is set out below. National Grid owns or operates the following	National Grid Gas Plc's comments are noted. Detailed discussions regarding adequate protection of National Grid Gas Plc's assets are ongoing. Information on interactions with SEP and DEP are being shared with National Grid Gas Plc to facilitate the ongoing discussions and negotiations in relation to the protective provisions and any other agreements that may be required. The Applicant hopes to conclude those negotiations in advance of the Examination closing.

I.D.	Relevant Representation	Applicant Comment
	infrastructure within or in close proximity to the proposed Order Limits for the Project: Gas Transmission: NGG has high pressure gas transmission pipelines located within or in close proximity to the proposed Order Limits The transmission pipelines form an essential part of the gas transmission network in England, Wales and Scotland: Transmission Pipelines: • Feeder 4 – Suffield to Little Barningham • Feeder 27 – Bacton to Kings Lynn • Feeder 2 – Erpingham to Guestwick • Feeder 3 – Bacton to Roudham Heath Protection of National Grid Assets As a responsible statutory undertaker, National Grid's primary concern is to meet its statutory obligations and ensure that any development does not impact in any adverse way upon those statutory obligations. As such, National Grid has a duty to protect its position in relation to infrastructure and land which is within or in close proximity to the draft Order Limits. As noted, National Grid's rights to retain its apparatus in situ and rights of access to inspect, maintain, renew and repair such apparatus located within or in close proximity to the Order Limits should be maintained at all times and access to inspect and maintain such apparatus must not be restricted. National Grid will require protective provisions to be included within the draft Development Consent Order (the "Order") for the Project to ensure that its interests are adequately protected and to ensure compliance with relevant safety standards. National Grid is liaising with the Applicant in relation to such protective provisions, along with any supplementary agreements which may be required. National Grid requests that the Applicant continues to engage with it to provide explanation and reassurances as to how the Applicant's works pursuant to the Order (if made) will ensure protection for those National Grid assets which will remain in situ, along with facilitating all future access and other rights as are necessary to allow National Grid to properly discharge its statutory obligations. National Grid will continue to liaise with the Applicant in this regard with a view to concluding matters as soon as possible during the DCO Examination and will keep the Examining Authority updated in relation to these discussions. Compulsory Acquisition Powers in respect of the Project As noted, where the Applicant intends to acquire land or rights, or interfere with any of National Grid's interests in land, National Grid will require further discussion with the Applicant. National Grid reserves the right to make further representations as part of	

I.D.	Relevant Representation	Applicant Comment
	the Examination process in relation to specific interactions with its assets but in the meantime will continue to liaise with the Applicant with a view to reaching a satisfactory agreement.	

4.15 National Highways Limited [RR-060]

Table 4.15.1 Applicant's comments on National Highways Limited relevant representation

I.D.	Relevant Representation	Applicant Comment
1	NATIONAL HIGHWAYS LIMITED (National Highways) has been appointed by the Secretary of State for Transport as strategic highway company under the provisions of the Infrastructure Act 2015 as the highway authority, traffic authority and street authority for the Strategic Road Network (SRN). As such, National Highways are responsible for managing the SRN in accordance with the requirements of our statutory licence and in general conformity with the requirements of the Highways Act 1980, and to satisfy the reasonable requirements of road safety. This is the section 56 representation of National Highways provided in respect of Equinor's (Applicant's) application for a Development Consent Order (Order) which seeks powers to enable the installation of offshore wind turbines with a maximum generating capacity of 402MW and associated infrastructure for connection into the national grid (Scheme). The Book of Reference (BoR) identifies 12 plots (Plots) of land owned or occupied by National Highways in respect of which compulsory acquisition powers to acquire new rights are sought. The compulsory acquisition powers sought are described in the BoR as being the creation and compulsory acquisition of new rights over land and the temporary possession of land (Compulsory Powers). National Highways notes that the Compulsory Powers are sought in relation to land forming part of the SRN being the A47 and A11 which has the potential to impact the A47 North Tuddenham to Easton and A47-A11 Thickthorn Junction schemes. The Applicant also proposes to route a cable underneath the A47 at Easton and A11 at Hethersett to interconnect the Scheme to a new substation to the southwest of the A47/A140 junction to the south of Norwich. To safeguard National Highways' interests and the safety and integrity of the SRN, National Highways objects to the inclusion	National Highways Limited's comments are noted. Detailed discussions regarding adequate protection of National Highways Limited's assets and the potential to impact the A47 North Tuddenham to Easton and A47-A11 Thickthorn Junction schemes are ongoing. Information on interactions with the SEP onshore site and the DEP onshore site is being shared with National Highways Limited, to facilitate and progress negotiation of protective provisions and a side agreement The Applicant hope to finalise negotiations in advance of the Examination closing.

I.D.	Relevant Representation	Applicant Comment
	of the Plots in the Order and to Compulsory Powers being granted in respect of them. The Plots constitute land acquired by National Highways for the purpose of its statutory undertaking and, accordingly, this representation is made under section 56 and sections 127 and 138 of the Planning Act 2008. National Highways considers that there is no compelling case in the public interest for the Compulsory Powers and that the Secretary of State, in applying section 127 of the Planning Act 2008, cannot conclude that new rights and restrictions over the Plots can be created without serious detriment to National Highways' undertaking and no other land is available to National Highways to make good the detriment. National Highways also objects to all other compulsory powers in the Order that affect, and may be exercised in relation to, National Highways' property and interests. In order for National Highways to be in a position to withdraw its objection, National Highways requires: (a) the inclusion of protective provisions in the Order for its benefit; and (b) agreements with the Applicant that regulate (i) the manner in which rights over the Plots are acquired and the relevant works are carried out including terms which protect National Highways' statutory undertaking and agreement that compulsory acquisition powers will not be exercised in relation to such land; and (ii) the carrying out of works in the vicinity of the SRN to safeguard National Highways' statutory undertaking. To safeguard National Highways' interests and the safety and integrity of the SRN, National Highways objects to the inclusion of the Compulsory Powers and any other powers affecting National Highways in the Order. National Highways requests that the Examining Authority treat National Highways as an Interested Party for the purposes of the Examination.	
2	The Book of Reference (BoR) identifies 12 plots (Plots) of land owned or occupied by National Highways in respect of which compulsory acquisition powers to acquire new rights are sought. The compulsory acquisition powers sought are described in the BoR as being the creation and compulsory acquisition of new rights over land and the temporary possession of land (Compulsory Powers).	National Highways Limited's comments are noted. Detailed discussions regarding adequate protection of National Highways Limited's assets and the potential to impact the A47 North Tuddenham to Easton and A47-A11 Thickthorn Junction schemes are ongoing. Information on interactions with the SEP onshore site and the DEP onshore site is being shared with National Highways Limited to facilitate and progress negotiation of protective provisions and a side agreement. The

I.D.	Relevant Representation	Applicant Comment
		Applicant hopes to conclude those negotiations in advance of the Examination closing.
3	National Highways notes that the Compulsory Powers are sought in relation to land forming part of the SRN being the A47 and A11 which has the potential to impact the A47 North Tuddenham to Easton and A47-A11 Thickthorn Junction schemes. The Applicant also proposes to route a cable underneath the A47 at Easton and A11 at Hethersett to interconnect the Scheme to a new substation to the southwest of the A47/A140 junction to the south of Norwich.	National Highways Limited's comments are noted. Detailed discussions regarding adequate protection of National Highways Limited's assets and the potential to impact the A47 North Tuddenham to Easton and A47-A11 Thickthorn Junction schemes are ongoing. Information on interactions with the SEP onshore site and the DEP onshore site is being shared with National Highways Limited to facilitate and progress negotiation of protective provisions and a side agreement. The Applicant hopes to conclude those negotiations in advance of the Examination closing.
4	To safeguard National Highways' interests and the safety and integrity of the SRN, National Highways objects to the inclusion of the Plots in the Order and to Compulsory Powers being granted in respect of them.	National Highways Limited's comments are noted. Detailed discussions regarding adequate protection of National Highways Limited's assets and the potential to impact the A47 North Tuddenham to Easton and A47-A11 Thickthorn Junction schemes are ongoing. Information on interactions with the SEP onshore site and the DEP onshore site is being shared with National Highways Limited to facilitate and progress negotiation of protective provisions and a side agreement. The Applicant hopes to conclude those negotiations in advance of the Examination closing.
5	The Plots constitute land acquired by National Highways for the purpose of its statutory undertaking and, accordingly, this representation is made under section 56 and sections 127 and 138 of the Planning Act 2008. National Highways considers that there is no compelling case in the public interest for the Compulsory Powers and that the Secretary of State, in applying section 127 of the Planning Act 2008, cannot conclude that new rights and restrictions over the Plots can be created without serious detriment to National Highways' undertaking and no other land is available to National Highways to make good the detriment.	National Highways Limited's comments are noted. Detailed discussions regarding adequate protection of National Highways Limited's assets and the potential to impact the A47 North Tuddenham to Easton and A47-A11 Thickthorn Junction schemes are ongoing. Information on interactions with the SEP onshore site and the DEP onshore site is being shared with National Highways Limited to facilitate and progress negotiation of protective provisions and a side agreement. The Applicant hopes to conclude those negotiations in advance of the Examination closing.

I.D.	Relevant Representation	Applicant Comment
6	National Highways also objects to all other compulsory powers in the Order that affect, and may be exercised in relation to, National Highways' property and interests. In order for National Highways to be in a position to withdraw its objection, National Highways requires: (a) the inclusion of protective provisions in the Order for its benefit; and (b) agreements with the Applicant that regulate (i) the manner in which rights over the Plots are acquired and the relevant works are carried out including terms which protect National Highways' statutory undertaking and agreement that compulsory acquisition powers will not be exercised in relation to such land; and (ii) the carrying out of works in the vicinity of the SRN to safeguard National Highways' statutory undertaking.	National Highways Limited's comments are noted. Detailed discussions regarding adequate protection of National Highways Limited's assets and the potential to impact the A47 North Tuddenham to Easton and A47-A11 Thickthorn Junction schemes are ongoing. Information on interactions with the SEP onshore site and the DEP onshore site is being shared with National Highways Limited to facilitate and progress negotiation of protective provisions and a side agreement. The Applicant hopes to conclude those negotiations in advance of the Examination closing.
7	To safeguard National Highways' interests and the safety and integrity of the SRN, National Highways objects to the inclusion of the Compulsory Powers and any other powers affecting National Highways in the Order. National Highways requests that the Examining Authority treat National Highways as an Interested Party for the purposes of the Examination.	National Highways Limited's comments are noted. Detailed discussions regarding adequate protection of National Highways Limited's assets and the potential to impact the A47 North Tuddenham to Easton and A47-A11 Thickthorn Junction schemes are ongoing. Information on interactions with the SEP onshore site and the DEP onshore site is being shared with National Highways Limited to facilitate and progress negotiation of protective provisions and a side agreement. The Applicant hopes to conclude those negotiations in advance of the Examination closing.
8	We are interested to participate during the hearing session and any other transport assessment review, Statements of Common Ground, local impact reports, and written question-related topics and discussion for the Sheringham and Dudgeon Extension Project (EN010109)."	National Highways Limited's comments are noted. Detailed discussions regarding adequate protection of National Highways Limited's assets and the potential to impact the A47 North Tuddenham to Easton and A47-A11 Thickthorn Junction schemes are ongoing. Information on interactions with the SEP onshore site and the DEP onshore site is being shared with National Highways Limited to facilitate and progress negotiation of protective provisions and a side agreement. The Applicant hopes to conclude those negotiations in advance of the Examination closing.

4.16 National Trust [RR-061]

Table 4.16.1 Applicant's comments on National Trust relevant representation

I.D.	Relevant Representation	Applicant Comment
1	The National Trust wishes to register as an interested party in respect of the application for a Development Consent Order for the Sheringham and Dudgeon Extension Projects. The National Trust ("the Trust") owns Sheringham Park, located to the east of Weybourne on the North Norfolk Coast. The estate includes 1000 acres of varying habitat including woodland, parkland and cliff top, and the Grade II* Sheringham Hall. The Trust operates a major visitor-based business at Sheringham, supporting and promoting its preservation work. In 1997, pursuant to section 21 of the National Trust Act 1907, Weybourne Woods were declared "inalienable". This status enables the Trust to live up to its core charitable objective of preserving places of historic interest and natural beauty for the nation, forever. The proposed Onshore Works Plans include a cable corridor (and access route) for onshore connection works which would pass through Trust owned land at Weybourne Wood which is part of the Sheringham Estate and part of the designated Norfolk Coast AONB. Equinor proposes to compulsorily acquire new permanent and temporary rights over the Trust's inalienable land at Weybourne wood, at a width of 100m for trenchless crossings. The Trust does not object to the principle of the proposed Sheringham and Dudgeon Windfarm Extension Projects. However, we do not support proposals that would seriously damage the integrity of any archaeological remains on the Estate, have an adverse impact on views from Sheringham Park or its biodiversity, or give rise to an adverse effect on the integrity of the Sandwich tern feature of the North Norfolk Coast SPA without a satisfactory derogation case. As it currently stands, the Trust has these three outstanding concerns, and therefore objects to the proposed DCO due to: • The impact of the current proposals on the little understood archaeology of the Estate; • The impact of the current proposals on Sandwich terns (an SPA feature) on the North Norfolk Coast; and	The Applicant acknowledges and thanks the National Trust for its Relevant Representation. Responses to the three outstanding concerns in relation to unknown archaeology, impacts of SEP and DEP to the Sandwich tern feature of the North Norfolk Coast Special Protection Area (SPA), and Landscape, visual and ecological impacts on the Sheringham Estate are detailed below.

I.D.	Relevant Representation	Applicant Comment
	• Landscape, visual and ecological impacts on the Sheringham Estate.	
2	Archaeology The Trust has a duty to protect our heritage and all archaeology within its care. The proposed groundworks pass through a wooded area of the wider Sheringham Estate, within the historic parkland. Whilst the exact area of the proposed groundworks has not had a formal archaeological survey, the adjacent woodlands have been thoroughly surveyed, revealing networks of medieval and post-medieval wood banks, quarry pits of medieval to modern date and a number of WWI and WWII defensive features. Furthermore, there exists an extant scheduled prehistoric barrow to the southeast of the proposed groundworks indicating that the wider area is likely home additional prehistoric settlement and/or funerary activity. It is imperative then, that the woodland is subject to archaeological and historic landscape surveys prior to any groundworks, inclusive of vehicle movement. Areas proposed for development and the wider environs should be subjected to full and extensive UXO survey. No formal agreement has been reached with Equinor as to how the Trust, County Council Archaeologist and developer might work together to achieve a suitable and appropriate methodology for the archaeological work to be undertaken on the Estate prior to any development.	All known designated and non-designated heritage assets are presented within the **Onshore Archaeological Desk-Based (Baseline) Assessment** [APP-229]. Where impacts from the project are likely to occur, these are assessed within ES **Chapter 21 Onshore Archaeology and Cultural Heritage** [APP-107, Section 21.6.1.2]. As part of the application, an **Outline Written Scheme of Investigation (Onshore) (Revision B)** [document reference 9.21] has been submitted which details the staged-approach to archaeological evaluation (Section 6) to inform mitigation requirements (Section 7) for the entire project, including those within the Order Limits within the Sheringham Estate. Further consultation with the Archaeological Advisor to Norfolk County Council and the National Trust's Archaeologist will be undertaken at the post-consent stage to agree the details of the archaeological strategy (including the preparation of Written Scheme of Investigation) across land under the ownership of the National Trust. Requirement 18 (Onshore Archaeology) of the **draft DCO (Revision C)** [document reference 3.1] and details the requirements for the final Written Scheme of Investigation and states that: *No phase of the onshore works may commence until a written scheme of archaeological investigation for that phase (which must accord with the outline written scheme of investigation (onshore)) has, after consultation with Norfolk County Council and the statutory historic body, been submitted to and approved by the relevant planning authority.*
3	Impact on Sandwich terns The Trust manages an important colony of Sandwich terns on the Norfolk coast at Blakeney Point, alongside Natural England at Scolt Head Island National Nature Reserve. The tern colony alternates between the two sites and represents approximately a third of the UK Sandwich tern population. This colony will be adversely impacted by the proposed development, as recognised in the supporting documentation predicting a loss of up to 28 birds per annum through collision or displacement. Compensation	The Applicant has submitted an **Apportioning and HRA Updates Technical Note** [document reference 13.3] at Deadline 1 which has re-calculated collision risk for Sandwich terns apportioned to the North Norfolk Coast (NNC) and Greater Wash SPA. The new estimated worst-case annual 95% confidence interval mortalities on which the compensation requirement will be based is ca. 12 - 17 adults (mean ca. 6 - 7 adults). As outlined in the **Sandwich Tern Compensation Document** [APP-069] and **Annex 2B: Sandwich Tern Nesting Habitat Improvements Site**

I.D.	Relevant Representation	Applicant Comment
	measures are proposed at Loch Ryan, Scotland (nesting habitat enhancement to recover population) and in the Farne Islands (improved breeding success). However, the Trust is not confident that these will be effective at the Farne Islands or demonstrate additionality and no agreement has been reached with the developer about compensation measures on our land.	**Selection** [APP-071], the Applicant's approach to identifying potential compensatory measures focused initially on the NNC SPA before widening to consider nearby and more distant SPA and non-SPA sites. The iterative development of the proposals (including site selection) has been undertaken through a detailed consultation process with relevant stakeholders (including National Trust) via the HRA Offshore Ornithology Compensation Expert Topic Group (ETG) (see the **Consultation Report Appendix 1 – Evidence Plan** [APP-030] for a record of meeting minutes and agreement logs, as well as **Annex 1D - Record of HRA Derogation Consultation** [APP-068]). As documented, it was necessary to look further afield in light of stakeholder feedback and challenges around additionality in delivering compensation within the NNC SPA. In doing so it was recognised by the Applicant that measures to restore breeding sites at Loch Ryan, Scotland and Foulness SPA would not only provide compensation by increasing breeding numbers but would also have the very strong qualitative merit of restoring former breeding range of this species in Britain and Ireland which has been lost. Proposed measures at the Farne Islands SPA would also provide compensation by increasing breeding numbers as well support National Trust's efforts to halt and reverse the decline in Sandwich tern breeding numbers at the Farnes which has been ongoing for over 40 years. The Applicant notes National Trust's concerns around additionality of the proposed measures at the Farne Islands SPA. During development of the proposed compensatory measures at that site, the Applicant sought to overcome additionality by attempting to identify measures that it was understood were not going to be included within the new SPA Management Plan (2022 – 2026) which the Applicant understands is still in the process of being finalised. In addition to pre-application consultation, the Applicant has also undertaken pre-examination engagement with the National Trust, with both parties meeting on the 14th of December 2022 to further discuss the potential for specific measures to be taken forward by the Applicant to support Sandwich tern restoration efforts that might not be available to National Trust due to for example, resource or funding constraints. However, an email response from the National Trust dated 20th January 2023, confirmed that the Trust continued to have concerns that the

I.D.	Relevant Representation	Applicant Comment
		measures proposed by the Applicant were not additional to existing management proposals and expressed a wish not to engage further on this matter with regards to opportunities on the Farnes. For a detailed record of this consultation, please see Appendix A of the **HRA Derogation and Compensation Measures Update** [document reference 13.7] note submitted at Deadline 1. In light of possible upcoming changes to policy and best practice guidance with respect to how additionality should be considered going forwards, and the severity of the situation at the Farne Islands despite ongoing conservation and management efforts (see **Annex 2B - Sandwich Tern Nesting Habitat Improvements Site Selection** [APP-071]), the Applicant considers its proposal to undertake measures to improve breeding success at the Farne Islands SPA to be an important part of its proposed package of compensatory measures for Sandwich tern. It is also considered that there is sufficient evidence outlined in the **Sandwich Tern Compensation Document** [APP-069] and the **Sandwich Tern Quantification of Productivity Benefits Note** [document reference 13.4] submitted at Deadline 1, to demonstrate that if delivered at an appropriate scale, the measures proposed could provide substantial benefits to breeding numbers of Sandwich tern at the Farnes. The Applicant is intending to submit at Deadline 2 a Draft SoCG: National Trust Sandwich Tern Compensation which sets out the respective positions on Sandwich tern compensation measures at the Farne Islands SPA.
4	Landscape, Visual & Ecological Impacts Weybourne Woods was declared inalienable in order to protect views from Sheringham Park and prevent inappropriate development. Construction impacts on Weybourne Woods and the AONB have been identified as major-moderate significance and adverse. Furthermore, it is proposed to remove an area of forestry. It is not clear to the Trust what landscape, arboricultural and ecological mitigation and enhancements are proposed.	SEP and DEP have undergone an extensive site selection process which has incorporated environmental considerations in collaboration with the engineering design requirements. Details of the site selection are set out in ES **Chapter 3 Site Selection and Assessment of Alternatives** [APP-089]. The selection of the cable corridor's proposed route through Weybourne Wood was selected further to an iterative design process, which balanced the potential impacts on local environmental considerations, in accordance with the Design Framework of the Projects (see the Design and Access Statement (Onshore) [APP-287].

I.D.	Relevant Representation	Applicant Comment
		The use of trenchless crossing trenchless techniques (e.g. HDD) to cross Weybourne Wood is one of the embedded mitigation measures that the Applicant has committed to in order to minimise potential impacts arising as a result of the cable corridor. In order to cross Weybourne Wood, the use of two HDD crossing is required. Each HDD crossing will be approximately 400m in length, which is the maximum distance that can be safely drilled as a result of the underlying geology of the area. A single entry / exit compound (approximately 100m x 50m) is required within the woodland in order to facilitate the trenchless crossings. Only part of the entry / exit HDD compounds falls within land owned by the National Trust. The Applicant has targeted an area of woodland (for the entry / exit HDD compound) that has already been the subject to some commercial tree felling, in order to minimise further trees losses. The **Arboricultural Survey Report** [APP-228, Section 6.1.3] details that the targeted area for clearance consists mainly of dead or dying trees (~60%), which will be commercially felled in time regardless of the Projects. Therefore, only a small number of additional trees need to be removed for SEP and DEP. Felled trees would be replanted within the extent of the Order Limits, but outside of a permanent easement required above the implemented underground cables. No trees would be removed outside of this small compound area. In relation potential impacts on landscape and visual receptors, the area of targeted clearance of existing trees and vegetation would be 'key-holed' within Weybourne Woods, so that the retained and surrounding woodland (on all sides) will mitigate potential visual impacts to the surrounding area. Therefore, visual impacts from visitors to Sheringham Park will thus be minimised. No permanent above ground infrastructure is to be sited in this area. More generally, the Applicant notes that the assessment of impacts on visual receptors at the accessible recreational landscapes within the AONB (which would include Weybourne Wood and the footpaths within it), would

I.D.	Relevant Representation	Applicant Comment
		be of a moderate significance and adverse, as presented in ES **Chapter 26 Landscape and Visual Impact Assessment** [APP-112, para 329]. In accordance with the impact assessment methodology presented in **Chapter 26 Landscape and Visual Impact Assessment** [APP-112, Section 26.4], effects which have been assessed to be 'major-moderate' or 'major' are considered significant in EIA terms. In relation to ecological mitigation at Weybourne Wood, habitat reinstatement is detailed in the revised **Outline Ecological Management Plan (Revision B)** [document reference 9.19, Section 4.1]. In addition, where land is reinstated with suitable habitats, this will accord with the Biodiversity Net Gain objectives of the Projects as detailed in the **Outline Biodiversity Net Gain Strategy** [APP-306]. The revised **Outline Ecological Management Plan (Revision B)** [document reference 9.19] should be read in conjunction with the **Outline Landscape Management Plan (Revision B)** [document reference 9.18]. **Outline Landscape Management Plan (Revision B)** [document reference 9.18] provides a framework from which to agree the detailed plans and operations for the soft landscape proposals (planting and seeding) to ensure that the design and mitigation intent is realised. Local Planning Authorities (and any other relevant stakeholders, such as the Norfolk Coast Area of Outstanding Natural Beauty (AONB) Partnership) will be consulted on the **Outline Landscape Management Plan (Revision B)** (document reference 9.18] prior to the construction of the onshore cable corridor. A final Landscape Management Plan will be submitted for discharge of the relevant DCO requirement which will accord with the **Outline Landscape Management Plan (Revision B)** [document reference 9.18]. The **Outline Landscape Management Plan (Revision B)** [document reference 9.18] and **Outline Ecological Management Plan (Revision B)** [document reference 9.19] is secured by Requirement 11 and 13 respectively of the **draft DCO (Revision C)** [document reference 3.1]. The Applicant acknowledges the National Trust's position as a conservation organisation and will consult National Trust in developing the

I.D.	Relevant Representation	Applicant Comment
		programme of ecology mitigation and enhancement insofar as the measures proposed affecting Weybourne Woods
5	Acquisition of Land and Rights over land The Trust notes that the Book of Reference refers to the compulsory acquisition of rights over Trust land and that part of the cable corridor will cross Trust inalienable land. The Trust has been working with Equinor to agree terms of this access that will cause minimal impact and disruption and with a view to securing a signed Option Agreement and Deed of Easement for the requisite cables and access over and under Trust land. However, at the time of writing, terms have not yet been agreed. Therefore, the Trust's concerns about this application as expressed here remain unaddressed. These matters will be expanded upon in our Written Representation in due course.	The Applicant has had and continues to have discussions with the Respondent. It remains the Applicant's preference to reach a voluntary agreement for the acquisition of land and rights if possible.

4.17 National Air Traffic Services [RR-062]

Table 4.17.1 Applicant's comments on National Air Traffic Services' relevant representation

I.D.	Relevant Representation	Applicant Comment
1	NATS are pleased to note the developer's awareness of the risks that the proposal carries in relation to NATS air traffic operations in the Southern North Sea and their desire to engage in consultation with NATS from an early stage. It should be noted that both the existing Dudgeon and Sheringham Shoal wind farms lie within the Greater Wash Transponder Mandatory Zone, TMZ, and the entirely of the proposed extensions do not. This TMZ was created in 2012 to "negate the impact of increasing levels of wind turbine generated primary surveillance RADAR (PSR) clutter".	The Respondent's comment is noted.

4.18 Natural England [RR-063]

4.18.1 Appendix A DCO DML

Table 4.18.1 Applicant's comments on Natural England's Appendix A relevant representation

ID	Relevant Representation	Applicant Comment
1	*Dear Sir/Madam, Due to the number and size of the documents, Natural England has e-mailed our Relevant and Written Representations to the Sheringham Shoal Extension Project (SEP) and Dudgeon Extension Project (DEP) Offshore Wind Farms to the project e-mail address (sadep@planninginspectorate.gov.uk). Our representations are included in the following documents: • SEP and DEP NE Relevant and Written Representation Letter • Appendix A Development Consent Order and Deemed Marine Licence • Appendix B - Offshore Ornithology • Appendix B1 – Natural England's Updated CRM Final Summary External • Appendix B2 – Natural England's Advice on Seabird HPAI Impact Assessment • Appendix C – Offshore Ornithology Compensation • Appendix D - Marine Mammals • Appendix D1 - NE Updated SACO for The Wash and North Norfolk SAC Harbour Seals Final Draft - Nov 22 • Appendix E - Marine Geology, Oceanography and Physical Processes • Appendix F - All Other Marine Matters • Appendix G - Cromer Shoal MCZ • Appendix H - Seascape, Landscape and Visual Effects • Appendix I - Onshore Ecology • Appendix J - Legislative and Policy Framework Kind regards, Helen Mann and Zara Ziauddin Case Officers for the SEP and DEP Project Southern North Sea Natural England - www.gov.uk/natural-england* *Email: Helen.Mann@naturalengland.org.uk Mobile no: 07789935411* *Email: Zara.Ziauddin@naturalengland.org.uk Mobile no: 07789505165*	
[APP-024] 3.1 Development consent order		
2	The interpretations have included a definition of: the habitats regulations derogation provision of evidence, annex 2A outline sandwich tern compensation implementation and monitoring plan. There is no issue on the face of this interpretation, however, they refer to a plan that may change during the examination process as discussion regarding the compensation are ongoing. Therefore, there may be a need to update this definition later.	The Applicant notes Natural England's comment.

ID	Relevant Representation	Applicant Comment
	This comment applies to the interpretation related to Annex 3A as well. We advise there is no action needed now, but once derogations issues have reached their conclusion, this interpretation should be reviewed to ensure it remains appropriate	
3	This requirement does not include a maximum number of turbines per development. This should be limited to the maximum considered by the project of 23 for SEP and 30 for DEP. Including the maximum number of turbines is included in all previous Offshore Wind Farm DCO's as it defines an important upper limit in impact. Please add additional text to make the limitation on the maximum number of turbines clear	The Applicant considers that the number of turbines for SEP and DEP is secured in Schedule 1 as part of the authorised development as comprised in Work No. 1A and Work No. 1B. However, Requirement 2 in the **draft DCO (Revision C)** [document reference 3.1] has now been updated to refer to the maximum number of turbines for both SEP and DEP.
4	As per Schedule 2 Requirement 2, a maximum number of turbines should be included here. As per above.	The number of turbines for SEP is secured in Schedule 10 as part of the authorised project as comprised in Work No. 1A and the number of turbines for DEP is secured in Schedule 11 as part of the authorised project as comprised in Work No. 1B.
5	Given the importance of in-combination and cumulative impacts of the development, the relevant Statutory Nature Conservation Body (SNCB) should be consulted upon the scheme setting out the phases of construction. The approval of this scheme can have significant effect on the required mitigation for this and other developments and input from statutory consultees at this early stage may be helpful in identification of best mitigations and approaches. Natural England advises the text should be amended to include consultation of the relevant SNCB.	Natural England's comments are noted. The Applicant does not consider that including Natural England as a required consultee for the MMO's approval of the phasing plan(s) is necessary. There is no precedent for the suggested approach. With regards to shaping best mitigation and approaches, Natural England will be duly consulted in the usual way by the MMO on relevant plans and, as such, are named consultees (as the relevant SNCB) within each DML in respect of the site Integrity Plan, pre- and post-construction monitoring and surveys and construction monitoring and surveys.
6	This condition notes the requirement to consult MCA and Trinity house, the statutory navigational authorities. It should also include the need to consult the relevant SNCB as appropriate. Natural England advises the condition should be amended to include consultation with the relevant SNCB as appropriate.	The Applicant does not consider this is necessary. There is no precedent for requiring the MMO to consult with the relevant SNCBs in relation to this condition.
7	At no point within this condition is the requirement to micro-site cables around identified features of conservation importance identified. This is a standard mitigation measure and is normally secured within the requirements at Condition 13 (1) (a). We advise the Applicant amends Condition 13 to make it	Condition 13(1)(a) of Schedules 10 and 11 and Condition 12 (1)(a) of Schedules 12 and 13 of the **draft DCO (Revision C)** [document reference 3.1] has been amended to include appropriate wording in relation to exclusions zones/micro-siting requirements.

ID	Relevant Representation	Applicant Comment
	clear that identified features of nature conservation importance will be micro-routed around.	
8	This condition allows for the scour and cable protection plan to be amended after installation. However, Natural England has concerns about the deployment of scour and cable protection across the entire lifetime of the project and consider that any cable or scour protection required after ten years of operation outside designated site and 5 years within should be secured through a new consent, with appropriate consultation and consideration of relevant environmental considerations. We advise the Applicant amends the condition to make it clear the plan may only be amended and resubmitted to a maximum period of ten years after commencement of operation.	The final Offshore Operations and Maintenance Plan (OOMP) will include details of the operations and maintenance requirements of SEP and DEP and identifies which activities have been assessed and can be undertaken pursuant to the DMLs included in the **draft DCO (Revision C)** [document reference 3.1] and which activities would require additional licences from the MMO. As can be seen from the outline OOMP Revision B [document reference 9.8], this includes the potential for replacement of or additions to external cable protection and scour protection installed during construction. The approval and implementation of the OOMP is secured by conditions 13(1)(f) and 15(3) in Schedules 10 and 11 and conditions 12(1)(g) and (14(3) of Schedules 12 and 13. Conditions 13(1)(f) and 14(1)(f) in the relevant DMLs also specify that the OOMP must be resubmitted and reviewed every 3 years therefore ensuring continual review of the position in relation to cable protection and scour protection alongside all other operation and maintenance activities and will enable the MMO to continually review at the appropriate time during operation whether or not a new consent/licence is required for any further deployment of cable protection or scour protection . Any updates to the scour and cable protection details submitted pursuant to condition 13(c)(ii) in Schedules 10 and 11 and condition 12(c)(ii) in Schedules 12 and 13 following cable laying activities would reflect the details contained within the OOMP and the ongoing dialogue with the MMO in respect of the OOMP.
9	Natural England does not agree with the requirement for this plan to be submitted 4 months prior to construction. The approval of this protocol is likely to include detailed consideration of implications on the Southern North Sea(SNS) Special Area of Conservation (SAC). A minimum period of 6 months should be included to allow for the detailed technical discussions required. Further, after experience on previous developments Natural England would request further wording to state this document may not be submitted for approval earlier than 9 months prior to commencement of piling. The Site Integrity Plan (SIP) is needed due to uncertainties of in-combination impacts, submission of this document earlier means there is still	The Applicant has agreed with the MMO to amend the SIP condition (condition 14 in Schedules 10 and 11 and condition 13 in Schedules 12 and 13) so that it requires submission of the SIP no later than 6 months prior to construction. The amendments have been included in Rev C of the **draft DCO (Revision C)** [document reference 3.1] submitted at D1.

ID	Relevant Representation	Applicant Comment
	a lot of uncertainties to address and also less detail is often available on the final works methodology. Amend the timing to require the SIP to be submitted no earlier than 9 months or later than 6 months prior to commencement.	
10	Natural England does not consider 4 months an appropriate timeframe to approve all plans and documentation. Some of the documents are likely to require detailed assessment. This may take multiple consultation periods of 4 weeks. Natural England would recommend this be amended to 6 months prior to commencement, to ensure sufficient time to sign off the large volume of complex documentation that will need to be submitted. Natural England recommend amending the time period to 6 months or adopt a more document specific timing requirement. Alternatively, we are willing to discuss with the Applicant and the MMO which documents are likely to take additional time and extend the time period for those. The current one size fits all approach may not be the best approach to take as some documents require less time and others need more. It also leads to a large peak of work for all involved.	The Applicant is currently in discussions with the MMO with regards to timescales. Please also see response to FWQ 1.11.6.1.
11	Natural England note that this condition is for monitoring only. The monitoring is required due to uncertainties within the assessment. However, there is no requirement within the condition for the applicant, or regulatory authority, to take action should the monitoring highlight that there is impact significantly in excess of the impact assessed. Consideration should be given to amending the monitoring requirements to make it clear that if impacts are identified that are in excess of those assessed there is a need to provide a consideration of appropriate action that could be taken. This could include a consideration of further mitigation, of further monitoring or assessment.	Natural England's comments are noted. The Applicant notes that condition 20 of Schedules 10 and 11 and condition 19 of Schedules 12 and 13 follow precedent in all recently granted offshore wind farm DCOs.
12	Comments raised on schedule 10 also apply to Schedules 11,12 and 13 where similar conditions exist.	Noted. Responses apply to Schedules 11,12 and 13 where similar conditions exist.
13	There does not appear to be a requirement here for post construction monitoring of the Cromer Shoals MCZ. Condition 12 (1) (e) refers to monitoring of the cables within the MCZ, but there is no monitoring condition that links to this requirement.	Post-construction monitoring of the Cromer Shoal Chalk Beds Marine Conservation Zone (CSCB MCZ) is secured through condition 19(1)(b) which requires the details of post-construction monitoring to accord with the offshore in-principle monitoring plan (Offshore IPMP) [insert ref]. The offshore IPMP includes monitoring proposals for the CSCB MCZ at

ID	Relevant Representation	Applicant Comment
	Text should be added to this condition to make it clear the need to monitor the works within the MCZ are secured. The monitoring condition should also secure the requirement to take appropriate restoration measures or mitigations should the monitoring highlight an impact of concern.	Paragraphs 32 and 33. In addition, all monitoring proposals within the CSCB MCZ will be included within the CSCB MCZ cable specification, installation and monitoring plan (CSIMP) which, once approved under condition 12(1)(e), must be implemented in accordance with condition 14(3). The CSCB MCZ CSIMP must accord with the details set out in the outline CSCB MCZ CSIMP [insert ref], which includes proposed monitoring in section 1.7 where it cross refers to the offshore IPMP and specifies that final details of monitoring will be agreed with the MMO in consultation with Natural England.
14	Comments raised on Schedule 12 also apply to schedule 13 where similar conditions exist.	Noted. Responses apply to Schedules 13 where similar conditions exist.
15	These conditions require the submission of plan of works for the Sandwich Tern Compensation Steering Group or the Kittiwake Compensation Steering group. The plan of works contains the membership of the Steering groups, timetables of involvement and dispute resolution mechanism. However, there is no requirement for consultation with the proposed members of the group prior to submission. Given the plan commits the membership to following a plan and to adherence to a dispute resolution procedure it should only be agreed once the membership have been able to voice concerns. Natural England advises this is amended to include a requirement to consult the membership of the steering group prior to approval of the plans.	Schedule 17, part 1 and 2 conditions 2 and 11 require a plan of work for the relevant steering group to be submitted to and approved by the Secretary of State. The Applicant does not consider that it is necessary to include additional consultation requirements at this stage that are secured by condition. The overall structure of the derogation provisions in the draft DCO will require extensive engagement and consultation between the members of the steering group and with the Secretary of State. Including additional consultation requirements at this stage in the process has the potential to cause delay in approval of the plan of work. In practice, it is anticipated that the undertaker will engage with the proposed members of the steering group on an ongoing basis post-consent. It is not in the undertaker's interest to have a plan approved that is considered unsuitable by the members of the steering group, as that will also cause delay. However, there is no need to secure additional consultation requirements by condition to ensure a satisfactory plan of work is submitted and approved. The approach adopted by the Applicant in this paragraph is consistent with the drafting to secure derogation provisions included in the Hornsea Three Offshore Wind Farm Order 2020, the Norfolk Boreas Offshore Wind Farm Order 2021, the Norfolk Vanguard Offshore Wind Farm Order 2022, the

ID	Relevant Representation	Applicant Comment
		East Anglia ONE North Offshore Wind Farm Order 2022 and the East Anglia TWO Offshore Wind Farm Order 2022. The Applicant does not propose to amend the drafting in the **draft DCO (Revision C)** [document reference 3.1] relating to these conditions.
16	This condition says following consultation with the relevant steering groups the relevant compensation implementation and monitoring plan must be submitted for approval. Should this not also be in accordance with the timetable and process approved under the pan of works. As currently drafted, there is no requirement to adhere to the plan that is approved. We advise the Applicant considers an amendment to the wording to make it clear the implementation and monitoring plans will be submitted at the appropriate juncture.	The Applicant does not consider that it is necessary or appropriate to include a condition to this effect. There are a number of practical reasons why the schedule for the undertaker to progress the development(s) might change and the timetable for submission of the CIMP needs to be altered. The plan of works for the steering group that is approved under conditions 2 and 11 will provide the framework for the conduct of that group. However, it should not be considered to set a deadline by which the CIMP is to be submitted. That would be the effect of the suggested amendment. The approach adopted by the Applicant in this paragraph is consistent with the drafting to secure derogation provisions included in the Hornsea Three Offshore Wind Farm Order 2020, the Norfolk Boreas Offshore Wind Farm Order 2021, the Norfolk Vanguard Offshore Wind Farm Order 2022, the East Anglia ONE North Offshore Wind Farm Order 2022 and the East Anglia TWO Offshore Wind Farm Order 2022. The Applicant does not propose to amend the drafting in the **draft DCO (Revision C)** [document reference 3.1] relating to these conditions.
17	When choosing a suitable site consideration is needed on the potential for changes in the location, such as the potential for development nearby that might cause a detriment to the compensation.	The Applicant considers that this matter would be addressed within the CIMP, including adaptive management provisions. The Applicant does not propose to amend the drafting of the **draft DCO (Revision C)** [document reference 3.1] relating to these conditions
18	Within these conditions monitoring is secured, including a requirement to implement adaptive management, or alternative compensation where monitoring hits identified triggers. However, nowhere within the schedule is it secured that adaptive management measures, or alternative compensation measures must be implemented as approved.	The Applicant considers that that the detail of the monitoring and implementation of adaptive management measures would be set out within the relevant CIMP. Schedule 17, Parts 1 and 2, Conditions 6 and 15 require the approved CIMPs to be implemented. The requirement to implement adaptive management or alternative compensation measures is therefore already secured by conditions 6 and 15, together with conditions 9 and 18 relating to amendments to the CIMPs. The Applicant does not

ID	Relevant Representation	Applicant Comment
		propose to amend the drafting of the **draft DCO (Revision C)** [document reference 3.1] relating to these conditions.
19	These conditions disapply conditions 6,7 and 8 or 15,16 and 17 respectively. These provisions depend at least partially on a third party outside the DCO delivering the compensation. Natural England queries what would happen should the third party fail to deliver? The conditions that are disapplied are the conditions that secure that the compensation will be delivered and to an appropriate timetable.	The Applicant's intention in disapplying paras 6, 7 and 8 (or 15, 16 and 17) was to make clear that the undertaker would not be required to undertake project-specific measures (in whole or in part) to the extent that they were substituted by strategic or collaborative compensation measures. It was not intended that the whole structure of the CIMP would fall away. The Applicant intends to amend the wording in the draft DCO to clarify this point as follows (using paragraph 5 as an example): *"5. Notwithstanding the requirements of paragraphs 6, 7 and 8 of this Part of this Schedule the undertaker shall not be required to undertake the nesting habitat improvements and restoration of lost breeding range measures ~~apply~~ to the extent that:* *(a) a contribution to the Strategic Compensation Fund has been elected in substitution for either the nesting habitat improvements and restoration of lost breeding range measures for the purposes of paragraph 4(1)(i) of this Part of this Schedule, or in substitution for the measures to improve breeding success at SPA sites other than the NNC for the purposes of paragraph 4(2)(i) of this Part of this Schedule;* *(b) a financial contribution towards the establishment of compensation measures by another party has been elected in substitution for either the nesting habitat improvements and restoration of lost breeding range for the purposes of paragraph 4(1)(j) of this Part of this Schedule, or in substitution for the measures to improve breeding success at SPA sites other than the NNC for the purposes of paragraph 4(2)(j) of this Part of this Schedule; or* *(c) the undertaker has elected to collaborate with another party in the delivery of compensation measures in substitution for either the nesting habitat improvements and restoration of lost breeding range measures for the purposes of paragraph 4(1)(k) of this Part of this Schedule, or in substitution for the measures to improve breeding success at SPA sites other than the NNC for the purposes of paragraph 4(2)(k) of this Part of this Schedule."*

ID	Relevant Representation	Applicant Comment
		The Applicant considers that the risk of a third party failing to deliver would be low, as the strategic or collaborative measures would either be a contribution to a strategic fund set up by government for the purpose of providing compensation, or would be a measure that has been approved by the Secretary of State under paragraph 4(1)(j) and/or (k); 4(2)(j) and/or (k); or 13(j) and/or (k). It is considered that before granting consent to substitute strategic or collaborative compensation measures for project-led compensation, the Secretary of State would need to have satisfied themselves that the measures are deliverable.
20	Condition 6 does not secure a time requirement for the delivery of the compensation. While Condition 15 secures delivery 3 full breeding seasons prior to the works. A timing requirement should be included for both proposals. We also note the decisions on the Hornsea 3, Boreas, Vanguard, East Anglia 2 and East Anglia 4 which secure compensation under similar circumstances 4 full breeding seasons prior to generation.	Condition 6 does contain a timing requirement by requiring *inter alia* that *"no operation of any turbine forming part of the authorised development may begin until the measures set out in the Sandwich Tern CIMP have been implemented."* The Applicant will look to implement compensation as soon as possible after the proposed measures have been agreed through the Sandwich Tern CIMP. The proposed timings for delivery of the compensation measures for Sandwich Tern is set out in Section 6.5.8 of the Sandwich Tern Compensation Document [APP-069]. The timescales for delivery of compensation measures relevant to kittiwake is set out in section 6.4.6 of the Kittiwake Compensation Document [APP-072].
[APP-083] 5.7.1 In-Principle Cromer Shoal Chalk Bed Marine Conservation Zone Measures of Equivalent Environmental Benefit Plan		
21	See comment on DCO Schedule 17 Part 1 and 2 Conditions 2 and 11.	See response in relation to DCO schedule 17 Part 1 and 2 paragraphs 2 and 11.
22	See comment on DCO Schedule 17 Part 1 and 2 Conditions 3 and 12	See response in relation to DCO schedule 17 Part 1 and 2 paragraphs 3 and 12.
23	See comment on DCO Schedule 17 Part 1 and 2 condition 3 (a) and 12 (a).	See response in relation to DCO schedule 17 Part 1 and 2 paragraphs 4 (1) and (2)(a) and 13 (a).

