XLINKS MOROCCO-UK POWER PROJECT

Preliminary Environmental Information Report

Volume 3, Chapter 6: Other Marine Users

FOR ISSUE
April 2024

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Contents

Tables

Figures (See Volume 3, Figures)

Figure Number	Figure Title
6.1	Other Marine Users Study Area
6.2	Offshore Wind
6.3	Subsea Cables
6.4	Recreational Diving Locations
6.5	Bideford Bay Seaweed Farm

Glossary

Term	Meaning
Applicant	Xlinks 1 Limited.
Baseline	The status of the environment without the Proposed Development in place.
Cumulative Effects	The combined effect of the Proposed Development in combination with the effects from other planning applications, on the same receptor or resource.
Cumulative Effects Assessment	Assessment of impacts as a result of the incremental changes caused by other past, present and reasonably foreseeable human activities and natural processes together with the Proposed Development.
DCO Application	An application for consent to undertake a Nationally Significant Infrastructure Project made to the Planning Inspectorate who will consider the application and make a recommendation to the Secretary of State, who will decide on whether development consent should be granted for the Proposed Development.
Development Consent Order (DCO)	An order made under the Planning Act 2008, as amended, granting development consent.
Decommissioning	The period during which a development and its associated processes are removed from active operation.
Embedded Environmental Measures	Equate to 'primary environmental measures' as defined by Institute of Environmental Management and Assessment (2016). They are measures to avoid or reduce environmental effects that are directly incorporated into the preferred masterplan for the Proposed Development.
Environmental Statement (ES)	The document presenting the results of the Environmental Impact Assessment process.
Future Baseline	Refers to the situation in future years without the Proposed Development.
Indirect Effects	Effects that result indirectly from the Proposed Development as a consequence of the direct effects, often occurring away from the site, or as a result of a sequence of interrelationships or a complex pathway. They may be separated by distance or in time from the source of the effects.
Offshore Cable Corridor	The proposed corridor within which the offshore cables are proposed to be located, which is situated within the United Kingdom Exclusive Economic Zone.
Planning Inspectorate	The agency responsible for operating the planning process for applications for development consent under the Planning Act 2008.
Proposed Development	The element of the Xlinks Morocco-UK Power Project within the UK, which includes the offshore cables (from the UK Exclusive Economic Zone to landfall), landfall site, onshore Direct Current and Alternating Current cables, converter stations, road upgrade works and, based on current assumptions, the Alverdiscott Substation Connection Development.
Temporal Scope	The temporal scope covers the time period over which changes to the environment and the resultant effects are predicted to occur and are typically defined as either being temporary or permanent.
Tolerable	The International Maritime Organisation Formal Safety Assessment methodology (IMO, 2018) is the internationally recognised approach for assessing effects on shipping and navigation receptors. This methodology is centred on risk control and assesses each effect in terms of its frequency and consequence in order that its significance can be determined as "Broadly Acceptable", "Tolerable" or "Unacceptable".
Transboundary Effects	Effects from a project within one state that affect the environment of another state(s).
Zone of Influence (ZoI)	The area surrounding the Proposed Development which could result in likely significant effects.

Acronyms

Acronym	Meaning
AIS	Automatic Identification System
AtoN	Aids to Navigation
CBRA	Cable Burial Risk Assessment
CCUS	Carbon Capture Utilisation and Storage
CEA	Cumulative Effects Assessment
CLV	Cable Lay Vessel
FLO	Fisheries Liaison Officer
IALA	International Association of Lighthouse Authorities
MoD	Ministry of Defence
MPS	Marine Policy Statement
NPS	National Policy Statement
NtM	Notice to Mariners
OMU	Other Marine Users
OOS	Out Of Service
OREI	Offshore Renewable Energy Installations
PDA	Project Development Area
PEXA	Practice and Exercise Area
RYA	Royal Yachting Association
SSC	Suspended Sediment Concentration
SWIC	South Wales Industrial Cluster
TCE	The Crown Estate
UNCLOS	United Nations Convention on the Law of the Sea
VMP	Vessel Management Plan
ZoI	Zone of Influence

Units

Units	Meaning
GW	Gigawatt
km	Kilometre
km^2	Square Kilometre
MW	Megawatt
m	Metre
m^2	Square metre
m/s	Metres Per Second (Speed)
nm	Nautical mile
%	Percentage

6 OTHER MARINE USERS

6.1 Introduction

6.1.1 This chapter of the Preliminary Environmental Information Report (PEIR) presents the preliminary findings of the Environmental Impact Assessment (EIA) work undertaken to date for the United Kingdom (UK) elements of the Xlinks Morocco-UK Power Project hereafter referred to in this chapter as the 'Proposed Development'.

6.1.2 This chapter considers the potential impacts and likely significant effects of the Proposed Development on other marine users (OMU) during the construction, operation, and decommissioning phases. In particular, this PEIR chapter:

- sets out the existing and future environmental baseline conditions, established from desk studies, surveys and consultation undertaken to date;
- presents the potential environmental impacts and likely significant effects on OMU arising from the Proposed Development, based on the information gathered and the analysis and assessments undertaken to date;
- identifies any assumptions and limitations encountered in compiling the environmental information; and
- highlights any necessary monitoring and/or mitigation measures that could prevent, minimise, reduce or offset the possible environmental effects identified in the EIA process.

6.1.3 The assessment presented is informed by the following technical chapters of the PEIR:

- Volume 3, Chapter 2: Fish and Shellfish Ecology
- Volume 3, Chapter 4: Commercial Fisheries
- Volume 3, Chapter 5: Shipping and Navigation
- Volume 3, Chapter 8: Physical Processes

6.1.4 This chapter also draws upon information contained within the following Annexes:

- Volume 3, Appendix 4.1: Underwater Noise Technical Note
- Volume 3, Appendix 5.1: Navigation Risk Assessment

6.1.5 The PEIR will inform pre-application consultation. Following consultation, comments on the PEIR and any refinements in design will be reviewed and taken into account, where appropriate, in preparation of the Environmental Statement (ES) that will accompany the application to the Planning Inspectorate for development consent.

6.2 Legislative and Policy Context

6.2.1 This section identifies the legislation, policy and other documentation that has informed the assessment of effects with respect to OMU.

Legislation

6.2.2 The legislation relevant to the OMU assessment is summarised in **Table 6.1**.

Table 6.1: Legislation relevant to OMU

Legislation	Relevance to Assessment
The Marine and Coastal Access Act (2009)	This act sets out provisions for marine management, in the UK, and outlines the ways in which licensing of marine functions and activities are to be enforced. The Act also establishes the Marine Management Organisation (MMO) as the public body responsible for enforcing marine regulations and for the preparation and implementation of new marine plans.
United Nations Convention on the Law of the Sea (UNCLOS) – Article 79: Submarine cables and pipelines on the continental shelf	Paragraph 5 protects submarine cables and pipelines and requires the Applicant to have due regard for any existing cables or pipelines in position and not prejudice the possibilities of repair.
UNCLOS – Article 113: high sea areas	This article states that if an existing submarine or power cable is broken or injured, this will be a punishable offence. If a cable or pipeline is broken during the laying or repairing of another cable, the Applicant will be subject to pay the repair costs.
The Submarine Telegraph Act (1885)	This act protects submarine telegraph cables. The Proposed Development has the potential to affect submarine cables and therefore the protection of these cables has been considered within the scope of this assessment.
Energy Act (2004)	This act sets out the basic requirements for applying a safety zone to be placed around or adjacent to Offshore Renewable Energy Installations (OREIs)

Planning Policy Context

6.2.3 The Proposed Development will be located within UK inshore waters and the UK EEZ offshore waters, beyond 12 nautical miles (nm) from the English coast. The onshore infrastructure is located wholly within Devon, England. As set out in Volume 1, Chapter 1: Introduction, of the PEIR, the Secretary of State for the Department for Energy Security and Net Zero has directed that elements of the Proposed Development are to be treated as development for which development consent is required under the Planning Act 2008, as amended.

National Policy Statements

6.2.4 There are currently six energy National Policy Statements (NPSs), three of which contain policy relevant to the Proposed Development, specifically:

- Overarching NPS for Energy (NPS EN-1) which sets out the UK Government's policy for the delivery of major energy infrastructure (Department for Energy Security & Net Zero 2023a);
- NPS for Renewable Energy Infrastructure (NPS EN-3) (Department for Energy Security & Net Zero 2023b); and

- NPS for Electricity Networks Infrastructure (NPS EN-5) (Department for Energy Security & Net Zero 2023c).

6.2.5 **Table 6.2** sets out key aspects from the NPSs relevant to the Proposed Development, with particular reference to the need for and approach to consenting such infrastructure.

Table 6.2: Summary of relevant NPS policy

Summary of NPS requirement	How and where considered in the PEIR
NPS EN-1	
Although there is no specific mention of consideration of OMU. The subject is addressed in Section 5.13.4 of the NPS EN-1 statement: *"The applicant's assessment should consider all relevant socio-economic impacts, which may include… effects (positive and negative) on tourism and other users of the area impacted"*	Effects on other users of the area impacted is considered within **sections 6.8**, **6.9** and **6.10.** Tourism has been considered within Volume 4, Chapter 3: Socio-Economics of the PEIR.
Paragraph 5.5.35 states "*that new energy infrastructure does not unacceptably impede or compromise the safe and effective use of any defence assets".* Paragraph 5.5.37 states "*Where the proposed development may affect the performance of civil or military aviation CNS, meteorological radars and/or other defence assets an assessment of potential effects should be set out in the ES".*	The Proposed Development is located within a Military Practice and Exercise Area (PEXA) and in proximity to three charted Ministry of Defence (MOD) firing practice areas. The impact of the Proposed Development on military activities and interests is considered within **sections 6.8**, **6.9** and **6.10** as well as Volume 3, Chapter 5: Shipping and Navigation of the PEIR.
NPS EN-3	
Paragraph 2.8.197 states "*Where a potential offshore wind farm is proposed close to existing operational offshore infrastructure or has the potential to affect activities for which a licence has been issued by government, the applicant should undertake an assessment of the potential effects of the proposed development on such existing or permitted infrastructure or activities".*	Consideration of impacts from the Proposed Development on other offshore infrastructure is provided in **sections 6.8, 6.9** and **6.10**.
Paragraph 2.8.200 states "*Applicants should engage with interested parties in the potentially affected offshore sectors early in the pre-application phase of the proposed offshore wind farm, with an aim to resolve as many issues as possible prior to the submission of an application."* Paragraph 2.8.203 states *"Such engagement should be taken to ensure that solutions are sought that allow offshore wind farms and other users of the sea to successfully coexist".*	The Applicant has undertaken consultation with several stakeholders which is detailed in **section 0**. The Applicant will continue consultation with stakeholders with the aim or resolving any issues prior to submitting the DCO application.
Paragraph 2.8.322 states "*The Secretary of state should be satisfied that the applicant has sought to design the proposal having consulted with the MMO…and representatives of the fishing industry with the intention of minimising the loss of fishing opportunity taking into account effects on other marine interests.*	Consideration of the effects of the Proposed Development on commercial fisheries has been undertaken within Volume 1, Chapter 4: Commercial Fisheries of the PEIR.