ID	Relevant Representation	Applicant Comment
24	The requirement for a marine licence should also include the timetables for expected issue of a marine licence and a demonstration that it can be obtained within the timescales of the plan.	Paragraph 21 sets out the requirements of information to be included within the MIMP. Sub-paragraph 21(b) requires the MIMP to include confirmation of whether any marine licence is required to implement the measures. For the avoidance of doubt, it is not a requirement for a marine licence to be obtained. The requirement for a marine licence would be considered by the Applicant with reference to the Marine and Coastal Access Act 2009 and in consultation with the MMO. The Applicant would not be able to provide a definitive timetable for the issue of a marine licence, as the determination of the application is outside of their control. Paragraph 21(d) requires an implementation timetable to be included within the MIMP. The Applicant considers that the requirements set out in paragraph 21 will provide sufficient information to the Secretary of State to consider whether the proposed MIMP can be approved. The Applicant does not propose to amend the drafting of these provisions
25	See comment on DCO Schedule 17 Part 1 and 2 condition 4 (1) (f), 4 (2) (f) and 13 (f).	See comment on DCO Schedule 17 Part 1 and 2 paragraphs 4 (1) (f), 4 (2) (f) and 13 (f)
26	This condition secures that no works may commence until the plan is approved. However, it does not secure the measures of benefit being undertaken prior to works. Similar to our comments on Schedule 17 Part 1 and 2 Conditions 6 and 15, we consider that it is important the plan secure that the measures will be in place and functioning prior to the impact occurring.	See comment on DCO – Schedule 17 Part 1 and 2 paragraphs 5 and 14.

4.18.2 Appendix B Offshore Ornithology

Table 4.18.2 Applicant's Comments on Appendix B Offshore Ornithology of Natural England's Relevant Representation (RR-063). Colours in the first column indicate Natural England's risk rating as per their Relevant Representation covering letter

ID	Natural England Comment	Applicant Comment
Key Issues		
1	1. EIA Population Scale Natural England advises that in terms of EIA, the key assessment should be an annual assessment of impact at the largest population size, as opposed to individual seasonal impacts, and further note that in the case of black-legged kittiwake ('kittiwake'), common guillemot ('guillemot') and Atlantic puffin ('puffin') the largest biologically defined minimum population size is in the breeding season. Natural England acknowledges that most of the relevant information is presented within the species accounts, but suggest that the Applicant briefly presents the annual impacts of SEP and DEP and cumulatively with other relevant projects for the species listed in the table below [see Natural England, 2022], using the population sizes provided.	The Applicant has reviewed the largest population sizes suggested by Natural England against what was used in ES **Chapter 11 Offshore Ornithology** [APP-097], and re-run calculations where differences were identified. A **CRM Updates (EIA Context) Technical Note** [document reference 13.2] has been submitted at Deadline 1 which includes updated CRM for all species requested by Natural England and presents the calculations for both project alone and cumulative impacts.
2	2. Collision Risk Modelling Parameters The SNCBs have been working for some time to provide updated CRM parameters, including updated avoidance rates. Several studies have been commissioned to review and update evidence-based avoidance rates (AR). Most recently Exeter University was commissioned by JNCC (and overseen by a project steering group including industry stakeholders), and have produced a final report providing updated avoidance rates derived from the existing evidence base. The report has yet to be published, and the SNCB guidance note is not yet available for distribution. However Natural England has produced an interim note, for use by developers that requires the updated parameters immediately. Please see the interim note in Annex B. Natural England advises that while we cannot ensure the SNCB guidance, when it is released, is identical to this interim note, we can assure the Applicant that if they choose to submit revised mortality estimates using the new parameters then we will base our position on these.	As noted above, the Applicant has submitted a **CRM Updates (EIA Context) Technical Note** [document reference 13.2] at Deadline 1, which includes updated project alone CRM for the species listed by Natural England and any corresponding Cumulative Impact Assessments. At a meeting with Natural England on 15th November 2022, the Applicant suggested that these changes could be implemented through a "correction" of existing outputs; however, the Applicant has since elected to re-run the CRM to ensure the outputs are as robust as possible.

ID	Natural England Comment	Applicant Comment
	However, as this note was not available at the time of submission, we are also open to forming a position for some species on the submitted mortalities. We would advise that, as a minimum, revised figures based on a subset of variables (i.e. using mean density data and CRM parameters (central value only) from the Natural England interim guidance note) are presented for the following species: • Sandwich Tern (noting that Natural England advise the use of the published flight speed of 10.3ms), and further noting that the modelling presented within the report at 98% with a 50% Macro avoidance rate is the equivalent of a 99% AR; • Gannet (noting new AR and approach to macro-avoidance will substantially reduce both the project alone and cumulative/in combination assessments); • Kittiwake; • Great black-backed gull; • Lesser black-backed gull; • Little gull.	
3	3. Natural England's Position We advise that Natural England's key positions on ornithological impacts are set out during the examination of Hornsea Project 4 (HP4) [REP7-104] and EA1N and EA2 [REP13-048] OWF. Our position regarding the red-throated diver feature of the Outer Thames Estuary SPA is as set out in EA1N and EA2 examination [REP9-067] and for the Greater Wash SPA in the HP4 examination [again REP7-104].	Noted.
4	Table 2 below [see RR-063] summarises our most recent position at the close of these examinations. Natural England advises the following:	Noted.
5	i) Table 2 represents the species and populations that Natural England have identified potential risks of significant impacts on seabird populations at the EIA or HRA scales. For other species/designated sites Natural England does not have	Noted. This is reflected in the **Draft SoCG: Natural England (Offshore Ornithology)** which will be submitted at Deadline 2.

ID	Natural England Comment	Applicant Comment
	any outstanding concerns and is unlikely to comment further on these matters in the Examination.	
6	ii) In the case of HRA, where Natural England has been unable to rule out an Adverse Effect on Integrity (AEoI) for qualifying features at SPAs, and where SEP and DEP make an additional contribution to the in-combination impact, then a derogation case will be required, unless the impact can be substantially mitigated. Where impacts have been deemed to be significant at the EIA scale, the Applicant should demonstrate that its contribution to those impacts has been duly reduced through mitigation.	The Applicant's **RIAA** [APP-059] concludes in-combination AEoI in respect of Sandwich tern (NNC and GW SPAs) and kittiwake (FFC SPA). A derogation case has therefore been presented. The Applicant's compensatory measures proposals are set out in **Appendix 2 – Sandwich Tern Compensation Document** [APP-069] and **Appendix 3 – Kittiwake Compensation Document** [APP-072]. With respect to the gannet feature of the FFC SPA, the Applicant notes that Natural England state in Appendix C of their Relevant Representation [RR-063]: *'Natural England can advise that on the basis of the information so far provided, we believe there will be no requirement for provision of gannet compensation'*. The updated project-alone CRM values for this species in respect of the FFC SPA are presented in the **Apportioning and HRA Updates Technical Note** [document reference 13.3] submitted at Deadline 1, which confirms a reduction in the worst-case upper 95% confidence interval value for this species from approximately 10 to 6 compared to that in the **RIAA** [APP-059]. Natural England confirmed via email (16 February 2022) that they will provide formal advice on their position once an updated FFC SPA gannet in-combination assessment (including impacts from Hornsea Four) is submitted into Examination. The Applicant can confirm that an updated gannet in-combination assessment has been provided in the **Apportioning and HRA Updates Technical Note** [document reference 13.3] submitted at Deadline 1. The Applicant anticipates being able to reach a final agreed position on this with Natural England at Deadline 2. In respect of guillemot and razorbill (FFC SPA), the Applicant's **RIAA** [APP-059] concludes that there would be no in-combination AEoI for these species, and therefore it is the Applicant's position that no derogation case is required. Nonetheless, without prejudice compensatory proposals for these species are set out in the **Proposed Without Prejudice DCO Drafting** [document reference 3.1.3], submitted at Deadline 1.

ID	Natural England Comment	Applicant Comment
7	iii) In instances where Natural England has concluded there is no significant adverse impact or AEoI, then the SEP and DEP assessment must seek to demonstrate that the additional impact from SEP and DEP does not change this position to one of significant adverse impact or AEoI.	Noted. Updated values for displacement and CRM are presented in the **Apportioning and HRA Updates Technical Note** [document reference 13.3] submitted at Deadline 1. Mitigation is described in Section 11.3.3 of ES **Chapter 11 Offshore Ornithology** [APP-097]. This includes a best-practice protocol for red-throated diver, which is secured through the **Outline Project Environmental Management Plan (PEMP)** [APP-297].
8	We highlight that Natural England has identified significant adverse impacts at the EIA scale to gannet, kittiwake, great black-backed gull, guillemot, razorbill and red-throated diver irrespective of whether SEP & DEP are included in the cumulative totals. SEP & DEP will be making an additional contribution to those totals.	Noted. The Applicant's position concerning these species is set out in ES **Chapter 11 Offshore Ornithology** [APP-097] and the **CRM Updates (EIA Context) Technical Note** [document reference 13.2] submitted at Deadline 1. The Applicant has identified significant adverse impacts at the EIA scale for great black-backed gull and Sandwich tern only.
9	Similarly, at the end of the HP4 Examination Natural England could not rule out adverse effects on the integrity of the kittiwake, guillemot, razorbill and seabird features of FFC SPA, irrespective of whether SEP & DEP were included in the in-combination totals. We have also previously advised in-combination adverse effects cannot be ruled out for sandwich tern at North Norfolk Coast SPA. Again, SEP & DEP will make contributions to the in-combination impacts.	See the Applicant's response at ID 6 of this table.
10	However, providing there are no further significant changes to the collision and displacement figures provided for SEP and DEP, Natural England is likely to reach a conclusion of no AEOI for FFC SPA gannet when considering the in-combination impact including SEP and DEP. Hence the Applicant is unlikely to require compensation for this species/SPA. However we do welcome the provision of the without prejudice compensation proposal for gannet submitted as part of the application should this be required.	See the Applicant's response at ID 6 of this table.
11	We have also previously advised that, lesser black-backed gull at Alde-Ore Estuary SPA, red-throated diver at Outer Thames Estuary SPA. We also have concerns about adverse effects on the Greater Wash SPA red-throated diver. We highlight that there is potential for SEP and DEP to make contributions to the in-combination impact, and that the extent of this contribution is as yet unclear.	Updated CRM values have been submitted by the Applicant at Deadline 1 for lesser black-backed gull (**CRM Updates (EIA Context) Technical Note** [document reference 13.2] and **Apportioning and HRA Updates Technical Note** [document reference 13.3]). The **Apportioning and HRA Updates Technical Note** [document reference 13.3] submitted at Deadline 1 includes an updated red-

ID	Natural England Comment	Applicant Comment
	Regarding the two red-throated diver sites, please see Section 9 below for further information.	throated diver Greater Wash SPA assessment utilising the refined assessment approach described by Natural England in Appendix B (Table 3) of their Relevant Representations [RR-063]. The refined approach uses updated displacement rates in 1km bands from 0 – 10km from the windfarm boundary. The Applicant's assessment of the Outer Thames Estuary SPA red-throated diver feature outlined in the **RIAA** [APP-059] concludes no AEoI, alone and in-combination. The Applicant does not intend to provide an updated assessment for this SPA.
12	4. BDMPS Apportioning in the Breeding Season Within the RIAA there are a number of qualifying features assessed that are within the mean max foraging range (as presented in Woodward *et al* 2018) of the project sites (e.g. puffin at FFC SPA and lesser black-backed gull at Alde Ore SPA) and others that are within the mean max plus one SD (e.g. razorbill and guillemot at FFC SPA) yet have not had any impact apportioned to them in the breeding season. In the case of guillemot and razorbill, Natural England accepts that on balance it is reasonable to exclude the extreme Fair Isle values in the mean max foraging ranges, nonetheless, razorbill is still within mean max plus 1 SD. It is not sufficient to demonstrate that SEP and DEP are outside core utilisation areas, as this does not wholly preclude the use of the area by breeding adults. While being outside a modelled utilisation area may suggest that a large proportion of, for example razorbill from FFC SPA, are not using SEP and DEP, it does not preclude the situation that a proportion of birds at SEP and DEP are breeding adults from the colony in question. Natural England recommends that some level of apportioning is presented for qualifying features within mean max and mean max plus one SD.	See the **Apportioning and HRA Updates Technical Note** [document reference 13.3] submitted at Deadline 1. The Applicant has undertaken apportioning according to either the methodology presented in SNH (2018) or quantitative assessments utilising data from Furness (2015) (in respect of razorbill and puffin). Birds which are not part of breeding populations have also been accounted for in the calculations, according to numbers presented in Furness (2015). It is noted that in its comments on the draft **Apportioning and HRA Updates Technical Note** [document reference 13.3], Natural England confirmed that there is 'no connectivity between breeding adult guillemot population of the Flamborough and Filey Coast SPA and the Projects'.
13	5. BDMPS Apportioning for Kittiwake and Gannet in the Non breeding Season Natural England advises that it is not appropriate to correct the BDMPS apportioning in the non-breeding season for the proportion of adults (or adult types in the case of kittiwakes) observed in the at sea survey data. The proportion of adults is already corrected for with the BDMPS figures, and applying this	The Applicant has reviewed these calculations and an updated assessment in accordance with Natural England's advice is provided in the **Apportioning and HRA Updates Technical Note** [document reference 13.3] submitted at Deadline 1.

ID	Natural England Comment	Applicant Comment
	correction 'double corrects', reducing the level of impact apportioned (albeit to a relatively small extent).	
14	6. Flamborough and Filey Coast SPA Natural England advises that puffin, as a component species of the FFC SPA seabird assemblage, will need to be considered as part of the assessment of impacts on the seabird assemblage in the HRA.	Puffin (FFC SPA) is included in the **Apportioning and HRA Updates Technical Note** [document reference 13.3] submitted at Deadline 1.
15	7. Highly Pathogenic Aviation Influenza (HPAI) Natural England has formulated some initial guidance regarding the implications of HPAI for OWF impact assessments. This is presented separately in Appendix B2.	The Applicant notes that Natural England has provided some initial guidance [Appendix B2 of [RR-063]) regarding the implications of HPAI for OWF impact assessments. In light of this, the Applicant does not consider that updates to the assessments already presented are required; however, the Applicant will be guided by the SNCBs on how HPAI may need to be considered in future.
16	8. Population Modelling In regard to population modelling, Natural England has been notified by the developers (BioSS/CEH) of an issue (coding bug) with the NE/JNCC Population Viability Analysis (PVA) tool. The identified issue causes the tool to produce incorrect results in situations where environmental stochasticity is included and a standard deviation (SD) of exactly zero is used for at least one of the baseline demographic rates. There appears to be no problem when using any other values, including very small but non-zero values, for the SD. In the case of SEP and DEP, based on parameters supplied in Section 11.1.2.7 of the Technical Appendix, then it does not seem that this bug will be an issue. For further information please see the advice we submitted to Hornsea 4 on this matter: [REP5a-029].	The Applicant agrees with Natural England that given the input parameters of the PVAs presented in the assessment, this coding bug should not affect the outputs.
17	9. Red-throated diver disturbance / displacement impacts Natural England is increasingly becoming concerned in relation to disturbance and/or displacement of red-throated divers from the more persistent presence of infrastructure-related vessels making transits through diver SPA (e.g. due to OWF O&M requirements) and consider that these could make a meaningful contribution to in-combination effects on the SPAs. Further investigation of all potential vessel movements within the Greater Wash SPA (and Outer Thames Estuary SPA) is	The Applicant has committed to implementing a best practice protocol for minimising disturbance to red-throated diver (see ES **Chapter 11 Offshore Ornithology** [APP-097]), which is secured through the **Outline PEMP** [APP-297].

ID	Natural England Comment	Applicant Comment
	needed, and the mitigation hierarchy applied to minimise the potential for SEP & DEP to contribute to these effects. Residual effects should be considered in tandem with displacement arising from the presence of the SEP array.	
18	Regarding array-related displacement, we note the straight line gradient approach has been used to assess red throated diver impacts, based on the methodology presented during the EA1N and EA2. Natural England have recently developed a more refined displacement gradient for red-throated diver as presented below in Table 3 [see Natural England, 2022]. This evidence-based approach was calculated by taking the max displacement in 1km bins from previously calculated displacement gradients and then applying a linear trend line. Note that the trend line has only been used to derive displacement rates outside the array. Within the array a precautionary 100% rate has been applied. The data used to inform the gradient is from Gunfleet Sands, Kentish Flats, Lincs, Lynn & Inner Dowsing, London Array and a gradient calculated by Raul Vilela for NE from the German Bight data in Vilela et al (2020). The use of this displacement gradient is not agreed with the other SNCBs and is not supplied as definitive advice. Although we believe it is a sensible approach to implement, we are happy to discuss the gradient further, including consideration of modifications or alternative approaches.	The **Apportioning and HRA Updates Technical Note** [document reference 13.3] submitted at Deadline 1 includes an updated red-throated diver GW SPA assessment utilising the refined assessment approach described by Natural England in Appendix B (Table 3) of their Relevant Representation [RR-063]).
19	10. Mitigation Hierarchy As noted in the recent draft Defra guidance on compensation within MPAs, when developers are considering an activity / development they should make every effort to work through the 'avoid, reduce, mitigate' hierarchy in a sequential manner, exhausting the possibilities of one level before proceeding to consider the next. The report can be found using the following link: Best practice guidance for developing compensatory measures in relation to Marine Protected Areas: consultation document (defra.gov.uk). In the case of SEP and DEP, some mitigation actions have been taken (e.g. in the RIAA Table 9-2 Embedded Mitigation Measures – Offshore Ornithology) and others explored (hot/cold spot analysis to identify persistent high density areas of sandwich tern and hence inform placement of turbines, Appendix 11.1 Annex 7). However, the assessment has also presented scenarios for DEP that involve placing all turbines in DEP N (as opposed to turbines in both DEP N and DEP S),	Regarding the options for the build out of DEP (the 'DEP design options' as described in Section 4.1.1.2 of ES **Chapter 4 - Project Description** [APP-090]) it is important to note that, in addition to the mitigation described in the assessment, the mitigation hierarchy has been followed by the Applicant in designing the Order limits. ES **Chapter 3 - Site Selection & Assessment of Alternatives** [APP-089], paragraph 23 describes the key factors applied in the selection of the DEP North boundaries (in addition to the Crown Estate's criteria that had already been applied). This includes (5th bullet point) "*A shallow area (part of Cromer Knoll sandbank) to the north west of the existing DOW was excluded from the DEP North boundary for technical reasons due to the shallow water depth and bathymetry, which were considered unsuitable for foundation and cable installation. In addition, Natural England advised (during a meeting held 29th January 2018) that this shallow area was believed to be*

ID	Natural England Comment	Applicant Comment
	this scenario is somewhat at odds with the mitigation hierarchy, as it increases the impact to key species sensitive to collision, indeed the hot/cold spot analysis for sandwich tern identified that 'One of the high and variable hotspot areas occurred within the boundary of the northern section of DEP', while for kittiwake the offshore ornithology chapter notes that the collision rate may increase by 26.5% if all turbines were built in DEP N. Natural England recommends this scenario is not progressed into any DCO that might be granted, as it departs from the mitigation hierarchy, would increase the project's impacts on key SPA features of concern and raise the demands on the proposed compensatory measures, the performance of which is inevitably uncertain. We also observe that should further mitigation be sought as part of the Examination's consideration of alternative project configurations, DEP N would appear to offer greater opportunities to reduce impacts on kittiwake and sandwich tern through reducing the number of turbines in this part of the site.	*important for feeding birds and that it would therefore be of benefit to exclude the area from development. Following the bathymetry analysis, engineering review and the advice from Natural England, this area was removed from the southern boundary of DEP North.*". As such the Applicant has already given very clear consideration to the potential importance of areas for feeding birds which has resulted in, in consultation with Natural England, avoiding this shallow area in order to minimise impacts. It has done this at an appropriately early stage of the pre-application process. <u>DEP design options</u> - For the majority of species, the assessment (using design-based density estimates) assumes DEP North and DEP South have an even density of seabirds distributed across them – this is because each area is too small (survey transects too short) to estimate densities for each using the design-based estimation approach (N.B the exception to the assumption of even density distribution is where model-based density estimation has been undertaken for Sandwich tern at Natural England's request – see below). On this basis, there are no grounds for reducing the number of turbines in any part of DEP, because the predicted impacts are the same irrespective of whether DEP North and DEP South are developed or only DEP North. - As set out in the **RIAA** [APP-059], when assessed for Sandwich tern using model-based density estimates, the DEP North only design option increases the collisions impact only very slightly. For example, updating the CRM values presented in the in-combination assessment (**RIAA** [APP-059], para 1004) (utilising the CRM parameters provided by Natural England, and under Scenario A (preferred by Natural England)) the increase in the background mortality rate for breeding adult Greater Wash SPA Sandwich terns increases from 9.1% (DEP North and DEP South, herein 'all-DEP') to 9.2% (DEP North only). Project-alone increases in background mortality are predicted to be 0.37% (all-DEP) and 0.55% (DEP North), respectively. A further update can

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		be provided at Deadline 2 if required. Note that these values exclude displacement mortality effects, which Natural England has indicated are not required; this approach also aligns with Natural England's position that macro-avoidance for Sandwich tern should not be included within the CRM. This is reflected in the **Draft SoCG: Natural England (Offshore Ornithology)** which will be submitted at Deadline 2. - Comparison of both the density estimates by survey and monthly collision estimates for Sandwich tern, between an 'all-DEP' scenario and DEP North only, shows that while for the majority of months mean density and predicted collision is higher for DEP North than all-DEP, there is substantial overlap in confidence intervals in all cases, and these differences do not approach statistical significance. - The 'hotspot' analysis undertaken as part of the density modelling (**Annex 7** of ES **Appendix 11.1 Offshore Ornithology Technical Report** [APP-195]) also confirms the high level of variability in Sandwich tern distribution identified within the MRSea model. A 'hotspot' (i.e. area of relatively high Sandwich tern density) was identified within the DEP North area, but this was classified as a 'variable hotspot', reflecting the high coefficient of variation (uncertainty) associated with the estimated density in this area. - Natural England's position, as stated in this comment, also relies on the 'encounter rate' derived from the raw survey data cited in ES **Chapter 11 Offshore Ornithology** [APP-097] to estimate the potential increase in collision rate for the DEP North only scenario, e.g. for kittiwake "*the collision rate may increase by 26.5% if all turbines were built in DEP N*". - As described in ES **Appendix 11.1 Offshore Ornithology Technical Report** ([APP-195], para 27), due to the relatively short lengths of survey transect within DEP North and DEP South, the small numbers of birds recorded (in the case of many species), and the large number of zero records within the dataset, it was not considered possible to generate reliable design-based density estimates for other species for

ID	Natural England Comment	Applicant Comment
		the different scenarios. However, it was recognised that a method was required to provide some understanding of potential differences in seabird abundance within each region, and for this reason 'encounter rate' (i.e. birds seen per km of transect) for DEP North, DEP South and DEP was calculated for all species. These differences are considered in the impact assessment, but it should be noted that the comparisons are not statistically robust, due largely to the small sample size. - Whilst the encounter rates for a number of species (the number of birds encountered per km of transect during aerial surveys) are higher at DEP North than all-DEP (e.g. for Sandwich tern 22.1% higher using baseline survey data, compared to 16.5% using model-based density estimates) the differences between the two build out scenarios are unlikely to be statistically significant, based on assessment of data presented in ES **Appendix 11.1 Offshore Ornithology Technical Report** ([APP-195], para 191). As discussed above, even when more robust model-based estimates are used (which have smaller confidence intervals than design-based estimates), the level of uncertainty is such that differences between all-DEP and DEP North would not be statistically significant; accordingly, it is considered very unlikely that assessment based on encounter rate can be relied on to differentiate the two scenarios. With respect to displacement: - Natural England has not made reference to the expected difference in displacement effects on sensitive species (namely auks) when comparing the DEP North and the all-DEP scenarios. However, it should be noted that displacement estimates would be lower for a DEP North only scenario. - No detailed assessment of displacement effects for a DEP North only scenario has been undertaken. However, a broad estimate of the difference of displacement effect between all-DEP and DEP North can be made, based on the relative areas (and hence the number of birds estimated to be present in each area). An

ID	Natural England Comment	Applicant Comment
		example, using guillemot, is presented below, based on an area of 287.4km^2 for all-DEP (+2km buffer), and 184.9km^2 for DEP North +2km. - Assuming that there is a uniform distribution (density) across the whole of the DEP area, and based on mean abundance estimates, the range of displacement mortality (based on 30-70% displacement and 1-10% mortality), is 56 – 1,311 birds for all-DEP, and 36 – 843 birds for DEP North. If apportioned to FFC SPA, this would represent 2 – 46 birds for all-DEP, and 1 – 29 birds for DEP North so a notably reduction. - As model-based density estimates are not available for any species apart from Sandwich tern, an approximation of the difference in density for DEP North compared to all-DEP can be made using the encounter rates during surveys (but noting the limitations of this approach, as set out above). For guillemot, the encounter rate was 18% higher for DEP North *vs*. all-DEP (Paragraph 116 of ES **Chapter 11 Offshore Ornithology** [APP-097]). Even taking account of this potentially higher density in DEP North (and on the assumption that encounter rate is proportionate to density), mortality rates would remain substantially lower for a DEP North scenario, compared to an all-DEP scenario; 43 – 995 birds, or 1 – 35 birds apportioned to FFC SPA (all-DEP values are unchanged from those above; i.e. 56 – 1,311 birds for all-DEP; 2 – 46 birds apportioned to FFC SPA). Under the maximum predicted displacement effect (i.e. 70% displacement and 10% mortality), and assuming the increased encounter rates reflect density, the DEP North scenario would reduce impacts to guillemots from FFC SPA from 46 to 35 birds, a reduction of 24%, when compared to an all-DEP scenario. - This demonstrates that while the all-DEP scenario may potentially increase collision risk to Sandwich tern (albeit that there is limited confidence and high uncertainty in this difference), there is a high level of certainty that there would be a relative reduction in the predicted displacement effects (on species sensitive to

ID	Natural England Comment	Applicant Comment
		displacement), when comparing the DEP North to all-DEP scenarios, because these effects are driven so strongly by the total array area. With respect to the Seascape and Visual Impact Assessment (SVIA) (ES **Chapter 25** [APP-111]): - Where the assessed effects on views are higher (including Peddars Way, which is significant) this is chiefly a result of DEP South, which is closer to the coastline. Any action to limit the number of turbines in DEP North would increase the same in DEP South. Such a change would be a challenge with respect to visual appearance and would not be welcomed by Natural England as evidenced in their advice to date (and who advised at the pre-application stage (including in their comments on the Preliminary Environmental Information Report) that it was DEP-South that should be excluded). Matters of visual appearance come with a much greater degree of certainty than that which can be associated with the seabird density and collision estimates (as discussed above) and this must be given appropriate consideration in the overall planning balance. In summary, there can be no grounds for removing the DEP North only option from the design envelope or reducing the number of turbines in any part of DEP because: - any reduction in impact from collisions is marginal and the benefits uncertain; - there is a high level of certainty that predicted displacement effects on species sensitive to displacement would be higher for an all-DEP scenario compared to DEP North only; - there is a high level of certainty that the assessed effects on views are higher as a result of development in DEP South; and - any action to reduce the number of turbines in any part of DEP is outweighed by the issues of technical feasibility and economic viability as set out in Section 4.6 (Step 4: Feasibility of Alternative

ID	Natural England Comment	Applicant Comment
		Solutions) **Habitats Regulations Derogation – Provision of Evidence** [APP-063] (also see Q1.5.1.2 of **The Applicant's Responses to the Examining Authority's First Written Questions** [document reference 12.4]). As noted in the Defra (2021) best practice guidance for developing compensatory measures in relation to Marine Protected Areas "*Alternative solutions…should be limited to those which would deliver the same overall outcome for the activity whilst creating a substantially lower risk of impact to the MPA*.". Neither of those conditions would be met by removing the DEP North only option from the design envelope or reducing the number of turbines in any part of DEP.
20	11. Updating Cumulative and In Combination Totals Natural England notes the Applicant has explained that 'The cut off for inclusion of other OWFs into the CIA was May 2022'. This means that for projects in Examination at that point (i.e. Hornsea Project Four), and those submitted for Examination more recently (i.e. Awel Y Mor), updates to the assessment will be required during the Examination for SEP and DEP'. As the Applicant notes, the cumulative and in-combination assessments presenting in the submission will need to be updated to reflect recently submitted/examined projects, particularly as the recent Hornsea Project Four examination has resulted in Natural England advising AEoI on a number of qualifying features at FFC SPA. As well as addressing the points raised above, Natural England will need to receive up-to-date cumulative and in-combination assessments for review before we can provide our final advice.	Updated cumulative and in-combination totals have been calculated and presented in the **CRM Updates (EIA Context) Technical Note** [document reference 13.2] and **Apportioning and HRA Updates Technical Note** [document reference 13.3] submitted at Deadline 1. Note that Awel y Mor is located outside the relevant BDMPS area for the species under consideration (i.e. in UK Western Waters BDMPS) and is therefore not relevant to the cumulative/in-combination totals.
Detailed Comments: SEP & DEP Environmental Statement Chapter 11 Offshore Ornithology (APP-097)		
21	Para 54 and Table 11.15 Seasonality. We note that Natural England recommends a winter period of (Sep-Apr) for red-throated diver (RTD), while the Table presents (September to February). This shortens the impact period and may have an effect on the outcome of the impact assessment. Natural England's standard advice regarding avoiding/mitigating disturbance from vessel movements (including relating to	It is the Applicant's view that the use of Natural England's preferred "winter" period (which is different to that presented in Furness (2015), which was used in the assessment) would have no material effect on the calculations which inform the assessment, or the assessment conclusions presented in ES **Chapter 11 Offshore Ornithology** [APP-097] and the **RIAA** (APP-059).

ID	Natural England Comment	Applicant Comment
	construction) is that 1st November to 31st March inclusive is the key period - this may be a more appropriate frame for the assessment. The Applicant should consider if the different winter season length would impact the assessment outcome, and consider seasonal restrictions to vessel movements in the SPA between 1st November and 31st March.	It is noted that the **RIAA** (APP-059) concludes that AEoI of the red-throated diver feature of the GW SPA can be ruled out for vessel effects during construction and operation and maintenance. Therefore, the Applicant considers that a seasonal restriction on vessel movements between 1st November and 31st March inclusive is not required. The Applicant has committed to implementing a best practice protocol for minimising disturbance to red-throated diver (see ES **Chapter 11 Offshore Ornithology** [APP-097]), which is secured through the **Outline PEMP** [APP-297].
22	11.5.3 - Existing Pressures on Wider Environment Natural England notes that this may need updating in light of the current Highly Pathogenic Avian Influenza (HPAI) situation. Natural England recommends the Applicant reviews our guidance (see Appendix B2) on this, and potentially compile available information on current understanding of impacts of HPAI to key species/colonies of relevance to the SEP and DEP application (Species: sandwich tern, kittiwake, guillemot, razorbill, little gull, RTD, gannet, lesser black-backed gull (LBBG), puffin, colonies: Flamborough & Filey Coast SPA, North Norfolk Coast SPA, Alde-Ore Estuary SPA, Greater Wash SPA). We advise the Applicant considers potential implications of HPAI for the impact assessments and submits an update into the Examination.	ES **Chapter 11 Offshore Ornithology** [APP-097] contains reference to HPAI. However, it is recognised that it simply acknowledges the current situation unfolding at seabird colonies throughout much of the UK and that at the time of writing, potential impacts (both short and long-term) were unclear. The Applicant notes that Natural England has provided some initial guidance (Appendix B2 of [RR-063]) regarding the implications of HPAI for OWF impact assessments. In light of this, the Applicant does not consider that updates to the assessments already presented are required; however, the Applicant will be guided by the SNCBs on how HPAI may need to be considered in future.
23	Para 65 A large body of evidence identifies climate change as a major driver of seabird population demographics'. Should there be some acknowledgement that delivery of offshore wind is a key part of decarbonising our energy supply and hence contributing to mitigating the climate crisis?	The Applicant notes and agrees with this point. The **Planning Statement** [APP-285] and **Habitats Regulations Derogation – Provision of Evidence** [APP-063] describes the need for the project and its contribution towards mitigating the climate crisis, including the positive impact this would have on seabird populations. The Applicant does not intend to provide any further information on this matter.
24	11.6.1.1.1. The current approach to assessing displacement during construction uses data from Fleissbech et al (2019). However, Natural England advises it may make more sense to just extend the predicted operational impact by 1-2 years rather than going through the process of calculating a different approach, acknowledging that as the construction develops there are more and more turbines present in the	Data from Fliessbach et al. (2019) is used in the construction phase displacement assessment but as an alternative to other input parameters used in previous OWF assessments. It is possible to undertake the assessment as per Natural England's request, though simply assuming construction phase displacement will result in the same level of impact as operational phase displacement

ID	Natural England Comment	Applicant Comment
	array site, which may (whether operational or not) cause displacement. This is only relevant if there is a need for population modelling (i.e. the period of impact is 42 years rather than 40 years).	is a highly simplified way of assessing this impact. A recent method adopted by Hornsea Project Four is to use a percentage of operational phase displacement as construction phase displacement. The Applicant proposes to adopt this approach within the **Auk Construction Phase Displacement Assessment (EIA Context) Technical Note** to be submitted at Deadline 2.
25	97 and Other Species Natural England recommends the assessment of an annual impact at the largest BDMPS population scale recommended for EIA, and notes that for some species the appropriate population scale is the breeding season population – please see our outline of this issue in Section 4 above.	See the Applicant's response at ID 1 of this table.
26	Para 314 Regarding the assessment of impacts on RTD - please note the latest SNCB advice (https://hub.jncc.gov.uk/assets/9aecb87c-80c5-4cfb-9102-39f0228dcc9a)	Noted. The Applicant considers that the assessment presented in ES **Chapter 11 Offshore Ornithology** [APP-097], **RIAA** [APP-059] and **Apportioning and HRA Updates Technical Note** [document reference 13.3] submitted at Deadline 1 accords with this guidance.
27	Table 11-132 Natural England advises that Rampion 2 PEIR was published in Aug 2021 (https://rampion2.com/wp-content/uploads/2021/07/Rampion-2-PEIR-Volume-2-Chapter-12-Offshore-ornithology.pdf). This should be included in totals where appropriate. We acknowledge that the Applicant plans to update the assessment with up-to-date Hornsea Project 4 totals. We highlight that a number of OWF PEIRs are anticipated in early 2023, and we advise data from relevant projects should be used to update cumulative/in-combination assessments as required.	Rampion 2 Preliminary Environmental Information Report (PEIR) numbers have been identified and included in the cumulative/in-combination totals presented in the **CRM Updates (EIA Context) Technical Note** [document reference 13.2] and **Apportioning and HRA Updates Technical Note** [document reference 13.3] submitted at Deadline 1. Other OWFs for which PEIRs may soon be available are North Falls and Five Estuaries; however, these are not available at the time of writing.
Detailed Comments: Report to Inform Appropriate Assessment (APP-059)		
28	9.3.3.4.3 | Para 1065 It is unclear why DEP is not being considered for operational phase effects, given that O&M vessels may transit through the SPA on route to the array. Consider impacts on O&M vessels from DEP as well as SEP, or clarify that O&M vessels from Great Yarmouth will not enter the SPA.	DEP has been considered for displacement effects due to Operations and Maintenance (O&M) vessel activity in Section 9.3.3.4.4.3 and 9.3.3.4.5.3 of the **RIAA** [APP-059]. The statement in paragraph 1065 of the **RIAA** [APP-059] refers to operational displacement from the physical presence of turbines in the wind farm site which is assessed in respect of SEP only in Section 9.3.3.4.4.2 and 9.3.3.4.5.2. However, this assessment has been updated in the **Apportioning**

ID	Natural England Comment	Applicant Comment
		and HRA Updates Technical Note [document reference 13.3] submitted at Deadline 1.
29	9.3.3.4.4.1 This assessment only considers impacts on SPA divers through mortality impacts, rather the reduction in available habitat resulting from disturbance/displacement from the cable installation vessels. Given the proposed duration of the cable installation phase, this aspect needs to be properly investigated. Assess implications of cable installation on extent of available habitat in the SPA. Consider need for a seasonal restriction to cable installation works between 1st November to 31st March inclusive or other mitigation measures.	The Applicant considers that the percentage area subject to displacement from cable laying vessel activity relative to the habitat available across the wider SPA could be investigated. It is noted that the effective area of displacement would be temporary in nature. The Applicant intends to provide this updated assessment (as an update to the **Apportioning and HRA Updates Technical Note** [document reference 13.3]) at Deadline 2.
30	Tables 9-38 to 9-40 and related text We note that the gradient approach to RTD displacement, as used in EA1N and EA2 has been presented within the RIAA. This accords with advice given in the ETG, but please note Natural England has recently provided updated advice on appropriate gradients, please see advice in Table 3 above. Natural England advises the Applicant amends the tables/results accordingly.	Noted. The **Apportioning and HRA Updates Technical Note** [document reference 13.3] submitted at Deadline 1 includes an updated assessment for red-throated diver using the new gradient values.
31	9.3.3.4.5.1 See comment on 9.3.3.4.4.1 above. Natural England is increasingly becoming concerned in relation to disturbance and/or displacement of red-throated divers from the more persistent presence of OWF-related vessels in the Greater Wash SPA (construction and O&M) and consider these could make a meaningful contribution to in-combination effects on the SPAs. For this reason, we do not support the conclusion in paragraph 1096. As a minimum, the best practice protocol for all vessel movements through the SPA should be adhered to (see EA1N/EA2 pre-determination submissions regarding the details of the protocol). However, at this stage we are uncertain that this will be sufficient to avoid the project from contributing to potential adverse effects on the SPA. Natural England advises mitigation measures are considered to reduce the potential for in-combination impacts, including (but not only) the best practice protocol adopted by other developers and the role of seasonal restrictions.	It is noted that the **RIAA** [APP-059] concludes that AEoI of the red-throated diver feature of the GW SPA can be ruled out for vessel effects during construction and operation and maintenance. Therefore, the Applicant considers that a seasonal restriction on vessel movements between 1st November and 31st March inclusive is not required. The Applicant has committed to implementing a best practice protocol for minimising disturbance to red-throated diver (see ES **Chapter 11 Offshore Ornithology** [APP-097]), which is secured through the **Outline PEMP** [APP-297].

ID	Natural England Comment	Applicant Comment
32	9.3.3.4.5.2 - presence of array The assessment usefully reveals that that 22.81% of the Greater Wash SPA already falls within 12km of an OWF. This inevitably raises the concern that there are existing adverse effects from existing OWF to which SEP could add further operational displacement i.e. an in-combination adverse effect. This matter will need further discussion during the Examination. We note in Para 1079 that part of the area impacted by operational displacement was classified for species other than RTD. Natural England advises this should be quantified and explored in more detail. Natural England advises further investigation of the significance of the impacted area to RTD is needed to help better understand the likely contribution of SEP to in-combination displacement to RTD. If an in-combination adverse effect cannot be excluded, impact avoidance/reduction e.g. array design should be considered.	The **Apportioning and HRA Updates Technical Note** [document reference 13.3] submitted at Deadline 1 includes an updated assessment of the affected area within the GW SPA. This includes the use of the new gradient values referred to in ID 30. The updated assessment conclusions are in line with that in the **RIAA** [APP-059] i.e. it concludes that AEoI of the GW SPA from operational wind farm array displacement from SEP in-combination with other OWFs can be ruled out. Therefore, the Applicant does not consider that measures such as array re-design are required.
33	Table 9-43 Data Natural England holds from the NNR manager for the colonies in question present some discrepancies, mainly minor. Please see Table 4 C1 below [see RR-063], highlighted cells indicate discrepancies. We have already provided the data to the Applicant. The key discrepancy is that there is productivity data for Scolt Head in the Seabird Monitoring Programme in 2019 (where the Table reads no data). Natural England advises the Applicant to update the figures - and explore whether the changes warrant an updated PVA.	The corrected data are acknowledged and have been reviewed. It can be confirmed that these small discrepancies will make no appreciable effect on the PVA outputs.
34	9.4.3.1.4.1 Natural England accepts there is potential for sandwich tern to be displaced, and while we welcome the review of possible evidence and the inclusion of this in the impact assessment, we do not consider the evidence base is sufficiently robust at this stage to incorporate Macro Avoidance into the collision risk assessment. Natural England will base our conclusions on collision alone and displacement and collision together (but not with the inclusion of macro avoidance in the collision assessment). However, we note that the advised change to the	The **Apportioning and HRA Updates Technical Note** [document reference 13.3] submitted at Deadline 1 includes an updated collision risk assessment in respect of Sandwich tern. This uses the updated avoidance rate recommended by Natural England and does not include an updated displacement assessment. This approach accords with discussions with Natural England at a meeting on the 28th November 2022 where it was confirmed that a Sandwich tern displacement assessment was not expected to be provided in the RIAA and therefore is not required to be updated.

ID	Natural England Comment	Applicant Comment
	avoidance rate for sandwich terns from 98% to 99% is the equivalent of the presented 98% figures with a 50% Macro Avoidance.	
35	Para 1151 Please note Natural England recommends the use of the published flight speed (Fijn and Gyimesi (2018)) of 10.3 m/s), as opposed to the selected flight speed of Fijn and Collier (2020) at 8.3 m/s, however we recognise the value in colony specific evidence and will take note of both outputs when forming our advice. Note also the advised changed AR of 99% - the use of a 50% MA and 98% AR is the equivalent of 0% MA and 99% AR. We advise that the Applicant should refer to the new CRM parameter guidance (see Appendix B1 [of RR-063]) and present the CRM outputs using the parameters set out in the new guidance (incl flight speed, but limited to a subset of mean values only (i.e. excluding models of outputs using the 95% CI/SDs of key parameters).	The updated assessment in respect of Sandwich tern included in the **CRM Updates (EIA Context) Technical Note** [document reference 13.2] and **Apportioning and HRA Updates Technical Note** [document reference 13.3] submitted at Deadline 1 include outputs using both Fijn and Gyimesi (2018) and Fijn and Collier (2020) flight speeds, and updated parameters recommended by Natural England.
36	Tables 9-66 to 9-70 We note a number of scenarios have been presented representing the range of possible legal and practical built turbine parameters. NE require that an 'as-built' scenario is 'legally secure' and as such the starting point for assessment will be scenario A. However we will also take note of Scenario C (which is as built, but with excess capacity modelled as consented). We also observe there is a scenario not presented which is all legally secured parameters (for this it would presumably be scenario A but with Dudgeon reflecting the as-built?)	The Applicant notes the Natural England comment received in DAS advice on the **CRM Updates (EIA Context) Technical Note** (document reference 13.2) regarding scenarios. The Applicant proposes to review and simplify the presented scenarios, to include the additional scenario referenced at the end of Natural England's comment (i.e. as consented for all windfarms, except for DOW as built and legally secured). This will be presented for Deadline 2.
37	9.14.3.1.2 SEP and DEP are both within mean max foraging range, yet the apportioning rate in the breeding season is 0% - this is not reasonable, despite presence of other nearer colonies, some of which are much smaller than Alde-Ore Estuary SPA. It would be appropriate to conclude there is connectivity and therefore some birds in breeding season should be apportioned. It is also reasonable and appropriate to take into account the presence of these smaller colonies (1330 pairs quoted as the regional population in the ES), but if regional breeding populations are to be calculated, it should be all colonies within foraging range of SEP/DEP and SEP & DEP. Natural England advises it would be worth reviewing the submissions made	The approach to apportioning has been updated in the **Apportioning and HRA Updates Technical Note** [document reference 13.3] submitted at Deadline 1.

ID	Natural England Comment	Applicant Comment
	in the Norfolk Boreas/Vanguard and EA1N/EA2 projects to see what data was marshalled regarding non-SPA colonies in Suffolk (e.g. Lowestoft), as some of those may fall within the foraging range. Natural England recommends developing an evidence-based approach to apportioning LBBG mortality to Alde-Ore SPA in the breeding season, considering all colonies within the mean max foraging range.	
38	Para 1426-1427 Kittiwake and Gannet apportioning has not been calculated correctly in the non-breeding season. The BDMPS proportions already take account of the number of adults likely to be present in the BDMPS, so it is not appropriate to correct (a second time) for the proportions of adults (or adult type in the case of kittiwake) in the BDMPS. For example, for gannet in the post breeding/autumn migration season the apportioning should be 4.8%, not 4.8%*93.4%. Please provide corrected figures.	This approach has been used in the **Apportioning and HRA Updates Technical Note** [document reference 13.3] submitted at Deadline 1.
39	Para 1475 HPAI appears to have spread rapidly within parts of the gannetry at FFC SPA in the 2022 breeding season. The consequences of this for the gannet population and its future growth rate are not known, but may have implications for the impact assessment (and indeed for other affected seabird species). Natural England will endeavour to keep the project updated during the Examination. We advise the impact assessment may need to be updated in the light of HPAI impacts, though this cannot be confirmed at this stage (a point also relevant to other seabirds affected by HPAI).	Noted.
40	1520 | Table 9-107: and other tables relating to auk displacement In the case of guillemot and razorbill we welcome the presentation of a range of displacement rates (30-70%) and mortality (1-10%) and will rely on a range-based approach to form our position as it acknowledges the uncertainties within the evidence base on this impact. However, we do not consider it appropriate (or suitably evidence based) to rely on one combination of displacement and mortality (50% and 1%) for the impact assessment.	The **Apportioning and HRA Updates Technical Note** [document reference 13.3] submitted at Deadline 1 includes outputs for the recommended displacement and mortality ranges. Nonetheless, the Applicant maintains that it is reasonable to use a realistic scenario to inform the assessment rather than the full range of presented values, some of which could be considered over-precautionary.

4.18.3 Appendix C Offshore Ornithology Compensation

Table 4.18.3 Applicant's comments on Natural England's Appendix C Offshore Ornithology Compensation relevant representation

ID	Relevant Representation	Applicant Comment
Appendix C Offshore Ornithology Compensation		
Sandwich Tern Compensation		
1	Natural England consider the principal method of compensation for Sandwich tern at Loch Ryan to represent the best available option for project-level delivery. The provision of breeding habitat at a location that has a historical population (no longer present), but with apparently suitable conditions to support a colony once again with sufficient intervention represents a major potential conservation gain for the species.	The Applicant notes and welcomes this position.
2	The measure is likely to be technically deliverable, though some issues such as water supply need to be properly established, and some degree of certainty regarding likely success can be established from the evidence. The measure could help re-establish the species range, increase resilience by reducing reliance on a few major breeding colonies, and deliver ancillary net gain benefits to other species. As such, in principle we are supportive of the measure. However, Natural England remain of the opinion that further development, refinement, and expansion is required before this primary measure can be considered effective and secured.	As discussed during the Habitats Regulations Assessment (HRA) Offshore Ornithology Compensation Expert Topic Group (ETG) meeting (ETG 4) on the 22 November 2022, since the DCO application submission, the Applicant has been maturing its Sandwich tern compensation proposals, including the inland pool measure at Loch Ryan. Key workstreams include: • Progressing landowner discussions; • Securing access licences to undertake non-intrusive surveys; • Procuring a dedicated planning and design consultant to progress design and planning; • Environmental surveys; • Developing concept design; and • Undertaking further consultation with key stakeholders including NatureScot, Dumfries and Galloway Council and Crown Estate Scotland.

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		An update on these workstreams is provided in the **Habitats Regulations Assessment Derogation and Compensatory Measures Update** [document reference 13.7] note submitted at Deadline 1. This includes confirmation that a site visit by technical specialists, topographic survey and Preliminary Ecological Appraisal of one site within the preferred Area of Search (AoS) have now been undertaken. The results of these surveys will help refine the preferred AoS and inform the concept design (including the most appropriate water supply) as well as the EIA Screening and Scoping (if required), and pre-application consultation with the Local Planning Authority. The likely success of the measure is addressed in the **Sandwich Tern – Quantification of Productivity Benefits Technical Note** [document reference 13.4] submitted at Deadline 1.
3	Of particular concern is that a site has not been secured, and efforts to do so appear preliminary. As such it feels premature to be so focused on a particular site for the creation of habitat for sandwich tern and there has been limited exploration and scoping of back-up sites. Until greater confidence is gained that the primary measure can indeed be delivered, Natural England would encourage ongoing exploration of opportunities at other sites.	As outlined in the **Habitats Regulations Assessment Derogation and Compensatory Measures Update** [document reference 13.7] note submitted at Deadline 1, discussions with landowners to secure the necessary land at Loch Ryan within the preferred AoS are progressing positively and draft Heads of Terms have now been provided to an initial party. The Applicant is currently on track to secure the necessary consents and land agreements in accordance with the outline implementation roadmap set out in Table 6-4 of **Appendix 2 – Sandwich Tern Compensation Document** [APP-069]. Exploration of alternative sites was undertaken during the pre-application phase as part of a robust and iterative site selection process informed by an extensive programme of consultation with the HRA Offshore Ornithology Compensation ETG (see **Annex 2B – Sandwich Tern Nesting Habitat Improvements Site Selection** [APP-071] and **Annex 1D - Record of HRA Derogation Consultation** [APP-68]). This process failed to identify any other suitable sites that had good stakeholder support, strong ecological merit and as high chance of successfully delivering the required level of compensation as Loch Ryan. In light of the positive progress that is being made with respect to securing land at Loch Ryan, the Applicant does not consider there to be a need at this stage to explore other sites.

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4	Natural England have very little confidence that a pontoon structure will be colonised by Sandwich tern. Without detailed designs, and preferably testing, we cannot support retaining this option for delivery of compensation. Instead, it is suggested that the focus should be on scoping and progressing alternative sites for habitat creation in case of insurmountable issues at Loch Ryan.	The Applicant recognises that there is little support from Natural England (or RSPB) for the installation of a pontoon at Loch Ryan as an alternative to the inland pool. Whilst it remains the Applicant's view that the pontoon option has ecological merit and is technically feasible, in light of stakeholder views and recognising the positive progress being made with respect to securing the inland pool option at Loch Ryan, the decision has been taken not to actively progress the pontoon option further at this stage. As outlined in the **Draft Statement of Common Ground: Natural England (HRA Derogation)** [document reference 12.15] submitted at Deadline 1, the Applicant and Natural England have therefore agreed not to pursue discussions during Examination regarding the installation of a pontoon at Loch Ryan. Should there be a need to revisit the pontoon option at a later stage (for example, in the unlikely event that the inland pool at Loch Ryan cannot be secured or is not entirely successful), the Applicant is confident that this could be progressed on a more accelerated programme to that outlined in **Appendix 2 – Sandwich Tern Compensation Document** [APP-069] and that stakeholders' concerns related to design, location and efficacy could be adequately addressed within this timeframe. As outlined in response to ID 3, landowner discussions to secure the necessary land at Loch Ryan within the preferred AoS are advancing positively. Given the likelihood of success of this measure, the Applicant does not propose to further investigate other potential sites to implement its Sandwich tern nesting habitat improvements and restoration of lost breeding range measure.
5	The scale of compensation is not yet clearly defined, and the methodology for determining the population required to compensate a specific level of estimated mortality has not been described. Natural England acknowledge that the Applicant proposes compensating for the estimated upper 95% confidence interval impact through the habitat creation measure.	The Applicant has submitted a **Sandwich Tern – Quantification of Productivity Benefits Technical Note** [document reference 13.4] at Deadline 1 which quantifies the anticipated productivity benefits that would be afforded by the Applicant's proposed compensatory measures for Sandwich tern at Loch Ryan (i.e. the inland pool) and the Farne Islands SPA. Discussion of the qualitative benefits of the Loch Ryan measure in restoring the lost breeding range of this species is also provided. The note provides evidence of the ability of the measure to deliver the required compensation under a precautionary but realistic scenario based on

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		assumptions of breeding numbers and breeding success. In addition, the note considers the uncertainty of the Loch Ryan measure being colonised by Sandwich terns in its early stages and the potential for any accrued mortality debt, and how this could be addressed by the Applicant's proposal for Farne Islands SPA. It is worth emphasising that the evidence indicates that the most effective compensation measure for impacts of offshore wind developments on Sandwich terns in UK North Sea waters, and on several other seabird species, would be to reduce fishing pressure on sandeel stocks in order to maintain sandeel total stock biomass above the "one-third for the birds" threshold (Cury et al. 2011, Hill et al. 2020). The Applicant advocates provision of strategic compensation towards achieving energy security and net zero for the UK, but recognises that prey availability measures can only be achieved by Government action (see the **Strategic and Collaborative Approaches to Compensation and Measures of Equivalent Environmental Benefit** [APP-084] and the **Habitats Regulations Assessment Derogation and Compensatory Measures Update** [document reference 13.7] note submitted at Deadline 1 for further information). There is strong evidence that allowing sandeel stocks to recover from their current depleted state would greatly increase seabird populations within a few years, and for sandeel-dependent seabirds such as Sandwich tern would give much greater gain than the precautionary estimates of the cumulative impact of the offshore wind industry; for example, Ecopath/Ecosim modelling by Natural England predicts a 42% increase in seabird numbers in the North Sea within 15 years of closure of the North Sea sandeel fishery (Bayes and Kharadi 2022, Natural England 2023).
6	The scale of the lagoon and islands design is relatively limited. While it is accepted that sufficient island space is proposed to accommodate a breeding population approximating that which was present at the site historically and would be expected to address an estimated impact of 28 birds/annum, we urge a more ambitious approach to lagoon habitat creation that seeks to reduce uncertainties by increasing the attractiveness of those islands. This would also maximise the potential for wider biodiversity benefits.	The Applicant's proposals presented within **Appendix 2 – Sandwich tern Compensation Document** [APP-069] are for an inland pool of at least 80m diameter. This area represents the indicative size of the pool; however, there would be an additional buffer to prevent human disturbance. This point was discussed with Natural England during the most recent HRA Offshore Ornithology Compensation ETG meeting (ETG 4) held on 22

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		November 2022. It was agreed that rather than having a substantial vegetative buffer around the inland pool to prevent human disturbance, the buffer could be formed (at least in part) of water within the pool itself. This would result in a slight enlargement of the overall surface area of the pool and increase habitat provision for waders and waterfowl as well as the potential for wider biodiversity benefits. This is reflected in the **Draft Statement of Common Ground: Natural England (HRA Derogation)** [document reference 12.15] submitted at Deadline 1. The **Sandwich Tern - Quantification of Productivity Benefits** [document reference 13.4] note submitted at Deadline 1 provides further information regarding the potential uncertainties of the proposed measure and demonstrates that the scale of compensation proposed is sufficient.
7	A number of management interventions are proposed at the Farne Islands SPA to aid the recovery of the Sandwich tern population there. Natural England have significant concerns about the likely efficacy of the measures proposed, the reliance on evidence from other tern species, the true additionality of the measures considering the historical implementation of them at the site (and for shelters, likely future use), and setting a precedent of allowing such measures to be implemented and defined as compensation. We do recognise that the interventions on the Farne Islands SPA are not the primary means of compensation here, but at this stage we conclude they add very limited value to the proposed package of measures.	Early informal discussions with National Trust during pre-application indicated that the measures proposed are likely to be additional to those set out in the forthcoming management plan (see **Annex 1D - Record of HRA Derogation Consultation** [APP-068]). The Applicant has not been able to obtain a copy of the latest Management Plan (April 2021 onwards) for Farne Islands SPA and has therefore been unable to formally validate the additionality of the proposed measures. The Energy Security Bill Policy Statement (BEIS, 2023) on the Offshore Wind Environmental Improvement Package (OWEIP) Measures states that "*Government is also considering enabling developers to undertake work already identified by Government to improve the condition of protected species and habitats. This would substantially increase the number of measures available to developers and also accelerate marine recovery for some sites*" (pg. 10 & 11). Final guidance on compensatory measures is due to be published by the Department for Environment, Food & Rural Affairs (Defra) in late 2023 and this is expected to provide further information on how additionality should be considered going forwards. In light of possible upcoming changes to policy and best practice guidance with respect to additionality and the severity of the situation at the Farne Islands which has seen Sandwich tern breeding numbers decline considerably over a 40-year period, despite ongoing conservation and

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		management efforts (see **Annex 2B - Sandwich Tern Nesting Habitat Improvements Site Selection** [APP-071]), the Applicant considers its proposal to undertake measures to improve breeding success at the Farne Islands SPA to be an important part of its proposed package of compensatory measures for Sandwich tern. It is considered that there is sufficient evidence outlined in **Appendix 2 – Sandwich Tern Compensation Document** [APP-069] and the **Sandwich Tern Quantification of Productivity Benefits Technical Note** [document reference 13.4] submitted at Deadline 1, to demonstrate that if delivered at an appropriate scale, the measures proposed could provide substantial benefits to breeding numbers of Sandwich tern at the Farnes as well as address any accrued mortality debt associated with the Applicant's proposed measure at Loch Ryan. Thus, it is considered important that this measure remains within the Applicant's proposed package of compensatory measures for Sandwich tern. Also see ID 32 where it is noted that Natural England reference the qualitative benefit of similar measures which have been implemented on the Isle of May.
8	There remains a need to fully detail the proposed scale of the measures if they will both be deployed. I.e., a target population (allowing for inter-annual variation) at the new colony to ensure success in terms of productivity required to compensate for impacts over the lifetime of the project. Currently, measures have loosely ascribed potential benefit quantified, but need to have clearly justified and defined scales to enable delivery and monitoring of benefits/success or need for adaptive management. It is not clear if both measures will aim to compensate the impact, in effect committing to a 2:1 ration of compensation, or if the suite of measures is to increase resilience and the overall aim of them is to compensate at a 1:1 ratio.	The Applicant has submitted a **Sandwich Tern - Quantification of Productivity Benefits Technical Note** [document reference 13.4] at Deadline 1 to address this point. Consideration of the measures at Farnes Islands SPA are incorporated within the quantification of productivity benefits.
9	We note the proposed approach regarding prey availability is a wholly strategic one. Whilst fisheries management itself is likely to be beyond the gift of the Applicant, Natural England considers that evidence-gathering on sandwich tern prey species could make a meaningful, if secondary, contribution to the proposed package of measures, through facilitating future strategic measures. We would be pleased to discuss potential options the	Noted. The Applicant has agreed to attend a meeting with Natural England, Marine Management Organisation (MMO) and the Centre for Environment, Fisheries and Aquaculture Science (Cefas) to discuss potential evidence gathering with respect to Sandwich tern prey species.

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	Applicant, which are likely to relate to collecting data on the distribution and abundance of herring and sandeel at the spawning and larval stages of their lifecycles in areas used by foraging terns from NNC SPA.	
Kittiwake Compensation		
10	Compensation for kittiwake is proposed by making nest site improvements to enhance the breeding success of nesting pairs occupying unsuitable or high-risk sites where they are currently failing, primarily due to displacement.	The Applicant confirms that this statement is correct; however, adds that the measure is to enhance the breeding success of nesting pairs which are currently failing due to displacement and unfavourable nesting conditions. Therefore, the Applicant's proposal differs from the installation of new artificial nesting structures being progressed by other developers. For further information on the distinction between the Applicant's and other developers' proposals, see the **Gateshead Kittiwake Tower Modification – Quantification of Productivity Benefits Technical Note** [document reference 13.1] submitted at Deadline 1.
11	Natural England considers that the most effective way of compensating for impacts on FFC SPA kittiwake would be to increase prey availability and thereby kittiwake productivity. However, we recognise the Applicant's position that this is not achievable through project-led compensation.	As outlined in **Appendix 3 – Kittiwake Compensation Document** [APP-072] and **Annex 1B - Sandwich Tern and Kittiwake Ecological Evidence** [APP-066], the Applicant agrees with Natural England's view that increasing prey availability would be the most effective means of increasing kittiwake productivity. It is for this reason that the Applicant felt it appropriate to set out this measure explicitly as a component of its proposed package of compensatory measures for kittiwake but as a measure that requires strategic delivery. Since submission, the Applicant has continued its dialogue with Defra regarding strategic approaches to compensation and is maintaining a watching brief with respect to the Government-led Strategic Ecological Compensation Study looking at prey availability measures for seabirds for any emerging opportunities that might be relevant to SEP and DEP (see the **Strategic and Collaborative Approaches to Compensation and Measures of Equivalent Environmental Benefit** [APP-084] submitted at Deadline 1 for further information).
12	An alternative compensation approach that is deliverable at the project level aims to increase the breeding kittiwake population and productivity through provision of artificial nest structures (ANS). Natural England consider the	The Applicant notes that its proposal is not to provide an onshore ANS although it is recognised that there are similarities. As described within **Gateshead Kittiwake Tower Modification – Quantification of**

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	approach to have broad merit but believe that further onshore ANS implementation is now of uncertain benefit in the light of the planned provision of approximately 3,000 nest spaces on the Southern North Sea coast by other OWF projects. It has not been demonstrated that there is a sufficient pool of habitat-limited kittiwake recruits, suitable locations and/or prey availability to meet and sustain the existing demand for this measure.	**Productivity Benefits Technical Note** [document reference 13.1] submitted at Deadline 1, the Applicant's proposal does not rely on a sufficient pool of site seeking recruits. The note also provides evidence which demonstrates that there is existing and, at present, increasing demand for additional or improved nesting provision for kittiwakes in the Tyne area. Also see response at ID 43.
13	Natural England therefore advise that any further ANS should be provided offshore. There is a comparative shortage of nesting opportunities available offshore, and the potential to site ANS in areas where the prey resource may be under-exploited by coastal-nesting kittiwakes. Predation pressure is also expected to be much reduced offshore. Furthermore, we note the Applicant's interest in collaborating with other developers to deliver ANS and consider that in the case of an offshore structure, collaboration and co-funding is likely to be more beneficial in delivering what we accept is a challenging and relatively expensive measure. At present however there is no detail provided on such a collaborative approach.	Construction of a new ANS offshore (and onshore) was considered by the Applicant during the pre-application phase but was discounted for project-led delivery following further review of ANS opportunities and accounting for the feedback received from stakeholders. Further details of the rationale for discounting this measure at the project-level is presented in Table 6-3 of **Appendix 3 – Kittiwake Compensation Document** [APP-072]. The Applicant welcomes Natural England's support for pursuing construction of a new offshore ANS on a collaborative basis; however, as outlined within **Strategic and Collaborative Approaches to HRA Compensation and MEEB** [APP-084] there are significant challenges to collaborative delivery of compensation at this time. As such, this option was presented as an alternative option subject to suitable delivery partner(s) and an agreed mechanism becoming available. An update on the Applicant's progress with respect to collaborative compensation delivery is provided in the **Habitats Regulations Assessment Derogation and Compensatory Measures Update** [document reference 13.7] note submitted at Deadline 1.
14	There may be alternative opportunities for compensation by reducing negative interactions with breeding kittiwakes in urban areas, as set out to some extent by the Applicant. Natural England consider that there may be compensatory opportunities here for SEP and DEP, given the level of predicted impact. However, we have concerns that the proposals submitted will not be responsive enough to adequately address the issues highlighted in Lowestoft. Further, we consider that elements of the proposal, especially at	It should be noted that modifications to the existing kittiwake tower at Gateshead represents the Applicant's preferred option for delivering nest site improvements to enhance breeding success. The Applicant recognises that there is strong opposition from East Suffolk Council for project-led delivery of nest site improvements to enhance kittiwake breeding success within Lowestoft town as it would be contrary to their strategic position. Whilst it remains the Applicant's view that its proposal for Lowestoft has strong ecological merit and is technically feasible, in light of East Suffolk Council's view and recognising the positive progress being made with

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	Gateshead, are essentially for the provision of onshore ANS. We reiterate that we do not support further onshore ANS provision.	respect to securing the option at Gateshead (see the **Habitats Regulations Assessment Derogation and Compensatory Measures Update** [document reference 13.7] note submitted at Deadline 1 which includes a letter of support from Gateshead Council in Appendix B), the decision has been taken to not actively progress the option at Lowestoft further at this stage. This approach is agreed in the **Draft Statement of Common Ground: Natural England (HRA Derogation)** [document reference 12.15]. As noted above the Applicant's proposal at Gateshead is not to provide an onshore ANS although it is recognised that there are similarities. For further information on the distinction between the Applicant's and other developers' proposals, see the **Gateshead Kittiwake Tower Modification – Quantification of Productivity Benefits Technical Note** [document reference 13.1] submitted at Deadline 1.
15	An ongoing 'rapid response' version of the proposed measure, that aims to 'save' nests each year from problematic locations that are identified (or reported) early in the breeding season may have more merit, though we recognise this would be logistically difficult, and have uncertain prospects for ongoing validity over the project lifetime. These challenges notwithstanding, we do see potential scope for working with both the Tyne and Lowestoft Kittiwake Partnerships along these lines, and recommend the Applicant further explore this approach. This could be undertaken in tandem with targeted small-scale local ANS provision close to those existing 'flashpoints' identified by the Applicant. Equally, the measure may seek to mitigate impacts arising from problematic nests or encourage short term tolerance in exchange for future deterrent measures.	Many of the characteristics described by Natural England (e.g. targeting problematic nest sites, deterrent measures and "saving nests") are already in-built to the existing proposal at Lowestoft and further engagement with the Lowestoft Kittiwake Partnership on 27 October 2022 has confirmed that the proposed approach aligns with the partnership's ambitions (see the **Habitats Regulations Assessment Derogation and Compensatory Measures Update** [document reference 13.7] note submitted at Deadline 1 for further information on this engagement). The recommendation of a 'rapid response' in the context of the Applicant's proposal for Lowestoft is noted; however, the Applicant agrees that in practice this approach would be logistically difficult and would have uncertain prospects for ongoing validity over the project lifetime. As outlined in the **Habitats Regulations Assessment Derogation and Compensatory Measures Update** [document reference 13.7] note submitted at Deadline 1, the Applicant has taken the decision since submission of the DCO application not to actively progress its proposal for Lowestoft further at this stage. The Applicant's focus is therefore on actively progressing delivery of Gateshead, which has good stakeholder support, strong ecological merit and a high chance of successfully

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		delivering the required level of compensation. As noted above, this approach is agreed in the **Draft Statement of Common Ground: Natural England (HRA Derogation)** [document reference 12.15].
16	We highlight that it may be difficult to secure agreements for the provision of nest sites on or near buildings that are actively discouraging nesting kittiwakes, even if a lower-impact site can be provided. The nest site provision measure sets out some locations where nests are known to have failed recently, however, there is no guarantee that sufficient failing sites will be identified at the time of implementation, and that a solution could be provided in a timely fashion. Currently, we expect birds that fail will move to a new site the following year, so it is not clear how to quantify the additional benefit of this measure.	As noted above, the Applicant is no longer actively progressing measures at Lowestoft. However, it is the Applicant's view that, in principle, based on further work undertaken since application and the information provided in **Appendix 3 – Kittiwake Compensation Document** [APP-072], that a sufficient number of buildings could be secured to deliver the necessary level of compensation. Regarding the Applicant's proposal at Gateshead, discussions with Gateshead Council (who is both the landowner and local planning authority responsible for determining any planning application associated with modifying the existing kittiwake tower) to secure the necessary permissions and consents are progressing positively. See the **Habitats Regulations Assessment Derogation and Compensatory Measures Update** [document reference 13.7] note submitted at Deadline 1 for further information, including a letter of support from Gateshead Council in Appendix B. **Appendix 3 – Kittiwake Compensation Document** [APP-072] provides information on the quantification of productivity benefits (Section 6.4.6) which is supplemented by the **Gateshead Kittiwake Tower Modification – Quantification of Productivity Benefits Technical Note** [document reference 13.1] on which the Applicant has consulted with Natural England prior to its submission at Deadline 1.
17	Furthermore, we retain concerns that the project timelines introduce a risk that the measure will effectively be superseded prior to implementation by the proposed large-scale installation of bespoke ANS in the Lowestoft and Gateshead areas which are designed to offer high quality nest sites to displaced birds, or those currently utilising sub-optimal habitat. We highlight that planning permission has been granted for three kittiwake walls at Lowestoft Harbour, and a marine licence is being sought for two large ANS a short distance offshore, totalling in excess of 1200 nest spaces. Furthermore,	The **Gateshead Kittiwake Tower Modification – Quantification of Productivity Benefits Technical Note** [document reference 13.1] which has been submitted by the Applicant at Deadline 1 demonstrates that in the context of the Tyne area, and taking account of other offshore wind developer proposals, there is existing and, at present, increasing demand for additional or improved nesting provision for kittiwakes. As outlined above, the Applicant's proposal for Lowestoft is no longer being actively progressed at this stage. Should there be a need to revisit this option at a later date, the efficacy of the proposal will be reassessed at that

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	it is the intention of ABP Lowestoft to restore the original, but no longer functioning, kittiwake 'wall' in the harbour.	time in light of expected project timelines and other kittiwake compensation or conservation schemes. This approach is agreed in the **Draft Statement of Common Ground: Natural England (HRA Derogation)** [document reference 12.15].
18	At Gateshead, a planning application has been submitted for a bespoke ANS adjacent to the existing Saltmeadows kittiwake tower. With a new purpose-built structure built immediately adjacent, it is hard to see there being sufficient benefit to a modification to the existing tower there.	The Applicant has submitted at Deadline 1 a **Gateshead Kittiwake Tower Modification – Quantification of Productivity Benefits Technical Note** [document reference 13.1] which includes consideration of the RWE kittiwake tower proposal and demonstrates that there is existing and, at present, increasing demand for new or improved nesting provision within the Tyne area. Furthermore, as outlined in the **Habitats Regulations Assessment Derogation and Compensatory Measures Update** [document reference 13.7] note submitted at Deadline 1, the Applicant is engaging with RWE regarding the adjacent ANS to ensure respective interests in the area can proceed unhindered by each other.
19	Natural England therefore recommends that the Applicant explores the potential for a 'rapid response' approach to dealing with negative urban interactions with local kittiwake partnerships as a potential avenue for compensation, and/or prioritises collaboration on an offshore ANS with other developers and brings forward a specific proposal regarding this.	See response to ID 15 of this table.
Gannet		
20	Natural England can advise that on the basis of the information so far provided, we believe there will be no requirement for provision of gannet compensation. As such we have not provided detailed comments on the without-prejudice proposals for delivery of compensation for that species.	The Applicant has submitted at Deadline 1 a **Collision Risk Modelling (CRM) Updates Technical Note** [document reference 13.2] which has recalculated mortalities for gannet based on updated Natural England guidance on CRM parameters. The worst case upper 95% confidence interval (CI) FFC SPA gannet combined collision risk and displacement mortalities have reduced by approximately 4 i.e. from approximately 10 to 6. In light of this and the adjacent advice from Natural England, the Applicant does not intend to progress its without prejudice compensation proposal for gannet which is anticipated to be agreed with Natural England by Deadline 2.
Guillemot and Razorbill		

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21	The proposals for compensatory measures to account for impacts on guillemot and razorbill are relatively undeveloped and lack the required detail on location, scale, technical feasibility and long-term implementation. Crucially, there is no clear evidence that bycatch or predation impacts at an identified site are occurring to a degree that offers the Applicant sufficient opportunity to reduce those impacts at the scale required to provide compensation.	Since submission of the DCO application the Applicant has had further discussions with fisheries stakeholders in the northeast and has ascertained that the level of set net fishing activity and therefore auk bycatch is unlikely to be of a sufficient scale to present a feasible compensation measure. However, in response to the points raised by Natural England within their Relevant Representation (RR-063), the Applicant is now investigating options for the implementation of the same or similar measures in the southwest of England. The Applicant is intending to submit in the early stages of Examination an Auk Bycatch Reduction Feasibility Statement which will include further details on these proposals including how the Applicant proposes to gather evidence on the extent of bycatch in southwest England and the proposed approach to the implementation and monitoring of bycatch reduction technologies. It should be noted that the Applicant's proposal also includes measures that could potentially be delivered on either a collaborative (bycatch reduction and predator eradication from a breeding colony) or strategic basis (i.e. contribution to strategic compensation fund such as the Marine Recovery Fund). See the **Habitats Regulations Assessment Derogation and Compensatory Measures Update** [document reference 13.7] note submitted at Deadline 1 for further information with respect to these options.
Detailed Comments		
22	Natural England reiterate that we consider it very unlikely that Sandwich terns would colonise a pontoon structure of a similar design to that frequently deployed for common tern. Anecdotally, it appears that sandwich terns tend to select nest sites on higher ground and often further from the tide line or water compared to common tern, a species which shows greater flexibility and variation in nest site selection. A pontoon structure would seem unlikely to offer suitable opportunities for sandwich tern should this be the case, and it is unclear whether the design would (or could) be modified compared to previously installed pontoons. A very large pontoon with a graded sand and shingle	As outlined in the **Habitats Regulations Assessment Derogation and Compensatory Measures Update** [document reference 13.7] note submitted at Deadline 1, the Applicant recognises that there is little support from Natural England (or RSPB) for the installation of a pontoon at Loch Ryan as an alternative to the inland pool. Whilst it remains the Applicant's view that the pontoon option has ecological merit and is technically feasible, in light of stakeholder views and recognising the positive progress being made with respect to securing the inland pool option at Loch Ryan, the decision has been taken not to actively progress the pontoon option further at this stage. As outlined in the **Draft Statement of Common**

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	covered topside could conceivably attract sandwich tern. Although introducing some management issues, vegetation could be used to approximate embryonic dunes. It is stated that, *"Although it is uncertain whether Sandwich terns would choose to colonize a pontoon (as common terns have in other locations), no attempts have been made to make this possible and so the lack of evidence is due to a lack of tests rather than to Sandwich terns failing to colonize such a structure."* However, this may be an oversimplification of the situation, i.e., while it could be argued that pontoons have not been designed for sandwich tern specifically, they have been installed in locations where the species breed and have not been colonised. Tern pontoons have been installed at locations with, or close to, breeding sandwich tern populations. For example, in the eastern Solent (South coast of England) there are tern rafts/pontoons in Langstone Harbour, at Farlington Marsh and in Chichester harbour, with Sandwich tern colonies utilising natural habitat at Langstone harbour and Pagham harbour. There has been no colonisation of pontoons by Sandwich tern. The fact that such pontoons have not been colonised may offer some first step in establishing design principles for pontoons by contrasting them with known natural sites (e.g., size comparisons, height above water level, etc). To have any confidence in the suitability of a pontoon for breeding sandwich tern Natural England will need to review detailed designs, which should be informed by species-specific preferences regarding breeding site characteristics. Preferably, these designs would be tested at a location where sandwich terns currently breed at sub-optimal locations (e.g., due to disturbance or predation pressures) or are habitat limited. On the evidence and information presented, Natural England advise that the Applicant commit to the preferred option of habitat creation by provision of a lagoon with nesting islands. Contingency should be provided through alternative locations rather than potentially suboptimal alternatives with high levels of uncertainty regarding colonisation potential.	**Ground: Natural England (HRA Derogation)** [document reference 12.15] submitted at Deadline 1, the Applicant and Natural England have agreed not to pursue discussions during Examination regarding the installation of a pontoon at Loch Ryan. Should there be a need to revisit the pontoon option at a later stage (for example, in the unlikely event that the inland pool at Loch Ryan cannot be secured or is not entirely successful), the Applicant is confident that this could be progressed on a more accelerated programme to that outlined in **Appendix 2 – Sandwich Tern Compensation Document** [APP-069] and that stakeholders' concerns related to design, location and efficacy could be adequately addressed within this timeframe.
23	The proposed scale of compensation is to compensate the annual upper 95% CI of adult mortality. According to the Applicants estimates this will require	The Applicant has submitted at Deadline 1 an **Apportioning and HRA Updates Technical Note** [document reference 13.3] which recalculates

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	the equivalent of 28 adult Sandwich terns to be delivered into the population annually for the lifetime of the project. It is suggested that *"120-150 pairs be likely to produce about 100 chicks per year (equivalent to about 38 adults)".* To provide the requisite confidence in the number of recruits that would be produced, the methodology for calculation of a reasonable target population for the compensatory measure should be fully detailed. It would be useful to stress test the proposed colony size in terms of its ability to deliver the required compensation under a worst-case productivity scenario. Natural England agree that the restoration of lost breeding range is of significant conservation benefit. It is of note that this benefit could also be considered scalable, i.e., the value of the measure in terms of population resilience will increase with scale of provision. However, it should also be recognised that the measure does not directly benefit the impacted site. This gives further weight to the need for an ambitious approach to habitat creation to benefit sandwich tern.	the Sandwich tern mortalities for SEP and DEP. The new compensation requirement = 12-17 adult Sandwich terns which is based on 95% CI values, with the lower estimate being calculated using a model-based density estimate and the upper, a design-based density estimate. The Applicant has also submitted at Deadline 1 a **Sandwich Tern - Quantification of Productivity Benefits Technical Note** [document reference 13.4] which quantifies the anticipated productivity benefits that would be afforded by the Applicant's proposed compensatory measures for Sandwich tern at Loch Ryan and the Farne Islands SPA. Discussion of the qualitative benefits of the Loch Ryan measure in restoring the lost breeding range of the species is also provided. The note provides evidence of the ability of the measure to deliver the required compensation under a precautionary but realistic scenario based on assumptions of breeding numbers and breeding success. In addition, the note considers the uncertainty of the Loch Ryan measure being colonised by Sandwich terns in its early stages and the potential for any accrued mortality debt, and how this could be addressed by the Applicant's proposal for Farne Islands SPA.
24	The land to the southwest of Scar Point would appear to offer opportunities for habitat creation. Natural England requests clarification regarding the extent of the area of search, and exclusion of the apparently suitable adjacent area to the south and west.	As noted at the HRA Offshore Ornithology Compensation ETG meeting held on 22 November 2022, the Applicant scoped potential sites to the south and west of the identified preferred AoS. These are shown on the **Figure 3** in **Appendix A - Supporting Figures for the Applicant's Responses to Relevant Representations** [document reference 12.3.1]. These sites remain as potential options; however, as considered from the outset and agreed with Dumfries and Galloway Council and NatureScot during a meeting held on the 16 November 2022, the area to the north of Wig Bay remains the preferred and least environmental constrained option (see the **Habitats Regulations Assessment Derogation and Compensatory Measures Update** [document reference 13.7] note submitted at Deadline 1 for further information regarding consultation undertaken since application).
25	Natural England agree that increasing the size of islands within the pool is not likely to impact colonisation potential. However, the proposed lagoon/pool and islands therein are of relatively limited size. We consider that provision of a greater number of islands within a larger lagoon could increase the	See the Applicant's response at ID 6 of this table.

ID	Relevant Representation	Applicant Comment
	likelihood of colonisation, given the limited understanding of what drives sandwich tern nest selection. There would be increased certainty in the measure being able to accommodate the population required if more space was available as the potential for habitat heterogeneity would be increased. The works would also then deliver greater ancillary benefits, e.g., to shorebirds in winter.	
26	While the evidence clearly indicates that sandwich tern breed at high density on small or restricted areas of suitable habitat, it is not as clear what other factors relating to the surrounding area may be of importance for this habitat to be so well utilised. Outline drawings of the pool would be useful to visualise the proposed habitat creation.	The Applicant has provided an update on the progress being made with respect to maturing its proposal for the inland pool at Loch Ryan within the **Habitats Regulations Assessment Derogation and Compensatory Measures Update** [document reference 13.7] note submitted at Deadline 1. This confirms that the Applicant anticipates being able to consult on concept designs in early Q2 2023, ahead of Deadline 3.
27	Consideration of increasing the scale of habitat provision should also account for the fact that other species are likely to colonise. This may be of overall benefit, e.g., in the case of black-headed gull. However, it should be considered that there will be increased competition for nest site space. Further, a very spatially compact colony of sandwich terns might be more vulnerable to kleptoparasitism (by black-headed gull) or avian predators that directly predate eggs and chicks, such as grey heron. Aspects of the design such as electric fencing should follow best practice guidance, e.g., Babcock and Booth (2020) Anti-predator Fencing. Tern Conservation Best Practice.	Natural England's advice is noted.
28	Overall, Natural England would strongly encourage the Applicant to be more ambitious regarding the scale of habitat provision, and to present detailed proposals for the habitat creation during the Examination.	See the Applicant's response at ID 6 and 26 of this table.
29	The pontoon design outlined here is essentially a scaled-up version of the general design that has frequently been provided for common terns. Sandwich tern have not colonised these pontoons previously, and the designs and locations may be unsuitable. Natural England are of the opinion that the provision of a pontoon for breeding Sandwich tern is a high-risk option due to a lack of any species-specific evidence to suggest that colonisation is likely. Moreover, in some	Noted. See the Applicant's response at ID 22 of this table regarding the pontoon option.

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	locations where pontoons have been deployed such as Chichester Harbour, Sandwich terns have never even been noted to approach the rafts (Peter Hughes, Chichester Harbour Conservancy, pers.comms) although it is noted there are a number of factors that could contribute to this (specific location, design, time of deployment). If a pontoon option is to be progressed, it is suggested that significant development of the design should be considered to increase the chance of colonisation by Sandwich tern. For example, creating a more diverse habitat by grading the surface, increasing the height above the water level, or planting vegetation might all be beneficial. Nevertheless we consider that the risk of non-colonisation would remain considerable.	
30	We note that *"Discussions with relevant landowners are underway to secure land or rights to deliver nesting habitat improvement measures at Loch Ryan, Scotland. The Applicant will provide PINS with a further update on the progress of these discussions following DCO application submission."* Natural England welcome this and highlight the importance of progressing efforts to secure land or rights to deliver nesting habitat. The measure cannot be considered secured until the completion of this process. We anticipate updates throughout the Examination and will advise as appropriate.	See ID 3 of this table for an update on the progress relating to securing land rights at Loch Ryan.
31	We note that the outline roadmap for the implementation of the habitat provision compensation measure aims to allow 2 full breeding seasons of operation prior to first power at SEP and DEP. Sandwich tern recruit into the breeding population in their third year, and therefore the measure could in theory be delivering adults into the wider breeding population at the point of impact. However, colonisation of habitat is highly uncertain in terms of time taken, and uptake/growth. With a 2-year lead in it is highly likely that the measure will accrue a mortality debt in the formative years. Calculations relating to the scale of the measure required to compensate a specified impact should be stress tested against mortality debt scenarios, especially when further adaptive management options are limited.	The Applicant would like to highlight that the outline implementation roadmap set out in Table 6-4 of **Appendix 2 – Sandwich Tern Compensation Document** [APP-069] is 'indicative' and as stated in this document, the Applicant will look to implement compensation as soon as possible after the proposed measures have been agreed through the Sandwich tern Compensation Implementation and Monitoring Plan (CIMP). However, further to this, the Applicant has submitted at Deadline 1 a **Sandwich Tern Quantification of Productivity Benefits Technical Note** [document reference 13.4] which includes consideration of any accrued mortality debt, to address this point.

ID	Relevant Representation	Applicant Comment
32	We note that the Applicant states, *"During early informal engagement with National Trust on the Plan it was confirmed that this does not include deployment of tern nest boxes and shelters that have been used successfully at Isle of May (Steel and Outram 2020) and does not include deployment of cameras to monitor tern nesting and any attempts at predation of tern nests. Both of these measures therefore can be considered 'over and above' management of this SPA and therefore are additional measures that can provide compensation."* It is important to note that Sandwich tern on the Isle of May do not nest in boxes, but in the open on the terraces. To our knowledge, there is no record from any colony of Sandwich terns nesting within boxes/shelters and there is only qualitative evidence of any benefit. For example, on the Isle of May, "*Sandwich terns do not use the boxes directly, but we found pairs like to nest against the side of them and the chicks definitely use them. On ringing missions, we would sometimes find every Sandwich tern chick had run to hide in boxes to escape us. This similar behaviour was used if a predator was in the area, so yes as we found that every little helped so putting boxes down had more benefits than not*." (David Steel, Isle of May warden, pers. comms). It must also be acknowledged that terraces (with boxes) have previously been built on Inner Farne but were not colonised by Sandwich terns. While Natural England are supportive of efforts to restore the Sandwich tern population on the Farne Islands, we highlight that the principal issues identified as affecting the colony relate to vegetation management (resulting in limitations to nesting space) and predation from large gulls. It is anticipated that the forthcoming National Nature Reserve (NNR) plan will include sufficient measures to address these. Should that plan then be implemented, it is difficult to support the delivery of compensation through measures that are not thought of sufficient importance to be delivered by the site management plan. While the provision of cameras to further understand predation would undoubtedly provide useful scientific data, and possibly inform further management, this should not be considered as a measure that could directly provide compensation.	The Applicant welcomes confirmation from the Isle of May warden, David Steel, of the beneficial use of tern nest boxes and shelters at the Isle of May for Sandwich terns. Higher breeding success is likely to be achieved where these structures are provided. The fact that other tern species also benefit will be to the advantage of Sandwich terns too, since larger numbers of breeding terns provide increased anti-predator defence and provide a dilution effect on predation impacts. The Applicant notes that the latest Management Plan (which has not been seen by the Applicant as it is not yet publicly available) will aim to halt and reverse the decline in Sandwich tern breeding numbers at the Farnes, but it is also noted that attempts to achieve this to date have been unsuccessful, and that there is no evidence to suggest that success will be achieved based on the limited attempts that have been made. There were 2,846 apparently occupied nests (AON) in 1990, 2,484 in 1997, 2,364 in 2001 but only 417 AONs in 2019, the latest count published in JNCC SMP database. The long decline of Sandwich tern breeding numbers has now brought the population close to being lost as a breeding species at the Farnes and the Applicant considers that interventions proposed would provide a valuable and tangible contribution to address a problem that has been ongoing for over 40 years without any successful management intervention being made. The Applicant recognises that in addition to vegetation no longer being suitable for tern nest sites across most of the former colony area, predation on terns by gulls is also a serious problem at the Farnes. Nest boxes and shelters (along with other interventions proposed by the Applicant such as bamboo canes) would be likely to reduce that problem whereas vegetation management will not in itself achieve that objective. The Applicant considers that Natural England's statement that *"it is difficult to support the delivery of compensation through measures that are not thought of sufficient importance to be delivered by the site management plan"* reflects the failure of successive Farne Islands site management plans to recognise what measures are required to allow Sandwich terns to breed more successfully at the Farnes. Vegetation management alone will not resolve the problem of predation by gulls that has impacted the

ID	Relevant Representation	Applicant Comment
33	Provision of nest boxes, monitoring by camera, and potential installation of bamboo canes to deter gull predation is proposed at the Farne Islands to improve breeding success of Sandwich terns. It should be noted that both nest boxes/shelters and bamboo canes have previously been used on the Farne Islands for the benefit of breeding terns, and boxes/shelters are likely to be deployed in the future. It is also unclear whether the provision of 400 nest boxes and 400 shelters in areas which could support sandwich tern is feasible, and whether this is proposed for areas already occupied by sandwich terns or where it is hoped they could return. Natural England remain concerned that the measures proposed are not truly additional, and in any event are likely to provide only minor benefits compared to an ongoing programme of vegetation and large gull management.	declining numbers of nesting terns as the ratio of gulls to terns on the islands has become increasingly unfavourable over recent years. This is likely to cause increased predation impact on the declining tern population. Shelters and nest boxes provide an opportunity to reduce that impact without killing large gulls that are themselves birds of conservation concern. Also see the Applicant's response at ID 7, the **Sandwich Tern – Quantification of Productivity Benefits Technical Note** [document reference 13.4] submitted at Deadline 1 for further information.
34	We consider that the evidence supplied regarding expected reductions to nest and chick predation is not specific to Sandwich tern. It is not expected that Sandwich terns will nest inside boxes, so nest predation is unlikely to be significantly reduced. If reducing predation of chicks is proposed as a compensatory measure, then a full understanding of existing levels and impacts of that predation will be required in order to design solutions and quantify any benefits. The current estimates of potential gains from these measures appear highly speculative.	The evidence is that provision of shelters reduces depredation on Sandwich tern chicks. It is uncertain whether Sandwich terns would gain benefits of reduced egg losses through provision of nest boxes; they may gain less than other tern species, but still are likely to gain some protection by nesting against boxes, as indicated by Steel and Outram (2020). This is discussed in the **Sandwich Tern – Quantification of Productivity Benefits Technical Note** [document reference 13.4] submitted at Deadline 1. The Applicant proposes to monitor predation by camera deployment and if the benefits are less than anticipated and less than required for compensation then the gull attack rate could potentially be further reduced (by up to 50%) by deployment of bamboo canes, as demonstrated previously by experimental studies at the Farne Islands (but not implemented in subsequent management). This is discussed further in the **Sandwich Tern – Quantification of Productivity Benefits Technical Note** [document reference 13.4] submitted at Deadline 1.
35	The Applicant states that, *"High uptake of nest boxes by terns is anticipated at the Farne Islands, and a significant boost to their breeding numbers and breeding success, as found at the Isle of May (Steel and Outram 2020)."*	The Applicant notes that numbers of Sandwich terns nesting at the Isle of May increased when nest boxes were provided for terns. Although Sandwich terns may prefer to nest against rather than inside nest boxes, this gives them some protection, as does the increased density of nesting

ID	Relevant Representation	Applicant Comment
	It is also noted here that a study relating to the efficacy of canes used data from the Farne Islands. Natural England do not consider that the cited evidence is sufficient to suggest high uptake of nest boxes by Sandwich tern. Sandwich tern do not nest within the boxes at the Isle of May (or elsewhere). Productivity benefits have not been quantified. Again, it is very difficult to support the implementation of bamboo canes as compensation due to issues of additionality and the danger of simply repurposing as compensation low-cost interventions that, if effective, should be incorporated into routine site management.	terns of other species, providing a predator-swamping and increased effectiveness of predator mobbing. There is evidence that Sandwich terns benefit from provision of nest boxes (Steel and Outram 2020). Likely productivity benefits are discussed in the **Sandwich Tern – Quantification of Productivity Benefits Technical Note** [document reference 13.4] submitted at Deadline 1. In the case of bamboo canes, the Applicant agrees that these should have been deployed as part of the routine site management. That is also considered best practice by RSPB. However, the fact is that canes have only been deployed experimentally at the Farne Islands (Boothby et al. 2019) and are not understood to be included as a tern protection measure in the latest Farne Islands Management Plan so the Applicant's proposal is considered to be additional.
36	General comments Natural England agrees with the suitability of the area and identified preferred site within it. The species conservation benefit of increasing resilience by range restoration and population dispersal is particularly highlighted by the recent HPAI outbreak.	The Applicant notes and welcomes this position.
37	General comments It would be useful to clearly identify and prioritise locations other than Loch Ryan in case of insurmountable issues with acquiring or developing a site there, or for potential adaptive management options if required.	As outlined in the **Habitats Regulations Assessment Derogation and Compensatory Measures Update** [document reference 13.7] note submitted at Deadline 1, discussions with landowners, Dumfries and Galloway Council and other relevant stakeholders including NatureScot have so far been positive and that there is no reason to believe that the necessary consents and permissions cannot be secured for this site. The Applicant has undertaken a robust and iterative site selection process informed by an extensive programme of consultation with the HRA Offshore Ornithology Compensation ETG (see **Annex 1D - Record of HRA Derogation Consultation** [APP-068]). Whilst as part of this process, other locations were reviewed and discussed with stakeholders, no other suitable location for implementing compensation that has as high a chance of success was identified (see **Annex 2B – Sandwich Tern Nesting Habitat Improvements Site Selection** [APP-071]). The Applicant is therefore committed to securing a suitable site at Loch Ryan.