Summary of NPS requirement	How and where considered in the PEIR
	Other marine interests have been identified in **section 6.5** and consideration of impacts on OMU is provided in **sections 6.8, 6.9** and **6.10**.
Paragraph 2.8.47 states *"Prior to the submission of an application involving the development of the seabed, applicants should engage with The Crown Estate to ensure they are aware of any current or emerging interests on or underneath the seabed which might give rise to a conflict with a specific application"*	The Applicant has undertaken consultation with The Crown Estate (TCE) which is detailed in **section 0**. The Applicant will continue engagement with TCE throughout the DCO process.
Paragraph 2.8.48 states "*Applicants are encouraged to work collaboratively with those other developers and sea users on co-existence/co-location opportunities, shared mitigation, compensation and monitoring where appropriate. Where applicable, the creation of statements of common ground between developers is recommended.'*	The Applicant has undertaken consultation with several stakeholders which is detailed in **section 0**. The Applicant will seek crossing and proximity agreements with other developers where required. Consultation with developers will continue throughout the DCO process.
Paragraph 3.5.2 states "*Proposals for renewable energy infrastructure should demonstrate good design, particularly in respect of landscape and visual amenity, opportunities for co-existence/co-location with other marine and terrestrial uses, and in the design of the project…"*	Volume 1, Chapter 4: Site Selection and Alternatives of the PEIR outlines the alternative options considered to promote co-existence/co-location with OMU. The impact of the Proposed Development on OMU is considered within **sections 6.8, 6.9** and **6.10**.
NPS EN-5	
Paragraph 2.13.23 states *"onshore connection locations for offshore transmission must seek to minimise environmental and other impacts, both onshore and in the marine environment and including to local communities"*	Consideration of impacts upon OMU arising from the Proposed Development have been assessed in **sections 6.8, 6.9** and **6.10**. Environmental impacts will be considered holistically as part of the EIA process. Impacts to local communities has been considered in Volume 4, Chapter 3: Socio-Economics of this PEIR.

The National Planning Policy Framework

6.2.6 The National Planning Policy Framework (NPPF) was published in 2012 and updated in 2018, 2019, 2021 and 2023 (Department for Levelling Up, Housing and Communities, 2023). The NPPF sets out the Government's planning policies for England.

6.2.7 There are no specific NPPF considerations relevant to the assessment of the effects on OMU.

Marine Policy

UK Marine Policy Statement

6.2.8 Policies from the UK Marine Policy Statement relevant to the OMU assessment are provided in **Table 6.3**.

Table 6.3: Summary of relevant MPS Policies

MPS Policy	How and where considered in the PEIR
Paragraph 3.2.9 states *"The construction and operation of offshore marine infrastructure, installations and activities…may impact on defence interests in certain areas. Marine plan authorities and decision makers should take full account of the individual and cumulative effects of marine infrastructure on both marine and land based MoD interests. Marine plan authorities, decision makers and developers should consult the MoD in all circumstances to verify whether defence interests will be affected".*	MoD activities, including PEXA and Firing Ranges are identified in **section 6.5**. Consideration of impacts to military activities is provided in **sections 6.8, 6.9** and **6.10**. Where likely significant effects are determined, mitigation is proposed and will be agreed in consultation with the MoD to ensure risks are As Low As Reasonably Practicable (ALARP). Further information is provided in Volume 3, Chapter 5: Shipping and Navigation of the PEIR**.**
Paragraph 3.3.29 states "*There are obvious social and economic benefits from such an increase in network capacity, most notably the facilitation of offshore renewable energy. There are also social and economic risks associated with such an increase in underwater cabling, which may affect activities such as dredging and the use of certain fishing gear, and impact on other sea users, including existing cable and pipeline operators*".	OMU receptors have been identified within **section 6.5**. Consideration of impacts to existing cable operators is provided in **sections 6.8, 6.9** and **6.10**. Impacts relating to commercial fishing are considered within Volume 3, Chapter 4: Commercial Fisheries of the PEIR**.**
Paragraph 3.8.7 states "*Fishing activity is sensitive to changes in other sea uses. Marine developments have the potential to prevent, displace or encourage fishing activities. There are potential social, economic and environmental impacts of displacement of fishing activity caused by other sea uses, particularly if from well established fishing grounds. In addition to marine fish stocks associated with commercial sea fishing, the coastal environment is important as a corridor for migrating Atlantic salmon and European eel, and in providing the marine feeding ground for sea trout. These important species that support coastal and inland commercial fishing and recreational angling could be vulnerable to a wide range of coastal activities*".	Impacts to recreational fishing arising from the Proposed Development have been considered within **sections 6.8, 6.9** and **6.10**. Consideration of impacts to fish and shellfish and commercial fishing are provided in Volume 3, Chapter 3: Fish and Shellfish Ecology and Volume 3, Chapter 4: Commercial Fisheries of the PEIR**.**

South West Inshore and South West Offshore Marine Plans

6.2.9 **Table 6.4** sets out a summary of the specific policies set out in the South West Inshore and South West Offshore Marine Plans (MMO, 2021) relevant to this chapter.

Table 6.4: Summary of inshore and offshore marine plan policies relevant to this chapter

Policy	Key provisions	How and where considered in the PEIR
SW-DEF-1	Proposals in or affecting Ministry of Defence areas should only be authorised with agreement from the Ministry of Defence.	MoD activities, including PEXA and Firing Ranges are identified in **section 6.5**. Consideration of impacts to military activities is provided in **sections 6.8, 6.9** and **6.10**. Where

Policy	Key provisions	How and where considered in the PEIR
		likely significant effects are determined, mitigation is proposed and will be agreed in consultation with the MoD to ensure risks are As Low As Reasonably Practicable (ALARP). Further information is provided in Volume 3, Chapter 5: Shipping and Navigation of the PEIR**.**
SW-AQ-1	Proposals within existing or potential strategic areas of sustainable aquaculture production must demonstrate consideration of and compatibility with sustainable aquaculture production. Where compatibility is not possible, proposals that may have significant adverse impacts on sustainable aquaculture production must demonstrate that they will, in order of preference: a) avoid b) minimise c) mitigate - adverse impacts on sustainable aquaculture production so they are no longer significant. If it is not possible to mitigate significant adverse impacts, proposals should state the case for proceeding.	The Proposed Development is located adjacent to the Bideford Bay Seaweed Farm. The impact of the Proposed Development on aquaculture is considered within **sections 6.8**, **6.9** and **6.10**.
SW-CO-1	Proposals that optimise the use of space and incorporate opportunities for co-existence and co-operation with existing activities will be supported. Proposals that may have significant adverse impacts on, or displace, existing activities must demonstrate that they will, in order of preference: a) avoid b) minimise c) mitigate - adverse impacts so they are no longer significant. If it is not possible to mitigate significant adverse impacts, proposals must state the case for proceeding.	The UK Offshore Cable Corridor overlaps with several subsea cables and Offshore Wind Leasing Round 5 Project Development Area (PDA) 3. These are detailed in the baseline section (**section 6.5**) and have been considered within **sections 6.8**, **6.9** and **6.10**.
SW-CAB-3	Where seeking to locate close to existing subsea cables, proposals should demonstrate compatibility with ongoing function, maintenance and decommissioning activities relating to the cable.	The UK Offshore Cable Corridor overlaps with several subsea cables. These are detailed in the baseline section (**section 6.5**). Impacts to existing subsea cables have been assessed in **sections 6.8**, **6.9** and **6.10**.
SW-ACC-1	Proposals demonstrating appropriate enhanced and inclusive public access to and within the marine area, including the provision of services	The study area is popular for recreational boating, sailing, scuba diving, water sports and recreational fishing as detailed in **section 10.5**.

Policy	Key provisions	How and where considered in the PEIR
	for tourism and recreation activities, will be supported. Proposals that may have significant adverse impacts on public access should demonstrate that they will, in order of preference: a) avoid b) minimise c) mitigate - adverse impacts so they are no longer significant.	Impacts to these receptors have been considered within **sections 6.8**, **6.9** and **6.10**.
SW-REN-2	Proposals for new activity within areas held under a lease or an agreement for lease for renewable energy generation should not be authorised, unless it is demonstrated that the proposed development or activity will not reduce the ability to construct, operate or decommission the existing or planned energy generation project.	The UK Offshore Cable Corridor overlaps with Offshore Wind Leasing Round 5: PDA 3. Consultation with The Crown Estate is ongoing and impacts from the Proposed Development on PDA 3 has been considered within **sections 6.8**, **6.9** and **6.10**.

North Devon Biosphere Reserve

6.2.10 The Proposed Development is located within the North Devon Biosphere Reserve, which is recognised under UNESCO's Man and the Biosphere (MAB) Programme and designated as an area for testing and demonstrating sustainable development on a sub-regional scale.

6.2.11 The North Devon Biosphere Reserve consists of three zones; a core zone centred around Braunton Burrows SAC / SSSI, a buffer zone consisting of the Taw Torridge Estuary (as far as Barnstaple and Bideford), and a transition zone formed by the catchment area of the rivers and streams that drain to the North Coast of Devon in addition to an area of sea as far out as Lundy.

6.2.12 The Biosphere Reserve is overseen by the North Devon Biosphere Reserve Partnership, which is a collaboration of 26 partnership organisations who work to deliver sustainable development through direct action, through advocacy and providing advice. The non-statutory 'North Devon Biosphere Reserve Strategy for Sustainable Development 2014 to 2024' (NDB undated) provides a context for stakeholders to deliver programmes and plans in support of the sustainable development of the Biosphere Reserve.

6.2.13 Within the North Devon Biosphere Reserve, non-statutory programmes and plans relevant to OMU include:

- Boat Stories programme - promoting use of sustainable fishmongers & buying locally landed sea fish in North Devon
- North Devon Marine Natural Capital Plan
- North Devon's Biosphere Reserve and Torridge District Energy Plan

6.2.14 The extent to which the Proposed Development impacts on the North Devon Biosphere Reserve and its relevant programmes / plans has been considered in this OMU chapter, and consultation will take place with the North Devon Biosphere Reserve Partnership ahead of ES stage to further characterise any potential impacts. Consultations and information sharing may provide additional

baseline characterisation data regarding OMU activities within the North Devon Biosphere Reserve area (local fisheries characterisations were undertaken in preparation of e.g. the Natural Capital Asset and Risk Register (Rees et al. 2019). **Table 6.5** presents a summary of the specific policies set out in the North Devon Marine Natural Capital plan (North Devon UNESCO Biosphere Reserve, 2020) and the Strategy for Sustainable Development (NDB undated) relevant to this chapter.