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		As outlined in the **Habitats Regulations Assessment Derogation and Compensatory Measures Update** [document reference 13.7] note submitted at Deadline 1, the Applicant is in discussions with QinetiQ/MoD regarding possibilities for Sandwich tern compensation at Foulness Island as part of the Applicant's overall package of measures for Sandwich tern.
38	The RSPB proposal to install a common tern raft in very close proximity to the identified site raises some concerns, but also possibilities. For example, if the pontoon was to be designed with Sandwich tern in mind it would still be reasonable to assume common tern could colonise it. A pontoon and lagoon could then conceivably be implemented alongside one another.	As noted in response to ID 22, the Applicant's pontoon option is not being actively progressed at this stage (see the **Habitats Regulations Assessment Derogation and Compensatory Measures Update** [document reference 13.7] note submitted at Deadline 1). The Applicant is aware of the RSPB proposal; however, does not consider that it conflicts with the inland pool proposal. Furthermore, collaboration with the RSPB on their proposal for a common tern raft is not something that has been explored and since the Applicant is not actively pursuing the pontoon option, is not something that the Applicant is intending to take forward at this stage. The Applicant considers that the RSPB's proposal to construct a small pontoon for common terns to nest on in Loch Ryan is compatible with the Applicant's proposal to create nesting habitat for Sandwich terns. The colonisation by Sandwich terns of an island in a pool would probably be more likely to occur if other birds have already colonised that new site. In particular, Sandwich terns are often attracted to nest close to black-headed gulls, as occurred at St John's Pool, Caithness where black-headed gulls nested first at the new site and were followed by Sandwich terns. Colonisation by Sandwich terns may be facilitated if common terns nest on the island too, but it is unclear whether creation of a pontoon colony in the loch by RSPB would increase, decrease, or have no influence on the probability of common terns also nesting on the newly-created island.
39	The Applicant claims that *"Until now no pontoon has been deployed at a site where Sandwich terns are likely to nest, so it is uncertain whether Sandwich terns would use a pontoon."* We are not convinced this is strictly true – see comments 7 and 11 above. To our knowledge, Sandwich terns have not interacted with habitat created on pontoons in any way despite using nearby natural habitat. However, it is possible that this is simply due to the pontoons being deployed later in the season to reduce 'swamping' by breeding black-headed gull. It is not clear if	For clarity, the Applicant considers more appropriate wording to be: *"no pontoon has been deployed at a site where Sandwich terns are likely to nest a**nd specifically designed to attract nesting by this species**, so it is uncertain whether Sandwich terns would use a pontoon."* See the Applicant's response at ID 22 of this table with respect to the Applicant's position on the pontoon option.

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	there is a pool of habitat limited black-headed gull in Loch Ryan, but it is conceivable that a similar issue could occur. The scale of habitat provision may need to account for this likelihood. There is no evidence to suggest that Sandwich terns might colonise a pontoon structure, although it does appear highly unlikely that those deployed to date for common tern will be attractive or suitable. Provision of a pontoon for Sandwich tern should be considered experimental, and thus carries a relatively high risk of failure.	As outlined in the **Draft Statement of Common Ground: Natural England (HRA Derogation)** [document reference 12.15] submitted at Deadline 1, the Applicant and Natural England have agreed not to pursue discussions during Examination regarding the installation of a pontoon at Loch Ryan. See the **Habitats Regulations Assessment Derogation and Compensatory Measures Update** [document reference 13.7] note submitted at Deadline 1 for an update on progress regarding the inland pool option.
40	We note that the RSPB have received funding to install a common tern pontoon just offshore of Wig Sands, immediately to the west of Scar Point in Loch Ryan. To help understand the spatial implications better, we request that the Applicant define the potential area for common tern pontoon installation on Figure 5.	See the Figure 3 in **Appendix A** [document reference 12.3.1].
41	Five potential sites have been identified around Loch Ryan, two of which are in the preferred area of search. We request that the Applicant mark all of the potential sites on Figure 5 and/or 6.	An updated figure has been provided – see Figure 3 in **Appendix A** [document reference 12.3.1].
42	The Applicant states, *"There is a limit to how many sites would be satisfactory locations for new artificial colonies of kittiwakes, but there is also a limit to how many immature prospecting kittiwakes will be available to take advantage of such opportunities. Although there clearly is a pool of immature kittiwakes seeking to recruit into colonies, the size of that pool is uncertain. Therefore, other possible, and complementary, approaches to increasing productivity of kittiwakes should be explored."* Agreed. Natural England consider the lack of knowledge regarding likely recruits to new nest sites, and the difficulty in securing locations to deploy ANS, to be significant problems.	The Applicant has submitted at Deadline 1 a **Gateshead Kittiwake Tower Modification – Quantification of Productivity Benefits Technical Note** [document reference 13.1] which demonstrates that there is existing and, at present, increasing demand for new or improved nesting provision for kittiwakes.
43	The Applicant states, *"…in principle, an adaptation to an existing structure that increased breeding success could be a greater contribution to kittiwake*	Noted. For further information on the distinction between the Applicant's and other developers' proposals see the **Gateshead Kittiwake Tower**

ID	Relevant Representation	Applicant Comment
	conservation than provision of new structures if those new structures achieved no greater breeding success than currently achieved by kittiwakes already nesting on existing artificial sites." Natural England does not believe that adaptations to an existing structure are inherently more likely to deliver productivity gains than provision of new structures. In fact, if well located and designed bespoke structures could well be more effective.	**Modification – Quantification of Productivity Benefits Technical Note** [document reference 13.1] submitted at Deadline 1. The Applicant agrees with Natural England that either type of measure (i.e. the Applicant's which aims to provide compensation by increasing breeding success or other developers' which aims to provide compensation by increase breeding numbers) could be effective in achieving their objective, providing they are well designed.
44	The Applicant highlights that the measure is *"very well aligned with the Lowestoft Kittiwake Partnership 'vision, objectives and outputs'"* Agree. If appropriately designed and targeted, the measure could deliver ancillary benefits by reducing conflict and ill-feeling toward nesting kittiwakes generally.	Noted. The Applicant agrees and has highlighted the potential community benefits within **Appendix 3 – Kittiwake Compensation Document** [APP-072].
45	Regarding scale of the measure, the Applicant states that, *"… the target of replacing 48 failing nest sites with 48 optimal nest sites is considered to be a sufficient and appropriate scale of compensation for SEP and DEP."* *"Given that the proposal for making nest site improvements for kittiwakes has been demonstrated to be feasible from an ecological perspective at a range of sites and locations, the detailed design of any such improvements will be developed at a later stage and agreed through the Kittiwake CIMP"* It is not clear that this approach will continue to be viable once other projects have installed ANS. A method to quantify benefit has not been fully detailed. This should be submitted into the Examination. We also observe that the Applicant equates birds lost from FFC SPA with birds entering the biogeographic population from which FFC SPA draws its recruits. Given all the other colonies that kittiwake produced by the ANS could colonise, Natural England does not consider this equivalence is likely to maintain the coherence of the national site network. The measure is described as an intervention to an identified issue, but it envisaged that once ledges have been provided to compensate for losses from a known displacement then they will continue to function. I.e., it is the intention that in following years the productivity of those ledges will constitute the measure of success. It remains unclear how this measure is	The Applicant has submitted at Deadline 1 an **Apportioning and HRA Updates Technical Note** [document reference 13.3] which recalculates the kittiwake mortalities for SEP and DEP. The new compensation requirement based on the 95% CI = 17 adult kittiwakes. To compensate for the loss of 17 adults per year, increased production of at least 34 (biogeographic population) to 68 (national site network) chicks fledged per year is required. See the **Gateshead Kittiwake Tower Modification – Quantification of Productivity Benefits Technical Note** [document reference 13.1] submitted at Deadline 1 for further context to these numbers. This note also demonstrates that there is existing and, at present, increasing demand for improved nesting provision for kittiwakes, taking account of new ANS proposed by other projects. See the **Gateshead Kittiwake Tower Modification – Quantification of Productivity Benefits Technical Note** [document reference 13.1] for a description of how the Applicant's proposals differ to that of an ANS.

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	fundamentally different to the provision of an ANS, and ultimately, if it is appropriate to continue facilitating or encouraging opportunistic nesting kittiwakes on buildings in urban environments given the future provision of purpose-built ANS.	
46	The measure is scheduled to be implemented 4 (worst case 3) years before the SEP and DEP turbines are operational. Due to the proposed timing and definition of success, there are high levels of uncertainty that suitable locations identified (or otherwise) will be available for the required scale of intervention over the lifetime of the project. It is plausible that prior to implementation, improvements and proliferation of deterrent measures and the new provision of bespoke ANS installed nearby may already be excluding birds from nuisance sites while providing high quality alternative sites. I.e., birds that would have been targeted by the measure may have relocated, and the potential for colonisation of inappropriate urban locations, some of which are clearly sub-optimal, may be reduced.	As noted above the Applicant has submitted at Deadline 1 a **Gateshead Kittiwake Tower Modification – Quantification of Productivity Benefits Technical Note** [document reference 13.1] which demonstrates that there is existing and, at present, increasing demand for improved nesting provision for kittiwakes, taking account of new ANS proposed by other projects. As noted in response to ID 14, the Applicant is not currently progressing its proposal at Lowestoft; however, it should be noted that kittiwake numbers at Lowestoft (including town, harbour and pier) have increased considerably (185 AONs in 2010, 446 in 2018, 700 in 2021), and there is no evidence of food limitation there or at Gateshead. Numbers seem likely to continue to increase at Lowestoft in the next few years. If the current growth rate is maintained there will be over 100 new nest sites occupied each year, with that number increasing while the exponential population growth rate is maintained. This scale of growth could more easily be matched by new ANS close to Lowestoft. It would be helpful to hear from Natural England how many new nest sites will be provided per year at Lowestoft by the existing planned ANS and therefore how close to capacity this location may now be. Those numbers do not appear to be readily available in the public domain.
47	The Applicant highlights that, *"However, Concerns have been raised by stakeholders around the potential for diminishing returns with an increasing number of new structures."* Natural England confirm that we are not supportive of the further provision of onshore ANS, especially in the Lowestoft area, until the results of the currently planned provision start to emerge. In the light of the recent planning application for an additional ANS next to the existing one at Gateshead Saltmeadows, further provision on the Tyne seems also of questionable benefit.	The Applicant considers that the proposals within **Appendix 3 – Kittiwake Compensation Document** [APP-072] will provide the necessary levels of compensation. The Applicant has submitted at Deadline 1 a **Gateshead Kittiwake Tower Modification – Quantification of Productivity Benefits Technical Note** [document reference 13.1] which demonstrates that there is existing and, at present, increasing demand for improved nesting provision for kittiwakes, taking account of new ANS proposed by other projects. The note also

ID	Relevant Representation	Applicant Comment
	It is not clear that the measures proposed here offer any real-world additional benefits distinct from the provision of new ANS.	quantifies the relative productivity benefits in the context of the biogeographic and national site network populations.
48	We note that 50% displacement and 1% mortality rates have been used to estimate mortality of 6 guillemot a year to be compensated. Natural England does not support the use of a single rate for the purposes of impact assessment, advising that a range-based approach is taken instead. Please see our offshore ornithology comments. We also do not support the use of this specific rate for scaling compensation.	The Applicant notes that the 50% / 1% rates are evidenced-based whilst still being precautionary. The Applicant considers this to be the most appropriate rate upon which to base impact conclusions and the levels of compensation that are required to be secured within the DCO. In addition, the Applicant has submitted at Deadline 1 an **Apportioning and HRA Updates Technical Note** [document reference 13.3] which recalculates the razorbill mortalities for SEP and DEP. Using the 50% / 1% rates results in a compensation requirement of 2 adult razorbills.
49	We note that 50% displacement and 1% mortality rates have been used to estimate mortality of 0.5 razorbill a year to be compensated. Please see comment 30 above, which also applies to razorbill.	
50	The Applicant highlights that Loch Ryan area hosts a wide range of migrant and wintering shorebirds, seabirds and waterfowl, and that habitat provision, *"will contribute to improving the conservation status of the broader network and these bird populations".* Natural England do not consider the provision of a pontoon will deliver any meaningful secondary benefits for non-target species. If provision of an inland pool is also intended to provide non-like-for-like compensation for project impacts other than Sandwich tern the design must balance the varied habitat requirements appropriately and the habitat provided be of a scale and nature that would result in meaningful levels of benefit.	As noted at ID 20, the Applicant does not intend to progress its without prejudice compensation proposal for gannet and anticipates being able to agree this with Natural England at Deadline 2.
51	The Applicant states, *"Evidence from St John's Pool is that waterfowl arrived within days of the habitat being created and other similar habitat creation schemes have experienced rapid take up by waterfowl and shorebirds. Therefore, it is reasonable to expect some benefits at Loch Ryan immediately following installation, allowing for the time of year that this is completed."* Natural England agree that the creation of a protected inland pool with islands would be utilised by waterfowl and shorebirds immediately. However,	Noted.

ID	Relevant Representation	Applicant Comment
	we highlight that if a pontoon was to be installed instead there would be few, if any, substantial benefits to these species.	
52	The nature and scale of set net use in Northeast England is not clear from the text, or information supplied by the Applicant in Annex 1D Record of HRA Derogation Consultation (document reference 5.5.1.4). Natural England request clarity on the exact nature of set netting activity identified, to understand the potential for bycatch reduction to provide compensation opportunities. Are nets for trout set from beaches and are they attended by fishers? Although it is stated that some fishers operate year-round, it is likely that this activity is predominantly seasonal, to what extent? How widespread is this activity? Has any attempt been made to quantify levels of auk bycatch? Has it been ascertained from fishers or NEIFCA if any best practice measures as adopted in the Filey Bay fishery are being followed voluntarily?	See response at ID 21 of this table.
53	Regarding the success of measures implemented at Filey Bay to reduce auk bycatch the Applicant states, *"the reduced bycatch achieved there may relate to the use of high visibility corline and the attendance of fishers at nets with the aim of releasing any birds that become entangled."* It is Natural England's understanding that the Filey Bay Net Limitation Order (NLO) bylaws stipulated that a record was kept of birds removed and number released alive. Has this data been obtained to evidence the efficacy of releasing entangled birds?	
54	Natural England currently consider the Looming Eye Buoys (LEB) to remain an unproven technology with respect to reducing bycatch of auks, and has significant reservations regarding the conclusions drawn on the trial carried out by Hornsea 4 OWF. Please see Natural England's advice during the Hornsea Project Four Examination available at: EN010098-001970-Natural England - Comments on any submissions received at Deadline 6 1.pdf (planninginspectorate.gov.uk).	
55	The Applicant states, *"The most effective measure implemented at Filey Bay is anticipated to be the training of fishers to safely remove and release birds*	

ID	Relevant Representation	Applicant Comment
	that become tangled in nets so that the birds survive rather than die". See previous comment, paragraph 210. Is there any evidence from any set net fisheries that training fishers to remove and release birds has been successful in reducing bycatch mortality? It is likely that fishers must attend nets very closely with short soak times for birds not to drown prior to retrieval. In this case it may be that bycatch is reducing simply by a disturbance effect reducing bird density in the vicinity of nets. It is not clear that the process of removing auks from nets and releasing them is in of itself a problematic process for fishers. Have fishers identified a need for this training?	
56	The potential for collaboration with Ørsted on bycatch reduction measure is noted. Natural England are supportive of potential collaborations to deliver compensation measures and consider the approach can facilitate and expediate delivery of costly and/or difficult measures.	Noted. An update on the Applicant's progress with respect to collaborative compensation delivery is provided in the **Habitats Regulations Assessment Derogation and Compensatory Measures Update** [document reference 13.7] note submitted at Deadline 1.
57	Natural England acknowledge that the Applicant is proposing that compensation is required for very small numbers of auks, even taking into account our reservations regarding the displacement and mortality rates used. However, before training of fishers to effectively release birds entangled in nets can be considered as a viable compensatory measure, the current level of bycatch mortality that could be prevented by more effective disentanglement and release needs to be quantified. At present it is not clear that live birds are being bycaught and not surviving the removal and release process.	See response at ID 21 of this table.
58	The Applicant has identified sites for delivery of bycatch reduction using the analysis presented by Cleasby et al (2022) to identify 'hotspots' of breeding birds from FFC SPA and gillnet fisheries. Natural England highlight that Cleasby et al (2022) state, "*Fishing effort data presented here did not include an estimate of bycatch rate. As such, the maps highlight areas of potential rather than actual risk.*" Accordingly, Natural England do not accept that these locations are necessarily suitable and	

ID	Relevant Representation	Applicant Comment
	consider that evidence is required to support the selection of these sites for bycatch reduction measures. Has there been any attempt to ascertain if bycatch is occurring, and if so, to quantify rates at the proposed fisheries?	
59	The Applicant states, *"Because measures will reduce bycatch of adult guillemots and razorbills (as well as other age classes that are present) the compensation will account one to one for losses to OWF impacts, with no delay."* Natural England agree that as bycatch reduction should reduce direct mortality it can deliver compensation instantly upon implementation. However, we consider that the age structure of the population must be accounted for in quantifying the benefit. Only the proportion of adult birds saved from bycatch mortality can be considered as direct compensation for impacts on birds apportioned to the breeding population at FFC SPA.	The Applicant agrees with Natural England that the compensation should be targeted at the SPA adult birds and that immatures are excluded from the calculations of compensation.
60	The Applicant states, *"It would be necessary to monitor bycatch of guillemots and razorbills in the gillnet fishery being subject to bycatch reduction measures, preferably including monitoring of bycatch numbers before bycatch reduction measures are implemented in order to be able to quantify the gain being made."* Natural England consider it essential that empirical data is gathered to evidence the levels and nature of pre-existing bycatch in the target fisheries. Without this data the benefits of implementing the compensatory measure cannot be proven, and following implementation, quantified.	See response at ID 21 of this table.
61	The Applicant states, *"It would also be desirable to monitor change in guillemot breeding numbers at FFC SPA (corrected for any influence of change in sandeel stock biomass and impacts of climate change) to assess the extent to which the population trajectory at FFC SPA was influenced by reduction in bycatch."* Whilst we welcome the proposed monitoring of guillemot trends at FFC SPA, we consider this is best done collaboratively by industry, as a number of developments will be impacting the SPA (and some will be required to provide compensation). It would not be possible to discern the impacts of a	Noted. The Applicant highlights that the Energy Security Bill Policy Statement (BEIS, 2023) makes reference to 'strategic monitoring' to allow for a greater understanding of cumulative environmental impacts, and notes that Government is "*working with stakeholders to identify possible opportunities for strategic monitoring*" (page 18). The Applicant has submitted a copy of the Energy Security Bill Policy Statement on the OWEIP Measures (BEIS, 2023) at Deadline 1 in response to Q.1.1.3.1 and part a) of Question Q.1.14.20 of the **Examining Authority's Written Questions (WQ1)** [PD-

ID	Relevant Representation	Applicant Comment
	given project and/or its compensation, but such monitoring would help provide some comfort that the populations trajectory was not adversely affected. We recommend the Applicant work with other developers to deliver strategic monitoring of the FFC SPA colony.	010]. The Applicant is also continuing to engage with other developers to explore opportunities for collaboration with respect to compensation delivery and monitoring.
62	Only one year of baseline monitoring of bycatch is proposed, and this monitoring is not implemented until the completion of the development of compensation proposals and site selection. Natural England highlight the necessity of identifying and quantifying bycatch as part of the measure development and site selection process. It is currently uncertain that there is bycatch of the target species that can be reduced. Further, the nature of this bycatch is not understood, so any measure to address it is purely speculative. Natural England advise that at least two years of baseline data should be gathered to account for inter-annual variation.	See response at ID 21 of this table.
63	The potential for compensation through eradicating rats in the Channel Islands is identified. Natural England recommend that the Applicant review our advice relating to the Hornsea 4 compensatory measure proposal, in which we highlight that, “it is not clear that the sites shortlisted will offer sufficient opportunity to deliver meaningful benefits to auks or the level of compensation that Natural England consider necessary”. This being the case, it is hard to see how predator management in the Channel Islands could offer compensation opportunities to SEP and DEP given the likely requirements of Hornsea 4.	As outlined in the **Strategic and Collaborative Approaches to Compensation and Measures of Equivalent Environmental Benefit (MEEB)** [APP-084], predator eradication is being considered on a purely collaborative basis. An update on the Applicant’s progress with respect to collaborative compensation is provided in the **Habitats Regulations Assessment Derogation and Compensatory Measures Update** [document reference 13.7] note submitted at Deadline 1.
64	The Applicant proposes a collaboration with other developers to deliver a predator reduction measure. As previously stated, Natural England are supportive of potential collaborations to facilitate the delivery of compensatory measures. However, for measures to be delivered by these collaborations to be considered secured the agreements must be fully detailed, and a mechanism for	Noted. An update on the Applicant’s progress with respect to collaborative compensation is provided in the **Habitats Regulations Assessment Derogation and Compensatory Measures Update** [document reference 13.7] note submitted at Deadline 1.

ID	Relevant Representation	Applicant Comment
	quantifying and portioning the benefits to the projects involved should be set out.	

4.18.4 Appendix D Marine Mammals

7. The Applicant notes that comments on Appendix D of Marine Mammals are intended to be provided at Deadline 2.

4.18.5 Appendix E Marine Processes

Table 4.18.4 Applicant's comments on Natural England's relevant representation Appendix E Marine Processes

ID	Relevant Representation	Applicant Comment
1	The project parameters are clearly defined	Noted
2	The rationale behind the WCS is mostly clear. However, the rationale behind some of the associated calculations and conclusions are not clear (see detailed comments). Furthermore, the impacts of the scenario whereby SEP and DEP may be constructed sequentially are not clearly defined. It would be useful to highlight the implications of a sequential construction scenario on the impact assessment.	The impact assessment presented in ES **Chapter 6 Marine Geology, Oceanography and Physical Processes (MGOPP)** (APP-092) considered the following development scenarios in determining the worst-case scenario: • Build SEP or build DEP in isolation - one OSP only, • Build SEP and DEP concurrently or sequentially - with either two OSPs, one for SEP and one for DEP, or with one OSP only to serve both SEP and DEP. For each of these scenarios it was considered whether the build out of the DEP North and DEP South array areas, or the build out of the DEP North array area only, represents the worst-case for that topic. Any differences between SEP and DEP, or differences that could result from the way the first and the second projects are built (concurrent or sequential and the length of any gap) are identified and discussed where relevant in the impact assessment section of the chapter. For each potential impact, where necessary, only the worst-case construction scenario for two Projects is presented (either concurrent or sequential). The justification for

ID	Relevant Representation	Applicant Comment
		what constitutes the worst-case is provided, where necessary, in Section 6.6 Potential Impacts.
3	The baseline characterisation is generally good, although characterisation of sandbanks, sandwaves and significant morphological features across the project area is inadequate. Please see our detailed comments and advice regarding baseline characterisation of sandbanks, sandwaves and seabed morphological features.	See ID 8, ID 20, ID 21 and ID 28 responses. The Applicant has submitted at Deadline 1 a **Marine Processes Technical Note** (document reference 13.5) which provides more detail on sandbanks, sandwaves and other significant morphological features.
4	The survey methodology and sampling are both adequate, with the exception of site-specific Suspended Sediment Concentrations (SSC)s across the study area for a range of tidal and wave conditions. It would be helpful if more site-specific SSC measurements could be provided.	The Applicant does not propose to undertake site-specific suspended sediment concentration measurements. The scope of the site-specific surveys was agreed during the evidence plan process. The Applicant agreed with the ETG to use the Cefas (2016) average suspended sediment concentration dataset which was obtained in a GIS form and the data interrogated for the site. Therefore, the data is site specific and showed that average suspended sediment concentrations across SEP and DEP are 5-10mg/l between 1998 and 2015. The site-specific data extracted from Cefas's dataset was provided in Figure 6.10 of the ES (APP-119). This is a recent long time series of data (17 years) and it is highly unlikely that the average concentrations up to the present day have changed.
5	The spatial extent of sediment deposition footprint and deposition thickness due to construction activities are described, but insufficient quantitative evidence and/or maps have been provided to support the conclusions drawn. We advise that the predicted deposition footprints from discharge of dredged materials at the arrays are provided, particularly for SEP which is close to the SAC. Modelled deposition footprints and thickness should also be provided for representative locations along the ECC between the HDD exit location and seaward boundary of the MCZ.	The Applicant has not quantified spatial distribution of deposition resulting from sediment plume dispersion for any of the offshore infrastructure. This is because the assessment was conceptual expert-based using the existing data from Sheringham Shoal Offshore Wind Farm (SOW) / Dudgeon Offshore Wind Farm (DOW) as analogues. No bespoke modelling of sediment dispersion and subsequent deposition has been done. The analogous SOW and DOW data suggests that worst-case thickness of sediment deposited from the plume would not likely exceed a maximum of 1mm and be less than 0.1mm over large areas of the seabed. After this initial deposition, this sediment will be continually re-suspended to reduce the thickness even further to a point where it will be effectively zero. This will be the longer-term outcome once the sediment supply from foundation installation or export cable installation has ceased. Hence, the footprint of deposition from the plumes is irrelevant to the assessment because

ID	Relevant Representation	Applicant Comment
		regardless of its geographical extent, it will have an immeasurable thickness once dredging has stopped.
6	We would advise that further evidence is required to support the predictions of elevated SSCs due to export cable installation and foundation installation, along with deposition footprints and thickness. In addition, there does not appear to be: -an offshore cable crossing schedule; -a map showing the spring tidal ellipses across the study area; -a map showing sediment transport potential across the study area; -DOW geophysical survey data to support conclusions that construction-related effects were minor and localised and that the seabed topography has not changed greatly; -any relevant evidence on the success of cable burial on sandbanks from either DOW or SOW.	It is stated in ES **Chapter 6 MGOPP** (APP-092) that a suspended sediment plume will be created due to export cable installation and foundation installation, which will eventually be deposited on the seabed. These are inherent in the nature of the activity and do not require quantitative evidence to support them. Offshore Crossing Schedule: The Applicant proposes to produce a formal offshore crossing schedule post consent as part of the cable specification, installation and monitoring plan secured through the DMLs, once more accurate details on for example infield, interconnector and export cable routes and requirements are defined. Tidal Ellipses: See ID 23 response. The Applicant has submitted at Deadline 1 a **Marine Processes Technical Note** (document reference 13.5) which provides a tidal ellipse map to support the Zone of Influence on the Tidal Regime. Sediment Transport Potential: The Applicant cannot present a sediment transport potential map for suspended sediment. This would require a detailed breakdown of the particle size classes, each of which would have a different potential. This is typically done for bedload transport of a particular particle size using one of a number of sediment transport equations. The Applicant considers this is disproportionate and unnecessary in terms of environmental assessment. DOW Experience: The Applicant has submitted at Deadline 1 a **Marine Processes Technical Note** (document reference 13.5) which provides more detail on the local changes to the seabed at DOW post-construction. Also see the **Outline Cromer Shoal Chalk Beds (CSCB) Marine Conservation Zone (MCZ) Cable specification and Installation Monitoring Plan (CSIMP)** (APP-291).
7	Natural England notes that the approach to the EIA assessment is proposed to align with other OWF NSIPs. This matrix approach has been used throughout ESs to date to support the assessment of the magnitude and	Noted regarding the matrix approach.

ID	Relevant Representation	Applicant Comment
	significance of impacts. Natural England notes numerous instances where significance has been presented as a range (i.e., slight, or moderate, or large) and it is nearly always the lower value that has been taken forward. In the absence of evidence to support the use of the lower value in a range, Natural England's view is that the higher value should always be assessed in order to ensure that impacts on features are not incorrectly screened out of further assessment. This is in line with the principles of the Rochdale envelope approach. The definitions used for magnitude and sensitivity seem appropriate however, we do not agree with all the assessments of magnitude and sensitivity. Mostly, apart from scour and secondary scour assessments. We advise that a scour assessment should be carried out, and secondary scour considered.	Regarding scour and secondary scour see ID 54 and 55 responses of this table.
8	Sandbanks We advise that sandbanks, sandwaves and other significant morphological features have not been adequately characterised or assessed in the ES. Potential changes to these features through activities such sandwave levelling or operation of the OWF could indirectly influence the MCZ and/or East Anglia Coast. We advise that further consideration should be given to the characterisation of sandbanks, sandwaves and other significant morphological features, their migration rates, and recoverability over the lifetime of the project. Marine Protection Areas Marine Protected Areas (MPAs) within the ZoI have not been identified as receptors in Chapter 6, with the exception of CSCB MCZ. Whilst we acknowledge that impacts to MPAs are considered in other chapters, because they could be affected indirectly by changes to marine geology, oceanography and physical processes, then they should be identified in this chapter. All Marine Protected Areas within the ZoI should be identified in Chapter 6 and shown on relevant maps.	See ID 3, ID 20, ID 21 and ID 28 responses. The Applicant has submitted at Deadline 1 a **Marine Processes Technical Note** (document reference 13.5) which provides more detail on sandbanks, sandwaves and other significant morphological features. Regarding the Inner Dowsing, Race Bank and North Ridge SAC and The Wash and North Norfolk Coast SAC upon which there is potential for indirect effects, these are assessed within the **RIAA** (APP-059). The receptors to be included for assessment were agreed during the Evidence Plan Process to include: • Cromer Shoal Chalk Beds MCZ • Coastline • Sandbanks
9	The list of projects screened into the Cumulative Effect Assessment are appropriate, however, there are three projects which we would advise be considered:	The Waveney Gas Platform and Elgood Wellhead are located adjacent to the DEP North array area and DEP South area, respectively, and are considered below. The southern boundary of Outer Dowsing OWF is about

ID	Relevant Representation	Applicant Comment
	Waveney Gas Platform Elgood Wellhead Outer Dowsing OWF We advise that Waveney Gas Platform, Elgood Wellhead, and Outer Dowsing OWF should be considered in the CEA. NB: Outer Dowsing PEIR is expected to be available in February 2023 With the exception of the three projects listed above, the impacts have been assessed adequately in the CEA.	13km north of the northern boundary of the DEP North array area. It is therefore outside the zone of influence and is not considered cumulatively. The Waveney Gas Platform and Elgood Wellhead gas production platforms could have the potential for cumulative impacts during the operation of SEP and DEP. Both are single platforms supported by several legs through the water column and into the seabed. The addition of two more platforms to a DEP array of 30 foundations and 67 foundations in DOW (and associated offshore platforms), will cumulatively make little difference to the overall effect on waves, tidal currents, and sediment transport. The bespoke wave modelling for SOW, DOW, SEP and DEP (Plate 6.24 of the ES - APP-119) shows that cumulatively, they are predicted to have only a localised impact on wave climate, where reflection from the wind turbines results in a slight reduction in wave conditions. This outcome would be similar if two more structures are placed into the model alongside over 100 structures already modelled. There would be no impact on the wave conditions in the Cromer Shoal Chalk Beds MCZ or on the nearshore wave conditions along the East Anglian coast.
10	Natural England agrees with some of the conclusions reached. Please see our advice on the conclusions with which we are unable to agree at present.	Noted
11	Only the CSCB MCZ has been identified as a receptor, no other MPAs have been included. All MPAs within the ZoI should be identified, even if they are assessed in other chapters. For the reasons stated in our detailed comments, at present we are unable to agree with the LSE conclusions for Inner Dowsing, Race Bank and North Ridge SAC and The Wash and North Norfolk SAC. We advise that further evidence be provided to support the LSE conclusions, as requested in our detailed comments.	See ID 8 response.
12	Mitigation summary - Monitoring of sandwave recovery / sandwave migration - Monitoring of sandbank recovery / sandbank migration - No sandwave levelling in a SEP in isolation scenario	No response required.
13	Project Description 4.4.7.5.4	Jetting is considered to be the worst-case scenario for increases in suspended sediment concentrations as discussed in ES **Chapter 6**

ID	Relevant Representation	Applicant Comment
	Natural England advises that the maximum trench width needs to be clarified in an updated document. Trench sizes quoted use a burial depth of 1.5m and a trench width of 5.2m (assuming a 30-degree trench side slope). However, in Chapter 6 Marine Geology, Oceanography and Physical Processes, it is stated that infield and interlink cables would be buried up to 1.5m below the seabed, width an indicative sediment displacement width of 1m for jetting. Similarly, it is stated that offshore export cables would be buried up to 1m below the seabed, with an indicative sediment displacement width of 1m. This is also contradictory to 5.1.2 [APP-182] relating to sediment process in the MCZ.	**MGOPP** (APP-092). This would create a trench approximately 1m wide. The 5.2m width dimension in the Project Description relates to the footprint of disturbance and is for ploughing which is not the worst-case scenario for the MGOPP assessment.
14	Project Description 4.4.7.5.5 3rd Bullet Point. It is noted that the export cables for the existing DOW also makes landfall at Weybourne, and that the proposed SEP and DEP offshore export cables cross and then route to landfall to the east of these cables. We also note that there will be a SEP/DEP cable crossing in the nearshore with the Stratos telecom cable and HP3 export cables, but the water depths and distances offshore are not clear. Natural England would welcome the provision of a subtidal crossing schedule. It would also be useful to provide information such as water depth at the cable crossings and their distance offshore. This is particularly important for those cable crossings in the nearshore part of the ECC in order to understand potential impacts on sediment transport processes.	Regarding the provision of an offshore crossing schedule see ID 6 response.
15	Project Description 4.4.7.5.5 Point 196. The maximum dimensions of cable protection for crossings are given as 21m and 100m. The maximum height of cable crossings will be 1.7m. However, in Chapter 6, Point 371, it states that the height of the protrusion will be up to 0.5m in most cases which is also confirmed in Appendix 6.3 APP-182 for the Cromer Shoal MCZ. The maximum height of cable crossings should be clarified and consistent throughout. Furthermore, there are no cross-section or plan schematics of cable crossing layout, it would be helpful if these were provided in an updated document.	The Applicant clarifies that the height of cable protection will be up to 0.5m except at cable crossings where it could be up to 1.7m. The Applicant proposes to produce a formal offshore crossing schedule post consent as part of the cable specification, installation and monitoring plan secured through the DMLs, once more accurate details on for example infield, interconnector and export cable routes and requirements are defined.
16	EIA Methodology 5.8	The Applicant confirms that there was a cut off for inclusion of other offshore wind farms within the ES of May 2022. The Applicant has

ID	Relevant Representation	Applicant Comment
	Point 88 states that only projects which are well described and sufficiently advanced, with sufficient detail available will be included in the CIA. Is there also a cut-off date for assessing whether or not to include a project? Please clarify, noting that several PEIRs (Section 42 consultations) are expected in February 2023. Natural England refer to our latest Best Practice Guidance 2022 of recommended tiers for scoping plans and projects for the CEA.	submitted at Deadline 1 a **Marine Processes Technical Note** (document reference 13.5) which provides more detail on projects included in the cumulative impact assessment.
17	Figure 6-2 shows the dimensions of the GBS simulated by DIFFRACT for input to the wave model. This shows WCS turbine foundations for DEP and SEP. The maximum diameter at water level is 13m and the shaft at the seabed is 36m. However, in Section 4.4.3.3 (Chapter 4), it states that the WCS for 18+ MW WTG foundations is a maximum diameter at water level of 14m and shaft diameter at the seabed of 40m. Therefore, the WCS GBS foundations modelled have narrower dimensions at water level and at seabed than the WCS presented in Chapter 4 which would lead to slightly greater impact on the wave climate. Natural England advises that the assessment currently doesn't reflect the worst case scenario and advises that this needs addressing in an updated document before a >36m shaft diameter can be agreed with certainty.	The Applicant acknowledges that the GBS dimensions simulated by DIFFRACT are slightly smaller than the dimensions of the largest 18+MW turbine (18+MW = 14m at water level and shaft diameter at seabed of 40m). However, the wave climate assessment assumes that there would be up to 30 of the DIFFRACT simulated turbines in DEP and 23 in SEP which is associated with the smaller 15MW turbine (compared to 24 and 19 respectively for an 18+MW turbine) which has a maximum diameter at the water level of 11m and shaft diameter at the seabed of 30m. Therefore, a worst-case assessment of a larger number of slightly smaller sized turbines has been provided.
18	Point 59. States that the GBS have diameters of 13m and 30m wide bases. This differs from the base diameter presented in Figure 6-2. Please provide further clarity as set out above.	The quoted GBS dimensions are a typographic error and should have read *"GBS have a diameter at the water level of 13m and shaft diameter at the seabed of 36m"* to reflect the DIFFRACT simulated dimensions.
19	There are potential cumulative impacts due to overlapping O&M activities at Waveney, Blythe Hub and Elgood Wellhead. We note that Blythe Hub has been considered in Chapter 6, but not Waveney or Elgood. We advise that Waveney and Elgood should be included in the CIA.	See ID 9 response.
20	We note that whilst sandwave recovery/migration has been included for post-construction in the In Principle Monitoring Proposal, sandbanks have not. We advise that sandbank recovery/migration should also be included in the In Principle Monitoring Proposal.	The Applicant understands that Natural England will be providing detailed comments on the Offshore IPMP (APP-289) at Deadline 1. The Applicant proposes to update the document to include provision for monitoring of sandwaves following receipt of those further comments from Natural England.

ID	Relevant Representation	Applicant Comment
21	The text describes a sandbank in NW of DEP N array area and also a sandbank in the NW of DEP S array area. The bathymetry shows the presence of significant sandbanks, which are probably Cromer Knoll and Inner Cromer Knoll, but no information has been provided regarding their form, spatial extent, elevation, depth, rate of migration and stability. We would advise that in order to understand impacts of the development on these sandbank features, it is important to first characterise their form, extent, elevation, rate of migration and stability. Please can the Applicant provide this information in an updated chapter.	The Applicant has submitted at Deadline 1 a **Marine Processes Technical Note** (document reference 13.5) which provides more detail on sandbanks, sandwaves and other significant morphological features.
22	Natural England queries if there is an equivalent shallow geology schematic for the Interlink Cable Corridor to help inform advice on significance of impacts?	There is no shallow geology schematic of the Interlink Corridor presented in the geophysical interpretive reports. However, in a broad sense the shallow geological make-up is similar to those of SEP, DEP North and DEP South presented as Plates 6.1 to 6.3 of the ES **Chapter 6 MGOPP** (APP-092).
23	Natural England notes that the neap and spring tidal excursions have not been provided. The spring tidal excursion is useful for estimating the potential extent of direct changes to flows as well as the anticipated maximum zone of influence for sediment plumes. We advise that the Neap/spring tidal excursions should be quantified in an updated chapter. It would also be useful to provide a map showing the spring tidal ellipses across the study area.	The Applicant has submitted at Deadline 1 a **Marine Processes Technical Note** (document reference 13.5) which provides a tidal ellipse map to support the Zone of Influence on the Tidal Regime.
24	Point 137. It is noted that owing to the mobility of Holocene sand along the SEP and DEP cable corridor, there is the potential for movement of this sediment and exposure or burial of the underlying geological units. Natural England queries what is the potential seabed mobility here and sediment transport potential? Has this been quantified? It would be helpful if the sediment transport potential could be provided in an updated chapter in order to assess cable burial success.	**Appendix 6.3 Sedimentary Processes in the Cromer Shoal Chalk Beds MCZ** (APP-182) of the ES provides a detailed appraisal of potential sediment transport across the MCZ. In addition, an Export Cable Burial Risk Assessment is provided in Appendix 2 of the **Outline CSCB MCZ CSIMP** (APP-291).
25	The HR Wallingford (2002) suspended sediment concentration data are very old. Whilst the Cefas (2016) data are newer, they are not site-specific, instead referring to 'the seas around the UK'. We would advise that SSC measurements are important in order to establish naturally occurring levels of SSCs across the study area, and to inform baseline characterisation so that	Regarding undertaking further site-specific surveys, see ID 4 response. The Applicant agreed with the ETG to use the Cefas (2016) average suspended sediment concentration dataset which was obtained in a GIS form and the data interrogated for the site. Therefore, the data is site

ID	Relevant Representation	Applicant Comment
	change can be assessed. These should ideally be collected throughout the water column over a range of representative tidal, seasonal, and wave conditions. Maybe this has been completed for DOW and/or SOW?	specific and showed that average suspended sediment concentrations across SEP and DEP are 5-10mg/l between 1998 and 2015. The site-specific data extracted from Cefas's dataset was provided in Figure 6.10 of the ES (APP-119). This is a recent long time series of data (17 years) and it is highly unlikely that the average concentrations up to the present day have changed.
26	Point 145. The regional net sediment transport rates are now very old (2002). Natural England's best practice (2021) advises that data older than five years should be used with care. Furthermore, it is not clear which geographical area these sediment transport rates relate to, and it would be useful to clarify this. More recent data should also be used, if possible. We advise that more recent regional net sediment transport data should be used and more context provided within an updated chapter on the regional net sediment transport rates.	The numbers for transport quoted in the HR Wallingford (2002) work are reproduced in the Shoreline Management Plan (SMP) 2 for this coast and so are considered 'the most recent'. A search found no other estimates.
27	We welcome the inclusion of sandbanks in the list of impact receptors. However, we believe it is important that the Applicant includes in this list, all marine protected areas that could be affected by changes to physical processes due to the proposed development (even if they are considered and assessed in other chapters). This should also include supporting habitats. Furthermore, all relevant marine protected areas should be identified on the appropriate figures or maps within this chapter.	See ID 8 response.
28	Natural England notes that the 'Sand banks (and associated sandwaves)' Receptor Group does not include any mention of Sheringham Shoal, Pollard Bank, Cromer Knoll, Inner Cromer Knoll, sandwaves in SEP, sandbanks situated at the NW of DEP N array and in DEP S, and in the north of the cable corridor between DEP N array and SEP. We advise that all sandbanks within the OLs for the project, should be included and named, where possible in an updated chapter.	The Applicant has submitted at Deadline 1 a **Marine Processes Technical Note** (document reference 13.5) which provides more detail on sandbanks, sandwaves and other significant morphological features.
29	Point 153. Cliff erosion rate at landfall is given as between 10-50m over the next 100 years, however, the source of this information has not been stated. Furthermore, in Chapter 3 (Site Selection and Assessment of Alternatives), it is stated that the onshore infrastructure will be sited approximately 150m back from the shoreline, taking into account shoreline erosion. However, it	The presentation of cliff erosion and beach profile data, and a coastal erosion assessment at the landfall are not provided because the installation of cables at landfall will be undertaken by HDD. Hence, there would be no changes to beach evolution and cliff erosion over and above the natural

ID	Relevant Representation	Applicant Comment
	has not been shown how shoreline erosion has been taken into account. We advise that it is important to consider recent cliff and beach profile survey data, alongside longer-term records (i.e. years), in order to establish the baseline. It is also vital to consider climate change impacts on cliff retreat and beach downwearing. This information should be included in an updated chapter.	processes, so presentation of detailed cliff erosion rate data is not considered to be required.
30	Section 6.6.3.3.1 The number of turbines installed at DOW is given as 90 in total. Should this be 97? Please clarify.	This is a typographic error. The number of turbines installed at DOW is 67.
31	Point 172. It is stated that for 'both SOW and DOW, the footprint of mud deposition was found to extend over a wide area, but at an unmeasurable rate. Even under slack water conditions, the maximum rate of deposition was less than 0.5mm in the areas of greatest deposition.' The spatial extents (i.e. footprints) of mud deposition for DOW and SOW have not been provided, but they would be useful to inform understanding of the equivalent footprint for, particularly, SEP. Can the spatial extent of the mud deposition footprint be provided, along with deposition thickness, particularly for SOW?	See ID 5 response.
32	Natural England queries if multiple coincident dredging operations likely and what would the worst case scenario would be? If so, this would lead to more spatially extensive and/or higher concentration sediment plumes which should be quantified in terms of suspended sediment concentration, plume extent, persistence and sediment deposition thickness. Natural England advises that further clarity is required within an updated chapter.	Suspended sediment concentrations arising from multiple coincident dredging operations could potentially interact to create a larger plume which could lead to greater thicknesses of deposition. However, the principle still holds true that the re-suspension of a (slightly) thicker deposit (maximum 3mm for a worst case of three overlapping plumes) would disperse rapidly and it would become immeasurable over a short period of time and have negligible impact on the seabed.
33	Point 180. The WCS for changes in SSCs due to seabed preparations for foundation installations would be associated with Gravity Base Structures (GBS). The discharge of dredged sediments during the preparation of GBS foundations will lead to elevated SSCs, and sediment plumes. There is a chance that sediments disturbed during construction of the SEP array, will enter the Inner Dowsing, Race Bank and North Ridge SAC (within 10km tidal excursion). The predicted deposition footprint has not, however, been provided for discharge of dredged material at the sea surface and near the	See ID 5 response.

ID	Relevant Representation	Applicant Comment
	seabed. Natural England advises that predicted deposition footprints from the sea surface and near seabed discharges of dredged material at the SEP array is provided within an updated chapter. This would provide further information on the potential effects due to discharged dredged material at the development site.	
34	Point 188. It is estimated that the maximum number of foundations that would require drilling would be 5% (4 WTGs). However, 5% of 53 WTGs is 2.65 (3 WTGs if rounded up). Please can this be clarified?	To provide a precautionary approach and ensure that, if SEP and DEP were constructed in isolation, there would be an allowance for up to two 15MW turbines or one 18+MW turbine to potentially be drilled within each windfarm site. A single 15MW turbine would result in up to 5,973m^3 of drill arisings and a single 18+MW turbine would result in up to 10,053m^3 of drill arisings. Therefore, as a worst-case scenario up to 11,946m^3 drill arisings could occur at SEP or DEP in isolation and up to 23,892m^3 at SEP and DEP.
35	Point 215. It is noted that the coarser sediment sand/gravel would be deposited near to the point of release up to thicknesses of approximately 3cm. It is not clear how this sediment thickness has been calculated. Within an updated chapter can it be shown how this estimate deposition thickness has been estimated?	The thickness assumes that as a worst case, 60% of the drill arisings are coarser sand and gravel (it is likely to be less than this, with more aggregated clasts). For each of the two 15MW wind turbines (per Project) that may have drill arisings, this equates to around 3,584m^3 of sediment at each. Assuming a distribution of this sediment for a distance of 200m away from each turbine equates to an average thickness of 3cm.
36	We note that no sandwave levelling is expected for a SEP in isolation scenario because there are no sandwaves present along the ECC. Will this be secured by a condition within the dML/DCO?	The Applicant is not aware of any precedent in securing this type of 'non-activity' within DMLs and does not consider that it is appropriate or required.
37	Points 239-241. The SOW and DOW-based model simulation quantification of magnitude of change are useful analogues for the SEPDEP export cable for sediment disturbed by export cable installation. However, it is not clear if/how the SOW/DOW max temporary disturbance widths for export cable installation and burial, or amount of sediment disturbed compare with those for SEP/DEP. This should be clarified. Furthermore, in Point 239, it is stated that although SSCs will be elevated they are likely to be lower than concentrations during storm conditions (including the Dec 2013 storm surge), which are likely to drive greater changes to the seabed than those due to the OWF infrastructure. Natural England advises that within an updated chapter it	The Applicant has submitted at Deadline 1 a **Marine Processes Technical Note** (document reference 13.5) which provides more detail on the potential impacts on suspended sediment concentrations from export cable installation.

ID	Relevant Representation	Applicant Comment
	should be shown how the SOW/DOW trench size and amount of disturbed sediment compare with those for SEP/DEP. Quantitative evidence should be provided to support the predictions regarding SSCs	
38	Point 245. It is noted that elevated SSCs above prevailing conditions are anticipated at the HDD exit point, but that they are also likely to remain within the range of background nearshore levels. This conclusion should be supported with quantitative estimates. Please see comment above.	
39	Points 255 & 256. Results from the sediment dispersion modelling for the SOW and DOW export cables (Points 170 & 171 in Chapter 6), suggest that suspended load for disturbed mud would extend as a plume over <2km for SOW, and <1km for silt in either direction. However, as noted above, there is no information on the max disturbance width or amount of sediment disturbed due to cable installation at DOW/SOW, compared with those at DEP/SEP. Please provide further clarification within an updated chapter.	
40	Point 255. Given that the ECC traverses the CSCB MCZ, it would be very helpful if the plume model data for SOW/DOW could also be provided as predicted deposition footprints for representative locations between the HDD exit location and seaward boundary of the MCZ. These should be representative of the different sedimentary zones along the ECC within the MCZ and also include the HDD exit location. Furthermore, it is not stated what the estimated deposited sediment thickness may be for the different sediment fractions (i.e. fine/medium/coarse) due to export cable installation. Modelled deposition footprints and thickness should be provided for locations representative of the different sedimentary zones along the ECC within the MCZ and include the HDD exit location. Can estimated deposited sediment thickness be provided for the different sediment fractions?	
41	In the Stage 1 CSCB MCZA (Doc Ref 5.6), the pressure 'Smothering and siltation rate changes (light)' has been used for the sensitivity assessment where 'light' deposition is defined as 'of up to 5cm of fine material added to the habitat in a single, discrete event', and 'heavy' deposition is up to 30cm of fine material. In Section 8.1.2.3 (Stage 1 CSCB MCZA), it states that deposits would be up to 3cm depth, but in 6.6.4.6, there is no similar estimate of deposited sediment thickness stated. Consequently, it is not evident whether	The 3cm of sediment deposition described in the ES (APP-119) is in reference to changes in seabed level due to drill arisings for installation of piled foundations for wind turbines and OSPs. It does not refer to sediment thicknesses generated by installation of the export cable. There has been a mistranslation of the information from the ES into the **Stage 1 CSCB MCZA** (APP-077) in this regard.

ID	Relevant Representation	Applicant Comment
	the smothering and siltation rate changes (light) pressure is the most appropriate, or whether the sensitivity of the CSCB MCZ is 'negligible' as stated in Table 6-23 (Chapter 6), or the impact 'negligible adverse', given the predicted two year recovery time Points 259 & 262 (Chapter 6). It would be helpful if the rationale for the 3cm sediment deposition thickness could be provided and also the rationale for the negligible sensitivity assessment for the CSCB MCZ.	There are no thicknesses of deposition from the plume presented in the ES for export cable installation. Information is presented on the destination of sand-sized material; it would settle out of suspension within less than 20m from the point of installation within the offshore export cable corridor and persist in the water column for less than half an hour. Almost no sand was predicted to be carried more than 100m from the cable.
42	We note that no sandwave levelling is anticipated for SEP in isolation. However, it may be required in a DEP alone or SEP and DEP scenarios. This could lead to impacts on nearby subtidal geomorphological features (e.g. the Cromer Knolls, Sheringham Shoal) through sandwave levelling. We advise a precautionary approach is adopted with regards to direct impacts to sandbanks and morphological features across the DEP/SEP arrays and adjacent cable corridors due to sandwave levelling, and potential indirect effects on other receptors (e.g. CSCB MCZ and/or the East Anglia Coast). Impacts to subtidal geomorphological features due to sandwave levelling should be adequately assessed, and indirect effects on other receptors be considered in an updated chapter. An assessment should be carried out to provide reassurance that there will not be any long-term morphological effects.	A precautionary approach to the direct effects of sand wave levelling has been undertaken in the ES (APP-119) using a conceptual approach (dynamic nature of sandy bedforms), and Race Bank post-construction monitoring and a sand wave study for the Norfolk Projects as analogues. Sandwave levelling is only anticipated across Cromer Knoll and Inner Cromer Knoll sandbanks (for array cable installation), and not across Sheringham Shoal and Pollard Bank. This means that sandwave levelling would occur outside the boundaries of any designated sites. The results of these analyses indicate that the overall form and functioning of any sand wave, or the sandbank system, over the long-term is not disrupted by levelling of the sand waves. The same can be applied to SEP / DEP because: • the dredged sand remains within the sand bank system, which would enable the sand to become re-established within the local sediment transport system encouraging the re-establishment of the bedform features • given the local favourable conditions that enable sand wave development, the sediment would be naturally transported back into the levelled area within a short period of time. • the levelled area will naturally act as a sink for sediment in transport and will be replenished in the order of a few days to a year. There will be no sandwave levelling across Sheringham Shoal. The export cable crosses the eastern tip of the bank where there are north-northeast to south-southwest oriented sandwaves along the northern flank. Levelling would not be required because the crests run parallel with the proposed

ID	Relevant Representation	Applicant Comment
		orientation of the cable(s). Pollard Bank is located west of the export cable corridor and disappears to the east and is not present inside the export cable corridor. The indirect effects of sandwave levelling on other receptors are made within the relevant chapters of the ES pertaining directly to those receptor types.
43	Points 292 & 293. The evidence from Race Bank OWF provides some useful insight to the potential impact of sandwave levelling at DEP N-DEP S. However, in order to understand whether the sandwaves are likely to regenerate after levelling, or be adversely impacted along with any adjacent bank system, it is first necessary to assess the seabed morphology at the locations requiring sandwave levelling using bathymetric survey data. In turn, the anticipated ranges of natural seabed change, sandwave migration rates and expected sediment variability should be assessed. This would inform the baseline upon which morphological change and variability can be assessed throughout the project development and lifetime. Furthermore, this should enable forecasting of site-specific sandwave regeneration timescale. We would advise that anticipated ranges of natural seabed change, sandwave migration rates and anticipated sediment variability should be further assessed in an updated chapter using bathymetric survey data, for those locations likely to require levelling (pre-sweeping).	More detail on the baseline condition of Cromer Knoll and Inner Cromer Knoll sandbanks and associated sandwaves is provided in the **Marine Processes Technical Note** (document reference 13.5). This analysis used the bespoke bathymetry data collected for the Projects. This data cannot be used to quantify the anticipated ranges of natural seabed change (apart from the height difference between the sandwave crests and troughs) or the sandwave migration rates, because there is no historic high-resolution bathymetry data that can be used as a basis for comparison in these areas. Given the difficulty of providing this historic quantification for predictive purposes, the combination of three related approaches; a conceptual approach (dynamic nature of sandy bedforms), the Race Bank post-construction monitoring results and the sand wave study for the Norfolk Projects, was deemed to be the best and most robust method available to this assessment. Post-construction monitoring of sandwave recovery and sand wave migration is included within the **Offshore In-Principle Monitoring Plan** [APP-289].
44	Table 6-26. We are unable to agree with the magnitude of effects on bedload sediment transport for sandwave levelling within offshore cable corridors owing to the uncertainty regarding sandwave recovery at SEPDEP and potential impacts on adjacent bank systems. We advise that the assessment described above should be carried out in order to gain more certainty regarding the likely regeneration of sandwaves following levelling.	See responses to ID 42 and ID 43. The magnitude of effects are considered appropriate based on the additional information provided on the bedforms, and the approach adopted in the assessment of effects. The worst-case changes in bedload sediment transport due to sand wave levelling within offshore cable corridors are likely to have the magnitudes of effect.
45	Points 313-317. We understand that the assessment of tidal currents at the adjacent SOW and DOW, which have conservative designs compared to SEP and DEP designs, concluded no significant changes to the broadscale	The predicted reduction of overall flow of 1-2% at SOW was confined to within the boundary of the array, with local areas of increased flow around each structure. It is anticipated that within the confines of SEP and DEP, a

ID	Relevant Representation	Applicant Comment
	flow regime, with a reduction in the overall flow within SOW of 1-2%. However, the equivalent overall flow reduction for DOW, or combined DOW/DEP and SOW/SEP scenarios have not been provided. It would be helpful if the predicted flow reduction at DOW and for a combined SEP/SOW and DEP N/DEP S/DOW scenario could be provided (based on the WCS foundation structures).	similar reduction in overall flow is anticipated, without interaction with SOW or DOW. The potential zone of influence on tides presented in Figure 6.11 of ES **Chapter 6 MGOPP** (APP-119) is a scenario of SOW/DOW and SEP/DEP together, and so is representative of the cumulative effect.
46	Given the greater spatial extent of the combined SEP/SOW and DEP/DOW arrays and complex seabed topography, there is the potential for more spatial variability in tidal behaviour across the arrays. Yet, in Point 314, it is stated that changes to seabed distribution due to turbine foundations at DOW were minimal, implying that changes to tidal currents (and waves) are local and do not have a significant effect on sediment transport further afield. However, there is no quantitative evidence to support this and it would be useful if this could be provided.	Quantitative evidence to support little change to seabed sediment distribution is provided in paragraph 336 and reproduced here. 'Comparison of the pre-construction and post-construction particle size data showed that there have been no significant changes in seabed sediment composition, indicating that sediment composition has remained unaffected by the development of the wind farm. What little changes there have been are a small reduction in mud content and a small increase in gravel content. Overall, mean mud content reduced from 4.5% to 2.6%, and gravel content increased from 24.8% to 27.0%. Both of these changes over the four-year period, are within the bounds of change expected under natural processes. Indeed, the secondary impact zones and reference areas had the greatest shift in sediment composition compared to the primary impact zone, indicating that natural variation due to natural processes is having a greater effect on seabed character than the presence of the wind turbine foundations.'
47	Point 316. The maximum zone of potential influence (ZoPI) on the tidal regime is presented in Figure 6.11, which we welcome. However, marine protected areas have not been identified on this map. It would be useful to identify marine protected areas on Figure 6.11 to show where they overlap with the ZoPI.	The Applicant has submitted at Deadline 1 a **Marine Processes Technical Note** (document reference 13.5) which provides a map with the marine protected areas superimposed on the ZoPI on the tidal regime.
48	Point 319. No significant impact on the tidal current regime is anticipated for SEP/DEP and therefore the impact on sandbanks is anticipated to be negligible adverse. However, we advise that a precautionary approach should be adopted, and that the potential impacts on a nearby sandbank systems should be considered and assessed in an updated chapter, given the greater spatial extent of the combined SEP/SOW and DEP/DOW	The evidence base for assessments of changes to tidal currents across wind farm arrays has consistently demonstrated that changes in the tidal regime due to the presence of foundation structures would be both small in magnitude and localised in spatial extent. The greatest effect would be adjacent to each foundation with a return to baseline conditions in the far-field.

ID	Relevant Representation	Applicant Comment
	scenarios, complex seabed topography, and potential for more spatial variability in tidal behaviour across the arrays.	Sandbanks are landscape-scale bedforms driven by large-scale regional tidal currents. Hence, the larger-scale (landscape) effect on nearby sandbank systems caused by small-scale changes to currents (and hence bedload sediment transport) restricted to areas adjacent to relatively small structures within this landscape would be immeasurable. Although the Zones of Potential Influence on the Tidal Regime (for both SEP/DEP and SOW/DOW together) based on tidal ellipse data extend over nearby sandbanks, the actual magnitude of change within these zones would be zero to very small. All the change (i.e. spatial variability) would be restricted to local areas around the foundations themselves and would not extend regionally into the Zone of Potential Influence. Hence, the assessment is already precautionary, and a more detailed regional view would be disproportionate to the potential effect that would occur, regardless of how complex the regional seabed is.
49	We are not able to agree with the assessment of 'Frequency' as 'Medium'. We would advise that the 'Frequency' of the effect to the wave regime is 'High' rather than 'Medium' because the effect is permanent and occurring with a high frequency.	The Applicant agrees with this change, and the Frequency magnitude of waves during operation is High. This does not change the Magnitude of Effect, when the other factors (Scale, Duration, Reversibility) are considered in combination.
50	Point 334. It is stated that changes to marine geology, oceanography and physical processes would be low in magnitude and largely confined to local wake or wave shadow effects attributable to individual WTG foundations. However, there is no evidence or analysis provided to support these conclusions. Evidence should be provided to support these conclusions.	The evidence to support this conclusion is provided in the tidal current and wave impact assessment Sections 6.6.5.1 and 6.6.5.2 of ES **Chapter 6 MGOPP** (APP-092). These physical processes are the drivers of sediment transport at the bed. These sections concluded that changes to these processes would be negligible and confined to local changes near to the foundations. Hence, the conclusion is that changes to sediment transport driven by these processes would also be negligible, and therefore the Applicant considers that no further evidence is necessary to support this conclusion.
51	Point 334 also refers to 'the evidence from theoretical studies….', however, there does not appear to be any evidence from theoretical studies, nor is it clear which theoretical studies are being referred to. The predicted effects on sediment transport processes due to the operation and maintenance (O&M) of SEPDEP should be provided. For example, changes to the predicted frequency exceedance of the critical shear stress could be assessed. This	The theoretical work referred to is the tidal currents analysis at DOW reported in Section 6.6.3.3 Theoretical model basis of ES **Chapter 6 MGOPP** (APP-092). Also 'the evidence from theoretical studies' should read 'the evidence from numerical modelling (waves) and theoretical studies (tidal currents)'.

ID	Relevant Representation	Applicant Comment
	could inform changes to the percentage of time that the spatially-varying typical seabed sediment across the development is predicted to be mobilised by tidal and wave processes. Predicted effects on sediment transport processes due to the O&M of the development should be considered over the lifetime of the project	The Applicant cannot present critical shear stresses bespoke to SEP/DEP because tidal currents have not been modelled. Additionally, an analysis of the exceedance of critical shear stress and its effect on the mobilisation of sediment on the bed is considered to be disproportionate and unnecessary in terms of environmental assessment. The negligible impact on physical processes and its translation into a negligible effect on sediment transport at the bed is proportionate.
52	Point 337. Geophysical survey data from the existing OWFs are useful. However, it is stated that the DOW geophysical survey shows that only minor and localised effects remain from the wind farm construction, and that the 'overall topography of the seabed within DOW has not greatly changed'. However, it does not state when this survey was undertaken, nor what the minor and localised effects might be that remain, nor how the seabed is not greatly changed and since when. This should be made clearer as it is too vague to provide any useful comparison with SEPDEP. Furthermore, does the post-construction survey show any evidence of change to sandbank morphology or migration rate across DOW?	See ID 6 response. The Applicant has submitted at Deadline 1 a **Marine Processes Technical Note** (document reference 13.5) which provides more detail on the local changes to the seabed at DOW post-construction.
53	Point 339. Predicted effects on sediment transport processes due to the O&M of the development have not been evaluated, neither have the sandbanks in the array(s) been sufficiently characterised to enable us to agree with the sensitivity and value assessment (Table 6-34). We advise that further evidence should be provided in an updated chapter to support this assessment.	See response to ID 48. Any effect on sediment transport would be manifest as changes to the morphology of the sandbanks and sandwaves, and so a morphological approach was adopted. More information on the baseline sandbanks has been provided in the **Marine Processes Technical Note** (document reference 13.5). The magnitude of effects are considered appropriate based on the additional information provided on sandbanks, and the approach adopted in the assessment of effects.
54	It is not clear whether a scour assessment has been carried out, yet the WCS (Point 345) is for scour protection to be provided for all foundations. Scour assessments are particularly important to those foundation structures in relatively shallow water where scour volumes are likely to be greatest. We advise that a scour assessment should be carried out and the impact of scoured material from around foundation structures in terms of elevated SSCs and resulting deposition should be considered.	No scour assessment has been carried out. An assumption has been made for the worst-case scenario that scour protection will be used wherever scour will occur, reducing sediment release to negligible quantities. A conservative worst-case scenario of all foundations having scour protection is considered for footprint loss.
55	Point 347. It is stated that it is likely that any secondary scour effects would be confined to within a few metres of the direct footprint of the scour	The limited geographical extent of secondary scour means that the potential impact would be anticipated to be nugatory. Hence, an

ID	Relevant Representation	Applicant Comment
	protection material. Natural England queries if there is any evidence to support this estimate, or predictive assessment? We advise that secondary scour should be assessed.	assessment of secondary scour has not been undertaken. However, the **Offshore IPMP** (APP-297) includes provision for monitoring of secondary scour around scour protection.
56	Point 378. In Chapter 9 (Petroleum Industry and other Marine Users), a crossing is shown between the offshore ECC and the disused Stratos telecom cable in the CSCB MCZ. It is not stated what the depth of this crossing would be, however, if it is sited inshore of the closure depth, then this could have an affect on sediment transport in the nearshore. We advise that if this crossing is located inshore of the closure depth, then the potential effect on sediment transport processes will need to be considered.	As noted in the **Outline CSCB MCZ CSIMP** (APP-291) the offshore cable corridor has been sited to completely avoid the need for any cable crossings (which necessitate the use of external cable protection) in the MCZ. The Applicant is committed to, if required, cutting a section of the disused Stratos cable to avoid the need for a cable crossing and therefore there would be no potential effect on sediment transport processes from the installation of external cable protection at cable crossings within the MCZ.
57	Point 388. We advise that there are alternatives to jack-up vessels which may avoid impacts to the seabed within the MCZ. Please consider alternatives to jack-up vessels in the MCZ as part of mitigation package.	The Applicant has considered whether the use of jack-up vessels could be ruled out in the MCZ however there is a potential requirement for their use at the HDD exit point and therefore they are required to be retained within the envelope and assessment.
58	Point 395. It is stated that it is not known whether cable repair and reburial will directly impact on sandbanks and sandwaves in the area during the operation phase. Natural England queries if there is any relevant evidence available from DOW/SOW that could be drawn upon here?	As described within Section 1.6.3.1 of the **Outline CSCB MCZ CSIMP** (APP-291), to date, no cable repair or remedial reburial works have been undertaken since SOW and DOW have been in operation.
59	Point 416. The cumulative effect on sediment transport processes at sandbank systems is not discussed here but should be considered in an updated chapter.	See ID 48 and ID 53 responses.
60	We advise that Table 6-46 may need revision following our earlier comments on sandbanks, the East Anglia Coast and the MCZ. Please refer to our advice in these detailed comments.	Based on the response to comments above the summary table does not require revision.

4.18.6 Appendix F All Other Marine Matters

Table 4.18.5 Applicant's comments on Natural England's Offshore Appendix F relevant representation

ID	Relevant Representation	Applicant Comment
1	Project Description: The project parameters are clearly defined, although there are six defined development scenarios listed in the introductory chapters, for water and sediment quality and benthic ecology, the Worse Case Scenario (WCS) is split into four. And whilst these are straight forward to understand it has added a degree of complexity to the overall assessment of impact significance alone and/cumulatively	Noted. For clarity, the impact assessments for offshore receptors consider the following development options in determining the worst-case scenario for each topic: • Build SEP or build DEP in isolation – one OSP only; and • Build SEP and DEP concurrently or sequentially – with either two OSPs, one for SEP and one for DEP (located in the DEP North array area), or with one OSP only (located in the SEP wind farm site) to serve both SEP and DEP. Within the offshore assessments, where relevant, each of these design options have considered whether the build out of the DEP North and DEP South array areas, or the build out of the DEP North array area only, represents the worst-case design option for that topic. Any differences between SEP and DEP, or differences that could result from the manner in which the first and the second projects are built (concurrent or sequential and the length of any gap) are identified and discussed where relevant in the impact assessments. For each potential impact, where necessary, only the worst-case construction scenario for two Projects is assessed, i.e. either concurrent or sequential. The justification for what constitutes the worst-case is provided, where necessary, in the assessments however it should be noted that since the majority of offshore assessments relate to the total seabed footprint, total volume of sediment release, maximum number of piles/piling time, maximum cable lengths etc, consideration of DEP North only or DEP North and DEP South impacts or concurrent or sequential construction, is not required to be drawn out within the assessments (except for assessment of effects on Sandwich tern for which model-based density estimates for that species enabled consideration of DEP North only – see response to WQ1.5.1.2). This is why the number of OSPs (either one or two) has been used to differentiate the worst-case scenario since that is what determines the maximum seabed footprint, number of piles/piling time, maximum cable lengths etc.

ID	Relevant Representation	Applicant Comment
2	NE position on Worst Case Scenario (WCS): The Worst Case Scenario calculations generally translate with the information presented in Chapter 4 Project Description. However, there are a couple of calculations that would benefit from expanded information: The calculations for Displaced Sediment during infield and interlink cable installation are not transparent within Tables 7-2 and 8-2 and we are unable to locate the information in [APP-090] Chapter 4 Project Description. There appears to be contradictory information regarding the description of the 'V' shaped trench and the subsequent calculation for export cable. We advise that this could be expanded further and cite the reasons for the burial depth varying from 1m for export cable and 1.5m for interlink / Infield cables, noting that in Section 5.1.2 of APP-182 the cable burial depth is predicted to be between 0.3m and 1.25m within Cromer Shoal Chalk Beds Marine Conservation Zone 'Cromer Shoal MCZ'. Also a cross check with [APP-090] Chapter 4 Project Description suggests that Section 4.4.7.5.4 Trench Sizes, states that "This assumes a conservative 30-degree trench side slope (based on burial in sand) and 1.5m burial depth for all cables, which could result in an estimated 5.2m wide trench.". This is contradictory to the information provided within these chapters and those for the Cromer Shoal MCZ.	The Applicant notes that the individual calculations for sediment displacement and sandwave levelling during installation of infield and interlink cables are identical in Tables 7-2 and 8-2 of the ES however the overall totals for the impacts differ because the ES **Chapter 7 Marine Water and Sediment Quality** [APP-093] assessment separates infield and interlink cables from export cables whilst ES **Chapter 8 Benthic Ecology** [APP-094] combines these. Therefore, whilst the total volumes stated for each impact may appear different when comparing between the two, the total volumes of sediment displacement are aligned when considered across the individual impact assessments. The 1m burial depth for export cable and 1.5m for interlink / Infield cables are target minimum burial depths that the Applicant will aim to achieve. The shallower burial depth for the export cable reflects the shallower depths of sediment within certain areas of the export cable corridor where at a small number of locations burial could be as shallow as 0.3m (see **Appendix 9.7.2 - Export Cable Burial Risk Assessment** [APP-293]. The Applicant clarifies that with regard to cable installation by jetting (which is the worst-case scenario for impacts assessing the potential effects from increases in suspended sediment concentrations), 1m burial depth x 1m width of displaced sediment with a v-shaped trench is assumed. However, for impacts where the worst-case scenario is related to the footprint of seabed disturbance, the calculations are based on the text within the project description as quoted here by Natural England.
Baseline Characterisation		
3	Data suitability, and data gaps: The survey methodology is appropriate. In areas where sample attempts failed due to the coarse nature of the sediment, sediment samples for chemical analysis were not acquired. As a result there are spatial gaps for the western area of SEP, DEP S and the northern sections of the export cable and interlink corridors. Of note in SEP and the northern section of the ECC, there are areas where higher proportions of fines were recorded in samples and it is likely the	Noted. The contaminants analysis undertaken by Fugro and subsequent interpretation provided in ES **Chapter 7 Marine Water and Sediment Quality** [APP-093] together with the contaminants analysis undertaken for SOW and DOW indicates that levels of contaminants in the offshore sites are low and typical of the region. In order to obtain a licence for sediment disposal, a lab with MMO accreditation is required to undertake contaminants analysis. The Applicant recognises that Fugro are not an MMO accredited lab and therefore the Applicant proposes to undertake

ID	Relevant Representation	Applicant Comment
	chemical concentration may be greater as a result. However, we recognise there was no evidence of point source contaminants above threshold values at the other stations sampled and therefore it is likely concentrations would also be within recognised threshold concentrations such as CEFAS AL1. But, given the disposal site is effectively the redline DCO boundary, Natural England defers to MMO / CEFAS for their approval of the spatial representation of the chemistry samples in relation to the suitability for sediment disposal across the array, export cable and interlink corridors. The analytical methodology for seabed imagery and samples including interpretation is in line with SNCB guidance. However, we recognise there is an outstanding issue of the laboratory accreditation used and this is under discussion with the MMO. Moving forward, in pre-construction survey design, we recommend ensuring Natural England's guidance and advice for offshore wind and cable projects is adopted. This is available at: Environmental considerations for offshore wind and cable projects - Home (sharepoint.com)	additional contaminants sampling and analysis (by an accredited lab) during pre-construction stage for the purposes of licensing for dredge disposal material at sea. A sample plan request is being submitted to the MMO imminently to agree contaminant survey and analyte requirements which will be aligned with the OSPAR requirements.
4	Baseline Characterisation: We request confirmation as to whether the Applicant has classified Transect SS-21A in the western area of SEP as Section 41 NERC, 2006 UK priority habitat 'peat and clay exposures with piddocks'. The Applicant has confirmed the representative biotope A4.231 'Piddocks with a sparse associated fauna in sublittoral very soft chalk or clay' was recorded at this station. Although piddocks were not observed as responsible for the burrows, the summary of available literature presented in the ES suggests the definition of this UK BAP habitat includes peat and clay exposures with no present or past piddock activity. However, within the Impacts Assessment itself, it is stated this priority habitat was not recorded. If this is the case, this is contradictory to the information provided within the habitat characterisation. We agree with the Applicant that there is insufficient evidence from the baseline survey data acquired to characterise Annex I stony or biogenic (Sabellaria spinulosa) reef. However, we continue to advise that on the basis of the biotopes identified in Golding (2020) recorded in the baseline survey and the low resemblance to reef observed, there is the potential for Annex I	As secured through the DMLs, pre-construction surveys will be undertaken to identify any potentially sensitive features that are required to be avoided. The pre-construction survey methodology would be agreed with the MMO in consultation with Natural England. The survey design would be based on best practice at the time and is anticipated to consist of a mixture of geophysical, drop-down video (DDV) and grab surveys (as applicable) to ensure a comprehensive ground-truthing of the proposed final cable route design. Initial geophysical surveys will be reviewed with DDV ground-truthing surveys to confirm presence as appropriate. This shall then be used to inform detailed layout design and will inform the mitigation scheme requirements. If potentially sensitive benthic features are identified, the results of the survey will be discussed at that time with the MMO and Natural England to agree whether the features are required to be avoided through micro-siting. Condition 13 (i) of Schedules 10 and 11 and Condition 12 (j) of Schedules 12 and 13 of the **Draft DCO (Revision B)** (AS-009) includes provision for a mitigation scheme for any benthic habitats of conservation, ecological and/or economic importance constituting Annex I reef habitats identified by

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	stony reef habitat to occur. Therefore, in the pre- construction surveys, where associated habitats/biotopes occur we advise this potential habitat is assessed as applicable along with the potential for UK BAP / Annex I 'Sabellaria spinulosa reef' and UK BAP 'peat and clay exposures with piddocks'. We advise the Applicants commitment to avoid and microsite for Annex I / Section 41 Priority (UK BAP) habitats and species continues to include Annex I stony reef along with Sabellaria spinulosa reef'' and peat and clay exposures with piddocks', if found, as a precautionary measure. This mitigation should be secured through condition within the Deemed Marine Licence.	pre-construction surveys and will be in accordance with the **Offshore In Principle Monitoring Plan** [APP-289]**.** This is the appropriate approach to mitigating impacts on benthic habitats of conservation, ecological and/or economic importance. Refer to response at ID 25of this table with respect to the A4.231 biotope.
EIA		
5	Identified Impacts and Methodology: We are generally satisfied with the EIA assessment for Sediment and Water Quality and Benthic Ecology. However, Natural England notes that the approach to the EIA assessment is proposed to align with other OWF NSIPs. This matrix approach has been used throughout ESs to date to support the assessment of the magnitude and significance of impacts. Natural England notes numerous instances where significance has been presented as a range (i.e., slight, or moderate, or large) and it is nearly always the lower value that has been taken forward. In the absence of evidence to support the use of the lower value in a range, Natural England's view is that the higher value should always be assessed in order to ensure that impacts on features haven't been incorrectly screened out of further assessment. This is in line with the principles of the Rochdale envelope approach. For Example: We agree with the use of Marine Evidence Based Sensitivity Assessment (MarESA) sensitivities guidance is followed in relation to potential impacts and pressures to the biotopes identified in Chapter 8 Benthic Ecology. In addition, we are satisfied that the appropriate SNCB advice packages have been used, including Natural England's Designated sites Views to identified pressures within protected sites associated with OWF and cable activities. Value: We welcome the update since our Section 42 PEIR response that the	ES **Chapter 5 EIA Methodology** [APP-091] describes the assessment methodology used in the ES which generally takes the approach of using set criteria to define the sensitivity of receptor and magnitude of effect which then forms the overall impact significance conclusion ranging through, negligible adverse, minor adverse, moderate adverse, major adverse and the equivalent definitions for beneficial impacts. Criteria for magnitude of effect use definitions of e.g. slight, moderate or large to provide a means of defining the potential scale of impact within a wider ecological context and is standard practice in EIA. Also, see response at ID 4 of this table, potentially sensitive benthic features will be avoided as necessary.

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	'Value' of habitats protected under national law now afford the same protected status as those under international law. Therefore, MCZ and UK Priority habitats are included as being of 'high' value and assessed as part of the WCS. And although the definitions for Magnitude and sensitivity seem appropriate, given the size of the wider Southern North Sea and the Marine Protected Areas (MPA), wording such as a 'minority' has a different context in terms of the important of some biotopes and habitats. For this reason therefore there are instances where we disagree with the assessments.	
6	CEA: We welcome the increased distance of 10km since Section 42 for screening in projects for CEA	Noted.
7	Assessment conclusion: We agree with the assessment conclusion that no Annex I reef (biogenic or geogenic) was identified by the surveys except for the nearshore area of outcropping chalk, with recognition this area will be avoided through the use of HDD at landfall. The conclusion does not comment on the presence (or not) of the UK priority habitat 'peat and clay exposures with piddocks'. We disagree with the assessment that the worst case will result in minor adverse impacts and consider that several of the impacts, notable those for long term and permanent habitat loss are moderate adverse significant at least.	The Applicant maintains its conclusions of negligible to minor adverse significance as assessed in ES **Chapter 9 Benthic Ecology** [APP-094].
Detailed Comments		
8	7.3.2. Realistic Worst Case Scenario Para 10 / Table 7-2 The majority of calculations are transparent through expanded information in the scenarios and/or the notes column. However, as set out below Natural England advises that the dimensions used to determine Impact 3 'Displaced Sediment during Export Cable installation' and Impact 4 'Sand wave levelling parameters' are unclear and requests that further information is provided by the Applicant.	Noted.

ID	Relevant Representation	Applicant Comment
9	Impact 3 'Displaced Sediment during Export Cable installation'. The notes suggest calculations are based on a V shaped trench which we assume therefore halves the volume of sediment displaced for the 1m depth x 1m wide x 40km, 62km or 102km export cable. However, as with Impact 4 below, a cross check with [APP-090] Chapter 4 Project Description Section 4.4.7.5.4 Trench Sizes, where it is stated that *"This assumes a conservative 30-degree trench side slope (based on burial in sand) and 1.5m burial depth for all cables"*, which could result in an estimated 5.2m wide trench. We ask the Applicant to confirm the dimensions of the export cable trench and the resulting displaced sediment volume.	The Applicant clarifies that with regard to cable installation by jetting (which is the worst-case scenario for impacts assessing the potential effects from increases in suspended sediment concentrations), 1m burial depth x 1m width of displaced sediment with a v-shaped trench is assumed. However, for impacts where the worst-case scenario is related to the footprint of seabed disturbance, the calculations are based on the text within the project description as quoted by Natural England.
10	Impact 4: Sand wave levelling parameters: *"Displaced sediment during infield and interlink cable installation".* A cross check with [APP-090] Chapter 4 Table 4.22 suggests the 16, 200m^3 component is for the DEP North array area. In addition, cross checking with Chapter 4 Project Description Table 4.20 and 4.21 it is not transparent the way the interlink and infield cable installation displaced sediment volumes are calculated with understanding from the notes of Table 7-2 of a 1m width and 1.5m max burial based on a V shaped trench.	The Applicant clarifies that "Displaced sediment during infield and interlink cable installation" in Table 7-2 of ES **Chapter 7 Marine Water and Sediment Quality** [APP-093] presents the volumes of sediment displaced depending on the design option i.e. SEP or DEP in isolation, SEP and DEP with 1 OSP and SEP and DEP with 2 OSPs. The areas where sandwave levelling is required are shown in Figure 4.9 of the Project Description [APP-117] and show the 'Areas' 1-4 referred to in Table 4-20 of **Chapter 4 Project Description** [APP-090]. The volume of sandwave levelling required would depend on the build-out scenario. The calculations for each design option in Impact 4 of Chapter 7 are based on the following. The Applicant has identified a minor error in the sand wave levelling calculations for the SEP and DEP 1 OSP scenario which is explained in the final bullet below: • For DEP in isolation, the 232,200m^3 volume provided for Impact 4 in Chapter 7 equates to Areas 2, 3 and 4 (and excludes Area 1 because for DEP in isolation this cable would be an export cable which is assessed in Impact 3). • SEP in isolation is 0m^3 because no sand wave levelling is required. • SEP and DEP 2 OSP design option is the same as DEP in isolation.

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		• SEP and DEP 1 OSP design option equates to Areas 1, 2 and 3 and incorrectly excludes Area 4. The total volume of sandwave levelling required should equal the total of Areas 1-4 which is 376,400m^3. This minor error does not affect the conclusions of any of the relevant assessments within the ES. Furthermore, the sandwave levelling volumes given in the **Disposal Site Characterisation Report (Revision B)** (document reference 9.13) are totals based on a 2 OSP design option and are therefore unchanged.
11	Natural England welcomes the intention for a pollution environmental management plan (PEMP). We defer to the MMO for comment and agreement on the mechanisms of the PEMP	As discussed with Natural England, the **Outline PEMP (Revision B)** (document reference 9.10) includes the best practice protocol for red-throated diver and vessel management protocol for marine mammals and the Applicant therefore assumes that Natural England will wish to be consulted.
12	Following our Section 42 comments, additional information is provided in relation to CEFAS 2016 published data placing suspended sediment concentrations within the range for seas around the UK (5-10mg/l).Please refer to our comment in Appendix E Marine Processes.	Noted. Further information on suspended sediments is available in the **Marine Processes Technical Note** (document reference 13.5) and in the Applicant's response to Appendix E of Natural England's Relevant Representation.
13	We acknowledge failed sampling attempts were likely indicative of coarse sediment type as a result of rocks preventing the grab jaws from closing and agree this provides evidence of a more coarse seabed, which the Applicant considers is less of concern in terms of contaminant release as a result of disturbance. However, Figure 7.5 highlights that the samples acquired were not truly representative of the spatial extent of the development and particularly the absence of contaminant data in the northwest area of SEP, DEP S and northern section of the ECC where grab samples recorded >10% mud. Therefore, we advise that uncertainty remains as to whether or not contaminants fall below acceptable levels. As the regulator for sample disposal licencing, we defer to the MMO with advice from CEFAS on the sufficiency of the samples in terms of spatial representation across the offshore development area. Further as the sample disposal site is effectively the DCO Redline boundary, we defer to the MMO /	Noted. See response at ID 3 of this table.

ID	Relevant Representation	Applicant Comment
	CEFAS as the regulator for sample disposal licencing (as presented in [APP-300] 9.13 Disposal Site Characterisation Report.pdf) for their approval in relation to their suitability in order to licence the array areas, export cable and interlink corridors for sediment disposal. We advise the In-Principle Monitoring Plan (IPMP) includes pre-construction monitoring for further sampling to ensure the suitability of sediments for disposal across the DCO boundary.	
14	Following the Section 42 Consultation, Natural England welcomes the expanded paragraphs providing context around the potential concerns associated with the analysis of polycyclic aromatic hydrocarbons and additional comparison of contaminant data against OSPAR CEMP data (ERL and BAC). Natural England has no further concerns on the analytical methodology, analysis and interpretation of results. However, we defer to MMO/ CEFAS to determine the sufficiency of the chemical analysis in terms of laboratory accreditation.	
15	We welcome the intention for monitoring to be outlined within an IPMP. Although we stated in our Section 42 response, that Natural England consider sediment and water quality monitoring is not required, further consideration in light of sediment disposal potentially across the construction area including Cromer Shoal MCZ, we consider pre-construction sediment contaminant monitoring will be required for the purposes of suitability for sediment disposal. We advise this must be agreed with the MMO/CEFAS and secured within the DCO/DML.	
Document Used: [APP-094] 6.1.8 Chapter 8 Benthic Ecology		
16	Construction Impact 1 Seabed Preparation. For clarity it would be useful to confirm the Total Disturbance for each scenario is the sum of the two values in the final cell, eg Total Disturbance Footprint for DEP in Isolation it is 5.12km^2 + 0.17km2 = 5.17km^2.	The Applicant confirms that the total value stated already includes the worst-case area of disturbance within the MCZ.
17	Operation Impact 1 – Temporary habitat loss / physical disturbance. It is not possible to compare the cable repair, replacement and reburial footprint to Chapter 4. Table 8-2 as they are expressed in m^2 per year, whereas Chapter 4 Table 4.30 expresses figures m^2/ 10 years in. We would welcome further	The calculations are proportionate to each other however since the cable lengths and therefore assumptions for temporary disturbance vary based on the design option being assessed, those presented in **Chapter 8**

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	explanation of the calculation SEP and DEP in Isolation to understand each WCS for this impact.	**Benthic Ecology** [APP-094] are required to be further refined from those presented in Table 4.30 of **Chapter 4 Project Description** [APP-090].
18	Whilst Natural England welcomes the Applicant's commitment to decommission cable protection within the MCZ it would be helpful if an Outline Decommissioning Plan could be provided at the consenting phase to secure and assess decommissioning activities in one location. However, regarding the decision to decommission scour protection, surface laid cables and external cable and crossing protection in-situ outside the Cromer MCZ, we continue to advise that regardless of legislation, decommissioning should aim to remove infrastructure to avoid irreversible (permanent) habitat loss, thus returning the seabed habitat to its pre-developed baseline status as required by OSPAR.	Noted. The **draft DCO** (Requirement 8) [AS-009] requires a written decommissioning programme to be submitted to the Secretary of State for approval before offshore works may commence.
19	We welcome the intention for sediment disposal to return material within the CSCB MCZ at or close to the source, to ensure that it remains within the site. Further, we welcome the intention that sediment will be deposited within an area of similar sediment type, site to ensure any sensitive habitats are avoided. This should be secured within a named DML disposal plan to be updated pre-construction.	The **Disposal Site Characterisation Report (Revision B)** [document reference 9.13] will be updated following analysis of additional contaminants analysis.
20	Natural England welcomes the commitment to microsite sensitive benthic features and habitats if identified by pre-construction surveys, such as those protected under Annex 1 and UK priority habitats identified under Section 41 of the NERC, 2006 Act However, Natural England notes this commitment needs to be secured through condition within the DCO/DML. Natural England agrees any Annex I habitat such as Sabellaria spinulosa reef habitat identified would be outside any SAC. However, with regard to footnote 6, we advise if Annex I habitat is identified the Applicant recognises their value to be equivalent to if they were within an MPA. This forms part of the UK government strategy of achieving the UK Marine Strategy of achieving Good Environmental Status (GES) of the UK wider seas regardless of whether sensitive species and habitats are located within an MPA network. We advise the Applicant to be fully committed to the protected status of protected sensitive habitats and species, regardless of whether they are located within a MPA.	See response at ID 4 of this table

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21	8.4.1.2 Policy, Legislation and Guidance -Other Paras 29 and 30 Natural England welcomes the Applicants consideration of the guidance documents outlined. In addition, we suggest the Applicant also uses guidance developed by Natural England for "Environmental Considerations for Offshore Wind and Cable Projects". This includes "Offshore Wind Marine Environmental Assessments: Best Practice Advice for Evidence and Data Standards" for baseline characterisation, pre-application, data and evidence expectations at examination and post-consent monitoring. In addition, advice is also provided on "Nature considerations and environmental best practice for subsea cables in English inshore and UK offshore waters". Moving Forward we recommend review of Natural England's guidance and advice. This is available at: Environmental considerations for offshore wind and cable projects - Home (sharepoint.com)	Noted.
22	Natural England welcomes the inclusion of information from Whalley et al 1999 to provide regional context to the concentrations recorded in the baseline survey, which exceeded the Canadian Sediment Quality Guidelines (CSQG) Sediment Threshold Effect Level (TEL). We agree with the Applicant's conclusions, that comparison with this data suggests the concentrations recorded are not considered atypical to the wider region.	The Applicant notes and welcomes this position.
23	Natural England welcomes the characterisation of the out-cropping chalk feature observed from seabed video imagery at Station EC-26 adjacent to landfall using guidance within NERR080 Natural England Marine Chalk characterisation Project.pdf. However, Natural England continues to advise that across much of Cromer Shoal MCZ there are areas of subtidal chalk lying underneath a thin veneer of sand/sediment which we also consider should be protected as outcropping chalk/subtidal Chalk Feature of Conservation Importance (FOCI). This is in accordance with our advice on fishing activities.	See ID 12 of the Applicant's response to Appendix G of Natural England's Relevant Representation
24	We acknowledge the assessments for stony reef at Stations EC-03 and EC-24 were classed as 'low 'resemblance to stony reef according to Irving (2009 and Golding (2020) and therefore at these locations where seabed imagery	Noted. See response at ID 4 of this table

ID	Relevant Representation	Applicant Comment
	was acquired there was insufficient evidence to classify as Annex I Reef Habitat. However we advise that the habitat classification for StationEC_03 of sublittoral coarse sediment (SS.SCS) and Station EC_24 of circalittoral mixed sediment (SS.SMx.CMx) are among the biotopes listed in Golding (2020) Refining the criteria for defining areas with a 'low resemblance' to Annex I stony reef (JNCC Report No. 656) as biotopes where reef may be found. As such we continue to advise that the potential for stony reef Annex I habitat, as with the potential for Annex I Sabellaria spinulosa (described in Para 120 not to constitute reef) is not entirely ruled out from pre-construction survey assessment. We advise the Applicants commitment to avoid and microsite for Annex1 habitats continues to include Annex I stony reef as a precautionary measure.	
25	8.5.4.4.4 Peat and Clay Exposures Para 123 It is stated 'A section of transect SS_21A in the SEP wind farm site represented the biotope A4.231 'Piddocks with a sparse associated fauna in sublittoral very soft chalk or clay', which is classed as an illustrative biotope of the UK BAP priority habitat 'peat and clay exposures with piddocks''. It is unclear from the description and interpretation which followed in this paragraph, whether based on observed imagery, this transect was classified as the UK BAP priority habitat 'peat and clay exposures with piddocks'. We request that the Applicant provides clarification on the classification of this habitat. In point 18 below, we query the statement in Paras 156 and 165 'However as there are no Annex I/ BAP priority habitats present…..'. Natural England advises that all outcropping and sub-cropping peat should be avoided.	The biotope 'Piddocks with a sparse associated fauna in sublittoral very soft chalk or clay' (A4.231) was assigned to transect SS_21A. For context this biotope was only confirmed at one location in the western corner of the SEP wind farm site. To clarify the point raised by Natural England, the biotope is classed as an illustrative biotope of the UK BAP priority habitat 'peat and clay exposures with piddocks' (UK BAP, 2008). As described in ES Appendix 8.4 – SEP Benthic Habitat Report [APP-187]: "*No specific assessment criteria have been defined for this habitat. However, when reviewing the geophysical and video data, identification of peat and/or clay seabed sediments would be further investigated for presence of piddocks and potentially the sponges Dysidea fragilis and Suberites carnosus, foliose red algae and the crabs Necora puber and Cancer pagurus, which are often associated with this habitat.*". The Applicant considers that the assessment provided appropriately differentiates between 'biotopes' (including A4.231) and 'Annex I and UK BAP priority habitats with the potential to be present in the benthic ecology study area'. With respect to the latter, pre-construction surveys will be undertaken to identify any potential Annex I / UK BAP priority habitats which, if required, will be avoided during detailed design. The commitment to undertake such a survey at the pre-construction stage is the normal and

ID	Relevant Representation	Applicant Comment
		appropriate means of addressing such matters and the commitment remains the same regardless of the assessment outcome.
26	It is stated that Sabellaria was found as single tubes, veneer, or very small clumps and therefore did not constitute Annex I reef habitat as defined in Gubbay (2007). Please be advised that, Sabellaria spinulosa reef of all quality is protected under Section 40 and 41 of the Natural Environmental and Rural Communities (NERC) Act 2006. Therefore, due regard must be given to the conservation of this habitat.	Noted.
27	8.6.2.1.3.1 | SEP in Isolation | Sensitivity Para 164 Natural England welcomes the intention to avoid the creation of persistent trenches, and use the techniques previously undertaken during the construction of the DOW. Please see our comments in Appendix G Cromer Shoal MCZ to the [APP-291] Outline CSCB MCZ CSIMP (document reference 9.7) and its [APP-292] Appendix 1 Interim Cable Burial Study (document reference 9.7.1).	Noted.
28	8.6.2.1.2 Construction Impact 1: Temporary habitat loss / physical disturbance | DEP in Isolation Sensitivity Para 156 and SEP in Isolation Sensitivity Para 160 / 8.6.2.1.3.1 | Para 165 and 169 We disagree with re-assigning the biotope A4.231 Piddocks with a sparse associated fauna in sublittoral very soft chalk or clay from high (as classified by MarSEA) to medium sensitivity. Regardless of their protected status (value), we consider the sensitivity should remain as classified. As point 15 above we query the Applicant's statement in Paras 156 and 165 that 'As there are no Annex I/ BAP priority habitats present….' As stated in Para 123 'The definition of the UK BAP priority habitat also encompasses occurrences of peat and clay exposures with no evidence of either past or present piddock activity, but which have the potential for this community to develop on the basis of environmental conditions and presence of similar beds locally (UK BAP, 2008c).' This implies the presence of this priority habitat, but as point 15 above we request clarification. Natural England however welcomes that that the impact significance for both	Noted. See response at ID 25 of this table.