Table 6.5: Summary of North Devon Biosphere Marine Natural Capital Plan and Strategy for Sustainable Development policies relevant to this chapter

Policy	Description	How and where considered in the PEIR
Marine Natural Capital Plan PL02: *Development or activities that will maintain and / or increase the cultural and economic value of inshore fisheries, including diversification, should demonstrate consideration of and compatibility with thresholds for sustainable use and be designed to maintain and, where possible, enhance ecosystems services and functions.*	*North Devon inshore fisheries hold important cultural, societal and economic value. PL02 seeks to support growth in this sector within sustainable exploitation limits and to promote innovative approaches to fisheries management that integrates with a 'whole-site' approach to marine biodiversity conservation. Protection and enhancement of ecological connectivity will benefit fish and shellfish populations that utilise multiple habitats as nursery areas or across different life stages.*	Impacts upon recreational fishing and seaweed farming is considered within **sections 6.8**, **6.9** and **6.10.** Impacts relating to commercial fishing are considered within Volume 3, Chapter 4: Commercial Fisheries, of the PEIR**.** Impacts relating to socio economics are considered within Volume 4, Chapter 3: Socio Economics and Tourism, of the PEIR.
Marine Natural Capital Plan PL03: *Development or activities within existing or potential strategic areas of sustainable mariculture production must demonstrate consideration of and compatibility with sustainable mariculture production.*	*The policy recognises that mariculture has the potential to grow in North Devon and provides multiple benefits such as contributing to food supply, bioremediation for improved water quality, and opportunities for blue carbon capture. PL03 seeks to protect existing mariculture operations as well as new opportunities identified in strategic areas through explicit spatial planning; and promotes co-existence and co-operation over exclusion for other activities.*	Impacts upon seaweed farming are considered within **sections 6.8**, **6.9** and **6.10**.
Marine Natural Capital Plan PL11: *Facilitate the identification of potential areas, and support proposals that enable provision of marine renewable energy technologies, where there is a net gain for marine biodiversity and natural capital, and where conflict of use is mitigated.*	Description: *Renewable energy technologies contribute to the diversification and decarbonisation of the electricity grid. PL12* [PL11] *supports the identification of future leasing rounds and provides a level of certainty*	Impacts upon other renewable energy infrastructure (excluding offshore wind) has been scoped out of the assessment. Impacts upon the Round 5 PDA for future offshore wind leasing rounds are considered within **section 6.11** as part

Policy	Description	How and where considered in the PEIR
	for other activities as to where future development may occur.	of the future baseline conditions of the cumulative effects assessment**.**
Strategy for Sustainable Development ENV5	*Implement the Biosphere Reserve Energy policy to reduce energy demand and produce renewable energy to ensure that appropriate balances are needed for food, fibre, energy, biodiversity, landscape and ecosystem services.*	Impacts upon other renewable energy infrastructure (excluding offshore wind) has been scoped out of the assessment. Impacts upon other cables including windfarm export cables and interconnectors, are considered within **sections 6.8**, **6.9** and **6.10**.
Strategy for Sustainable Development SOC2	*Develop and promote enjoyment of the environment as a tool for public health improvement*	Impacts upon recreational activities such as surfing, diving, and other water sports, are considered within **sections 6.8**, **6.9** and **6.10**. Further information is provided in the PEIR Volume 3, Chapter 5: Shipping and Navigation; Alongside Volume 4, Chapter 3: Socio Economics and Tourism.

6.3 Consultation and Engagement

6.3.1 In January 2024 the Applicant submitted a Scoping Report to the Planning Inspectorate. The Scoping Report sets out the proposed scope and methodology for the technical studies being undertaken to provide an assessment of any likely significant effects for the construction, operational and decommissioning phases of the Proposed Development. It also described those topics or sub-topics which are proposed to be scoped out of the EIA process and provided justification as to why the Proposed Development would not have the potential to give rise to significant environmental effects in these areas.

6.3.2 Following consultation with the appropriate statutory bodies, the Planning Inspectorate (on behalf of the Secretary of State) provided a Scoping Opinion on 07th March 2024. Pertinent environmental aspects raised during the scoping process specific to OMU are listed in **Table 6.6**, together with details of how these issues have been addressed within the PEIR.

Table 6.6: Summary of Scoping Responses

Comment	How and where considered in the PEIR
Planning Inspectorate	
The Scoping Report states that separate consents would be sought for offshore UXO clearance works, if required. The Inspectorate advises that the ES should still include a high-level assessment of offshore UXO clearance in relevant aspect chapters based on a likely worst case scenario (any assumptions used in the definition of the worst case scenario should be explained in the ES). The ES should address any cumulative effects from the construction of the Proposed Development with the likely effects from the UXO clearance.	UXO clearance would be undertaken as standalone activity prior to cable lay activities. Should UXO clearance be required, any impacts arising from these works will be assessed as part of the standalone marine licence process. This Scoping Opinion response was specifically discussed with the MMO in preparation of this PEIR. The MMO confirmed their preference that UXO assessment and licensing should be undertaken as a two-stage marine licence process separate to the EIA. (This approach is understood to be in the process of becoming mandatory.) The two stages would consist of initial marine licence for UXO survey and separate marine licence for site specific clearance (where identified as necessary). As discussed, this process allows a feature specific response to be developed, which could not be assessed in advance. UXO clearance would be undertaken under a separate marine licence, as agreed by MMO should the requirement for UXO clearance be required.
Several aspect chapters in the Scoping Report refer to fixed distance study areas with no explanation as to why these have been selected. The ES should ensure the study area for each aspect reflects the Proposed Development's ZoI and the impact assessment should be based on the ZoI from the Proposed Development with reference to potential effect pathways. Clear justification should be provided to support any distances applied.	The proximity, sensitivity of receptor, magnitude of effect and significance of impact on OMU receptors such as Offshore Wind receptors have been assessed in relation to project activities in **sections 6.8** through **6.13** of this OMU PEIR chapter**.** An explanation as to the OMU study area is provided in **section 6.4** of this chapter.
It is noted that the Scoping Report includes consideration of potential transboundary effects in relation to OMU. The Inspectorate recommends that the ES should identify whether the Proposed Development has the potential for significant transboundary effects, and if so, what these are, and which EEA States would be affected. The Inspectorate will undertake a transboundary screening on behalf of the SoS in due course.	Transboundary effects have been Scoped in and are considered in **section** Error! Reference source not f ound. of this OMU PEIR chapter.
The Scoping Report states that changes could occur from presence of rock berms, which may be required for cable protection at crossings or in isolated hard seabed areas during operation. It appears possible that rock berms would be in place for extended periods of construction activity in advance of the cable becoming operational and that mitigation may also be required during this period. The Inspectorate advises that the potential for change to the hydrodynamic regime due to the presence of cable protection should be assessed for	The impact of rock berms on the OMU receptors is not anticipated to be significant and therefore has not been assessed, with the planning inspectorate directing this comment to physical processes and benthic ecology topics specifically.

Comment	How and where considered in the PEIR
the phases during which it is likely to give rise to significant effects and that the ES should describe any mitigation required and explain how this would be secured in the DCO.	
The ES should consider the removal of hard substate in the decommissioning (removal) phase, where likely significant effects could occur, or provide evidence demonstrating agreement with the relevant consultation bodies that significant effects are not likely to occur.	The effects arising from decommissioning (removal) have been assessed in **section 6.10** and are anticipated to be similar to those associated with construction.
Table 8.7.2 states in the final column that an assessment of the impact of a temporary increase in SSC and deposition of sediment on offshore wind, subsea cables and pipelines, recreational boating and sailing, recreational fishing and seaweed farming, and military activity and munitions OMU receptors is to be scoped out with reference to Table 8.7.3; however, these receptor types are not described in Table 8.7.3 and no explanation has been provided. In the absence of supporting justification and information, the Inspectorate is not in a position to agree to scope these matters from further assessment. Temporary increases in SSC or sediment deposition may, for example, affect recreational fishing or the seaweed farm presented on Figure 8.7.6. Accordingly, the ES should include an assessment of these matters or justification as to why no likely significant effects would arise.	Increases in SSC and the associated deposition of sediment has been assessed for construction (**section 6.8**), O&M (**section 6.9**), and decommissioning (**section 6.10**).
On the basis that operation (excluding repairs) and decommissioning (in situ) are not likely to increase vessel traffic and cause disruption to other marine user activities, the Inspectorate is content that this matter can be scoped out of further assessment.	N/A (scoped out)
On the basis that operation (excluding repairs) and decommissioning (in situ) are unlikely to lead to a temporary increase in SSC and deposition of sediment that could have potential to impact diving and water sports receptors, the Inspectorate is content that this matter can be scoped out of further assessment.	N/A (scoped out)
On the basis that operation (excluding repairs) and decommissioning (in situ) are unlikely to lead to an increase in subsea noise on diving and water sports and recreational fishing and seaweed farming receptors, the Inspectorate is content that this matter can be scoped out of further assessment.	N/A (scoped out)
The Inspectorate agrees that subsea noise is unlikely to affect offshore wind, military activity and Munitions, subsea cables and pipelines, and recreational boating and sailing receptors and is content that this matter can be scoped out for these receptors.	N/A (scoped out)

Comment	How and where considered in the PEIR
The Inspectorate agrees that the Proposed Development is unlikely to lead to significant effects on oil and gas infrastructure and is content to scope out this matter from further assessment.	N/A (scoped out)
The Scoping Report explains that there is no spatial overlap between the Proposed Development and known areas of aggregate extraction or resources areas. On this basis, the Inspectorate is content that this matter can be scoped out of further assessment.	N/A (scoped out)
The Scoping Report states that there is no spatial overlap between the Proposed Development and any known active disposal sites. On this basis, the Inspectorate is content that this matter can be scoped out of further assessment.	N/A (scoped out)
The Inspectorate agrees that the Proposed Development is unlikely to lead to significant effects on other offshore energy infrastructure and is content to scope out this matter from further assessment.	N/A (scoped out)
The ES should confirm whether any proposed works to facilitate the Proposed Development will be undertaken below the MHWS within the River Torridge. The impact of any potential works below the MHWS within the River Torridge on other marine users Torridge should be assessed in the ES.	The Proposed Development will undertake HDD below MHWS at the River Torridge crossing. There are not anticipated to be any interactions between the construction, operation and maintenance, and decommissioning phases of the project on OMU in the River Torridge below MHWS. The use of the jack-up vessel 1km offshore has been included in the construction phase assessment of impacts resulting from increased vessel movement in **section 6.8**.
The ES should assess impacts from climate change, including extreme weather events over the construction and decommissioning periods, where significant effects are likely to occur and describe and secure any relevant mitigation measures.	It is not anticipated that climate change projections will have any significant impacts on OMU. The predicted increase in temperature and reduction in rainfall are not expected to significantly change the distribution of OMU and this has been summarised in the climate change chapter of the PEIR (Volume 4, Chapter 1).
The ES should set out the methodologies used to explain any departure from the proposed approach where professional judgement is applied. Outputs from other assessments should be clearly explained where these have been applied.	The assessment undertaken for OMU uses guidance documents listed in **section 6.4**.
Where significance criteria are not explicitly defined within the guidance, the ES should clearly set out where deviation from guidance has occurred and professional judgement has been applied.	Significance criteria have been defined in **section 6.4.2** and **Table 6.13**.
The Inspectorate agrees that likely significant effects arising from residues and emissions (e.g. dust, pollutants, light, noise, vibration) are to be assessed in the relevant aspect chapters of the ES and a standalone aspect chapter for residues and emissions is not required.	Residues and emissions relevant to OMU which may result in significant effects (e.g. pollutants (SSC) and noise) have been assessed within **sections 6.8, 6.9**, and **6.10** for each stage of the project.
The Scoping Report states that potential impacts on material assets arising from the Proposed	Potential impacts on material assets that were Scoped in, have been assessed within **sections 6.8**, **6.9**, and **6.10** for each stage of the project.

Comment	How and where considered in the PEIR
Development will be considered in the other marine users, historic environment, land use and recreation; and socio-economics aspect chapters of the ES and a standalone material assets aspect chapter is not proposed. The Inspectorate agrees with the proposed approach on this basis.	
JNCC	
We would recommend that the Applicant uses 'Nature conservation considerations and environmental best practice for subsea cables for English inshore and UK offshore waters' (Natural England and JNCC, 2022) guidance.	The 'Nature conservation considerations and environmental best practice for subsea cables for English inshore and UK offshore waters' is not applicable to OMU.
Maritime & Coastguard Agency	
There are other works to facilitate the development, including permanent road improvement works, temporary and permanent utility connections, permanent utility diversions and temporary construction compounds, drainage and access, and HDD under the River Torridge. It should be confirmed by the applicant whether there are any proposed works / activities undertaken below the Mean High-Water Spring within the River Torridge as a result of these aspects. For example, we note the use of a jack-up vessel for the HDD works near the landfall. The impact on any other marine users for the selected location should also be considered.	The Proposed Development will undertake HDD below MHWS at the River Torridge crossing. There are not anticipated to be any interactions between the construction, operation and maintenance, and decommissioning phases of the project on OMU in the River Torridge below MHWS. The use of the jack-up vessel 1km offshore has been included in the construction phase assessment of impacts resulting from increased vessel movement in **section 6.8**.
Defence Infrastructure Organisation	
With respect to the section on Military Activities and Munitions (p.345), the statement in para 8.7.31 correctly refers to the complex of FOST Exercise Areas and Danger Areas. These include X5001 Southern Fleet Exercise Area, X4920 Alfa One and D064C/B South West MDA, operating between 5000-66000ft. The route appears to pass through/beneath the above and any cable installation development scheme would need to take the ongoing use of the areas for defence purposes into account.	Assessment of impacts resulting from the Proposed Scheme of MoD activities has been conducted in **sections 6.8, 6.9**, and **6.10** for each stage of the project. Consultation with the MoD is anticipated to occur as part of the statutory consultation phase of the DCO application. Consultation is proposed to identify further MoD activity areas which may be impacted by the Proposed Development.
The statements in para 8.7.32 and associated figures seem to be broadly accurate - however their identification of D00l - Trevose Head as an Army Danger Area is incorrect - it is operated by the Navy and support air to surface gunnery etc (see the UK AIP as a valid data source on the extent/management of MOD designated Danger Areas (ref ENR 5.1).	The D001 – Trevose Head Navy Danger Area has been amended within **section 6.5** to identify the MoD receptor more accurately.
Please note, there are other defence interests in the locality relating to navigational interests and installations that are not defined in the public domain. The MOD will be able to provide specific advice, as may be necessary, on the proposed cable installation when more detailed information becomes available.	Consultation is proposed to identify further MoD activity areas which may not be publicly available and/or may be impacted by the Proposed Development.
Natural England	

Comment	How and where considered in the PEIR
Based on the information provided, Natural England's advice is that the proposed cable route is unlikely to have a significant effect on terrestrial European sites and can therefore be screened out from requiring further assessment.	N/A (scoped out)

6.3.3 Following scoping, consultation and engagement with interested parties specific to OMU has continued.

6.3.4 A summary of the key issues raised during consultation activities undertaken to date is presented in **Table 6.7**, together with how these issues have been considered in the production of this PEIR chapter.

Table 6.7: Summary of consultation relevant to this chapter

Date	Consultee and type of response	Issues raised	How and where considered in the PEIR
November 2023 / Ongoing	The Crown Estate – Email correspondence and virtual meetings.	The Applicant submitted an indicative route in October 2022 for TCE to perform a 'proximity check'. In Jan 23 'Proximity check' results did not identify any impact on offshore agreements at that stage. In Oct 23 a 'conflict/overlap' between the proposed Offshore Cable Corridor and TCE PDA3 area was identified. Following further discussions, this resulted in the Offshore Cable Corridor being widened adjacent to the PDA3. It is intended that The Applicant will engage with future wind developers (PDA3 developers) to agree appropriate micro-routing of the cable at this location. The current Offshore Cable Corridor is intended to allow micro-routing flexibility within the proximity of PDA3 as discussions with TCE continue.	The proximity, sensitivity of receptor, magnitude of effect and significance of impact on Offshore Wind receptors have been assessed in relation to project activities in **sections 6.8** through **6.13** of this chapter**.**
January 2024 / Ongoing	White Cross OWF – Email correspondence and virtual meeting	The developers of White Cross OWF were contacted to discuss the export cable route of the OWF. The discussion highlighted no objection to the Proposed Development Offshore Cable Corridor and both parties agreed to stay in contact in order for both projects to identify suitable cable routes. Further meetings are planned (provisionally April 2024).	The proximity, sensitivity of receptor, magnitude of effect and significance of impact on Offshore Wind receptors have been assessed in relation to project activities in **sections 6.8** through **6.13** of this chapter**.**
December 2023	MCA consultation meeting	MCA queried if there were plans for cable protection as opposed to burial.	Proposed protection outlined in Volume 1, Chapter 3: Project Description of this PEIR. Impact of reduction in under keel clearance due to external protection assessed in

Date	Consultee and type of response	Issues raised	How and where considered in the PEIR
			Volume 3, Chapter 5: Shipping & Navigation of this PEIR.
		MCA noted that the RYA coastal atlas may be a useful resource, that liaison with local ports may be required and that locations of renewables projects in the area should be considered.	RYA Coastal Atlas data is anticipated to be included in the ES baseline assessment of Shipping & Navigation. Liaison with local ports to be undertaken via Notice to Mariners. Locations of renewables projects presented in. **section 6.5** of this chapter.
		MCA noted the importance of considering IMO Routing Measures in the area within the risk mitigation procedures for the project vessels, and that considering the impact on these when determining vessel timings and lighting of construction vessels would be an important mitigation.	To be considered in Vessel Management Plan as part of the CEMP (see e.g. Volume 3, Chapter 5: Shipping & Navigation of this PEIR).
		MCA noted that the 5% rule on water depth reduction should be followed, and that the MCA would expect to see electromagnetic interference considered, dependent on the findings of the electromagnetic deviation support document.	See e.g. Volume 3, Chapter 5: Shipping & Navigation of this PEIR.
December 2023	Trinity House consultation meeting	Trinity House noted that reductions of water depth were a primary concern for Trinity House, as were cables becoming exposed due to the seabed movements.	Reduction in water depth assessed in Volume 3, Chapter 5: Shipping & Navigation of this PEIR. Monitoring of cable protection included in mitigation measures and project description (see Volume 1, Chapter 3 of this PEIR).
		Trinity House noted that there would be no expectation to mark the landfall physically in the interests of data security, but that cable routes should be charted.	Charting of cable included as mitigation measure (see Volume 3, Chapter 5: Shipping & Navigation of this PEIR).
		Trinity House noted the military exercise areas in the area and added that there is a naval training centre nearby. Anatec noted that consultation with the Ministry of Defence would be undertaken by the Project.	Consultation with MoD included as mitigation measure (see Volume 3, Chapter 5: Shipping & Navigation of this PEIR).

6.4 Methodology

6.4.1 This section presents an outline of the general approach to the OMU assessment including any relevant guidance and data sources used, the study area, assessment methodology and any assumptions and limitations. The methodology is consistent with the proposed approach submitted as part of the EIA Scoping Report.

Relevant Guidance

6.4.2 A summary of relevant information and guidance relevant to the assessment undertaken for OMU is provided here:

- Maritime and Coastguard Agency (MCA) Marine Guidance Note (MGN) 654 (M+F) Offshore Renewable Energy Installations (OREI) safety response: This guidance highlights the issues to be considered when assessing the impact on navigational safety and emergency response caused by OREI developments and any associated infrastructure in UK waters.
- European Subsea Cables Association (ESCA) 'Guideline 6 for Proximity of Wind Farm developments and offshore cables' (ESCA, 2023): This provides guidance on considerations to be given by all stakeholders in the development of projects requiring proximity agreements between Offshore Wind Farm (OWF) projects and subsea cable projects. The guidance addresses installation and maintenance constraints related to OWF structures, associated cables and other subsea cables, where such structures and subsea cables will occupy proximate areas of seabed.

Scope of the Assessment

6.4.3 The scope of this PEIR has been developed in consultation with relevant statutory and non-statutory consultees as detailed in **Table 6.6** and **Table 6.7**. Taking into account the scoping and consultation process, **Table 6.8** summarises the issues considered as part of this assessment.