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	Annex I / UK BAPS. spinulosa reef associated with biotope A5.611 and UK BAP peat and clay exposures with piddocks' that can be associated with biotope A4.231 are assigned a high sensitivity and considered within this assessment. As above Natural England seeks clarification as to status of the UK BAP 'Peat and clay exposures with piddocks' at Transect SS-21A.	
29	8.6.2.1.5 Construction Impact 1: Temporary Habitat Loss / Physical Disturbance | Sensitivity Para 175 , Magnitude 176 & 177 and Impact Significance 178. In the context of the conservation objectives for the features /habitats within the Cromer MCZ, Natural England considers the sensitivity of these habitats within the site should be considered high in recognition of their 'value' and not medium as classified by MarESA, due to the fact that these habitats are also found outside the MCZ in the Southern North Sea. This applies through the assessment.	The Applicant notes Natural England's position. As described in Section 8.4.3.1.2 of **Chapter 8 Benthic Ecology** [APP-094], it is important to understand that value and sensitivity are not the same and are judged on a receptor by receptor basis. A receptor could be of high value (e.g. Annex I habitat) but have a low or negligible physical/ecological sensitivity to an effect. Similarly, low value does not equate to low sensitivity. The value is considered, where relevant, as a modifier for the sensitivity assigned to the receptor, based on expert judgement. The Applicant maintains that since the outcropping chalk feature of the MCZ will be avoided by HDD, the worst case sensitivity of identified habitats and biotopes potentially subject to temporary disturbance or long term habitat loss impacts within the MCZ is considered to be medium. Therefore, it follows that the impact significance conclusions are also unchanged.
30	8.6.3.1.1.1 Operation Impact 1: Temporary habitat loss / physical disturbance | Para 246 Natural England agrees with the Applicant's statement that *"The introduction of stable artificial substrate in the form of external cable protection and turbine foundations may encourage reef formation but would not be considered Annex I habitat as it would not naturally occur at the location".* However we advise that during any Operation and Maintenance activities, the Applicant makes every effort to ensure that any impacts to Annex I / UK BAP habitats if naturally present on the surrounding seabed are microsited for where possible.	Noted.
31	8.6.3.2.1.1 Operation Impact 2 Permanent Habitat Loss: Sensitivity Paras 254 to 256	Noted. See response at ID 25 of this table.

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	As above, Natural England is not in agreement with amendment of MarESA sensitivity adjustments to medium where there is no protected status. However, we welcome the sensitivity for 'Annex I / UK BAP priority habitat S. spinulosa reefs that can be associated with biotope A5.611 and the UK BAP priority habitat 'peat and clay exposures with piddocks' which can be associated with biotope A4.231' remaining as 'high' sensitivity for this MarESA pressure. We consider the Impact Significance for permanent habitat loss is moderate adverse for both the biotopes and Annex I / UK BAP priority habitats.	
32	8.6.3.3.1 Operation Impact 3: Long term habitat Loss - Cromer Shoal Chalk Beds MCZ Para 269 As stated in our Section 42 response, Natural England welcomes the commitment, as also outlined in the Outline CSCB MCZ CSIMP, to the use of removable rock bags as cable protection, thus minimising permanent habitat loss within the MCZ. However, every effort should be made to minimise cable protection within the MCZ.	Noted. As described in the **Outline CSCB MCZ CSIMP** [APP-291] the Applicant will make reasonable endeavours to bury offshore export cables and thus minimise the requirement for external cable protection within the MCZ.
33	8.6.3.3.1.1 Operation Impact 3: Long term Habitat Loss – Cromer Shoal Chalk Beds MCZ Para 272 As point 19 [ID29] above, in the context of the conservation objectives for the features /habitats within the Cromer MCZ, Natural England considers the sensitivity of these habitats within the site should remain high. We consider therefore the impact significance of 'moderate adverse' is applied to both the assessment of the habitats and biotopes within the MCZ and the WCS for Annex I / UK BAP priority habitat S. spinulosa reefs and the UK BAP priority habitat 'peat and clay exposures with piddocks'.	See response at ID 29 of this table.
Appendix 6.3.8.5 – Benthic Habitat Mapping [APP-188]		
34	Figure 22 and 23 provides best available evidence of sediment most likely to support spawning and sandeel habitats. We advise that this highlights the importance of DEP N to sandeels and thereby Annex I Sandwich terns. We advise further consideration is given to removal of turbines from DEP N	As noted by the Applicant in **Chapter 9 Fish and Shellfish Ecology** [APP-095] and as agreed with the Marine Management Organisation (MMO) and the Centre for Environment, Fisheries and Aquaculture Science (Cefas) [RR-053], efforts to quantify impacts to spawning grounds are likely to provide inaccurate and/or misleading figures for the following reasons:

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		• Spawning areas can change over time or become recolonised.
		• Whilst spawning and nursery ground maps are used to provide the most recent and appropriate information to identify spawning areas, they do not fully define/consider/identify:
		  • All potential areas of spawning.
		  • Any habituation that may occur i.e., identify areas where higher densities of spawning are present.
		  • Specific substrate requirements e.g., substrates which are more suitable within wider broadscale sediments.
		  • More suitable topography e.g., ridges/edges of sandbanks where sandeel may spawn or furrows where herring may spawn.
		  • Environmental factors that may influence spawning intensity such as temperature, oxygenation, natural disturbance, anthropogenic disturbance etc.
		Regarding the point in relation to mitigation hierarchy, see the Applicant's response to this point in its responses to Appendix B of Natural England's Relevant Representation.

Appendix 6.3.9.1 – Fish and Shellfish Ecology Baseline Technical Report [APP-190]		
35	Natural England note that data from otter trawl surveys in 2005 and 2008 showed that herring was the most abundant species caught. And this supports herring being a key prey resource for Annex I Sandwich terns in the second part of the breeding season. However, Natural England acknowledges the age of the data and defers to CEFAS for recommendations of further data sources to complement this data and potential requirement for pre-construction surveys. We also note that any additional surveys data could have wider ecosystem benefits in terms of management measures for Annex I birds.	Noted. The Applicant has agreed to attend a meeting with Natural England, the MMO and Cefas to discuss potential evidence gathering with respect to Sandwich tern prey species.
36	Similar to the above, there was a pre-construction survey in 2009 and a post-construction herring spawning survey in 2010. Natural England acknowledges the age of the data and defers to CEFAS for	

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	recommendations of further data sources to complement this data and potential requirement for pre-construction surveys. We also note that any additional surveys data could have wider ecosystem benefits in terms of management measures for Annex I birds.	
Appendix 6.3.10.2 – Underwater Noise Modelling Report [APP-192]		
37	Natural England previously recommended that underwater noise modelling from concurrent piling between SEP and DEP to be undertaken and included in the assessment. Behavioural contours to also be included. Both simultaneous piling (i.e. one piling operation occurring in the SEP wind farm site at the same time (i.e. simultaneously) as a piling operation in the DEP wind farm site) and sequential piling within a 24 hour period have been considered within the updated underwater noise modelling. Natural England advise further underwater noise assessment is undertaken which includes concurrent piling from SEP and DEP. Natural England defer to CEFAS for more further detailed comments in relation to potential subsea noise impacts to fish species .	Simultaneous piling is defined in ES Chapters 9 and 10 as *'A scenario where two piles are installed at the same time at different locations.'* . This is the same as concurrent piling however the Applicant has used 'concurrent' when referring to general offshore construction activities that are being undertaken in tandem in order to differentiate between piling and 'other' construction activities that could emit underwater noise if activities are occurring at the same time. Simultaneous piling is possible should SEP and DEP be constructed concurrently. In this scenario, as a worst-case, one piling operation could occur in the SEP wind farm site at the same time (i.e. simultaneously) as a piling operation in the DEP wind farm site (one piling operation per project). A scenario whereby simultaneous piling could occur solely within the SEP wind farm site or solely within the DEP wind farm site could also occur however this is not the worst-case scenario since it would result in lower impact ranges because the noise sources are closer together. To clarify, the worst-case scenario for underwater noise assessments for marine mammal receptors is based on simultaneous piling and for fish receptors is based on sequential piling (within the same 24 hour period).
Document: [APP-296] 9.9 Offshore Operation and Maintenance Plan (OOMP)		
38	Natural England notes there is much emphasis on the post consent detailed design and therefore it is not clear if the O&M activities permitted under Section 7 have been fully assessed as part of the HRA/MCZ assessment or will be subject to another HRA/MCZ process post consent by the MMO.	The Applicant notes that none of the activities listed under Paragraph 8 of the **Outline OOMP (Revision B)** [document reference 9.9] are dependent upon post-consent detailed design. These activities have been assessed in the ES (Chapters 6, 7, 8, 9, 10 and 13), within the assumed maintenance activities per annum for scheduled and unscheduled maintenance. In addition, as stated, notification should be provided to the MMO on any of the works being undertaken.

<table>
<tr><th>ID</th><th>Relevant Representation</th><th>Applicant Comment</th></tr>
<tr><td>39</td><td>Natural England advises that because O&M activities are only mentioned and not clearly defined we do not believe that they have been assessed and therefore further information is required to undertake any HRA/MCZ assessment.</td><td>The Outline OOMP (Revision B) [document reference 9.9] has been updated at Deadline 1 to note that up to 1,800m^2 of external cable protection within the CSCB MCZ has been assessed in the Stage 1 CSCB MCZ Assessment [APP-077] and that a new marine licence is potentially required for the installation during operation of external cable protection within the MCZ. However, a new marine licence would only be required in the extremely unlikely event that the area of external cable protection installed exceeds 1,800m^2; or a period of five years has elapsed since the completion of construction.

Approval from the MMO will be required prior to the installation of additional external cable protection in different locations.

This update has been provided to address the comment within Appendix A of Natural England's Relevant Representation [RR-063]: 'Natural England has concerns about the deployment of scour and cable protection across the entire lifetime of the project and consider that any cable or scour protection required after ten years of operation outside designated site and 5 years within should be secured through a new consent, with appropriate consultation and consideration of relevant environmental considerations.'</td></tr>
<tr><td>40</td><td>Natural England advises more information is required on what is considered to be 'corrective work' and if that is permitted on the DML</td><td>This has now been removed from the Outline OOMP (Revision B) [document reference 9.9] as the Applicant agrees that this is not clearly defined however is considered to be covered by the maintenance activities already listed.</td></tr>
<tr><td>41</td><td>Natural England notes that this is a live document but advises that a true assessment of potential impacts can't be undertaken from the information included

Natural England advises that the following information is required to assess the impacts from O&M activities:
• Number of vessel transits per activity per day/month
• Timing of planned maintenance work
• Agree what are emergency works
• Separate out inside MCZ with outside MCZ and other designated sites</td><td><table><tr><td>Number of vessel transits per activity per day/month</td><td>These are assessed within the relevant ES chapters (Chapters 6, 7, 8, 9, 10 and 13).</td></tr><tr><td>Timing of planned maintenance work</td><td>The MMO would be notified of any of the works being undertaken</td></tr><tr><td>Agree what are emergency works</td><td>These aren't listed in the Outline OOMP [APP-296].</td></tr></table></td></tr>
</table>

ID	Relevant Representation	Applicant Comment	
	• Monitoring to be undertaken to inform 5 yearly review • How often will a sub-bottom profiler be used and how will the noise be taken account of • Volume of additional scour prevention around the turbines over the project lifetime • If scour/cable protection in new location – where, how much etc. • Confirm bird scarers are not noisy scarers which can disturb Annex I birds • More detail on the use of drones for offshore inspections	Separate out inside MCZ with outside MCZ and other designated sites	This had already been done in the **Outline OOMP** [APP-296] however has been updated – see ID 39 of this table.
		Monitoring to be undertaken to inform 5 yearly review	Monitoring would be undertaken in accordance with the Monitoring Plan which would inform the O&M Plan review updates. Conditions 13(1)(f) and 14(1)(f) in the relevant DMLs specify that the OOMP must be resubmitted and reviewed every 3 years therefore ensuring continual review of the position in relation to cable protection and scour protection alongside all other operation and maintenance activities and will enable the MMO to continually review at the appropriate time during operation whether or not a new consent/licence is required for any further deployment of cable protection or scour protection.
		How often will a sub-bottom profiler be used and how will the noise be taken account of	As and when required with more specific details to be reflected in the Final OOMP noting that this is a live document.
		Volume of additional scour prevention around the turbines over the project lifetime	As noted in the **Outline OOMP (Revision B)** [document reference 9.9], unless the total area of scour protection installed for the chosen foundation type exceeds that assessed in the ES, or a period of ten years has elapsed since the completion of construction then no additional marine licence is required.
		If scour/cable protection in new location – where, how much etc.	

ID	Relevant Representation	Applicant Comment	
			However, approval from the MMO will be required prior to the installation of additional scour protection in different locations. If these conditions were not met then a new marine licence would be required.
		Confirm bird scarers are not noisy scarers which can disturb Annex I birds	As noted, these are 'passive' and therefore are not noise emitting however this has been clarified in the **Outline OOMP (Revision B)** [document reference 9.9].
		More detail on the use of drones for offshore inspections	As and when required with more specific details to be reflected in the Final OOMP noting that this is a live document.

4.18.7 Appendix G Cromer MCZ

Table 4.18.6 Applicant's comments on Natural England's Appendix G Cromer MCZ relevant representation

ID	Relevant Representation	Applicant Comment
1	Natural England doesn't agree with the Applicant's Stage One MCZ assessment in relation to the defining the magnitude of impacts (3.2.1.1). This is because the assessment has been approached from an EIA perspective rather one considering whether or not the conservation objectives for the site will be hindered. Please see Annex 1 for further details on Natural England's standard position.	The Applicant has followed the available guidance for MCZA as detailed in Section 2.2 of the Applicant's **MCZA** (APP-077). This includes the MMO 2013 MCZ and marine licensing guidance, as well as Natural England's own guidance (2020) on how to use the Conservation Advice Packages for Environmental Assessments. The assessment methodology defines criteria for magnitude of effect which includes consideration of for example duration of the loss, scale of the loss and impact on structure, functioning or supporting processes of the habitat. In order to determine the sensitivity of the protected features of CSCB MCZ, Natural England's Advice on Operations (AoO) which indicates the

ID	Relevant Representation	Applicant Comment
		current condition of protected features and the sensitivity of each receptor to relevant pressures was used. Following determination of effect magnitude and receptor sensitivity, the Stage 1 assessment then goes on to consider the risk that SEP and/or DEP could hinder the conservation objective of maintaining the protected features of the CSCB MCZ in a favourable condition or restoring them to favourable condition. The assessment uses Natural England's Supplementary Advice on Conservation Objectives (SACO). SACOs present attributes which are ecological characteristics or requirements of the designated species and habitats within a site. The listed attributes are considered to be those which best describe the site's ecological integrity and which, if safeguarded, will enable achievement of the Conservation Objectives. Therefore, the Applicant considers that the correct approach to Stage 1 assessment has been followed.
2	Whilst we acknowledge that the MCZ consists of broadscale habitat types rather than features akin to Annex I there are areas that are FOCI or have sub features that provide a defined function with differing sensitivity in which impacts should be avoided.	Noted. The surveys undertaken to inform the assessments that have been undertaken at this stage of the Projects are characterisation surveys with the aim of characterising the receiving environment that may be impacted by the proposed works and providing information on which to base the assessments. The methodology for the benthic characterisation survey and subsequent data analysis was agreed with Natural England and the MMO through the EPP (see ES Chapter 8 Benthic Ecology, APP-094). Characterisation surveys are distinct to pre-construction surveys. The latter aim to confirm the presence and location of sensitive features and to establish the environmental baseline for monitoring purposes, closer to the point of construction. As secured through the DMLs, pre-construction surveys within the MCZ will be undertaken to identify any potentially sensitive features that are required to be avoided. The pre-construction survey methodology would be agreed with the MMO in consultation with Natural England. The survey design would be based on best practice at the time and is anticipated to consist of a mixture of geophysical, drop-down video (DDV) and grab surveys (as

ID	Relevant Representation	Applicant Comment
		applicable) to ensure a comprehensive ground-truthing of the proposed final cable route design. Initial geophysical surveys will be reviewed with DDV groundtruthing surveys to confirm presence as appropriate. This shall then be used to inform detailed layout design and will inform the mitigation scheme requirements. If potentially sensitive benthic features are identified, the results of the survey will be discussed at that time with the MMO and Natural England to agree whether the features are required to be avoided through micro-siting. This is the routine and accepted approach for dealing with such matters. Condition 13 (i) of Schedules 10 and 11 and Condition 12 (j) of Schedules 12 and 13 of the **Draft DCO (Revision B)** (document reference 3.1) includes provision for a mitigation scheme for any benthic habitats of conservation, ecological and/or economic importance constituting Annex I reef habitats identified by pre-construction surveys and will be in accordance with the **Offshore In Principle Monitoring Plan** [APP-289]**.** This is the appropriate approach to mitigating impacts on benthic habitats of conservation, ecological and/or economic importance.
3	Natural England advises that impacts considered as a percentage of the whole MCZ is misleading given the size of the site. The impacts from SEP and DEP combined are still 0.19ha from cable protection.	Noted. Impacts are provided as a percentage against each relevant MCZ feature (broadscale habitats) within Table 8-2 and Table 8-3 of the **Stage 1 CSCB MCZ Assessment (MCZA)** (APP-077). The provision of percentage areas impacted across the whole MCZ provides wider context.
4	Natural England welcomes consideration of removal of cable protection at the time of decommissioning. If removal could be achieved, then whilst the impacts would no longer be permanent, they would still last for the lifetime of the infrastructure (40 years) and potentially longer as a residual impact. Therefore, because this impact is lasting/long term and site recovery wouldn't be assured, Natural England's view is that reasonable scientific doubt would likely remain regarding the impact of the proposals on the conservation objectives for the site. Accordingly, we advise that a more precautionary approach is required when considering the generational impacts to the designated site features both alone and cumulatively.	It should be noted that the Applicant has submitted a **Decommissioning Feasibility Appendix** (APP-294) which demonstrates that, if required, decommissioning of any installed cable protection within the MCZ is feasible.
5	Whilst we acknowledge that the predicted impact from DEP and SEP combined poses a lower risk to the site features than Hornsea Project Three; Natural England doesn't agree with the Applicant's conclusion that there will	Noted. The cumulative **Stage 1 CSCB MCZ Assessment** [APP-077] conclusions are summarised in Section 9 of that document. The assessments conclude that the conservation objective of maintaining the

ID	Relevant Representation	Applicant Comment
	be no significant risk of the activity hindering the achievement of the conservation objectives for Cromer Shoal MCZ.	protected features of the CSCB MCZ in a favourable condition or restoring them to favourable condition will not be hindered by the construction, operation and decommissioning phases of SEP or DEP in isolation, SEP and DEP, or cumulatively with any other plan, project or activity. However, the Applicant is providing a Stage 2 assessment (i.e. MEEB proposals), on a precautionary and without prejudice basis to enable consultation on Stage 2 to be undertaken preapplication and during Examination, should it be required in the consent determination process
6	Of particular concern is the area of mixed sediment within the cable corridor, which has a more diverse community. Should cable protection be placed in this location then the conservation objectives to restore/maintain features will not be achieved.	The Applicant will make reasonable endeavours to avoid the need for external cable protection within the whole of the MCZ including within the mixed sediment feature. Micro-siting of the export cables within the wider export cable corridor will be used to avoid areas where burial is more likely to be challenging on account of ground conditions and ensure the amount of external cable protection required is minimised. However, as shown on Figure 7.1 of the **Stage 1 CSCB MCZA** [APP-077], the area of mixed sediment bisects the entire cable corridor and therefore it would not be possible to microsite around this. The **Stage 1 MCZA** [APP-077] assesses the potential impact of long term habitat loss on the mixed sediment feature of the MCZ and concludes that that the conservation objective of maintaining the feature in a favourable condition or restoring it to favourable condition will not be hindered by the construction, operation and decommissioning phases of SEP and / or DEP. The CSCB MCZ is designated for seven broadscale marine habitat features (of which there are three in the offshore export cable corridor including Subtidal mixed sediments (A5.4)), two habitat features of conservation interest (FOCI) and one feature of geological interest, as shown in Table 7-1 of the Stage 1 MCZA [APP-077]). The FOCI are: peat and clay exposures; and subtidal chalk – these are the specific habitats that are known to be threatened, rare or declining in our seas, and present in this MCZ. FOCI species and habitats may be more sensitive to pressures and hence need targeted protection. By contrast, protecting examples of broadscale habitats, such as mixed sediments, across the MPA network aims to ensure that the full range of marine biodiversity in our seas is conserved. By definition, broadscale habitats are broadly (widely)

ID	Relevant Representation	Applicant Comment
		distributed across both the MCZ (as shown in Figure 7.1 of the Stage 1 MCZA [APP-077]) and the wider region of the southern North Sea. Therefore, there is very little basis for the suggestion that placing cable protection in one broadscale habitat over another in the same site will result in the Conservation Objectives not being achieved. As such, it is not necessary either to seek to avoid a particular broadscale habitat (nor could that be done with any degree of confidence – see below), or to suggest that avoiding works of a particular nature (in this case the use of external cable protection) is a necessary action to avoid hindering the Conservation Objectives. Further weight is given to this position in considering what is known about the specific characteristics and distribution of this broadscale habitat feature within the cable corridor. As would be expected, there are differences in the distribution of habitats between the MCZ feature map (Natural England, 2020; Green and Dove, 2015) and the Applicant's own mapping, which is both more detailed and more recent. These differences are evident between Figures 7.1 and 7.2 of the Stage 1 MCZA [APP-077]. Specifically, with respect to subtidal mixed sediments (MCZA para 109), the Applicant's habitat mapping confirms that mixed sediment areas form a mosaic with subtidal coarse sediment areas for much of the offshore export cable corridor within the CSCB MCZ (these are the areas shown in green and orange on Figure 7.2). It is noted that it is difficult to delineate subtidal coarse and subtidal mixed sediment habitats in the offshore export cable corridor due to their similarity, with mixed sediment areas being close to the coarse sediment areas with a relatively low percentage of fines, but sufficient fine material to influence benthic communities. The key implication of this is that there can be no basis for any requirement to avoid areas of broadscale subtidal mixed sediment because they exist in a mosaic with other habitat types and it is not possible or appropriate to attempt to confirm their exact distribution, which is also likely to vary over time (as described in Natural England, 2020). The final point relates to the suggestion that the mixed sediment areas have a more diverse community. This may be the case although as above cannot be said with any certainty with respect to any particular location due

ID	Relevant Representation	Applicant Comment
		to the mosaic pattern of habitat distribution. Furthermore, as described in Section 8.2.2.2 of the **Stage 1 MCZA** [APP-077] (para 200) "*All sediment biotopes, including those recorded in the SEP and DEP offshore export cable corridor, and the biotopes Natural England's AoO [Advice on Operations] identifies as being represented within CSCB MCZ sediment habitat features, have high sensitivity to physical change to another sea bed type with no resistance and very low resilience.*". This confirms that, based on Natural England's own advice, there are no grounds for making a distinction between mixed sediment habitats and coarse sediment habitats because for the purpose of the assessment the sensitivity of benthic communities within them is the same. Condition 13 (i) of Schedules 10 and 11 and Condition 12 (j) of Schedules 12 and 13 of the **Draft DCO (Revision B)** (document reference 3.1) includes provision for a mitigation scheme for any benthic habitats of conservation, ecological and/or economic importance constituting Annex I reef habitats identified by pre-construction surveys and will be in accordance with the **Offshore In Principle Monitoring Plan** [APP-289]**.** This is the appropriate approach to mitigating impacts on benthic habitats of conservation, ecological and/or economic importance, which would include the FOCI habitats discussed above.
7	Whilst, the Marine and Coastal Access Act (2009) does not provide any legislative requirement for explicit consideration of in-combination or cumulative impact assessment to be undertaken when assessing the impacts of licensable activities upon an MCZ; we agree with the MMO in considering that in order to fully discharge regulatory duties under section 69 (1) of the MCAA, in combination and cumulative effects must be considered.	Noted. These are assessed in Section 8.4 of the **Stage 1 CSCB MCZ Assessment** (APP-077).
8	We acknowledge at Para. 31 of the Stage 1 MCZ Assessment [APP-077] the Applicant has considered TIERs to inform such an assessment. However, we advise that the 2013 guidance on TIERs has been updated in Natural England's best practice guidance available at: Environmental considerations for offshore wind and cable projects - Home (sharepoint.com): Phase III: Expectations for data analysis and presentation at examination for offshore wind applications.	Noted.

ID	Relevant Representation	Applicant Comment
9	Natural England advises that Cromer Shoal MCZ assessments undertaken by previous competent authorities concluded: significant adverse impact on the designated features of the MCZ from the placement of cable/pipeline protection could be ruled out. However, Natural England advises that as with cable/pipeline protection within SACs the lasting habitat change/loss over the lifetime of the projects and beyond is hindering the conservation objectives of the site and is in the process of updating our condition assessment for Cromer Shoal MCZ accordingly. Thereby, Natural England considers the O&M phase activities for DEP (and or) SEP combined with DOW, SOW, Hornsea Project Three and on-going Oil and Gas impacts will result in lasting habitat change / physical disturbance which will further hinder the conservation objectives of the CSCB MCZ.	With respect to Natural England's intended update of the condition assessment, refer to ID 11 below. With respect to cumulative effects with the other projects mentioned the Applicant notes that: • SOW and DOW do not contribute to lasting habitat change/loss (the O&M activities required only relate to temporary sea bed disturbance from export cable reburial, repair or replacement (i.e. no external cable protection). • The Hornsea Project Three impact from lasting habitat change/loss is both very small (up to 0.016% of the subtidal sand broadscale habitat feature or 0.0009% of the total area of the MCZ) and only affects the subtidal sand broadscale habitat (the majority of the SEP and DEP export cable corridor is subtidal coarse or mixed sediments). • Impacts from the existing pipelines at Bacton are considered to be part of the baseline. No information is available on any planned decommissioning works although if such works are undertaken, it is reasonable to assume that once the pressure has been removed from the site, habitats will recover. • Due consideration must be given to the recent introduction of EIFCA fisheries management measures including byelaws and fisheries closures within the CSCB MCZ (see para 259 of the Stage 1 MCZA [APP-077]). These have been established in order to protect the features of the CSBC MCZ from the pressures of commercial fishing. The successful operation of these measures will lead to a reduction in pressure on the features of the CSCB MCZ. The reduction of such a pressure and the likely recovery that will follow, with that pressure having affected a much larger extent of the site and over a much longer timeframe than any OWF proposal, must be given due its consideration in the balance of the overall cumulative assessment.

ID	Relevant Representation	Applicant Comment
10	The risk of, and observed, reduction in designated habitat extent which has occurred and/or is predicted to arise from the above developments has meant that the MCZ is highly likely to be taken further away from its required conservation state in the future. Unless these unanticipated significant impacts on the MCZ are addressed, Natural England advises that the overall coherence of the national site network as designated is at risk from a lasting habitat change/loss over the lifetime of the consented/built projects. This is important context for future licensing and condition discharge decisions, as it substantially increases the risk that subsequent licence applications (including this Application) could result in further significant impacts on the MCZ. Accordingly, we strongly advise that Applicant's potentially affecting the MCZ will need to intensify their use of the mitigation hierarchy to avoid, reduce and mitigate their impacts to a level where such effects cannot arise.	Noted. The Applicant highlights that the preferred method of cable protection is through burial and it has entirely avoided the sensitive outcropping chalk feature in the nearshore through its commitment to long HDD. An allowance for external cable protection within the MCZ is provided in order to provide flexibility in case there are sections of the cable that cannot be buried. Therefore, in terms of long term habitat loss within the MCZ, SEP and DEP will only contribute to this if external cable protection is required which will not be known until after the consent decision has been made.
11	Natural England wishes to highlight that the outcome the review of our conservation advice and condition assessment for the Cromer Shoal Chalk Beds MCZ will be available in the New Year (2023).	Noted. The Applicant notes that at the time of writing (4 February 2023) this has not been updated however would highlight that a change in condition assessment is not anticipated to result in a change to the Applicant's assessment conclusions that the conservation objective of maintaining or restoring the MCZ features to a favourable condition would not be hindered. Notwithstanding this, the Applicant looks forward to reviewing the evidence that the updated condition assessment relies on, noting that the anticipated timeframe for its release will be during the SEP and DEP Examination.
12	Natural England does not agree with the Applicant's assessment that Cromer Shoal Chalk Beds MCZ Subtidal Chalk FOCI is restricted to the areas identified by the geophysical survey. We agree that areas of current outcropping chalk have been identified. However, across much of the site there are areas of subtidal chalk lying underneath a thin veneer of sand/sediment i.e. subcropping chalk. We advise that chalk with sediment veneer should be considered as subtidal chalk feature (HOCI 20) when assessing impacts. This is in accordance with our advice on fishing activities.	The primary objective of the long HDD is to avoid the sensitive outcropping chalk feature in the nearshore for which the MCZ has been designated. This objective is achieved. The location of the HDD exit is described at paragraph 257 of ES **Chapter 4 Project Description** [APP-090]: "*The HDD will exit in the subtidal, approximately 1,000m from the coastline (up to 1,150m from the onshore entry point).*"). As is evident from the habitat map in the **Stage 1 MCZA** [APP-077] (Figure 7.2), this will be in an area of subtidal sand and/or coarse sediment (both broadscale habitats). The Applicant notes that Natural England's advice against the HDD exits pits being located in an area of 'subcropping chalk' requires an appreciation of:
13	"We note that the Applicant's sensitivity biotope mapping (5.6.2 Appendix 2) is based on the veneer within the glacial channel rather than the subcropping	

ID	Relevant Representation	Applicant Comment
	chalk, which does not align with our advice. Thereby whilst we may be able to agree with an assessment that indicates that if cables are installed as described within the veneer, chalk will not be physically impacted, this position would change should cable protection be proposed in these areas no matter the current stability of the sediments within the glacial channel. Natural England therefore advises against the HDD exits pits being located in an area of subcropping chalk."	• What is meant by the subcropping chalk, in what form does it exist in the export cable corridor and how does it correspond to the subtidal chalk FOCI for which the MCZ is designated. • How, if deemed necessary, it would be possible to avoid subcropping chalk. • If it were possible to locate the HDD exit to avoid the subcropping chalk what alternative feature would it be possible to move the works to in order to secure a better environmental outcome. • The limitations with respect to how far it is technically feasible to drill. These are addressed in turn below. Subcropping chalk covers a large extent of the MCZ and was discussed with stakeholders in the ETG meetings, with those discussions resulting in the Applicant producing ES **Appendix 6.3 Sedimentary Processes in the Cromer Shoal Chalk Beds MCZ** [APP-182] and ES **Appendix 6.4 Sheringham Shoal Nearshore Cable Route - BGS Shallow Geological Assessment** [APP-183] which describe the sedimentary processes and geology along the export cable corridor in the MCZ. These were, in part, intended to address concerns around subcropping chalk and the potential for it to become exposed. It was subsequently agreed with Natural England and the MMO at Seabed ETG 2 following presentation of evidence contained in Appendix 6.3 [APP-182] that seabed sediments in the offshore export cable corridor within the CSCB MCZ are static, with the exception of Holocene sand / subtidal sand, which is mobile under some conditions. Therefore, the potential for subtidal chalk to be exposed in the future is restricted to the subtidal sand areas identified by the geophysical survey (as shown in Figure 7.2 of the **Stage 1 MCZA** [APP-077]). However, as set out in paras 116-117 of the Stage 1 MCZA [APP-077]: "*given the thickness of the Holocene sands (generally up to 3m where it occurs from 500m to 4.5km offshore, and up to 2m, locally to 6m, in the seaward 2km of the cable corridor inside the MCZ), it would only be possible for movement of the feather edges (where the sediment is thin*

ID	Relevant Representation	Applicant Comment
		and could all move), to generate new sea bed substrate, including the potential to expose previously buried chalk if present directly below the sand layer without a static gravelly sand/sandy gravel layer in between. There is a deep infilled channel cut through the chalk to -17m LAT filled with Weybourne Channel deposits (Appendix 6.3 of the ES [APP-182] [visible on Figure 3.4*]) located across the export cable corridor from approximately 750m to 1.5km offshore (Gardline, 2020a). It is likely that the offshore HDD exit location will be in this channel and therefore, given the depth of overlying sediment deposits there is no potential for exposure of chalk in this area. Survey data indicates that areas where there is potential for subtidal chalk to be exposed are of very limited extent within the offshore export cable corridor, and it is unknown if any such exposures would meet the criteria to be classified as the subtidal chalk habitat FOCI (e.g. criteria provided by Natural England for the Hornsea Project Three (RPS, 2020), or how persistent they would be. Therefore the MCZA is based on the known locations of subtidal chalk restricted to the outcropping subtidal rock feature in the inshore area of the CSCB MCZ only.*". The Applicant considers that this provides a very clear and evidenced rationale for why it would not be appropriate to consider chalk with sediment veneer (subcropping chalk) as subtidal chalk feature – namely the subcropping chalk is too deep and/or unlikely to be exposed by the largely immobile sediments that lie on top of it. Of further note, the Applicant would draw attention to the description of the subcropping chalk feature provided throughout ES Appendix 6.3 [APP-182] which explains that the subcropping chalk is in an eroded form to a relatively flat and regular surface and that it is in no way similar to the complex erosional geo-structures of exposed chalk (such as ridges, pinnacles and arches) present in the nearshore. The implication of this is that in the unlikely event that subcropping chalk was somehow impacted by the works it is not reasonable to treat it as the same feature (the outcropping chalk) for which the MCZ has been designated. For these reasons the suggestion that subcropping chalk should be considered as subtidal chalk feature for the purpose of the assessment significantly overreaches the Conservation Objectives of the MCZ

ID	Relevant Representation	Applicant Comment
		designation. Alongside this, there is a complete absence of any substantiated technical evidence to support such an action being necessary or appropriate. On the same basis, if it was deemed necessary to avoid subcropping chalk, it is difficult to see the case for how this would be possible based on the information that is available (which is extensive). The habitat mapping discussed above indicates that a shorter drill would reduce the distance between the HDD exit and the nearshore outcropping chalk feature, which would not be desirable, and would still be in the subtidal sand area. A longer drill would result in the HDD exit being in either sand or coarse sediment with the same or similar environmental outcome. The limitations with respect to how far it is technically feasible to drill, noting that increasing the length of the drill also increases the risk of the HDD works failing.
14	Table 1 Benthic mitigation "Standard Best Practice Mitigation: Avoid MCZ Due to physical constraints and grid connection Natural England notes that impacts to a designated site are unavoidable. But alternative routes through the MCZ to landfall at Bacton have been considered and discounted."	No response required.
15	"Standard Best Practice Mitigation: Reduce number of export cables though use of HV/DC system or coordinated approach with other projects – Norfolk Projects SEP and DEP Mitigation: Section 5.1 (Para 47) MCZ Stage 1 Assessment Natural England notes the potential for progressing a single ops serving both windfarms. Natural England is most supportive of this option due to the ecological benefits both for marine and terrestrial receptors. Otherwise, we would strongly encourage an integrated transmission system being progressed with HDD ducts for both SEP and DEP being installed when the first project constructs."	Noted. The Applicant's approach regarding scenarios is as set out in the Scenarios Statement [APP-314].

ID	Relevant Representation	Applicant Comment
16	"Standard Best Practice Mitigation: Reduce the number of cable crossing within a designed site to avoid the requirement for cable protection – Hornsea Project Three SEP and DEP Mitigation: Natural England notes that all cable crossings are proposed to be outside of designed sites. Therefore, we consider the mitigation measure adopted"	No response required.
17	"Standard Best Practice Mitigation: Cutting and removing sections of disused cables to avoid cable crossings SEP and DEP Mitigation: Natural England notes on page 28 Table 4 of 5.6 [APP-077] that it is proposed that this will be applied to 'Stratos telecommunications' cable. This is welcomed."	No response required.
18	"Standard Best Practice Mitigation: Micro siting cables around reef and other features of ecological importance – All projects post Lincs OWF consent 2008 SEP and DEP Mitigation: Natural England notes that this is referred to in the various SEP and DEP documents for the MCZ, but equally this is not secured as a condition on the face of the DCO/dML. Natural England would welcome this being secured as a condition."	Condition 13 (i) of Schedules 10 and 11 and Condition 12 (j) of Schedules 12 and 13 of the **Draft DCO (Revision B)** [document reference 3.1] include provision for a mitigation scheme for any benthic habitats of conservation, ecological and/or economic importance constituting Annex I reef habitats identified by pre-construction surveys and will be in accordance with the **Offshore In Principle Monitoring Plan** [APP-289].
19	"Standard Best Practice Mitigation: Sandwave levelling to reduce risk of free spanning cables and requirement for external cable protection – though this has own issues in relation to ensuring sediment remains in the system, disposal in like for like habitat/sediment, demonstrating full recoverability etc. – All projects since 2016 have included an element of this SEP and DEP Mitigation: Natural England notes that this is no requirement for this mitigation measure within the MCZ. And has not commented further in this document."	Noted.
20	"Standard Best Practice Mitigation: Adoption of the reburial hierarchy with external cable protection being last resort – all protects SEP and DEP Mitigation: Whilst reburial is mentioned in various documents the reburial hierarchy is not. An outline of the process for reburial should be	Section 1.6.5.2 of the **Outline CSCB MCZ CSIMP** [APP-291] includes a protocol for export cable remedial reburial.

ID	Relevant Representation	Applicant Comment
	included with the MCZ Cable Specification, Installation Plan and Monitoring Plan [APP- 291]."	
21	"Standard Best Practice Mitigation: Pre consent undertake a cable burial risk assessment using geotech. data to focus cable protection requirements to areas where cables are likely to be sub-optimally buried e.g. mixed sediment - to apply for a realistic worse-case scenario – All projects since Vanguard SEP and DEP Mitigation: Whilst, the Applicant has undertaken a cable burial study 9.7.1 and 9.7.2 [APP-292 and 293] these are only interim and are reliant on being updated post consent. Therefore, there is no indication of the areas most likely to require cable protection. We advise that more information is required at the consenting stage."	See response at ID 13 of this table.
22	"Standard Best Practice Mitigation: Use of guard vessels and/or advance mapping to avoid sub-optimally buried/surface laid cables negating the need for physical cable protection e.g. Lincs cable in the Wash SEP and DEP Mitigation: Natural England notes that sub-optimally cables of >0.3m are acceptable to the Applicant due to the stiffness of the sediment providing the necessary protection from anchor damage without the need for external cable protection. Natural England welcomes this position."	Noted.
23	"Standard Best Practice Mitigation: Requirement to install cable protection with the minimal footprint e.g. pinning – TWT cable corridors SEP and DEP Mitigation: Natural England notes that concrete/glass reinforced plastic protection covers have been included as an option to reduce the footprint of any cable protection. But this still has similar impacts to concrete mattresses. Therefore, given the Applicant's requirement to bury the cables options to secure surface laid cables have not been considered."	No response required.
24	"Standard Best Practice Mitigation: Requirement to install cable protection with the greatest likely of removal e.g. rock bags. See decommissioning paper. Example Norfolk Projects SEP and DEP Mitigation: Natural England welcomes the inclusion of 9.7.3 [APP-294] cable protection decommissioning plan and notes that only options that have been identified as having the greatest likelihood of successful	The Applicant notes and welcomes this position.