Table 6.8: Issues considered within this assessment

Activity	Potential effects scoped into the assessment
Construction Phase	
• HDD Marine Works • Duct Installation • Route Preparation • Cable Lay and Burial	Increased vessel traffic causing disruption to OMU activities
• HDD Marine Works • Duct Installation • Route Preparation • Cable Lay and Burial	Physical presence of infrastructure and safe passing zones
• HDD Marine Works • Route Preparation • Cable Lay and Burial	Temporary increase in suspended sediment concentrations and deposition of sediment

Activity	Potential effects scoped into the assessment
• HDD Marine Works • Route Preparation • Cable Lay and Burial	Increased underwater noise
Operational Phase – repair activities only	
• Cable Inspection Surveys • Maintenance and Repair	Increased vessel traffic causing disruption to OMU activities
• Cable Inspection Surveys • Maintenance and Repair	Physical presence of infrastructure and safe passing zones
• Cable Inspection Surveys • Maintenance and Repair	Temporary increase in suspended sediment concentrations and deposition of sediment
• Cable Inspection Surveys • Maintenance and Repair	Increased underwater noise
Operational Phase	
• Standard operation of the Proposed Development	Physical presence of infrastructure
Decommissioning Phase – removal	
• Cable Inspection Surveys • Maintenance and Repair	Increased vessel traffic causing disruption to OMU activities
• Cable Inspection Surveys • Maintenance and Repair	Physical presence of infrastructure and safe passing zones
• Cable Inspection Surveys • Maintenance and Repair	Temporary increase in suspended sediment concentrations and deposition of sediment
• Cable Inspection Surveys • Maintenance and Repair	Increased underwater noise
Decommissioning Phase – *in situ*	
• Leaving decommissioned cables in *situ*	Physical presence of infrastructure

6.4.4 Effects which are not considered likely to be significant have been scoped out of the assessment. A summary of the effects scoped out is presented in **Table 6.9**.

Table 6.9: Issues scoped out of the assessment

Activity	Potential effects scoped out of the assessment
Construction Phase	
• HDD Marine Works • Duct Installation • Route Preparation • Cable Lay and Burial	All impacts (for the lifetime of the Proposed Development) on oil and gas infrastructure
• HDD Marine Works • Duct Installation • Route Preparation • Cable Lay and Burial	All impacts (for the lifetime of the Proposed Development) on Aggregate Extraction or Resource Areas
• HDD Marine Works	All impacts (for the lifetime of the Proposed Development) on Marine Disposal Sites

Activity	Potential effects scoped out of the assessment
• Duct Installation • Route Preparation • Cable Lay and Burial	
• HDD Marine Works • Duct Installation • Route Preparation • Cable Lay and Burial	All impacts (for the lifetime of the Proposed Development) on other offshore energy
Operational Phase (including repair activities)	
• Cable Inspection Surveys • Maintenance and Repair	All impacts (for the lifetime of the Proposed Development) on oil and gas infrastructure
• Cable Inspection Surveys • Maintenance and Repair	All impacts (for the lifetime of the Proposed Development) on Aggregate Extraction or Resource Areas
• Cable Inspection Surveys • Maintenance and Repair	All impacts (for the lifetime of the Proposed Development) on Marine Disposal Sites
• Cable Inspection Surveys • Maintenance and Repair	All impacts (for the lifetime of the Proposed Development) on other offshore energy
Decommissioning Phase (*in situ* and removal)	
• All associated decommissioning activities	All impacts (for the lifetime of the Proposed Development) on oil and gas infrastructure
• All associated decommissioning activities	All impacts (for the lifetime of the Proposed Development) on Aggregate Extraction or Resource Areas
• All associated decommissioning activities	All impacts (for the lifetime of the Proposed Development) on Marine Disposal Sites
• All associated decommissioning activities	All impacts (for the lifetime of the Proposed Development) on other offshore energy

Study Area

6.4.5 The study area considered as part of the OMU assessment is defined as the Offshore Cable Corridor, together with the relevant impact zones of influence. The study area varies in scale depending on the particular receptor. For example, the position of existing subsea cables is well known and documented, the study area for subsea cables can therefore be reduced to those exact locations and the largest distance at which increased sediment deposition is likely to occur as defined in Volume 3, Chapter 8: Physical Processes of the PEIR is 3.9km.

6.4.6 A buffer of 5 nm (Volume 3, Figure 6.1) has been proposed around the Offshore Cable Corridor to consider the wider area around the Proposed Development and consider OMU receptors and vessel movements. This is standard practice, and the buffer is consistent with that used in Volume 3, Chapter 5: Shipping and Navigation of the PEIR.

Methodology for Baseline Studies

Desk Studies

6.4.7 Baseline data collection has been undertaken to obtain information across the study area. The current baseline conditions presented below set out the data currently available from the study area.

6.4.8 The data sources that have been collected and used to inform this OMU assessment are summarised in **Table 6.10** below.

Table 6.10: Data Sources used to inform OMU PEIR assessment

Source	Summary
Navigation Charts (UKHO)	Navigation resource for all marine users in the UK. Indication of offshore assets and marine infrastructure.
The Crown Estate (TCE) Wind Leasing Rounds 1-5	TCE have set out plans to explore viable options for a potential leasing opportunity for the first commercial-scale floating wind projects to be located in the Celtic Sea.
TCE, The Oil and Gas (O&G) Authority	Location of O&G assets across the UK marine environment including both exploratory, operational, and decommissioned sites.
EMODnet Human Activities	Overview shapefiles of human activity in the marine environment at both UK and European scale.
DESNZ	UK policy and baseline information regarding the human and economic environment.
British Marine Aggregate Production Association (BMAPA) annual reports;	Location and description of marine aggregate activity in the UK marine environment.
Global Marine Cable Route Desk Top Study	A feasibility report detailing the potential risks to the cable along preliminary cable routes.
OceanIQ Subsea Cables	OceanIQ data layer for subsea cables.
TCE and UK Storage Appraisal Project strategic study of the potential for UK CO_2 storage.	Determination of UK approach to Carbon Capture and Storage, alongside key areas of focus for future policy and implementation of infrastructure.
TCE Proximity Report	A report provided by TCE to guide optioneering of the Proposed Development's Offshore Cable Corridor.
CEFAS GIS Shapefile of Disposal Sites	Location and description of marine disposal sites in the UK marine environment.
SeaSearch Recreational Diving Records	Location of key diving sites within the UK, alongside the recorded findings of dive surveys.
Kingfisher Information Service (KIS) Offshore Renewable & Cable Awareness project (KIS-ORCA).	Location of major subsea infrastructure including power cables and pipelines across the UK and Europe.
Recreational Automatic Identification System (AIS) Data	11 months of recreational AIS data offering complete coverage of the study area spanning September 2022 to August 2023.
South West Inshore and Offshore Marine Plan	Published in June 2021, the South West Inshore and Offshore Marine Plans and Technical Annex provide a wealth of data and information surrounding OMU within the marine plan area

6.4.9 The array of desktop studies and geospatial data illustrated in **Table 6.10** has been consolidated to provide a baseline for various industries and activities known to be operating within the Offshore Cable Corridor.

Site-Specific Surveys

6.4.10 No site-specific surveys have been undertaken for this OMU assessment due to the availability of suitable desk-based data and consultation with stakeholders.

Impact Assessment Methodology

Overview

6.4.11 The general approach to the assessment of the Proposed Development is set out in Volume 1, Chapter 5: EIA Methodology of the PEIR. The assessment methodology for the OMU for the PEIR is consistent with that provided in the EIA Scoping Report and no changes have been made since the scoping phase.

6.4.12 The assessment of potential impacts upon OMU receptors is based on the maximum development parameters as outlined in **section 6.6**.

6.4.13 The desktop study has collated available information to date within the study area for receptors identified. Baseline data collection is an ongoing process and will be further developed, refined and updated following any feedback from the PEIR, statutory consultation and stakeholder engagement (as required). This will ensure that an appropriate level of baseline information is available to undertake the final associated impact assessment.

6.4.14 The assessment considers all relevant marine recreational pursuits, offshore and coastal activities and marine infrastructure. For the identified receptors, potential impacts are considered throughout the installation, operational and decommissioning phases of the Proposed Development.

6.4.15 Cumulative effects have been assessed by considering all other relevant developments, proposed or existing, that are in the vicinity of the Proposed Development and which have the potential to affect the same receptors. Where other developments are expected to be completed prior to the installation of the Proposed Development and the effects of these developments are fully determined, the effects arising from the developments are considered as part of the baseline but may also be considered as part of the installation, operational and decommissioning cumulative assessment.

6.4.16 The approach to determining the significance of effects is a two-stage process that involves defining both the magnitude of the impact and the sensitivity of the receptor. The section below describes the criteria applied in this chapter to assign values to the magnitude of potential impacts and the sensitivity of the receptors. The terms used to define magnitude and sensitivity are based on those which are described in further detail in Volume 1, Chapter 5: EIA methodology of the PEIR.

Receptor Sensitivity/Value

6.4.17 The criteria for defining the sensitivity of a receptor in this chapter are outlined in **Table 6.11** below.

Table 6.11: Sensitivity criteria

Sensitivity	Definition
Very High	Receptor is of very high importance and rarity, international scale and very limited potential for substitution
High	Receptor is of high value or importance, with critical importance to the local, regional or national economy. Receptor is highly vulnerable to impacts that may arise from the Proposed Development and recoverability is long-term or not possible.
Medium	Receptor is of medium value or importance, with reasonable contribution to the value of the local, regional or national economy. Receptor is moderately vulnerable to impacts that may arise from the Proposed Development and has moderate to high levels of recoverability.
Low	Receptor is of minor value or importance with small levels of contribution to the value of the local, regional or national economy. Receptor is not generally vulnerable to impacts that may arise from the Proposed Development and/or has high recoverability.
Negligible	Receptor is of very low value or importance, with negligible contribution to the value of the local, regional or national economy. Receptor is not vulnerable to impacts that may arise from the Proposed Development and/or has high recoverability

Magnitude of Impact

6.4.18 The criteria for defining magnitude in this chapter are outlined in **Table 6.12** below.

Table 6.12: Impact magnitude criteria

Magnitude of impact		Definition
High	Adverse	Complete loss of ability to carry on activities. Impact is of extended temporal or physical extent and of long-term duration (i.e., total life of Proposed Development) and/or frequency of repetition is continuous and/or effect is not reversible.
	Beneficial	Significant improvement in ability to carry on activities. Impact is of extended temporal or physical extent and of long-term duration (i.e., total life of Proposed Development) and/or frequency of repetition is continuous and/or effect is not reversible.
Medium	Adverse	Loss or alteration to significant portions of key components of current activity leading to a reduction in the level of activity that may be undertaken and/or physical extent of impact is moderate and/or medium-term duration (i.e., operational period) and/or frequency of repetition is medium to continuous and/or effect is not reversible for the project phase.
	Beneficial	Improvement or alteration to significant portions of key components of current activity leading to an increase in the level of activity that may be undertaken and/or physical extent of impact is moderate and/or medium-term duration (i.e. operational period) and/or frequency of repetition is medium to continuous and/or effect is not reversible for the project phase.
Low	Adverse	Very slight adverse change from baseline condition and/or physical extent of impact is low and/or short-term duration (i.e., construction period) and/or frequency of repetition is negligible to continuous and/or effect is reversible.

Magnitude of impact		Definition
	Beneficial	Very slight beneficial change from baseline condition and/or physical extent of impact is low and/or short-term duration (i.e., construction period) and/or frequency of repetition is negligible to continuous and/or effect is reversible.
Negligible	Adverse	Very minor loss or detrimental alteration to one or more characteristics, features or elements.
	Beneficial	Very minor benefit to, or positive addition of one or more characteristics, features or elements.
No Change	No loss or alteration of characteristics. Features or elements; no observable impact either adverse or beneficial	

6.4.19 For the purposes of the OMU assessment, the following definitions have been used for effect timescales:

- short term: a period of months, up to one year;
- medium term: a period of more than one year, up to five years; or
- long term: a period of greater than five years.

Significance of Effect

6.4.20 The significance of the effect upon OMU has been determined by taking into account the sensitivity of the receptor and the magnitude of the impact. The method employed for this assessment is presented in **Table 6.13**. Where a range of significance levels is presented, the final assessment for each effect is based upon expert judgement.

6.4.21 In all cases, the evaluation of receptor sensitivity, impact magnitude and significance of effect has been informed by professional judgement and is underpinned by narrative to explain the conclusions reached.

6.4.22 For the purpose of this assessment, any effects with a significance level of minor or less are not considered to be significant in terms of the EIA Regulations.

Table 6.13: Assessment Matrix

Sensitivity of Receptor	Magnitude of Impact				
	No Change	**Negligible**	**Low**	**Medium**	**High**
Negligible	No Change	Negligible	Negligible or Minor	Negligible or Minor	Minor
Low	No Change	Negligible or Minor	Negligible or Minor	Minor	Minor or Moderate
Medium	No Change	Negligible or Minor	Minor	Moderate	Moderate or Major
High	No Change	Minor	Minor or Moderate	Moderate or Major	Major
Very High	No Change	Minor	Moderate or Major	Major	Major

6.4.23 Where the significance of effect is ‘no change’, no effect would arise.

6.4.24 The definitions for significance of effect levels are described as follows:

- **Major:** These beneficial or adverse effects are considered to be very important and are likely to be material in the decision-making process. These effects are generally, but not exclusively, associated with sites or features of international, national or regional importance that are likely to suffer a most damaging impact and loss of resource integrity. However, a major change in a site or feature of local importance may also enter this category. Effects upon human receptors may also be attributed this level of significance.
- **Moderate:** These beneficial or adverse effects have the potential to be important and may influence the key decision-making process. The cumulative effects of such factors may influence decision-making if they lead to an increase in the overall adverse or beneficial effect on a particular resource or receptor.
- **Minor:** These beneficial or adverse effects are generally, but not exclusively, raised as local factors. They are unlikely to be critical in the decision-making process but are important in enhancing the subsequent design of the project.
- **Negligible:** No effects or those that are beneath levels of perception, within normal bounds of variation or within the margin of forecasting error.
- **No change:** No loss or alteration of characteristics, features or elements; no observable impact in either direction.

Assumptions and Limitations of the Assessment

6.4.25 There are no significant data limitations relating to OMU that affect the robustness of the assessment presented in this PEIR. The data used to inform the baseline was gathered using the best available and most robust evidence, therefore the Applicant is confident with this assessment. It should be noted, however, that more information may be available through consultation on this PEIR that may add data and information on OMU to the assessment that will be presented in the ES.

6.4.26 There will be elements of the Project Design which require flexibility, to allow e.g. for micro-routing and deployment of specific installation methods at the time of installation. To manage the associated assessment uncertainty and allow a robust impact assessment to be undertaken, the assessment presented in this chapter is based on a maximum design scenario for the Proposed Development. Through adoption of this maximum (or 'realistic worst case') scenario, there is confidence that the maximum potential adverse impact has been assessed, and as a result, impacts of greater adverse significance would not arise should any other development scenario to that assessed within this Chapter be taken forward in the final design.

6.5 Baseline Environment

Desk Study

6.5.1 Information on OMU within the study area was collected through a detailed review of existing studies and datasets. These are summarised at **Table 6.14**.

Table 6.14: Summary of desk study sources used

Title	Source	Year	Author
Seaweed Farm Installation – Bideford Bay North Devon	Devon and Severn IFCA	2022	Devon and Severn IFCA
Water Sports in the United Kingdom	Statista	2023	Statista
Subsea Cables	OceanIQ	2024	OceanIQ
Subsea Cables	KIS ORCA	2024	KIS ORCA
Number of people participating in scuba diving or snorkelling in England from 2016 to 2022	Statista	2023	Statista
12 Months AIS Data (September 2022 – August 2023)	Anatec Ltd.	2022/2023	Anatec Ltd.
Human Activities Data Layer	EMODnet	2024	European Commission
SeaSearch recreational diving records	SeaSearch	2022	SeaSearch
Navigation Charts	UKHO Admiralty Charts (1121, 1123, 1164, 1178, 117, 2565, 2649, 2675).	2024	UKHO
Crown Estate Round 5 Leasing Update	GIS for wind farm sites in the Celtic Sea, Wales and Northern Ireland provided by The Crown Estate.	2023	TCE

Offshore Wind

6.5.2 Government policy is driving growth of offshore wind, with the UK 'Net Zero Strategy: Build Back Greener' committing the UK to 'Net Zero' by 2050, and an ambition for 40 GW of offshore wind by 2030 (HM Government, 2021). Part of this implementation of offshore wind has driven demand for floating arrays, targeted in the North and Celtic Seas, the latter being of particular relevance to the Proposed Development. There are several offshore windfarms in various stages of development within the Celtic Sea region (Volume 3, Figure 6.2), including some undergoing the initial stages of consenting and development. These include Llyr 1 (100MW) and Llyr 2 (100MW), alongside Erebus (100MW) and the Pembrokeshire Demonstration Zone (180MW) all of which are located outside the study area.

6.5.3 Although the Celtic Sea is anticipated to undergo heavy development as part of the Round 5 offshore wind leasing, there are currently no established OWF located within the 5 nm study area of the Proposed Development. As these Round 5 projects are at an early inception phase, there are significant unknowns with regard to the PDAs, meaning the development of these areas is not reasonably foreseeable in EIA terms. Should further information become available on forthcoming projects as part of the TCE Round 5 PDAs a qualitative assessment can be undertaken. This will be kept under review for the submission of the ES. The PDAs are currently at an early stage of inception with the pre-qualification questionnaire (PQQ) stage undertaken in March 2024. For this reason, the Round 5 PDAs have not been considered as part of the current baseline and are assessed further as part of the Future Baseline and in **section 6.11** Cumulative Effects Assessment.

6.5.4 The White Cross offshore windfarm is located approximately 10 km north of the Proposed Development and partially located within the study area (there is partial overlap with the White Cross export cable corridor). A collaborative approach e.g. to data sharing and microrouting is being adopted between the two schemes. The proposed windfarm aims to be generating electricity in 2027, with a capacity of 100 MW from eight floating turbines, the project aims to begin onshore Pre-construction in 2026 ahead of offshore installation in early 2027 (White Cross Offshore Wind Farm, 2024).

Military Activity and Munitions

6.5.5 The section provides a summary of Ministry of Defence (MoD) activities, including military Practice and Exercise Areas (PEXAs).

6.5.6 The study area is located within a broad Military Practice and Exercise Area that extends to cover the majority of the offshore south west extent of the UK EEZ, and passes through military exercise airspace off the northern coast of Cornwall, Devon and the Isles of Scilly (South West Marine Plan, 2021). This area includes the X5001 Southern Fleet Exercise Area, X4920 Alfa One and D064C/B South West MDA, operating between 5000-66000ft (MoD, 2024).

6.5.7 Volume 3, Chapter 5: Shipping & Navigation of the PEIR identifies three chartered MoD Firing Practice Areas, with two overlapping zones (D110 and X5105) located approximately 3.3 nm north of the landfall. There are several defence interests located outside but within close proximity to the Study Area, such as the Trevose Head Navy Danger Area (D001), 1 nm to the east of the study area. These areas were identified by the MoD in the Scoping Opinion and will be the subject of site specific consultation with the MoD. Firing Practice Area areas are shown in Volume 3, Figure 5.2. A chart notes states that these areas are operated under a clear range procedure, meaning that firing and exercises take place when the areas are considered to be clear of shipping. No restriction is placed on the right to transit the firing practice areas at any time. Impacts from the Proposed development on the vessel traffic on the MoD are assessed in Volume 3, Chapter 5: Shipping & Navigation.

6.5.8 There are no munitions disposal areas within the study area. The closest munitions record is a chemical munitions disposal over 18 km south east of the study area.

6.5.9 As per the Scoping Opinion, The Applicant will consult with the MoD to refine and identify further defence interests in proximity of the Proposed Development, which will be included in the OMU baseline and assessment at ES stage.

Subsea Cables

6.5.10 Subsea cables are a general term that encompasses a range of cables that typically include subsea telecommunications cables, power cables and interconnectors. **Table 6.15** summarises the active cables that the Proposed Development will cross. These can also be viewed in Volume 3, Figure 6.3.

Table 6.15: Active Subsea Cables that cross the Proposed Development (EMODnet 2024; KIS ORCA, 2024; UKHO 2024).

Asset Name	Operator	Depth at crossing(s), m
TGN Western Europe	Tata Communications	-75.1 and -42.5
TGN Atlantic South	Tata Communications	-73.9 and -45.9
UK-Ireland Crossing 1	Lumen	-88.82
Apollo North	Vodafone	-73.95
Grace Hopper Seg 02	Google	-75.40
Yellow	Lumen	-75.50
GLO-1	Globacom Ltd	-78.55
Europe India Gateway	Vodafone	-95.96
Amitie Seg 01-3	ASN	-99.59
UK-Ireland Crossing 1	Lumen	-68.50
ESAT 1	BT	-90.69
Flag Atlantic North	Reliance Globalcom	-104.37
TAT 12	BT	-107.16
Atlantic Crossing 1 Seg C	Lumen	-119.80
Flag Atlantic Interlink Seg AB	Global Cloud Exchange	-121.34
Apollo South	Vodafone	-127.08

Recreational Boating and Sailing

6.5.11 The south west UK coastline is a popular destination for recreational boating and sailing, supported by numerous marina facilities and a large number of Royal Yachting Association clubs and cruising routes. These include significant presence at Bideford, Newquay, Padstow and St. Ives, contributing to a host of local cruising routes and sailing areas. There are also numerous sailing schools and other training establishments along this stretch of coastline.

6.5.12 The Lundy ferry transits from Bideford north of the Offshore Cable Corridor within the study area and from Ilfracombe where it enters the study area off the coast of Lundy. The majority of the Offshore Cable Corridor extends through the Celtic Sea and avoids the majority of recreational marine traffic in the inshore South West Marine Plan area.