ID	Relevant Representation	Applicant Comment
	removal have been included as part of the plan. Therefore, we advise this mitigation measure has been implemented to be refined post consent."	
25	"Standard Best Practice Mitigation: No use of jack up barges along export cable routes through benthic SACs – Norfolk OWF projects SEP and DEP Mitigation: Natural England advises further consideration of this mitigation measure in the operation and maintenance plan 9.9 [APP-296]"	The Applicant is intending to update the **Outline Offshore O&M Plan** (APP-296) at Deadline 2 to address this point.
26	"Standard Best Practice Mitigation: No cable protection in fisheries byelaw areas to avoid hindering reef recovery, noting that cable may still go through the outskirts of these areas - Norfolk Projects SEP and DEP Mitigation: Natural England notes that there has been no consideration of the potential fisheries bye law areas and potential to hinder the positive environmental outcomes with Cromer Shoal MCZ that they are designed to achieve. We would welcome further consideration of this."	The fisheries byelaw area in the CSCB MCZ covers the majority of the site, including the area covered by the export cable corridor. Therefore, if cable protection is required the Byelaw area will not be able to be avoided. The Byelaw is considered within the cumulative effects Section 9 of the **Stage 1 CSCB MCZ Assessment** [APP-291]. The Byelaw is considered to have a positive effect on the broadscale habitat features by reducing pressures from fishing activities.
27	"Standard Best Practice Mitigation: Designing rock armouring to mirror the structure and function of geogenic reef – advised for Viking Link interconnector SEP and DEP Mitigation: Due to the requirement to remove the cable protection at the time of decommission this is not considered a viable mitigation option for these projects."	No response required.
28	Natural England would welcome more information on how if required (based on the installation technique) sediment will be removed at the exit pit/s, stored and redistributed. And how impacts to surrounding features can be avoided/reduced. We advise that Section 8 of the MCZ Stage I assessment requires more detail and consideration.	Paragraphs 256-267 of ES **Chapter 4 Project Description** [APP-090] describe the HDD process as it relates to the offshore environment. As described at paragraph 262, a jack-up barge vessel with backhoe excavator (Plate 4-16) would be used for the excavations and/or installing any necessary external cable protection. All excavated sea bed sediments will be temporarily stored alongside the works location and within the export cable corridor (i.e. sidecast), prior to being backfilled after cable installation (for a period of up to approximately nine months for SEP and DEP). The sea bed footprint of the deposited material is estimated to be up to approximately 400m^2. Alternatively, the excavated sediment could be stored on a barge.

ID	Relevant Representation	Applicant Comment
29	Natural England notes that secondary scouring needs further consideration in the Stage I MCZ assessment (para. 192, 197 and 209) in relation to impacts to sediment transportation	The limited geographical extent of secondary scour means that the potential impact would be anticipated to be nugatory. Hence, an assessment of secondary scour has not been undertaken. However, the **Offshore IPMP** [APP-297] includes provision for monitoring of secondary scour around scour protection.
8) 5.6.3 Unexploded Ordnance Clearance (UXO) [APP-080]		
30	Natural England welcomes the consideration of ORDTER (2018) when considering the potential size of UXO detonation craters. However, we advise that further information is required in relation to the depth of any crater and the impacts this may have on any subcropping chalk, peat and clay. In particular if chalk, peat/clay or mixed sediment is impacted features are likely to destroyed as part of any explosion. Limited evidence is presented to demonstrate that the structure and function will fully recover. In addition, we advise that impacts from UXO detonations are considered in-combination with Hornsea Project 3.	The Applicant proposes that, since UXO clearance will be subject to a separate marine licence post-consent that any further assessment is reserved until more accurate information on the number, location and type of UXO to be detonated is known which will allow an accurate assessment to be undertaken. It should be noted that the Applicant will liaise with Hornsea Three (and Vattenfall) as UXO and construction programmes are developed and once more certainty around these timeframes is available.
9) 5.6.4 Planting of Native Oysters as MEEB [APP-081]		
31	Whilst Natural England is seeking further specialist input to help provide further advice to help the successful delivery of Oyster restoration at Examination Deadline 1, we advise that we currently have fundamental issues with the chosen location for restoration as shown by the red square in Figure 2.1 [APP-081]. Natural England advises that it is difficult to recreate mixed sediment, but the idea behind the MEEB option is sound i.e. the recreation of mixed sediment/reef epifauna communities in a new location. Natural England highlights the importance of the existing mixed sediment within the Cromer Shoal MCZ. The Cromer Shoal MCZ mixed sediment in this location has several sub features to that of the generic habitat type and there is no current requirement to restore/enhance these habitats. Natural England therefore advises against the placement of clutch and restoration of an Oyster bed in the middle of a mixed sediment area. For this to be considered as additionality we advise that it would be better to	The Applicant has updated the **In-Principle MEEB Plan (Revision B)** (document reference 5.7.1) at Deadline 1 to move the location of the 'initial native oyster restoration site search area' so that it covers an area of coarse as well as mixed sediment which the Applicant trusts will address Natural England's concerns with respect to the proposed location of the native oyster bed. However, please also note the Applicant's response at ID 6 of this table.

ID	Relevant Representation	Applicant Comment
	extend/enhance the area of the mixed sediment on the boundary with impoverished coarse sediment e.g. in the centre of the 'c' shaped mixed sediment area or north/south of the blue rectangle. In relation to the potential loss of coarse sediment within Cromer Shoal MCZ Natural England advises for this designated site only that an Oyster bed in the interface between the two habitat types will not detrimentally impact on the wide-ranging coarse sediment within the Cromer Shoal MCZ.	
10) 5.7.1 Appendix 1 In principle CSCB MCZ MEEB Plan [APP-83]		
32	Natural England advises that regardless of the potential project progression scenarios the size/scale of Oyster Bed is dependent on ecological functionally and therefore will not change.	The Applicant agrees and has proposed a 10,000m^2 reef size in order to provide an ecologically functional self-sustaining reef noting that this provides a greater than 1:5 MEEB ratio.
33	Natural England recognises the time required for ecological functionally to occur and therefore would advise the implementation of Oyster restoration prior to the cable installation but reflecting that it may not be fully delivering. (Para. 93)	The Applicant will endeavour to adhere to the indicative programme in Section 8.7 of the **In-Principle MEEB Plan (Revision B)** (document reference 5.7.1) and as far as possible expedite the restoration works if MEEB is deemed to be required by the Secretary of State.
34	Natural England advises that removal of anthropogenic marine debris will not provide the necessary compensation measure alone, but could form part of a package with something much more substantive or a positive Net Gain option. As with our advice to the Secretary of State (dated 20 January 2022) on Hornsea Project Three it is challenging to demonstrate that this option will offset habitat loss.	Noted. This option would only be considered by the Applicant in consultation with the MEEB Steering Group and following approval by the Secretary of State if oyster bed planting in the MCZ or wind farm sites was deemed not to be feasible.
35	Natural England welcomes the consideration/inclusion of strategic benthic compensation options as a fallback plan/adaptive management (para 60 and APP-084].	Noted.
36	Natural England recommends working with local fishermen to source the clutch as has been done on previous projects (8.4.3.1).	Yes, as noted in Section 8.4.3.2 the Applicant would, as far as possible, seek to use suppliers and partners from within the Norfolk region, providing benefits to local communities.
37	Natural England remains supportive of removing redundant surface laid infrastructure where there is currently no mechanism for removal.	Noted.
11) 6.3.6.3 Sediment Processes Cromer Shoal MCZ [APP-182] and 6.3.6.4 BGS Shallow Geology Assessment [APP-183]		

ID	Relevant Representation	Applicant Comment
38	Natural England notes the age of the data presented in this document and advises that consideration of more recent data included within other documents gives a more holistic characterisation of the site. Including the stable nature of the sediment along the glacial channel.	Noted.
39	Natural England notes that, in some places, sediment veneer is likely to be less than 1m, with 0.3 -1.25m stated at 5.1.2. Natural England advises that impacts to chalk should be avoided either through installation or further external cable protection.	See the Applicant's response at ID 12.
40	Natural England advises that impacts to peat and clay should also be avoided from cable installation and potential cable protection.	Condition 13 (i) of Schedules 10 and 11 and Condition 12 (j) of Schedules 12 and 13 of the **Draft DCO (Revision B)** (document reference 3.1) includes provision for a mitigation scheme for any benthic habitats of conservation, ecological and/or economic importance constituting Annex I reef habitats identified by pre-construction surveys and will be in accordance with the **Offshore In Principle Monitoring Plan** [APP-289]**.** This is the appropriate approach to mitigating impacts on benthic habitats of conservation, ecological and/or economic importance.
13) 9.7 MCZ Cable Specification and monitoring plan [APP-291]		
41	Natural England advises that prior to construction, sign off of this document should be required in consultation with the relevant SNCB	Condition 12(e) of Schedule 12 and 13 **Draft DCO (Revision B)** (document reference 3.1) secures provision for production of CSCB MCZ Cable Specification and Installation Monitoring Plan in accordance with the **Outline CSCB MCZ CSIMP** [APP-291] which is required to be approved by the MMO prior to commencement of the works.
42	Natural England advises that where there is shallow veneer this should be monitored and managed accordingly.	Noted, that Applicant will consider including this within an update to the **Offshore IPMP** [APP-289] when it is updated during the early stages of Examination.
43	Natural England notes that the information included in Figure 2 and supporting text (1.3.1 para.12) doesn't reflect the more detailed information in 6.3.8.5 Figure 14 which we advise is amended given the purpose of this document.	The Applicant agrees and will update Figure 2 of the **Outline CSCB MCZ CSIMP** [APP-291] when it is updated during Examination.

ID	Relevant Representation	Applicant Comment
44	Natural England highlights that the cable installation plan will need to take into consideration potential impacts to other designated sites. For example, potential disturbance/displacement impacts to Annex I Red Throated Diver and possible implications of mitigating impacts to the Greater Wash SPA	The Applicant considers these measures are covered in the **Outline PEMP** [APP-297] and will be included in the final PEMP post-consent.
45	Natural England highlights the need for the implementation of adaptive management measures should monitoring demonstrate the impacts are greater than predicted or unforeseen.	Noted.
46	Natural England advises that monitoring will be required to inform the as yet to be agreed 5 yearly review of the Operations and Maintenance plan.	The approval and implementation of the OOMP is secured by conditions 13(1)(f) and 15(3) in Schedules 10 and 11 and conditions 12(1)(g) and (14(3) of Schedules 12 and 13 of the **Draft DCO (Revision B)** (document reference 3.1). Conditions 13(1)(f) and 14(1)(f) in the relevant DMLs also specify that the OOMP must be resubmitted and reviewed every 3 years therefore ensuring continual review of the position in relation to cable protection and scour protection alongside all other operation and maintenance activities and will enable the MMO to continually review at the appropriate time during operation whether or not a new consent/licence is required for any further deployment of cable protection or scour protection. Any updates to the scour and cable protection details submitted pursuant to condition 13(c)(ii) in Schedules 10 and 11 and condition 12(c)(ii) in Schedules 12 and 13 following cable laying activities would reflect the details contained within the OOMP and the ongoing dialogue with the MMO in respect of the OOMP.
47	Natural England advises that any increase in the footprint of cable protection within the MCZ during the operational phase of the project will require a separate marine licence due to the potential impacts to designated site features which may have changed over time.	The **Outline OOMP (Revision B)** [document reference 9.9] has been updated at Deadline 1 to note that up to 1,800m^2 of external cable protection within the CSCB MCZ has been assessed in the **Stage 1 CSCB MCZ Assessment** [APP-077] and that a new marine licence is potentially required for the installation during operation of external cable protection within the MCZ. However, a new marine licence would only be required in the extremely unlikely event that the area of external cable protection installed exceeds 1,800m^2; or a period of five years has elapsed since the completion of construction.

ID	Relevant Representation	Applicant Comment
		Approval from the MMO will be required prior to the installation of additional external cable protection in different locations. This update has been provided to address the comment within Appendix A of Natural England's Relevant Representation [RR-063]: '*Natural England has concerns about the deployment of scour and cable protection across the entire lifetime of the project and consider that any cable or scour protection required after ten years of operation outside designated site and 5 years within should be secured through a new consent, with appropriate consultation and consideration of relevant environmental considerations.'*
48	Natural England advises that standard best practice to inform the cable burial risk assessment is to undertake geotechnical investigations prior to submission, However, for these projects we advise that the geotechnical and cable installation data from Dudgeon OWF is the best available evidence and we would expect geotechnical data to be collected prior to cable installation to inform the necessary regulatory sign off in consultation with NE	Noted.
49	Natural England would support not using mechanical trenchers/hybrid trenchers from a ecological perspective to reduce impacts	Noted.
12) 8.1 Cable statement [APP-283]		
50	Natural England would welcome the adoption of an integrated system and therefore concurrent development. If the projects are taken forward separately then we would strongly advise the Applicant to commit to installing the cable ducts for both projects when the first project is installed as per East Anglia ONE North and Two, East Anglia ONE and East Anglia Three, and the Norfolk Projects (Vanguard and Boreas). Should this approach be adopted then many of the transmission asset impacts will be significantly reduced.	The Applicant's approach regarding scenarios is as set out in the Scenarios Statement [APP-314].

4.18.8 Appendix H Seascape Landscape and Visual Impact Assessment (SLVIA)

Table 4.18.7 Applicant's comments on Natural England's Offshore Appendix H SLVIA relevant representation

ID	Relevant Representation	Applicant Comment
1	Natural England consider that the effects of SEP and DEP on the statutory purpose of the Norfolk Coast Area of Outstanding Natural Beauty (NCAONB) is a Likely Significant Adverse effect.	The position of Natural England is noted. Paragraph 534 of **ES Chapter 25 Seascape and Visual Impact Assessment** [APP-111] ('SVIA') confirms that the Applicant's assessment of the effects on SEP and DEP on the NCAONB would be of a moderate significance and adverse, and therefore not significant in EIA terms.
2	The NCAONB's ca. 65km coastline is one of the longest stretches of 'remote and wild' coastline in England (QNB 6). Extensive views of SEP and DEP will be available from much of this coastline, which has the highest level of statutory protection. There is also no single approach to assess effects from OWFs on the statutory purpose of designated landscapes. In the absence of this, we find that the SVIA conclusion ''SEP and DEP would not be visible from many areas of the AONB' although factually correct misses the point that the turbines will be highly visible from the coastal portions of the designation.	Figure 25.1 of ES **Chapter 25 SVIA** [see APP-135] shows the extent of the NCAONB. Figures 25.9 (APP-135) and 25.10 [APP-136] of ES **Chapter 25 SVIA** illustrate the Zone of Theoretical Visibility ('ZTV') of SEP and DEP respectively. The extent of the ZTV is not disputed, which is recorded in the Draft Statement of Common Ground between the Applicant and Natural England ('NESoCG') [document reference 12.13]. For the purposes of **ES Chapter 25 SVIA** [APP-111], the NCAONB was divided into three discrete geographical areas, as described in paragraph 229 of the SVIA. As set out in the NESoCG, it is agreed that the central section (which runs along the north Norfolk coast between Hunstanton and Paston) is the area of relevance to the assessment in terms of potentially significant effects on seascape, landscape and/or visual receptors. Figures 1 and 2 [12.3.1 Appendix A], which are submitted with this response, show the potential ZTVs within the extent of the NCAONB at a greater scale, indicating which areas of the NCAONB would or would not potentially experience theoretical visibility of SEP and/ or DEP. As noted above, the extent of the ZTV is not disputed and these figures are submitted only to make it easier to see the extent of the NCAONB and the extent of the ZTV for SEP and/or DEP. The NCAONB extends 4 – 6km inland from the coast and it is agreed between the Applicant and Natural England that the greatest visibility will be from the beaches (which are extensive). However, whilst this

ID	Relevant Representation	Applicant Comment
		position is agreed, parts of this coastline are characterised by areas of extensive marsh, with flood banks curtailing views; or the beaches are backed by extensive dune systems or woodland belts (e.g. Wells to Holkham), which screen views out to sea. The main Norfolk Coast Path, which runs along the coast, is often on the landward side of the marshes, or the woodland belts, meaning extensive areas of foreground marsh, or the tree belts limit or curtail views out to sea. From inland locations, open views are available from higher vantage points where topography and/or vegetation do not obstruct views out to sea. Paragraphs 532 and 533 of **ES Chapter 25 SVIA** [APP-111] have assessed that the extent of SEP and/or DEP's visibility would affect a 'localised' proportion of the overall NCAONB. In SVIA terms, a 'localised extent' is defined as the *"Site and surroundings up to 2km, or part of receptor area (up to approx. 25%)"* [See Table 25-14: Extent of Effect, APP-111]. Therefore, it is reasonable to say that visibility of SEP and/or DEP along the coast (in light of the rationale outlined above) would constitute a comparatively small part of the overall NCAONB. It is agreed there is no single approach to assessing the effects of an Offshore Wind Farm ('OWF') on the statutory purpose of a designated landscape. **ES Chapter 25 SVIA** [APP-111] provides the Applicant's assessment of effects on visibility and seascape character. The submitted document, Impacts on the **Qualities of Natural Beauty (QNB) of Norfolk Coast Area of Outstanding Natural Beauty** [APP-311] provides the Applicant's assessment of the potential impacts on the Qualities of Natural Beauty of the NCAONB. The latter is a discrete assessment, focussing on how the key QNBs of the NCAONB could be affected as a consequence of construction and operation of the SEP and DEP. This is achieved by drawing together the conclusions of relevant assessments (undertaken for the ES) into a single report. It draws upon, where relevant, the assessment of effects on character and views contained within the SVIA. The Applicant's approach was discussed and agreed with the Expert Topic Group ('ETG') stakeholders at ETG Meeting 3 (Part 1 of 2, 02/02/2022).

ID	Relevant Representation	Applicant Comment
		Together, these two documents [APP-111 and APP-311] represent the Applicant's full assessment of effects in line with best practice guidance. Agreement to this approach between Natural England and the Applicant is recorded in NESoCG [document reference 12.13]. Visibility is also only one aspect of the assessment. As noted in the SVIA [APP-111] at paragraphs 96 to 108, visibility will be influenced by the prevailing meteorological conditions. It is reasonable to assume that there would be a finite number of days per annum where the meteorological conditions would provide ideal viewing conditions and visuality to all of the turbines of SEP and/or DEP. Nevertheless, the assessment of potential effects has been made on the basis of a worst-case scenario, which assumes that the proposed SEP and/or DEP turbines would be most visible from within the study area.
3	Natural England agrees that the existing OWFs form a part of the seascape and visual baseline. However Natural England seeks to determine the additional harm that SEP and DEP will present to the statutory purpose of the NCAONB. We advise that a Cumulative Impact Assessment (CIA) should be undertaken to inform the EIA to ensure that the impact of SEP and DEP on the statutory purpose of the NCAONB, in the context of the existing OWFs, can be made. We advise that this is a requirement pursuant of Regulation 14 of the EIA Regulations.	For the purposes of EIA, the scope of the CIA and those projects to be assessed were reported to ETG stakeholders, and in turn, informed the SVIA. No specific schemes were identified, thus a CIA was not required, as reported at paragraph 90 of **ES Chapter 25 SVIA** [APP-111]. The Applicant therefore does not consider further CIA work is necessary in respect of the SVIA. The submitted report, Impacts on the **Qualities of Natural Beauty of Norfolk Coast Area of Outstanding Natural Beauty** [APP-311], sets out the relevant national policy with regard to nationally recognised designations, which includes AONBs. The revised draft NPS EN-3 states at para 2.22.21: *"In sites with nationally recognised designations (SSSIs, National Nature Reserves, National Parks, the Broads, Areas of Outstanding Natural Beauty, Registered Parks and Gardens, and Marine Conservation Zones), consent for renewable energy projects should only be granted where the relevant tests in Sections 5.4 and 5.10 of EN-1 are met and any significant adverse effects on the qualities for which the area has been designated are clearly outweighed by the environmental, social and economic benefits. The Secretary of State should have regard to the aims and goals of the government's 25 Year*

ID	Relevant Representation	Applicant Comment
		Environment Plan and other existing and future measures and targets in England, including under the new strategy for nature." It is agreed with Natural England that the existing OWFs in the vicinity of SEP and DEP (namely Race Bank, Sheringham Shoal and Dudgeon OWFs) form a part of the seascape and visual baseline, which form the basis of the assessments in the SVIA and the assessment of the impacts of the NCAONB's QNBs. With regard to the Natural England's position to seek *"…the additional harm that SEP and DEP will present to the statutory purpose of the NCAONB"*, it is important to note that the NCAONB was designated in 1968, and an assessment of the condition of its 'natural beauty' was undertaken in 1995, at a time when OWFs were not present. The Management Plan Strategy 2014 – 2019 provides an update to the assessment of the QNB, noting recent developments and consents for OWFs have given rise to concerns that the wilderness quality of the seascapes, as noted by local observers, have had a "significant negative impact in respect to QNB 6 (Sense of Remoteness, Tranquillity and Wildness); and an effect on QNB 2 (Strong and Distinctive Links between Land and Sea) and QNB 3 (Diversity and integrity of landscape, seascape and settlement character), albeit the document records the panoramic coastal views and seascapes remain distinctive in character. The latest Management Plan assesses the status of each QNB at the time of the designation and any change since then. QNB 2 was assessed as Green at designation , with a change to Amber due to existing and consented OWFs, i.e. some grounds for concern. QNB 6 was assessed as Amber at the time of designation and was unchanged due to existing and consented OWFs. QNB 3 considers the diversity and integrity of landscape, seascape and settlement character and records the status of the QNB as Amber at designation and at the time of the reassessment. This is due to a number of changes either within or beyond (thus affecting the AONB's setting) including the development of the A149 bypass, settlement expansion, building

ID	Relevant Representation	Applicant Comment
		changes, agricultural reservoirs, onshore wind farms as well as the OWFs. Therefore, APP-311 provides an update on the status as a consequence of SEP and DEP, and no further change is predicted i.e. the addition of SEP and DEP to a baseline of QNBs with OWFs would not change the status of the QNBs to an extent that the QNB would become Red (i.e. the QNB is not being conserved or enhanced). The Applicant therefore does not consider further CIA work is necessary in respect of the assessment of the impacts on QNBs,. Please also see the response to FWQ 1.18.3.1, 1.18.3.2 and 1.18.3.3.
4	The overarching National Policy Statement (NPS) for Energy (EN-1) (paragraph 5.9.9) confirms that decisions to consent SEP and DEP should have regard to the 'specific statutory purposes' of nationally designated landscapes. Natural England advises that SEP and DEP will adversely affect Special Quality 6 of the NCAONB: 'sense of remoteness, tranquillity, and wildness' (QNB 6). People's experience of wilderness within the AONB will be strongly influenced by the presence of the turbines of SEP and DEP in the seascape setting of the NCAONB.	It is agreed with Natural England that QNBs 2,3 and 6 are those which are of most relevant when applying the 'Duty to Regard' to the statutory purposes of the AONB. APP-311 considers all 7 QNBs for completeness. The Applicant is not aware of any specific evidence relating to visitor or resident's experience in North Norfolk which Natural England are referring to. Recent attitude polls to Renewable Energy (including the BEIS Public Attitudes tracker, 15th December 2022) continue to show widespread support to wind energy. The extent of influence on the perception of wildness and tranquillity will vary due to a variety of factors: according to the individual; from positive to benign to adverse; and on the experience on the day as determined by metrological and other conditions.
5	NPS EN-1, paragraph 5.9.9, confirms that the conservation of natural beauty should be given substantial weight in the consenting process. Natural England advises that the NCAONBs Qualities of Natural Beauty (QNBs) 2, 3 and 6 (as described within the NCAONB Management Plan) will not be conserved and enhanced by SEP and DEP and that it will be possible to secure sufficient mitigation to counter this affect.	The position of Natural England is noted. The response at (ID 3) above refers to this; and it is the Applicant's view is that QNBs 2, 3 and 6 will remain Amber in status i.e. some concern. The applicant considers the statutory purpose of the AONB remains, and the overall integrity of the AONB is maintained.
6	Natural England supports in principle the Design Objective 11, which commits SEP and DEP to 'Respond to the distinctive and unique character of the local landscape /	The submitted document, Offshore Design Statement [APP-312] sets out the Applicant's approach to Good Design, in line with NPS EN-1, paragraphs 4.5.1 – 4.5.3.

ID	Relevant Representation	Applicant Comment
	seascape, including the Norfolk Coast AONB and views out to sea', although we are uncertain as to how the design of SEP and DEP meets this objective.	Section 2 of both the **Offshore Design Statement and the Design and Access Statement** (Onshore) [APP-287] lists the Applicant's 12 Design Objectives, which will ensure the project fits sensitively into the local context, mitigating and providing enhancements to community and environment where possible, whilst achieving the requirements of energy production to help meet growing demand for low carbon energy. Paragraph 4.3.3 and Sections 5 and 6 of the Offshore Design Statement set out how this objective has been considered in respect of offshore elements and met throughout the design process, which commenced at the 'Area for Lease' stage. The Examining Authority's attention is drawn to the blue shaded boxes, which include various factors or decisions which directly relate to responding to the AONB and its seascape setting. Similarly, sections 5 and 6 of the Design and Access Statement (Onshore) set out how this objective has been considered in respect of onshore elements, notably at the landfall and along the cable corridor. The blue box on page 50 specifically deals with how the project responds to the AONB's distinctive and unique character. Decisions like placing the cable underground and using trenchless crossing techniques (like HDD) for approximately half the distance the cable crosses the AONB, have placed design principles at their heart and will avoid sensitive landscape features, including woods.
7	Visualisations showing how 53 x 265m high turbines may appear in views from the NCAONB should be used to inform the EIA process.	For the PEIR, additional visualisations (wireframes and photomontages from nine selected representative viewpoint locations) of a larger number of smaller 14MW turbines (at 246m high to blade tip x 54no) were presented in support of the SVIA for information, in addition to the larger 26MW turbines (at 330m high) used to inform to the assessment of potential effects arising from the WCS. Stakeholders have thus had access to visualisations of 53 x 265m during the application process. The SVIA is based on the worst case scenario (WCS), with visualisations provided from all representative viewpoint locations. Additional single frame views were requested by Natural England in

ID	Relevant Representation	Applicant Comment
		their Section 42 response, which were subsequently provided as part of the DCO application. This is documented in the **ES Chapter 25 SVIA** [APP-111] at Section 25.2 within Table 25-1 and recorded the NESoCG [document reference 12.13]. The Applicant considers the visualisations provided as part of **ES Chapter 25 SVIA** are appropriate for the EIA process.
8	Natural England's advice on the sensitivity of the Landscape Character Types within the coastal areas of the NCAONB is in agreement with the North Norfolk Landscape Sensitivity Assessment 2021, but is in disagreement with the judgements made within the ES.	The position of Natural England is noted. The Applicant's assessment of Landscape Character Types' ('LCT') sensitivity can be found at the following paragraphs of **ES Chapter 25 SVIA** [APP-111]: • Drained Coastal Mashes – see paragraph 334. • Coastal Shelf – see paragraph 356. • Open Coastal Marsh – see paragraph 315
9	Natural England remains in disagreement with the Applicant on the scale of effects from SEP and DEP on the statutory purpose of the NCAONB from the agreed representative viewpoints.	The position of Natural England is noted. The Applicant's assessment of the scale of effects from agreed representative viewpoints can be found in Table 25-19: Effects at Representative Viewpoints, on pages 103 to 105 of the **ES Chapter 25 SVIA** [APP-111]. This assessment of the scale of effects has informed the assessment on the statutory purposes of the NCAONB as detailed in Section 25.6.2.4.1 (paragraphs 498 to 542) of the SVIA, and the effects on the QNBs as detailed in Impacts on the Qualities of Natural Beauty of Norfolk Coast Area of Outstanding Natural Beauty (**APP-311**).
10	We draw the examiners attention to our experience from recent Offshore windfarm NSIP examinations, namely East Anglia ONE North and East Anglia TWO, and highlight that due to professional judgements it is unlikely that agreement between Natural England and the Applicant on the significance of the impacts will be reached during the examination process, thereby we are likely to 'agree to differ' in our views.	The position of Natural England is noted. The Applicant is aware of Natural England's response in respect to East Anglia ONE North and East Anglia TWO, and that agreement was not reached between the parties. Natural England considered significant adverse effects on the AONB would result from the schemes which are more than 30km offshore.

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		Regarding SEP and DEP, whilst Natural England consider an 'agree to disagree' position is likely, Natural England's Section 42 response, appended to the Relevant Representation, stated at paragraph 57: "*…there is in fact little difference between the Applicant's judgement and our own*…" suggesting this is simply a matter of a difference in professional judgement and interpretation of the evidence.
11	Natural England considers that the effects of SEP and DEP on the statutory purpose of the NCAONB is a Likely Significant Adverse effect.	See the response at (ID 1) above.
12	Natural England agrees with the conclusion of the SVIA (paragraph 591) that effects on the statutory purpose of the NCAONB will be adverse. Natural England also agrees that the effects of DEP on the statutory purpose of the NCAONB will be of a lesser extent compared to those from SEP. However Natural England disagrees with the impact significance concluded within the SVIA and maintains that the effects are significant and adverse.	See the responses at (ID 1) and (ID 10) above.
	The difference between the Applicant's judgement of impact significance on the NCAONB (medium-low magnitude, moderate-slight significance) and Natural England's judgement of impact significance (medium magnitude and major-moderate significance) has increased since the assessment within the Preliminary Environmental Information Report (PEIR), without any obvious justification from the Applicant to the change in the assessment. The SVIA now concludes a moderate-slight significance of effect on the NCAONB, instead of a moderate effect as reported within the PEIR.	The position of Natural England is noted. The Applicant notes that for the Preliminary Environmental Impact Report ('PEIR'), effects arising on the NCAONB (which balance effects on landscape character and visual amenity) were as follows: • SEP in isolation: medium-low magnitude and moderate significance • DEP in isolation: low-negligible magnitude and moderate-slight significance • SEP and DEP: medium-low magnitude and moderate significance These judgments are the same as presented in ES Chapter 25 SVIA [APP-111] at paragraphs 532 to 534.
13	Natural England welcomes the adjustments made by the Applicant to the indicative layouts of the SEP and DEP array: in particular, the relocation of 1 turbine from the most southerly extend of DEP; and the relocation of 2 turbines from the most southerly extend of SEP. However, we have not seen an appraisal of these changes within the SVIA, and do not agree that this design change is enough to mitigate the impacts to sufficiently decrease the impact significance of SEP and DEP on the NCAONB.	The changes referred to are from the illustrative layout assessed at the PEIR stage, and the application's illustrative layout. The **Offshore Design Statement** [APP-312] (ODS) records the design process (see Section 4.4) and the various technical constraints (see paragraph 6.3.1) and design and layout objectives (see Section 2.2 and 6.2) which influence layout as part of a continuous iterative design process. The design was frozen for the purposes of assessment and the

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		illustrative layout at that point was assessed in the SVIA and illustrated using wirelines and photomontage. A comparison between the wirelines and photomontage provided at PEIR stage and the Application was undertaken and presented to NE at [ETG 3]. This shows how the scheme has improved in visual terms, as noted by Natural England, and as a consequence of the design process, both in terms of reducing the relative height difference of existing and proposed turbines as seen in the view as a consequence of being further from the particular viewpoint, and the arrangement of turbines along the skyline and relative to each other. As noted in the agreement log of the NESoCG, ETG Meeting 3 (Part 1 of 2, 02/02/2022) discussed how the changes to the offshore layout from that presented in the PEIR and acknowledged the amount of work which had been undertaken since ETG Meeting 2. The Applicant acknowledges that the improved illustrative layout submitted with the DCO application does not change the level of effects reported in the SVIA (which is based on the Realistic Worst-Case Scenarios as documented in Section 25.3.2 of **ES Chapter 25 SVIA** [APP-111]) but does demonstrate the Applicant's overall approach to design and follows the deign principles set out int the ODS.
14	We maintain that the overall potential impact from SEP and DEP on the statutory purpose of the NCAONB will be major-moderate, adverse, unacceptable, and significant in EIA terms. Consequently, Natural England believes that SEP and DEP will harm the natural beauty of the NCAONB.	See the response to (ID 1), (ID 2) and (ID 3) above.
15	"This is because: a. The heights of the proposed turbines when viewed from the NCAONB (see Table 3) will be highly apparent and will significantly and adversely degrade the wildness special quality (QNB 6) for which the NCAONB was designated. b. The closest coastlines to the proposed locations of SEP and DEP are within the NCAONB. And the closest coastline to SEP is both within the NCAONB and the North Norfolk Heritage Coast (NNHC); a nationally defined landscape. This area is	The Applicant confirms the following on a point by point basis: a. The Applicant's agrees the height difference will be visible, albeit as set out in detail in the response to ID 2, the extent of visibility would be limited to locations along the coast and inland where views are not screened by intervening landscape features. In addition, existing views also include views of existing OWFs. APP-311 concludes, as set out in more detail in the response to (ID 3) above, that no further change is predicted i.e. the addition

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	particularly sensitive to wind energy infrastructure, and the area's special qualities which specifically relate to the coast and seascape. c. The marked contrast in apparent height between the proposed turbines of SEP and DEP and the existing Offshore Wind Farms (OWFs) (Sheringham Shoal, Race Bank and Dudgeon) will further, significantly and adversely degrade the quality of views out to sea from the NCAONB. Specifically, the marked contrasts in turbine heights will create a visually cluttered, confusing and incoherent seascape when viewed from many coastal locations within the NCAONB and NNHC. d. The visualisations provided show a clear 'curtaining' effect when SEP and DEP are viewed from the NCAONB. This effect is created by the apparent joining together of SEP and DEP with existing OWFs and is particularly apparent from the westernmost viewpoints along the NCAONB coastline. e. The contrast in turbine heights between the proposed and existing arrays, combined with the apparent 'curtaining' effect will degrade the perception of wildness, remoteness, and tranquillity (QNB 6) that users of the NCAONB experience. f. As set out in our S42 response, Natural England's advice is that the Sheringham Shoal array has already compromised the statutory purpose of the NCAONB, with the Race Bank and Dudgeon arrays compounding the visual impact of Sheringham Shoal. The ES should provide a sufficient evidence to assist the ExA is determining whether or not SEP and DEP will further compromise the statutory purpose of the NCAONB. Natural England does not find a clear narrative for this within the SVIA. g. Natural England also advises that the SEP and DEP project will further erode the sense of wilderness that is characteristic of the coastal areas of the NCAONB (QNB 6) and recommends that it is the responsibility of the Applicant to clearly inform on the additional impact that SEP and DEP will have on the statutory purpose of the NCAONB. h. The NCAONB Management Plan 2014-2019 states that 'The wilderness character of seascapes on a large proportion of the undeveloped coast, principally the North Norfolk Heritage Coast, has been adversely affected by the development of offshore wind farms'. We advise that it would be impossible for SEP and DEP to not present	of SEP and DEP to the baseline would not change the status of the QNBs to an extent that the QNB would become Red (i.e. the QNB is not being conserved or enhanced). The Applicant therefore disagrees with Natural England that SEP and/or DEP would "*significantly and adversely degrade"* QNB 6. The QNB's of the NCAONB are documented in the Management Plan Strategy 2014- 2019. QNBs relevant to seascape, landscape and visual matters are described in general terms in the third, fourth and fifth paragraphs of this section of the Management Plan (see page 15). The Management Plan sets out how the character of the NCAONB is "…*very varied in character, containing a wide variety of landscapes, seascapes and locally distinctive features…"* and that the *"…sea provides a unifying theme, with the variety and interrelationship of dynamic coastal features…".* The Management Plan states that *"…the links between land and sea are an essential part of its unique character", and visually, the NCAONB has "…panoramic and spectacular views…", which "…all give an impression of wildness and the dominance of the forces of nature…".* Areas inland are described with "*perceived qualities of relative remoteness and tranquillity…"* and at night, *"…the area is noted for the quality of its night skies, the relative lack of artificial lighting away from main roads and towns providing fine views of constellations and occasionally the northern lights."* Having set the scene as to what makes the NCAONB a 'Special Place', the Management Plan defines the NCAONB's QNBs and assesses their status. As referred to in response (ID 3) above, the Management Plan refers to offshore windfarms as a concern in respect to QNBs 2,3 and 6. The Applicant is not aware of any specific study which concludes that the area is particularly sensitive to wind energy. The Applicant's view is that the QNBs 2, 3 and 6 remain Amber as stated in response (ID 3) above. b. The visualisations provided in the Application illustrate how the turbines will appear on the horizon, including their relative height in comparison to existing turbines, based on the illustrative layout

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	a further and significant impact on the special qualities of the NCAONB yet the SVIA conclusions does not reflect this."	at the time of the application. Prior to that, a presentation demonstrating the design process, factors which affect how a layout might be perceived in a view, and how the scheme had visually improved since the PEIR stage was made at the second ETG meeting ('ETG 2'). The changes made by the Applicant were recognised by Natural England at ETG 2, and are confirmed in the NESoCG [document reference 12.13], which recorded the improvements made with respect to spread and coherence. The Applicant has considered in detail layout and in particular coherence when preparing its **Offshore Design Statement** [APP-312]. Layout will be controlled by the layout commitments (set out in Section 6.2 of **APP-312**), and whilst the technical, economic and safety requirements will take precedent in refining the final layout, other considerations, guided by the Project Vision and Design Objectives, may include the potential effects upon seascape, landscape and visual receptors. Where practicable, noting MGN 654 requirements and the Layout Commitments (see Section 6.2), the Applicant would seek to produce a layout which achieves the following objectives: • Produce visually balanced and coherent layout of turbines when seen from key viewpoints, demonstrating a good rhythm, spacing; • Achieve an appropriate scale in terms of distribution of turbines in relation to the coastal topography; • Achieve simple visual relationship with skyline, avoiding variable spacing and overlapping of turbines within an array or significant outliers; and • Achieve satisfactory visual relationship (balanced, ordered, coherent and clearly legible) with existing arrays layout The design process will deliver a scheme which does respond to the special and unique character of the NCAONB, and is

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		balanced, ordered, coherent and clearly legible as far as is practicable. c. The Applicant refers the Examining Authority to the illustrative wirelines and photomontages [see APP-138 to APP-152]. . The Applicant considers the sheer breadth of the Norfolk seascape horizons will remain readily apparent and dominant in the view. Windfarms will be apparent as discrete features on the horizon, with significant gaps between and to the side, which will vary depending on the viewpoint. The Examining Authority's attention is drawn to the 1km separation distance to the existing arrays and the minimum 5km separation distance with Race Bank, referred to in **APP-311**. There will not be a continuous band of windfarms joining with each other (i.e. 'curtaining') as shown by the visualisations [see see APP-138 to APP-152] . Whilst the angle of view is relevant when considering how schemes interact with each other visually, views are mostly perpendicular and northward from the coast, thus east west gaps are readily appreciated. d. See the responses to (c) and (d) above. e. See the responses to (ID 2), (ID 3) and (ID 4) above. f. See the response to (ID 3) above. g. The baseline for the SVIA includes existing built schemes. How the SEP and DEP 'combine' with the existing schemes, in terms of the visual appearance and character effects of larger and more spread out turbines being added into the view of existing rows of smaller turbines is the subject of ES Chapter 25 SVIA. See the response to (ID 3) above for a more detailed response. , The Applicant notes Natural England do not provide specific evidence to justify their position.
16	The NCAONB's ca. 65km coastline is one of the longest stretches of 'remote and wild' coastline in England (QNB 6). Extensive views of SEP and DEP will be	See the response to (ID 2) above.

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	available from much of this coastline, which has the highest level of statutory protection. There is also no single approach to assess effects from OWFs on the statutory purpose of designated landscapes. In the absence of this, we find that the SVIA conclusion 'SEP and DEP would not be visible from many areas of the AONB' although factually correct misses the point that the turbines will be highly visible from the coastal portions of the designation.	
17	"We advise this because: a. Paragraph 76 of the SLVIA implies that the Landscape Institute's core guidance (GLVIA3, paragraph 3.35) provides a threshold of impact significance in EIA terms; and that this threshold sits above 'moderate significance'. However, as stated in paragraph 3.32 of the GLVIA3 this significance rating has no meaning in relation to the EIA Regulations. b. There is no single approach to assessing the effects of OWFs on the statutory purpose of designated landscapes, and the GLIVIA3 does not provide a lead on this subject. c. While we agree with paragraph 125 of the SEP and DEP SLVIA, which confirms that the visibility of SEP and DEP 'on-the-ground would be primarily contained within the broad area of landscape that arises… between Old Hunstanton…and Cromer… and a narrower strip of land along coastline between Cromer and Winterton-On-Sea'; and with paragraph 129 of the SVIA which confirms that 'Exceptions to this are small areas…'. We would like to emphasise that the stretch of coastline belonging to the NCAONB is ca. 65km long and contains many of the features and special qualities which merited the area's designation as an AONB. d. While the conclusion made in paragraph 591 that 'SEP and DEP would not be visible from many areas of the AONB' is correct, it is also correct that extensive views of SEP and DEP will be available from the majority of the NCAONB coastline. e. Further to point (b), the conclusion of the SVIA, a conclusion of only five sentences that 'SEP and DEP would not be visible from many areas of the AONB' could suggest that the impacts on seascape, landscape and visual resources will be minimal, and could be misleading to a non-landscape specialist trying to understand the assessment.	The Applicant confirms the following on a point by point basis: a. The Applicant disagrees. This paragraph is taken from the Applicant's consultant's standard methodology which has been examined on countless occasions at Public Inquiries and accepted by Inspectors as an appropriate approach. b. The Applicant agrees with this comment. The adopted approach as detailed in **APP-311** was discussed at the ETG meetings and agreed, as documented in documented in the **ES Chapter 25 SVIA** [APP-111] at Section 25.2 within Table 25-1, and recorded the NESoCG [document reference 12.13] c. See the response to (ID 2) above. d. See the response to (ID 2) above. e. See the response to (ID 2) above. f. See the response to (ID 13) above.

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	f. As written in Point 1) of this response, the Applicant's professional judgement of impact significance on the NCAONB has decreased since the assessment within the PEIR without any obvious justification from the Applicant."	
18	Natural England agrees that the existing OWFs form a part of the seascape and visual baseline. However Natural England seeks to determine the additional harm that SEP and DEP will present to the statutory purpose of the NCAONB. We advise that a Cumulative Impact Assessment (CIA) should be undertaken to inform the EIA to ensure that the impact of SEP and DEP on the statutory purpose of the NCAONB, in the context of the existing OWFs, can be made. We advise that this is a requirement pursuant of Regulation 14 of the EIA Regulations.	See the response to (ID 3) above.
19	We advise that the statutory purpose of the NCAONB is already compromised (see Natural England's S42 comments) and SEP and DEP will comprise it further. It is critical that the additional impact that SEP and DEP may have on the statutory purpose of the NCAONB is understood. It is also critical that this impact is assessed independently of impacts from SEP and DEP to the wider landscape, seascape and visual resource. We advise that by doing this, the policy contained in paragraph 5.9.12 of NPS EN-1 which seeks to 'avoid compromising the purposes of designation' can be better considered.	See the response to (ID 3) above.
20	"We advise this because: a. PINS Advice note seven, paragraph 9.6, states that 'Regulation 14 of the EIA Regulations 2017 also identifies that the ES must include the information reasonably required for reaching a reasoned conclusion on the significant environmental effects'. We advise that the full impact of SEP and DEP on the NCAONB cannot be understood without conducting a CIA. We advise that the Applicant should inform the EIA process with an answer to the question 'what is the additional harm to the AONB from the turbines proposed by SEP and DEP?' in the format of a CIA. This is a separate assessment to the in-combination assessment of the SEP and DEP projects alone and together, already contained within the SVIA. b. A CIA is essential part of assessing the impact of SEP and DEP on the statutory purpose of the NCAONB as it will a combination of arrays is what people are going to see when looking out from the NCAONB if the turbines of SEP and DEP are erected. NPS EN-1, paragraph 4.2.5, states that 'When considering cumulative effects, the ES should provide information on how the effects of the Applicant's	The Applicant confirms the following on a point by point basis: a. See the response to (ID 3) above. b. See the response to (ID 3) above. c. The Applicant agrees that the matter was discussed, and that text would be developed in respect of a comparison. The description of the baseline (which includes existing OWFs), and baseline photographs, along with the description of development, and the full assessment of effects in ES Chapter 25 SVIA [APP-111] make the differences clear and is in line with best practice guidance. A specific request for a CIA in the manner now described was not made, nor was referenced in the PEIR response. d. The Applicant considers paragraph 90 of the SVIA [APP-111] to be clear. There were, and are still, no other schemes within the

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	proposal would combine and interact with the effects of other development (including projects for which consent has been sought or granted, as well as those already in existence)'. c. In the Expert Topic Group (ETG) meeting held by the Applicant on 01 July 2021, Natural England raised the issue of the height discernibility between SEP and DEP and the existing arrays and noted that a CIA is required to fully consider impacts from SEP and DEP on the statutory purpose of the NCAONB. d. Currently, the SVIA states that a CIA is not required (paragraph 90) but it does not provide a reason for this. Consequently, the current SVIA uses the existing and significant harm to the NCAONB (from the existing arrays) to rationalise the scale of effect from SEP and DEP on the NCAONB to a moderate impact significance for SEP and moderate-slight impact significance for DEP. Natural England fundamentally disagrees with this approach and the resulting conclusion. e. Despite a CIA not being undertaken for the SVIA, paragraph 85 of the SVIA confuses matters by indicating that the CIA is a live document, which only considers whether the 'residual impacts assessed for DEP and/or SEP on their own have the potential to contribute to a cumulative assessment'. As described in Point 3 (a) and (b), this is not the type of assessment that is required. We note that paragraph 92 of the EIA Methodology states that 'The list of plans or projects included in the CIA is specific to each topic and is detailed in each technical chapter (Chapters 6 – 29), having been developed through ongoing consultation with stakeholders.' As indicated in point (c) Natural England have already raised the need for a CIA to accompany the SVIA in Chapter 25. f. The visualisations appended to ES Chapter 25 represent SEP and DEP in the context of the existing arrays. These visualisations should be used to develop conclusions as to how the compounding of visual impacts effects of these multiple arrays will affect the statutory purpose of the NCAONB. We advise that the key policy test is the further harm to the seascape setting of the NCAONB and the consequences that this has on the already compromised statutory purpose of the NCAONB. g. The Applicant agreed to supply text at the ETG meeting on 2nd February 2022 detailing a comparison between SEP and DEP and other consented arrays visible from the NCAONB. We note that this document is not part of ES, yet as our S42	study area that are in the planning system, and which would trigger the need for a CIA. e. See the response to (ID 3) above. f. See the response to (ID 9) above. g. As per the response to (ID 20 (c)) above, the Applicant agrees that the matter was discussed and that text would be developed in respect of a comparison. However, the Applicant considers that the description of the baseline (which includes existing OWFs), and baseline photographs, along with the description of development, and the full assessment of effects in **ES Chapter 25 SVIA** [APP-111] make the differences clear and is in line with best practice guidance.