6.5.13 Several key recreational boating and sailing routes have been identified within the study area, these include routes between the north Cornwall coastline and Celtic Sea destinations (such as Wales), and those extending north west, connecting Cornwall and Devon to the Irish coastline.

6.5.14 Automatic Identification System (AIS) data illustrated in Volume 3, Chapter 5: Shipping and Navigation**,** was analysed to understand the vessel traffic baseline by vessel type, including recreational vessels. Volume 3, Figure 5.7 shows the intensity of recreational vessels within the study area over a period of September 2022 – August 2023. There are several areas of highest recreational density located towards the landfall with vessels transiting to and from the Taw, Torridge and Bideford Estuaries. Further out in Bideford Bay is another aggregation of high vessel intensity which crosses the study area, both in a north east and south

westerly direction along the coastline. There are several other areas of highest intensity recreational traffic that cross the study area, particularly off the coast of Padstow, Lands End and the Isles of Scilly. Beyond this, recreational vessel intensity is at its lowest within the study area as the UK EEZ is approached.

6.5.15 Data provided by the Royal Yachting Association in the South West Marine Plan data explorer (MMO, 2021) shows a general boating area extending from the River Taw out of Taw and Torridge Estuaries into Bideford Bay which intersects with the study area. This is an indicative area outlined by the RYA which mainly relate to club training and racing areas associated with recreational boating and sailing. This broadly corresponds with the vessel intensities for recreational vessels shown on Volume 3, Figure 5.7. Recreational vessels are likely to originate from Bideford Bay, the adjacent port of Appledore, the North Devon Yacht Club, and Appledore Sails.

6.5.16 There are no other identified boating areas within the study area.

6.5.17 The general coastal and inshore area across the region is popular for recreational boat hire, and activities undertaken from the various sailing clubs above, as well as those independently run from beaches and harbours within the wider Marine Plan area that contribute to the study area baseline. During the summer months in particular, other small recreational motorboats are launched from the beaches along the coast. Many of these recreational activities occur well inshore of the majority of the offshore cable corridor, although there will be potential for direct overlap within Bideford Bay where the cables, and study area make landfall in the nearshore environment.

Diving and Water Sports

6.5.18 Approximately 17 million people in the United Kingdom participate in some form of water sport activity with the majority spending recreational time at the beach, or on coastal walks or outdoor swimming (Statista, 2023a). In terms of water sport activity events in the UK, the region with the highest proportion of events is the South of the UK, with approximately 20% of any water sport activity taking place in the south west of the UK and 20% in the South East (Statista, 2023a).

6.5.19 Bathing is a popular recreational activity along the Cornwall and Devon coast within the Study Area due to the number of beaches and over 20 ‘Blue Flag’ beaches attracting tourists to its seaside towns. Peak use of these bathing waters is in spring and summer with the most activity occurring during the summer holidays between July and August. There are also two Water Framework Directive (WFD) Bathing Water locations within 5 nm of the Offshore Cable Corridor including at Saunton Sands and Westward Ho! both rated ‘excellent’ in 2022 and 2023.

6.5.20 The Isle of Lundy at the northern most extent of the study area presents a unique experience for sea swimmers due to the range of wildlife species and unique landscape features where the Atlantic meets the Bristol Channel. The intensity of sea swimming increases throughout the summer months when locals and tourists frequent many coves, hidden beaches and sea pools.

6.5.21 Water sports in the south west are highly popular due to the wave regime. Surfing and other wave related sports (e.g., paddleboarding, kayaking, and windsurfing) generally seek out high value shallow inshore areas for activities related to their operation i.e., far inshore of the majority of the Offshore Cable Corridor. These

activities are mainly focussed around the summer months, with peak surf conditions usually occurring around late summer and autumn. Bideford Bay is host to an array of businesses providing some form of water sports activities at Westward Ho! beach or that utilise Bideford Bay.

6.5.22 The number of people taking part in scuba diving or snorkelling in England in 2022 was three times higher than the previous year (Statista, 2023b). The south west contains many of the UK's diving sites and contains a number of dive centres and schools based along the Devon and Cornwall coast which could potentially utilise the Offshore Cable Corridor. This includes such places as the Ilfracombe and North Devon Sub Aqua Club, Easy Divers, Lundy Diving, Harlyn Dive School, Padstow BSAC Centre, Viewpoint Diving Cornwall, Dive Newquay, Atlantic Diving, Freedive UK and Watersports Warehouse to name a few.

6.5.23 The south west is an important resource for scuba diving and is particularly popular due to the numerous dive sites within the study area, particularly in the inshore Celtic Sea, and Devon and Cornwall coastline, including the wreck of SS Thistlemore off the Bideford coastline. The Isle of Lundy is a popular dive site within the study area due to its unique location habitat types and geology. Volume 3, Figure 6.4 shows key SeaSearch records located within the study area identified from 5 years of surveys between 2016 and 2020.

6.5.24 Whilst SeaSearch records exist prior to 2014, only the most recent seven years of available data has been used to reflect current patterns of use. SeaSearch dives are carried out on a voluntary basis and although they are technically scientific in nature, they often form participants' recreational time and act as a proxy for recreational diving.

6.5.25 A baseline characterisation of the economy of inshore and offshore recreation and a detailed assessment of the potential effects from the Proposed Development are considered further in Volume 4, Chapter 3: Socio-Economics of this PEIR.

Recreational Fishing

6.5.26 Alongside commercial fishing in the south west, recreational fishing and aquaculture are popular activities due to a range of popular recreational species frequenting local waters, including Bass and Seabream. Access to marine infrastructure which facilitates the practice in areas such as Newquay, Hayle, and Penzance help contribute to the locally popular activity.

6.5.27 Recreational fishing is likely to be undertaken within the study area and is offered by a range of local companies to tourists and local enthusiasts. These contribute to the shipping and navigation baseline environment discussed in Volume 3, Chapter 5: Shipping and Navigation of this PEIR.

6.5.28 Shore fishing for crab and lobster, alongside spearfishing are also practiced recreationally in significant numbers across the south west of the UK, with Cornwall home to its own, local Spearfishing Club (Cornwall Inshore Fisheries and Conservation Authority, 2023).

Aquaculture

6.5.29 Aquaculture is defined as the farming of fish, crustaceans, mollusc and aquatic plants including seaweed.

6.5.30 In 2022, Algapelago Marine Limited installed a seaweed farm off the North Devon Coast in Bideford Bay. The Bideford Bay Seaweed Farm is a pilot seaweed farm to seed, grow, harvest and process seaweed for use in a broad range of applications such as agriculture, food, skincare, biomaterials and biorefining (Algapelago, 2024). The farm covers an area of approximately 1 km^2 and consists of a series of submerged 220 m long lines (ropes) anchored with eco-block moorings on the seabed (Devon and Severn IFCA, 2022). The longlines are marked by yellow buoys and the cultivation/growing lines which hold the seaweed are obvious on the sea surface by 300 litre floats tied in a series about the growing line. The lines lie within a range of 2-8 metres below the surface.

6.5.31 The Offshore Cable Corridor extends parallel to the south western extent of the Bideford Bay Seaweed Farm, having been specifically routed to avoid the Seaweed Farm during early route reviews. It is located just 15 m north of the Offshore Cable Corridor at its closest point and is shown in Volume 3, Figure 6.5.

Site Specific Surveys

6.5.32 No site-specific surveys have been undertaken to date to inform this PEIR due to the availability of suitable desk-based data and consultation with stakeholders. It is not anticipated that the OMU chapter will require site-specific surveys.

Future Baseline Conditions

6.5.33 Development within the Cornwall and Devon marine environment is guided by the South West Marine Plan. This policy document provides a clear, evidence-based approach to inform decision-making by marine users and regulators on where, when or how activities might take place within the South West marine area.

6.5.34 The UK National Policy drive for Net Zero by 2050 has supported the development of offshore wind infrastructure. The Crown Estate issued three Floating Offshore Wind Leasing Round 5 Project Development Areas (PDA) in 2023. One of these Celtic Sea PDAs is located within the northern extent of the study area in the Celtic Sea. PDA 3 overlaps with the study area and Offshore Cable Corridor as shown in Volume 3, Figure 6.2 (noting that the Offshore Cable Corridor has been widened along this length to allow additional flexibility in micro routing as necessary); whilst PDA 2 is located approximately 10 km north of the study area. PDA 1 is located approximately 24 km north. These areas are allocated for up to 1.5 GW of generating capacity which may possibly be comprised of three development stages of at least 300 MW (The Crown Estate, 2023).

6.5.35 The Round 5 PDAs situated in the Celtic Sea aim to diversify the supply of offshore wind generation away from cluster areas such as the North Sea. It is anticipated the drive for implementation of offshore wind in the South West Marine Plan area will increase in line with UK policy for 50 GW of offshore renewable generation by 2030.

6.5.36 The South West Marine Plan identifies the whole of the south west of the UK as a key landing point for a substantial number of economically important subsea cable connections across the Atlantic and Europe. This accumulation of subsea cables and support infrastructure is likely to lead to several more projects to be commissioned in the south west. Such examples include the Celtic Interconnector running from Ireland to France which aims to be commissioned in 2026. The UK

aims to increase the number of these subsea electricity and telecommunication cables, enhancing energy security and adoption of high-speed internet.

There is limited information available on the potential for aquaculture within the study area, however, the MMO published a report on identifying potential areas for aquaculture in English waters. This report identified that areas in the south west were suitable for aquaculture including optimal and sub-optimal conditions for growing *Saccharina latissimi* sugar kelp and *Laminaria digitata* oarweed seaweed and *Pecten maximus* king scallop as well as several fish species (MMO, 2019). Furthermore, the Bideford Bay Seaweed Farm has aspirations to expand the farm should the pilot be successful. There are no planned aquaculture sites at present and therefore no changes are currently considered in the future baseline.

6.5.37 There is uncertainty associated with long-term predictions for recreational boating, diving, water sports and fishing given there is limited reliable information on future trends on which any assumptions can be made, however based on trends it is considered likely that uptake of these activities will increase in the future.

Key Receptors

6.5.38 **Table 6.16** identifies the receptors taken forward into the assessment.

Table 6.16: Key receptors taken forward to assessment

Receptor	Description	Sensitivity/Value
Offshore Wind and associated infrastructure	Existing and proposed wind farm array areas, cable routes and offshore substations	Low
Military Activity and Munitions	Military munitions disposal areas and practice areas	Negligible
Subsea Cables	Existing and proposed subsea cables	Medium
Recreational boating and sailing	Dinghy racing, yacht racing, motorboating	Medium
Diving and water sports	Recreational diving, surfing, bathing and other water sports	Low
Recreational fishing and aquaculture	Recreational fishing including sea angling, shore angling, spearfishing, and aquaculture.	Medium

6.6 Key Parameters for Assessment

Maximum Design Scenario

6.6.1 The maximum design scenarios identified in **Table 6.17** have been selected as those having the potential to result in the greatest effect on an identified receptor or receptor group. These scenarios have been selected from the Project Design Envelope provided in Volume 1, Chapter 3: Project Description of the PEIR. Effects of greater adverse significance are not predicted to arise; should any other development scenario, based on details within the Project Design Envelope (e.g., different infrastructure layout), to that assessed here be taken forward in the final design. Therefore, this comprises a conservative assessment of a worst-case scenario.