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	response advises, such a document should be included as part of the determination process to assist the ExA and the decision maker."	
21	The overarching National Policy Statement (NPS) for Energy (EN-1) (paragraph 5.9.9) confirms that decisions to consent SEP and DEP should have regard to the 'specific statutory purposes' of nationally designated landscapes. Natural England advises that SEP and DEP will adversely affect special quality 6 of the NCAONB: 'sense of remoteness, tranquillity, and wildness' (QNB 6). People's experience of wilderness within the AONB will be strongly influenced by the presence of the turbines of SEP and DEP in the seascape setting of the NCAONB.	See the response at (4) above.
22	"We advise this because: a. Natural England considers that QNB 6, sense of remoteness, tranquillity, and wildness, is the key landscape characteristic and a key quality of the coastal landscapes of the NCAONB. Natural England remains in agreement that special qualities QNBs 2, 3 and 6 (as described in the NCAONB Management Plan 2014-2019) are of most relevance to the SVIA. b. Natural England disagrees with the assessment of QNB 6 in paragraph 509 of the SLVIA. i. Adverse effects of the existing OWFs on the wildness character of the NCAONB, and specifically within the North Norfolk Heritage Coast is already reported within the NCAONB Management Plan. ii. SEP and DEP will add larger turbines into the seascape setting of the NCAONB, which will cause a further, and significant loss to QNB 6. iii. The visual receptors of SEP and DEP are people within the NCAONB that will experience a significant loss of sense of remoteness, tranquillity, and wildness. The assessment of QNB 6 does not specify the user groups impacted, who are usually experiencing QNB 6 when conducting recreational activities in the NCAONB. Natural England's S42 response details the visual receptor groups of most importance to consider within an SVIA. iv. As the receptors of visual effects from SEP and DEP are the people using the NCAONB, they would be directly affected by any loss in remoteness, tranquillity, and wildness.	The Applicant confirms the following on a point by point basis: a. See the responses to (ID 3) and (ID 2) above. b. See the responses to (ID 3) and (ID 2) above. c. See the responses to (ID 3) and (ID 2) above. d. i. To clarify, the existing turbine lighting is visible as illustrated by the night time baseline photos shown at Viewpoints 1 Wells-next-the-Sea [APP-138], 4 Incleborough Hill [APP-141] and 6 Trimingham [APP-143], manifest as red 'dots' of light on the horizon. Further lights will be added, marginally higher above the horizon by SEP and DEP. The Applicant considers there will be no meaningful additional sky glow, in the manner witnessed on shore in respect to settlements, with the effects best represented by ES Chapter SVIA's photomontages [APP-138 to APP-152]. The Applicant notes that paragraphs 529 to 531 of the SVIA [APP-111] should be read together; and are consistent with paragraph 38 of Document 9.25 (Impacts on the QNB of Norfolk Coast AONB [APP-311]). ii. The Light Pollution Planning Practice Guidance, paragraph 003 is aimed primarily at land-based developments where glare and sky glow are often experienced at close proximity in settled areas. An OWF is some way off the coast, so this planning guidance should be given limited weight. Wind turbine generators have to

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	c. The statement in paragraph 522, 531 (and other instances) of the SLVIA that 'Offshore wind farms are, however, already visible from the AONB…' does not justify the further loss of a sense of remoteness, tranquillity, and wildness from SEP and DEP. d. Natural England are unclear about what 'Dark skies would be affected to a degree' means (paragraph 529 of the SVIA). Second, it is not certain how much 'skyglow' SEP and DEP will create. We note that there are already considerable night-time lighting effects arising from with the Sheringham Shoal array and that SEP and DEP will only add to this. i. Document 9.25 states that SEP and DEP will 'would not create any additional skyglow' but paragraph 529 of the SVIA states that 'Dark skies would be affected to a degree'. ii. We note that the Light Pollution Planning Practice Guidance, paragraph 003, states that 'Lighting near or above the horizontal is usually to be avoided to reduce glare and sky glow (the brightening of the night sky)', and we note that the SEP and DEP site is on the horizon when viewed from the NCAONB. e. Natural England is concerned that the three night-time visualisations indicate a wide expanse of light across the horizon with no clear breaks. For instance as seen in the photomontages for Wells-next-to-the-Sea (in Figure 25.21); Trimingham (Figure 25.26); and at Incleborough Hill (Figure 25.24) where the pattern of lights appears particularly cluttered. We agree with some parts of paragraph 251 of the SVIA: that the spread and increased height of lighting 'would be more noticeable'; and that the spread of lighting across the view would be a visual issue. f. Natural England does not understand the meaning of paragraph 252 of the SVIA, which states that 'only where it has been judged that there would be a difference between day-time and night-time views has this been noted within the assessment'. We advise that day and night views are fundamentally different, not least because visual perception at night is dictated by lights and illuminations rather than distance, with the perception of latter being radically altered at night."	have lighting for marine and aviation safety reasons, and the standard, type and location of the lighting is determined by the appropriate authorities and designed to meet its purpose whilst reducing light pollution wherever possible. e. Natural England's position is noted. f. The Applicant considers that paragraph 252 of ES Chapter 25 SVIA [APP-111] is self explanatory. The SVIA provides an assessment of night time views, illustrated by selected photomontage, which are presented in the following documents: • **APP-138** – Viewpoint 1 Wells-next-the-Sea • **APP-141** – Viewpoint 4 Incleborough Hill • **APP-143** – Viewpoint 6 Trimingham
23	NPS EN-1, paragraph 5.9.9, confirms that the conservation of natural beauty should be given substantial weight in the consenting process. Natural England advises that the NCAONBs Qualities of Natural Beauty (QNBs) 2, 3 and 6 (as described within	See the response to (ID 5) above.

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	the NCAONB Management Plan) will not be conserved and enhanced by SEP and DEP and that it will be possible to secure sufficient mitigation to counter this affect.	
24	"Within the SVIA and Document 9.25, too much emphasis has been placed on the wording within section 3.2 of the NCAONB Management Plan that reports an impact from wind farms on the wilderness quality of QNB 2. Please note that the NCAONB Management Plan is 'primarily for use by the members of the Norfolk Coast Partnership to inform, guide and influence their activities within the area'. Natural England's advice is that SEP and DEP should be judged on the additional impact it would have upon the statutory purpose of the NCAONB. As stated in our S42 response, Natural England believes that the Sheringham Shoal array has already compromised the statutory purpose of the NCAONB. The addition of SEP and DEP into the seascape of the NCAONB can only further degrade the quality of the setting and by extension the NCAONB. It is stated (pages 14 and 15 of Document 9.25) that 'additional wind turbines into seascape views which would be discernibly larger and more widely spaced compared to the existing offshore wind turbines, increase the spread of wind turbines across views, and introduce additional lighting at night'. Natural England queries how the addition of much larger turbines, with a greater spread across the seascape, and with additional lighting would allow the assessment of QNB 2 to remain Amber i.e., 'some grounds for concern that the quality is not being conserved and enhanced'. Particularly since the 2012 assessment of special qualities undertaken by the Norfolk Coast Partnership, upon completion of the Sheringham Shoal, array already determined an Amber status of QNB 2."	See the response to (ID 3) above.
25	See section 4 of this response for detailed comments on the direct impact of SEP and DEP on QNB 6. People's experience of wilderness within the AONB will be significantly influenced by views out to SEP and DEP in the seascape setting of the NCAONB.	See the response to (ID 4) above.
26	"We advise this because: a. Natural England acknowledges the changes made to the layout of the indicative turbine locations since the consultation on the PEIR. Whist we welcome these changes we still advise that significant adverse effects persist.	The Applicant confirms the following on a point by point basis: a. The position of Natural England is noted. b. To clarify, Section 3.3.5 of the Offshore Design Statement [APP-312] refers to indirect effects in that the offshore arrays are located in the seascape setting of the AONB, rather than within the

ID	Relevant Representation	Applicant Comment
	b. Natural England disagrees with section 3.3.5 of the Design Statement (Document 9.26), which reports that the NCAONB 'will not be directly impacted by the proposed offshore arrays' as no evidence has been provided to support this statement. We would also like to clarify that SEP and DEP would be visible to the human eye between the shoreline (low water mark) and 1km from the shoreline as the montages for the inland viewpoints located within the NCAONB (well beyond 1km from the shoreland) clearly show the turbines of SEP and DEP. c. In section 5.3 of the Design Statement, states that 'The Sheringham Shoal OWF Visual Impact Assessment showed that the wind farm is potentially visible from the North Norfolk coast between Brancaster in the west and Walcott in the east'. This statement is now redundant as the Sheringham Shoal OWF is visible from multiple locations on the North Norfolk coast, and its visibility is highly apparent in the SVIA visualisations. We fail therefore to see the relevance of this statement and for its inclusion in the SEP and DEP ES. d. We note that 'a minimum spacing of 1 nautical mile [blade] tip to tip will be maintained between the turbines of the nearest operational wind farm and the turbines of SEP and DEP". Natural England advise that clear separation distance should be maintained between SEP and DEP and existing arrays when viewed from the NCAONB to help conserve QNB 2, 'panoramic coastal views and seascapes'. We welcome paragraph 32 of the SVIA which states that the design will maximise the gap between SEP and the Race Bank OWF. We are however confused by paragraph 129 of the SVIA, which makes it clear that there are only a few small areas inland where Race Bank could theoretically be visible on its own and fail to see the relevance of this statement. e. We note that the turbines 'will be arranged in straight lines along the perimeter where practically possible'. It would be helpful to understand whether this layout has been used in the photomontages. f. Natural England supports, in principle, the layout objectives described in section 6.3.4 of the Design Statement (Document 9.26). Table 2 details our further comments on the layout of SEP and DEP."	designated area. See the response to (ID 2) above regarding visibility. However, the Applicant agrees that views of turbines will be available between the shoreline and within 1 km from the low water mark (the NCAONB's northern boundary), where vegetation, dunes, floodbanks or topography does not screen seaward views. c. Natural England refers to Section 5.3 of the Offshore Design Statement [APP-312], however the quote relates to Section 5.4. Section 5.4 concerns the decisions made in respect to Sheringham Shoal OWF by the Applicant when submitting a bid to extend Sheringham Shoal and Dudgeon Wind Farms. Informed by the effects of Sheringham Shoal OFW on the nearest coastal receptors and recognising the potential for landscape and visual impacts from an extension closer to the coast, a decision was made to limit the Area for Lease to avoid extending the windfarm south and closer to the coast. This is consistent with the Project Objective 11, referred to within the response to (ID 6) above. d. The Applicant's view is the panoramic coastal views and seascapes will be maintained, and the strong and distinctive links between land and sea will remain (QNB 2), as set out in paragraph 25 of APP-311. e. Figures 25.9 to 25.20, which support ES Chapter 25 SVIA [APP-111], illustrate the ZTVs of SEP and DEP based on illustrative layouts. The same illustrative layouts were used as the basis for generating the wirelines and photomontages, which are present in **APP-138** to **APP-152**. The western, northern and eastern boundaries of SEP, the western and northern boundaries of DEP North and the western boundary of DEP South all demonstrate turbines arranged in straight lines. f. The Applicant notes the support (in principle) by Natural England to all the Design Layout Objectives referred to in the Offshore Design Statement [APP-312].

ID	Relevant Representation	Applicant Comment
27	"Layout objective: Produce visually balanced and coherent layout of turbines when seen from key viewpoints, demonstrating a good rhythm, spacing Natural England Comment: We support this objective. While we understand (paragraph 33 of the SVIA) that it is not possible for the Applicant to confirm the actual layout at this stage it would be useful for the Applicant to provide a commentary on why the indicative turbine locations have changed, and whether these changes can be formalised within the design at this stage."	Natural England has noted the improvements to date – see the response to (ID 15 (c)) above, which reflects a desire to ensure outlying turbines are avoided from viewpoints identified by Natural England as 'key'; and that there is a 'rhythm' to the proposed turbine's spacing, such that the extensions of SEP and/or DEP are as visually 'balanced' as possible. The Offshore Design Statement [APP-312] records the design process and decisions made to inform the illustrative layout upon which the application was based on, albeit as determined by the Project Parameters described in ES Chapter 4 (**APP-090**). Section 6 of the Offshore Design Statement set outs various layout commitments which will be secured through the deemed marine licences (condition 13(1)(a) of Schedules 10 and 11 and condition 12(1)(a) of Schedules 12 and 13). Section 6.3 sets out the process for finalising the layout, which will include measures to produce the optimum design in visual terms, when viewed from the shore and inland locations. The Project Vison [APP-313] sets out at the highest company level a commitment to achieve a safe, high value and low carbon project, which, inter alia, responds to the distinctive and unique character of the local landscape/seascape, including the NCAONB and views out to sea. This commitment has flowed through the design process and will continue following consent, if granted, into the detail design and implementation stages, guided by the Offshore Design Statement [APP-312] and the Project Vision [APP-313].
28	"Layout objective: Achieve an appropriate scale in terms of distribution of turbines in relation to the coastal topography Natural England Comment: We support this objective, although note that the difference in height between the existing arrays (to blade tip height; 132m for Sheringham Shoal, 187m for Dudgeon and 265-330m for SEP and DEP) will in	The Applicant accepts that the turbines will appear larger than the existing OWF given their greater height, and their approximate co-location as extensions, meaning distance away from coastal viewpoints would not negate the effect of the increased height. This layout objective seeks to ensure the lateral spread is minimised as far as possible given the alignment of the coast means views are

ID	Relevant Representation	Applicant Comment
	practice make this very difficult to achieve. Therefore, Natural England is unclear as to how this objective will achieved."	northwards, and thus the east west spread of the turbines and their relationship with existing arrays has a role to play in the scale of effects.
29	"Layout objective: Achieve simple visual relationship with skyline, avoiding variable spacing and overlapping of turbines within an array or significant outliers Natural England Comment: We support this objective, although note that this will be a difficult objective to achieve due to the extensive length of coastline from which the SEP and DEP will be visible (upwards of 65km). Natural England is unclear where the SVIA reports on this objective with respect to the visualisations provided within the ES, or whether the Applicant considers this objective met, and if so, how?"	The design process has used certain 'key' viewpoints to test and shape design iterations. These viewpoints were agreed with members of the ETG and coincide with those viewpoints Natural England requested single frame views to be provided from. The 'key viewpoint location are representative of the central section of the NCAONB and Heritage Coast locations. The nature of the view and how existing windfarms and SEP and/or DEP appear in the view clearly change as one moves around the coast. This is best demonstrated by the existing OFWs which are arranged in rows – sometimes all the turbines are aligned with clear gaps between the rows; at other times, a continuous spread is apparent across the part of the horizon occupied by turbines. Given the numerous objectives, constraints and technical factors which will determine the final layout, the Applicant considers this objective has been met as far as possible. However, the Applicant acknowledges that there is potential for improvement when final layouts are determined, subject to the technical, economic and safety requirements of the Projects which will take precedent in refining the final layout, as set out in Section 6.3.4 in the Offshore Design Statement [APP-312].
30	"Layout objective: Achieve satisfactory visual relationship (balanced, ordered, coherent and clearly legible) with existing arrays. Natural England Comment: We support this objective, although note that the difference in height between the existing arrays and those of SEP and DEP will in practice make this very difficult to achieve. Natural England is unclear where the SVIA reports on this objective with respect to the visualisations provided within the ES, or whether the Applicant considers this objective met, and if so, how?"	See the responses to (ID 28), (ID 29) and (ID 30) above. The Applicant considers this objective has been met as far as possible, albeit there is potential for improvement when final layouts are determined, subject to the technical, economic and safety requirements of the projects which will take precedent in refining the final layout as set out in Section 6.3.4 in the Offshore Design Statement [APP-312].

ID	Relevant Representation	Applicant Comment
31	Visualisations showing how 53 265m high turbines may appear in views from the NCAONB should be used to inform the EIA process.	See the response to (ID 7) above.
32	Worst Case Scenario 2 (30 x 330m turbines) is considered by the Applicant to constitute the most harm to the NCAONB, compared with Worst Case Scenario 1 (53 x 265m turbines). We agree with this conclusion.	No response required.
33	Natural England's advises that the impact to the statutory purpose of the NCAONB, should 53 turbines be constructed, needs to be understood and its likely effect on the NCAONB assessed. The 265m turbines would still be significantly taller than the surrounding OWFs, and the extra 23 turbines would likely create a highly perceptible increased in horizonal spread of the combined arrays from sensitive viewpoints within the NCAONB. Consequently, the impact of Worst Case Scenario 1 has the potential to be as harmful to the NCAONB's statutory purpose as the impact of Worst Case Scenario 2. Further, a scenario with turbines of heights between 256 to 330m, and of a number between 30 and 53, may also constitute a further Worst Case Scenario. However, we advise that visualisations of Worst Case Scenario 2 should inform the decision making process.	It is an agreed position that 30 x 330m high turbines represents the WCS for the SVIA, which as stated in ES Chapter 25 SVIA [APP-111] Section 25.3.2.1 General Approach, provides a *"…a precautionary but robust impact assessment at this stage of the development process…"* and the use of the realistic worst-case scenario for each individual impact can safely assume that *"…all lesser options will have less impact."* The illustrative layouts are shown on the ZTV figures [see APP-135 and APP-136] as explained above in the response to (26 (e)). It can be seen that turbines are generally located at the edge or near to the edges of the Order Limits. Should smaller turbines be used, the Order Limits mean that the schemes could not extend the lateral spread any further. The density of turbines would increase as there would be more turbines in the same horizontal width, giving the possibility of a less coherent design given the technical challenges. Not with standing this, the increased heights of the 330m turbine (from the existing turbines) would contrast with the existing turbines. This was the determining factor in agreeing the WCS, as explained in paragraphs 16 to 24 of ES Chapter 25 SVIA [APP-111]. For the PEIR, additional visualisations (wireframes and photomontages from nine selected representative viewpoint locations) of a larger number of smaller 14MW turbines (at 246m high to blade tip x 54no) were presented in support of the SVIA for information, in addition to the larger 26MW turbines (at 330m high) used to inform to the assessment of potential effects arising from the WCS. Stakeholders have thus had access to visualisations of 53 x 265m during the application process. The SVIA is based on the WCS, with visualisations provided from all representative viewpoint locations. Additional single frame views where

ID	Relevant Representation	Applicant Comment
		as requested by Natural England in their Section 42 response, which were subsequently provided as part of the DCO application. This is documented in the ES Chapter 25 SVIA [APP-111] at Section 25.2 within Table 25-1 and recorded the NESoCG [document reference 12.13]. The Applicant considers the visualisations provided as part of ES Chapter 25 the SVIA are appropriate for the EIA process.
34	"We advise this because: a. We note that the Project Description (Chapter 4, section 4.1) states that 'Chapters 6 to 29 should be referred to for details of the worst-case scenarios that apply to each assessment topic'. We also note that paragraph 21 of Chapter 25 indicates that the project parameters that define Worst Case Scenario 2 were used to draw the ZTV and visuals appended to the SVIA. We agree with the Applicant that Worst Case Scenario 2 is the most realistic worst-case scenario due to the technology likely to be available at the proposed time of construction. However, we advise that a greater number of smaller turbines, up to 53 turbines of 265m, would still result in a significant adverse effect on the statutory purpose of the NCAONB. (i) There remains a significant height difference between the minimum turbine height of 265m, and the current blade to tip heights of the Sheringham Shoal array (134m) and the Dudgeon array (187m). (ii) There remains significant scope within the project parameters to vary the number of turbines within the final design between 30 to 53. The SVIA is written as if the overall design will sit in agreement with Worst Case Scenario 2. However, since the EIA is being developed using the Rochdale Envelope approach, any number of turbines between 30 and 53 may be consented. Consequently, visuals showing what 53 265m high turbines look like should also be used to inform the EIA process. Viewpoints where the turbines of SEP and DEP may be viewed with apparent heights of above 0.4 degrees should be included within this exercise (iii) Table 3 indicates the apparent heights in degrees of 265m height turbines from the SVIA viewpoints located within the NCAONB. b. We note from paragraph 11 of the SVIA that the study area was determined based on hub height. While we remain in agreement with the viewpoints selected, it is important to note that our comments are based on visibility to blade to tip height	The position of Natural England is noted. However, the Applicant restates that the SVIA is based on the agreed WCS. The Applicant confirms the following on a point by point basis: a. i and ii. See the response to (ID 33) above. b. See the response to (ID 33) above. c. The distances from the coast of any OSP will be limited by the order limits as described in paragraph 118 of ES Chapter 4 Project Description APP-090. One OSP will be located within the SEP wind farm site and in the case that two OSPs are constructed there will be one located in the DEP North array area and one in the SEP wind farm site. The closest point of DEP-N to the coast is 37km as stated in paragraph 22 of ES Chapter 25 Seascape and Visual Impact Assessment APP-111. The OSP located within the SEP array area will have a maximum topside height of 50m HAT as described in Table 4-14 and the closest point to shore of the SEP array is 15.8km as stated in Table 4.5 both (ES Chapter 4 Project Description APP-090).

ID	Relevant Representation	Applicant Comment
	which at the proposed distances from the coast of SEP and DEP will be readily apparent. c. We note that the proposed substation(s) will be constructed to a height of 50m above Highest Astronomical Tide, at an unspecified distance from the coast. Paragraph 4 of the Project Description states that the Offshore substation platform/s are 'key offshore components'. Natural England advise that the minimum distance from the coast is provided within the project's core information so that its likely effects on the NCAONB can be appropriately screened within the EIA. Further, it is unclear to Natural England whether the substation within the SEP project area would be larger or higher (than 50m) in the development scenario where it is the only substation to serve both the SEP and DEP offshore wind array areas."	
35	Natural England's advice on the sensitivity of the Landscape Character Types within the coastal areas of the NCAONB sits in agreement with the North Norfolk Landscape Sensitivity Assessment 2021, and in disagreement with the judgements made within the ES.	See the response to (ID 8) above.
36	"We advise this because: a. Within our S42 response, Natural England offered advice on the impact significance of SEP and DEP on the following landscape character types that are characteristic of the coastal regions of the NCAONB as this is where the impacts of SEP and DEP will be concentrated. These landscape character types are: i. Drained Coastal Marshes; ii. Coastal Shelf; and, iii. Open Coastal Marsh. Natural England's advice on the impact significance of SEP and DEP on these landscape types has not changed (Table 4) and remain Major-Moderate, significant in EIA terms and adverse. b. In addition to the advice given by Natural England at S42, we have the following advice regarding the SVIA's assessment of landscape character types within the NCAONB: i. Regarding the judgement of susceptibility of landscape receptors. Paragraph 5.40 of the GLVIA3 states that the susceptibility of a landscape receptor i.e., the	The Application confirms the following on a point by point basis: a. The position of Natural England is noted. b. The position of Natural England is noted as follows: i. Regarding the SVIA's methodology and how it defines 'susceptibility', Table 25-8 Landscape and Visual Receptor Susceptibility of ES Chapter 25 SVIA [APP-111], not Table 25-7 as noted by Natural England, sets out the definitions of 'susceptibility' when assessing the sensitivity of Landscape Character, Visual Receptors and Designated Landscapes. The SVIA sets out in the following paragraphs its assessment of susceptibility (and in turn how this combines with 'value' to reach a judgement on 'sensitivity' in accordance with the SVIA's methodology): • Drained Coastal Mashes – see paragraph 334.

ID	Relevant Representation	Applicant Comment
	character of Drained Coastal Marshes, Coastal Shelf, and Open Coastal Marsh is its ability to accommodate change 'without undue consequences'. As shown in Table 25-7, for landscapes with national/international value, landscape susceptibility is high in cases where undue consequences are 'likely to arise'. Natural England advises that the susceptibility of the character of Drained Coastal Marshes, Coastal Shelf, and Open Coastal Marsh is high for the reasons outlined within Table 5 of this response. ii. Regarding the judgements on magnitude of landscape effects. We remain in disagreement with the SVIA judgements regarding the magnitude of effects from SEP and DEP on Drained Coastal Marshes, Coastal Shelf, and Open Coastal Marsh, please refer to our S42 response for our detailed comments. iii. Regarding the judgements on the sensitivity of landscape receptors. Regarding the sensitivity of Drained Coastal Marshes, Coastal Shelf, and Open Coastal Marsh to SEP and DEP. Natural England is in agreement with the landscape sensitivity judgements within Table 5.1 of the North Norfolk Landscape Sensitivity Assessment 2021 (where 'large scale wind' is defined as turbines of heights 130m to tip). Note, that the minimum turbine heights of SEP and DEP (265m) is over twice the turbine height used to inform the judgements contained within the North Norfolk Landscape Sensitivity Assessment 2021. iv. Regarding judgements on the scale of effects. We note inconsistencies in judgements on the scales of effect from SEP and DEP on landscape character. Paragraph 303 of the SVIA states that effects on landscape character along the Norfolk coastline, from where SEP and DEP will be visible, would be 'at most, small scale effects'. This statement contradicts analyses within the SVIA, such as those shown within Table 25-16, which report up to medium scales of effect; a judgement which Natural England also disagrees with."	• Coastal Shelf – see paragraph 356. • Open Coastal Marsh – see paragraph 315. ii. Judgements reached on the magnitude of effects are in accordance with the SVIA's methodology (see Section 25.3.3.1.3, **APP-111**). As stated at paragraph 73: *"The magnitude of effect is informed by combing the scale, duration and extent of effect. Plate 25-1 […] illustrates the judgement process."* iii. The commentary of Natural England is noted. The Applicant reiterates that the SVIA's approach and methodology is based on best practices and is compliant with industry standard Guidelines for Landscape and Visual Impact Assessment (GLVIA 3, 2013). c. iv. The commentary Natural England is noted. It is disagreed that the judgements on the scale of effect on landscape contradicts analysis within the SVIA [APP-111]. The information contained at Tables 25-16, 26-17 and 26-18, for example, presents a summary of visual effects from the representative viewpoint, relating only to part of the elements that comprise the overall landscape's character. As stated at paragraph 319 in the SVIA, by way of example, *"The character of the land within the LVA would be unaltered. The only effects would be to views offshore, of the expensive seascape and skyline containing existing offshore wind farms.".*
37	"Landscape Character Type: Drained Coastal Marshes Susceptibility: High NE Rationale: The 'potential consequences' from SEP and DEP on DCM2 as referred to in paragraph 334 of the SLVIA will affect the special qualities of the NCAONB. See Table 1."	See response to (ID 36 b i) above.

ID	Relevant Representation	Applicant Comment
38	"Landscape Character Type: Coastal Shelf Susceptibility: High NE Rationale: The 'potential consequences' from SEP and DEP on CS1 as referred to in paragraph 356 of the SLVIA will affect the special qualities of the NCAONB. See Table 1."	See response to (ID 36 b i) above.
39	"Landscape Character Type: Open Coastal Marsh Susceptibility: High NE Rationale: The 'potential consequences' from SEP and DEP on OCM1 as referred to in paragraph 315 of the SLVIA will affect the special qualities of the NCAONB. See Table 1."	See response to (ID 36 b i) above.
40	"Landscape Character Type: Landscape Character Type A Open Coastal Marsh Susceptibility: High NE Rationale: The 'potential consequences' from SEP and DEP on LCTA as referred to in paragraph 370 of the SLVIA will affect the special qualities of the NCAONB. See Table 1."	See response to (ID 36 b i) above.
41	Natural England remains in disagreement with the Applicant on the scale of effects from SEP and DEP on the statutory purpose of the NCAONB from the agreed representative viewpoints.	See the response to (ID 9) above.
42	"We advise this because: a. The scale of visual effect at only one viewpoint (Viewpoint 1 Wells-next-to-the-Sea) has been changed since the PEIR (from Small to Medium-Small for SEP in isolation), a judgement Natural England remains in disagreement with. b. Natural England's S42 advice on the scale of visual effects from representative viewpoints remains our current opinion, therefore this response does not attempt to repeat our previous advice provided to the applicant at the pre Application phase."	The Application confirms the following on a point by point basis: a. The position of Natural England is noted. It is acknowledged that the scale of visual effect at Viewpoint 1 Wells-next-the-Sea was adjusted between the PEIR and DCO submission, based on an additional site based review of the SVIA's judgements on scale of effects prior to the submission of the DCO submission. b. The commentary of Natural England is noted.
43	1. Natural England agrees with the Applicant that direct adverse effects will occur on the NCAONB during the construction phase of the onshore cables works and that	No response required.

ID	Relevant Representation	Applicant Comment
	during the operational phase no landscape effects will occur from Operation and Maintenance Activities.	
44	However, to achieve this a vital mitigation measure during the construction phase, should both projects be approved, is for the onshore cabling to be installed for both simultaneously and not sequentially. If sequential is progressed then the first project must install the infrastructure for both projects as agreed for the recently consented East Anglia ONE North and East Anglia TWO OWFs, which cable through the Suffolk Coast and Heaths AONB. The former will restrict construction phase impacts to the short term, but the latter would produce medium term impacts on the AONB. The importance of the AONB (a nationally designated landscape with the highest level of planning policy protection) justifies the most effective mitigation being applied i.e. both onshore cabling stages to be completed together and the landscape fully restored as soon as possible.	Details of the construction scenarios are presented in ES Chapter 4 Project Description [APP-090] and supplemented by the Scenarios Statement [APP-314].
45	Natural England advises that close attention is made to the advice of the NCAONB Partnership and relevant local authorities. These local partners have knowledge and understanding of the immediate landscape through which the cable corridor will pass.	The Applicant notes that neither Norfolk County Council ('NCC') or North Norfolk District Council ('NNDC') have made representations regarding seascape aspects. The NCAONB Partnership have not made representations regarding seascape or landscape matters. Resourcing pressures meant the Norfolk Coast Partnership ('NCP') were not able to participate in landscape/seascape ETG meetings. A meeting was held on 8 March 2021 to provide a full briefing on onshore and off shore aspects relevant to the AONB and discuss areas of interest. Minutes of the meeting and copies of ETG minutes were provided, and responses were received from the Adelle Powell and Katy Owen (CEO) from the Partnership as follows: • 3rd May 2021, from Adele Powell: *"To my knowledge, no concerns have been raised by AONB members regarding the project. In terms of the AONB Management Plan refresh, this is still underway. We'll be sure to update you, as soon as things are finalised."*

ID	Relevant Representation	Applicant Comment
		• 10th May 2021 from Katy Owen: "*Just to add to Adele's comments – the Norfolk Coast Partnership was alerted to this project during the last CMG. Nothing was raised, other than the need for all stakeholders to keep talking and work together as much as possible to add value to existing schemes and contribute to nature recovery where possible. Regarding the management plan, this is currently under review by the partners then will be sent for a new SEA/HRA and government sign off. We expect the revised plan to be endorsed/available by end of Sept this year.*" The updated Management Plan is not available as yet and it is agreed by all parties that the Management Plan Strategy 2014 – 2019 is the relevant plan for the Examination.
46	Natural England supports in principle the Design Objective 11, which commits SEP and DEP to 'Respond to the distinctive and unique character of the local landscape / seascape, including the Norfolk Coast AONB and views out to sea', although we are uncertain as to how the design of SEP and DEP meets this objective.	See the response to comment (ID 6) above.

4.18.9 Appendix I Terrestrial Ecology

Table 4.18.8 Applicant's comments on Natural England's Onshore Appendix I Terrestrial Ecology relevant representation

ID	Relevant Representation	Applicant Comment
1	Further clarity is required on some details of the assessment data collection methodology, baseline characterisation and mitigation measures. In addition, further clarity and commitment is required on the level and range of pre-construction surveys that will be carried out and how these will inform future mitigation decisions and undecided crossing point methods. Natural England require the Outline Ecological Management Plan and the Outline Landscape Management Plan to be combined into one document (Outline Landscape and Ecological Management plan (OLEMS)) prior to Deadline 1.	Details of pre-construction ecological surveys likely to be required is presented in the **Outline Ecological Management Plan (Revision B)** [document reference 9.19, Annex 1] and secured via Requirement 13 (Ecological Management Plan) of the **draft Development Consent Order** (DCO) (Revision C) [document reference 3.1]. Ecological surveys will be carried out unless the time elapsed between the pre-consent survey and the proposed construction date is short enough to render a repeat survey unnecessary, as informed by best practice guidance on the validity of ecological survey data (Advice note on the lifespan of ecological reports and surveys (CIEEM, 2019)). This will be judged on a survey-by-survey basis, and will be in accordance with industry guidance and methodology

ID	Relevant Representation	Applicant Comment
		[document reference 3.1]. Note that all pre-construction surveys will be reported on in the OEMP, on which Natural England will be consulted prior to discharge.
2	There are three broad development scenarios for cable route construction considered in the onshore ecology assessment: build SEP or DEP in Isolation, build SEP and DEP Sequentially or Concurrently. Each scenario has different design parameters and impacts with a number of alternative development options and transmission infrastructure options. Natural England acknowledges that the preferred development scenario is for an integrated transmission system serving both offshore wind farms and where both projects are built concurrently, we welcome this approach. If this is not possible, we advise that under the sequential development scenario, when the first project proceeds the cable ducts for the second project are installed at the same time to avoid unnecessary direct and indirect impacts for habitats and species as set out in Scenario 2 of the Scenarios Statement (document reference 9.28 [APP-314]). This will significantly reduce the construction time and significantly reduce ecological and visual impacts for these projects.	The Applicant notes the comment and confirms that the envelope of construction options being included within this application is set out in Environmental Statement (ES) **Chapter 4 Project Description** [APP-090, Section 6.1.4]. Further detail on the scenarios is presented in **Scenarios Statement** [APP-314].
3	All crossings of the onshore cable route are listed within a Crossing Schedule ([APP-178] Appendix 4.1 to [APP-117] Chapter 4 – Project Description) and the method of crossing identified – either trenchless or open cut. However, the method for some crossings has yet to be confirmed within the Schedule. The project description does not specify when the undecided crossing locations will be determined and on what basis, for example as a result of pre-construction ecological surveys? Natural England would seek to be consulted on, and be provided with all relevant evidence, for all undecided crossing locations prior to construction commencing otherwise there is a concern that protected species may be negatively impacted by the project.	For selected crossings, the method cannot be determined at this time prior to further feasibility assessment work, which will take place post-consent. The final list of techniques proposed for each crossing will be included within the Ecological Management Plan secured through Requirement 13 (Ecological Management Pan) of the **draft DCO** (Revision C) [document reference 3.1]. Natural England will be consulted by the relevant planning authority prior to discharge.
4	The rationale and parameters for the selection of the realistic Worst Case Scenarios (WCS) for each broad development option is generally clear and is based on the project parameters as set out in [APP-117] Chapter 4	The Applicant acknowledges Natural England's comment.

ID	Relevant Representation	Applicant Comment
	- Project Description of the Environmental Statement. The impacts for onshore terrestrial ecological receptors are plainly set out in [APP-131] Table 20-3 of Chapter 20 - Onshore Ecology and Ornithology for all development scenarios.	
5	We consider the data and baseline characterisation is broadly suitable, however some clarification is required on why particular methods were chosen to refine the data search data. In addition, in order to clarify and ascertain the necessary mitigation measures for some ecological receptors, it is considered that further information is required through pre-construction surveys and that the extent of the pre-construction surveys are clearly set out in the DCO. Our detailed comments highlight the specific areas where clarification and pre-construction surveys are required to support the mitigation proposals, and are summarised below: - Pre-construction surveys are required to ascertain the importance of two crossing locations for bats where the crossing method has yet to be determined. The surveys should then inform the type of crossing method to be used based on the impact. The crossing locations are near to and/or link suitable roosting and foraging habitat for bats, this includes Alderford Common SSSI, which is noted for containing hibernation and maternity bat roosts. - Further pre-construction hibernation survey data is required for bats on trees where hibernation potential exists to inform if mitigation measures are required. Surveys and mitigation should follow industry best practice and be recorded in the OLEMS document. - Clarification is required as to why a particular methodology was chosen to refine the bat species data obtained from the Norfolk Biodiversity Information Service (NBIS) to inform the bat surveys. It is unclear why a 50m buffer from the DCO area was used to identify particular bat species to inform the survey methodology? - An Arboricultural Impact Assessment and Tree Protection Plan has not been completed as part of the Environmental Statement. However, the [APP-228] Arboricultural Report (Appendix 20.15 of Chapter 20, document reference 6.1.20) recommends that a full tree survey of the	To address each of the detailed points raised in this response in turn: - Pre-construction surveys as outlined in the **Outline Ecological Management Plan (Revision B)** [document reference 9.19] include updated bat activity surveys of the two crossing locations for bats where the crossing method has yet to be determined. - As part of the pre-construction surveys outlined in the **Outline Ecological Management Plan (Revision B)** [document reference 9.19], all trees and structures will be reassessed for their suitability to support bat roosts, including hibernation roosts. Any features identified as having High or Moderate roost potential in accordance with Bat Conservation Trust guidelines will be subject to pre-construction bat roost surveys, including hibernation surveys where appropriate. Any trees or structures with confirmed bat roosts will then require a European Protected Species Mitigation licence to permit removal/felling. - The 50m distance for bat records was chosen with a view to picking up all potential roosts which could be subject to direct or indirect effects from the project. However, the key issue which informed the scope of bat surveys was not the NBIS records but habitat suitability, i.e. if an area of high suitability habitat had no NBIS bat records nearby, the area was still surveyed regardless of the absence of bat records. - The Applicant agrees that an arboricultural survey and assessment is requirement prior to construction, this is detailed in the **Outline Landscape Management Plan (Revision B)** [document reference 9.18] and secured via Requirement 11 (Provision of landscaping) of the **draft DCO** (Revision C) [document reference 3.1] - Details of the pre-construction surveys proposed are outlined in the **Outline Ecological Management Plan (Revision B)** [document reference 9.19, Section 2.1]. Note that, as outlined in the OEMP, '*all*

ID	Relevant Representation	Applicant Comment
	whole DCO boundary prior to construction to identify trees to avoid and inform the necessary mitigation measures and Tree Protection Plan. Natural England advise that this commitment is carried through in the OLEMS document. Further clarification is required as to what pre-construction surveys will be undertaken. It is not clear from the OEMP whether a full suite of pre-construction surveys for all potentially impacted ecological receptors will be carried out. For example, will the inaccessible parts of DCO boundary from the original surveys for badgers be resurveyed pre construction and prior to the granting of any licence.	*features surveyed during the pre-application survey effort, and any additional survey locations or features will be re-surveyed, where necessary, in accordance with industry guidance and methodology (i.e. following the approach used during pre-application surveys, or updated best practice at that time)'* [document reference 9.19, para. 23]. To confirm, this means a full suite of surveys will be carried out unless the time elapsed between the pre-consent survey and the proposed construction date is short enough to render a repeat survey unnecessary, as informed by best practice guidance on the validity of ecological survey data (*Advice note on the lifespan of ecological reports and surveys* (CIEEM, 2019)) This will be judged on a survey-by-survey basis, and will be in accordance with the relevant guidance. Note that all pre-construction surveys will be reported on in the OEMP, on which Natural England will be consulted prior to discharge.
6	Natural England is broadly satisfied that the majority of impacts are identified and assessed, however some areas where Natural England advise further clarity is required on the identification and assessment of impacts are outlined within the Detailed Comments table. This includes further clarity regarding the impacts on the River Wensum and associated habitats and species should a bentonite breakout occur and as a result of the suggested mitigation measures. We advise that the INNS mitigation measures (Impact 10) are carried through to and coordinate with the Bentonite Breakout Plan, which is necessary to mitigate for the potential for the release/breakout of inert drilling fluids (Impact 1).	The Applicant confirms that an impact assessment of the potential effects upon the River Wensum from bentonite breakout are described in **ES Chapter 20 Onshore Ecology and Ornithology** [APP-106, Section 20.6.1.1]. We accept the recommendation to include Invasive Non-Native Species (INNS) mitigation measures within the final bentonite breakout mitigation plan. As outlined in ES Chapter 20 Onshore Ecology and Ornithology [APP-106, Section 20.6.1.1], a bentonite breakout mitigation plan will be developed and included within the project's final Code of Construction Practice, detailed in Requirement 19 (Code of Construction Practice) of the of the **draft DCO** (Revision C) [document reference 3.1]. An outline bentonite breakout mitigation plan is described in the **Outline Code of Construction Practice (Revision B)** [document reference 9.17].
7	It is not clear why a 50m buffer from the DCO area was used to define the search area for 'significant' bat species data from NBIS to inform the transect and static surveys.	Note that a 5km search area for bats was used for the desk study when searching for bat species records [APP-106, Table 20-2], larger than the 2km search are used for other species. See response to comment 5 above regarding how effects on bats were scoped for the EIA.
8	Natural England considers that justification has not been provided as to why the consented solar farm north of Cawston has not been listed as a	The Applicant is aware of the planned solar farm development and that when the Local Planning Authority adopted it's Screening Opinion, it confirmed the

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	potential project for consideration in the cumulative impact assessment ([APP-131] Table 20-15 of Chapter 20).	proposed solar farm is not EIA development as defined in the 2017 Regulations. Given the solar farm project is not EIA development, data is limited to allow a meaningful assessment, and as such has not been included in the CIA. Although there is a potential spatial overlap between the two projects, it is understood the proposed solar farm will require minimal construction works and as such, it is not anticipated there will be any cumulative effects arising from interactions between the project and SEP & DEP. In addition, the DCO allows for trenchless techniques, e.g. HDD at this section of the cable corridor should the Solar Farm be constructed first.
9	Natural England generally concurs with the assessment conclusions.	The Applicant acknowledges Natural England's comment.
10	The Habitats Regulations Assessment Screening report provided ([APP-060] document ref. 5.4.1) screens in the potential for a likely significant effect on all qualifying features of the River Wensum SAC, however the Screening document has been updated by the Screening Matrices document ([APP-061, APP-062] document reference 5.4.2) and the Report to Inform Appropriate Assessment document ([APP-060] document reference 5.4). In the matrices document potential effects upon white-clawed crayfish, brook lamprey and bullhead (qualifying features of the River Wensum SAC) have been screened out due to the Applicant's commitment to use trenchless crossing techniques at the River Wensum, however there is the potential for these species to be impacted should a bentonite breakout occur. A bentonite breakout plan is proposed as mitigation for the Desmoulin's whorl snail Vertigo moulinsiana and Ranunculion fluitantis and Callitricho-Batrachion vegetation and is potentially relevant for the other qualifying features of the River Wensum. Further clarity is required as to why the Applicant has screened out potential effects upon white-clawed crayfish, brook lamprey and bullhead when there is a potential impact pathway on these species and mitigation may be required.	The Applicant agrees that potential effects upon white-clawed crayfish, brook lamprey and bullhead should be screened into the assessment. A technical note, detailing updates to the conclusion of the **Report to Inform Appropriate Assessment** (RIAA) [APP-059], **Habitats Regulations Assessment Screening Matrices** [APP-061] and **H**abitats Regulations Assessment Integrity Matrices [APP-062] will be provided at Deadline 2 of the DCO Examination. Potential effects on these features will be mitigated through the provision of a bentonite breakout plan. The development of a Bentonite Breakout Plan is outlined in the **Outline Code of Construction Practice (Revision B)** [document reference 9.17] and Requirement 19 (Code of Construction Practice) of the of the **draft DCO (Revision C)** [document reference 3.1].
11	Further consideration should be given as to whether the bentonite breakout plan mitigation proposals are relevant as mitigation for potential impacts on white-clawed crayfish, brook lamprey or bullhead and should be included in the Appropriate Assessment.	See response to comments 6 and 10 above.