Table 6.17: Maximum design scenario considered for the assessment of potential impacts

Potential Impact	Phase[1]					Maximum Design Scenario	Justification
	C	Op	$O_{pre\ pair}$	$D_{in\text{-}situ}$	D_{remove}		
Increased vessel traffic causing disruption to OMU activities	Yes	No	Yes	No	Yes	**Construction phase** • Phased construction activities. Pre-lay works may commence in 2027. Cable lay activities due to start Q1 2028. Second bundle cable lay due to start 2030. Burial and protection activities would progress broadly in parallel, with protection taking longer to complete. • Activities assumed 24 hours a day but transient (progressing along the OCC at typical rates of e.g. trenching at c.50 to 400 m per hour). • HDD vessels: Two jack-up/multi-cat vessels • Pre-Installation Survey Vessels: Two • Trenching Vessels: Four • Rock Placement Vessels: Two • Cable Lay Vessels: Two (at change overs) • Guard Vessels: 20 (every 10 nm) • Roaming 500m safe passage distance zone	Maximum vessel numbers and construction period will be assumed providing worst-case scenario for disturbance to OMU. It is assumed a voluntary roaming 500m safe passage distance zone associated with construction and repair of the Proposed Development in place during relevant activities (in accordance with industry best practice).
						Operational phase – repair • Potential for unplanned maintenance and repair, involving works similar to those described for the construction phase but on a lesser scale (targeted local 'repair' works where necessitated).	This scenario represents the maximum vessel numbers during O&M over the anticipated design life of the Proposed Development
						Decommissioning Assumed similar to construction phase.	Should the decommissioning strategy involve the removal of the Proposed Development from the seabed it is assumed the maximum design scenario used for construction would also apply. Should the Proposed Development remain in-situ, maximum design scenario is equivalent to Operational-normal.

Potential Impact	Phase[1]					Maximum Design Scenario	Justification
	C	Op	$O_{pre\ pair}$	$D_{in\text{-}situ}$	D_{remove}		
Physical presence of infrastructure and safe passing zones	Yes	Yes	Yes	Yes	Yes	**Construction phase** • Construction phase taking place between March 2028 – May 2029 for Bipole 1 and March 2030 – May 2031 for Bipole 2 • Cable installation activities occurring 24/7 • HDD: Two jack-up/multi-cat vessels • Pre-Installation Survey Vessels: Two • Trenching Vessels: Four • Rock Placement Vessels: Two • Cable Lay Vessels: Two • Guard Vessels: 20 (every 10 nautical miles) • 500m safe passing zones • Maximum spacing between Bipoles: 250m • Maximum Additional Cable Protection: 1m high x 7m width • Maximum Cable Crossing Footprint: 3,500m^2 (500m length x 7m width x 1.4m height) • Maximum Number Cable Crossings: 21	This is the maximum adverse scenario associated with the construction of the Proposed Development, dimensions of cable protection and crossings and vessel numbers and construction periods.
						Operation phase • Operational Life: 50 years • Survey Vessels: One vessel annually for first 5 years and then roughly 5 years for the remainder of the operational life **Operation phase (repair)** • Potential for unplanned maintenance and repair, involving works similar to those described for the construction phase but on a lesser scale (targeted local 'repair' works where necessitated).	This scenario represents the maximum disturbance to existing infrastructure and worst-case disturbance scenario to OMU.
						Decommissioning (in-situ) Assumed similar to operation phase without survey vessels	Should the decommissioning strategy involve the removal of the Proposed Development from the seabed it is assumed the maximum

Potential Impact	Phase[1]					Maximum Design Scenario	Justification
	C	Op	$O_{pre\ pair}$	$D_{in\text{-}situ}$	D_{remove}		
						Decommissioning (removal) Assumed similar to construction phase.	design scenario used for construction would apply. Should the Proposed Development remain in-situ, maximum design scenario is of a lesser magnitude that the scenario for operation.
Temporary increase in suspended sediment concentrations and deposition of sediment	Yes	No	Yes	No	Yes	**Construction phase** **HDD** • Four HDD exit points • 15m x 15m excavation around each HDD exit point • 40m separation between drill exit points ***Route Preparation - Pre-Lay Grapnel*** • Max width 1m x max depth 1m ***Route Preparation - Sandwave Clearance*** • Mass Flow Excavator: • Seabed Surface Plough: Maximum width 20m ***Route Preparation - Boulder Clearance*** • Pre-Lay Plough: 15m width for maximum 200km of route ***Route Preparation - Trench Ploughing*** • Trench with a 'Y' shaped profile • Trench up to 500mm wide and 700mm depth (at its base) • Maximum disturbance footprint of Pre-Lay Plough: 15m width ***Route Preparation* - Cable Installation** • Four 525kV HVDC marine power cables (270km length x2)	Mass Flow Excavation and water jetting are considered to have the greatest potential to cause resuspension of sediment at the seabed within Bideford Bay, at a rate described by the trench dimensions and rate of cable burial.

Potential Impact	Phase[1]					Maximum Design Scenario	Justification
	C	Op	$O_{pre\ pair}$	$D_{in\text{-}situ}$	D_{remove}		
						• Maximum rate of cable installation: 400 m per hour • Burial Technique: Mechanical trenching or water jetting • Cable Burial Depth: Target depth 1.5 m • Cable Bundle Trench Width: 1.5 m • Cable Bundle Trench Separation: 180m or 250m in areas of high shipping density	
						Operation phase (repair) • Maximum rate of cable installation: 400 m per hour • Burial Technique: Mechanical trenching or water jetting • Cable Burial Depth: Target depth 1.5 m • Cable Bundle Trench Width: 1.5 m • Cable Bundle Trench Separation: 180m or 250m in areas of high shipping density	This represents the maximum scenario for sediment disturbance resulting from repair activities.
						Decommissioning (removal) Assumed similar to construction phase.	Should the decommissioning strategy involve the removal of the Proposed Development from the seabed it is assumed the maximum design scenario used for construction would also apply.
Increased subsea noise	Yes	No	Yes	No	Yes	**Construction phase** • Phased construction activities. Pre-lay works may commence in 2027. Cable lay activities due to start Q1 2028. Second bundle cable lay due to start 2030. Burial and protection activities would progress broadly in parallel, with protection taking longer to complete. • Activities assumed 24 hours a day but transient (progressing along the OCC at typical rates of e.g. trenching at c.50 to 400 m per hour). • HDD vessels: Two jack-up/multi-cat vessels • Pre-Installation Survey Vessels: Two • Trenching Vessels: Four	Maximum vessel numbers and construction period will be assumed providing worst-case scenario for underwater noise to be generated.

Potential Impact	Phase[1]					Maximum Design Scenario	Justification
	C	Op	$O_{prepair}$	$D_{in-situ}$	D_{remove}		
						• Rock Placement Vessels: Two • Cable Lay Vessels: Two (at change overs) • Guard Vessels: 20 (every 10 nm) • Roaming 500m safe passage distance zone	
						Operation phase (repair) • Maintenance Vessels, assume a worst case similar to construction: • Burial Technique: Mechanical trenching or water jetting • Potential for unplanned maintenance and repair, involving works similar to those described for the construction phase but on a lesser scale (targeted local 'repair' works where necessitated).	This scenario represents the worst-case disturbance potential for underwater noise impacts to be generated.
						Decommissioning (removal) Assumed similar to construction phase.	

Table notes: [1] C=Construction phase, Op=Operational phase, Oprepair=Operational phase repair activities, Din-situ=Decommissioning phase assuming cable de-energised and left in-situ, Dremove=Decommissioning phase assuming cable removed

6.7 Mitigation Measures Adopted as Part of the Proposed Development

6.7.1 As part of the Proposed Development design process, a number of mitigation measures have been adopted to reduce the potential for impacts on OMU. These mitigation measures will evolve over the development process as the EIA progresses and in response to consultation. They will be fed iteratively into the assessment process.

6.7.2 As there is a commitment to implementing these measures, and also to various standard sectoral practices and procedures, they are considered inherently as part of the design of the Proposed Development and are set out in this PEIR. **Table 6.18** sets out the relevant mitigation measures to the OMU assessment.

6.7.3 The mitigation measures proposed as part of the Proposed Development include the following types of mitigation:

- Primary (inherent) mitigation – measures included as part of the Proposed Development design. The Institute of Environmental Management and Assessment (IEMA) describes these as '*modifications to the location or design of the development made during the pre-application phase that are an inherent part of the Proposed Development and do not require additional action to be taken*'. This includes modifications arising through the iterative design process. These measures will be secured through the consent itself, through the description of the Proposed Development and the parameters secured in the DCO and/or marine licences. For example, a reduction in footprint or height.
- Secondary (foreseeable) mitigation. IEMA describes these as '*actions that will require further activity in order to achieve the anticipated outcome'*. These include measures required to reduce the significance of environmental effects (such as lighting limits) and may be secured through an environmental management plan.
- Tertiary (inexorable) mitigation. IEMA describes these as '*actions that would occur with or without input from the EIA feeding into the design process. These include actions that will be undertaken to meet other existing legislative requirements, or actions that are considered to be standard practices used to manage commonly occurring environmental effects'*. It may be helpful to secure such measures through the Offshore Construction Environmental Management Plan (an outline Offshore CEMP is provided as PEIR Volume 1, Appendix 3.3, which will continue to be developed and submitted as part of the DCO application).

Table 6.18: Mitigation measures adopted as part of the Proposed Development

Measure Adopted	How the Measure Will be Secured
Primary mitigation	
HDD methods will be employed to avoid any direct disturbance of the intertidal, the foreshore and the coastal cliffs.	Design parameters taken forward into DCO
Cable burial is the preferred method of cable protection. The cable will be buried at a target depth of up to 1.5m to reduce risks to the cable (e.g., anchor damage), subject to a detailed CBRA.	DCO licence. Pre-requisite contractor requirement - secured via final Offshore CEMP.

Measure Adopted	How the Measure Will be Secured
Cable crossing and proximity agreements with recognised subsea cables and pipeline operators will be obtained. Crossing design will adhere to international best practice.	DCO licence. Pre-requisite contractor requirement - secured via final Offshore CEMP.
Secondary mitigation	
N/A	
Tertiary mitigation	
A Marine Pollution Contingency Plan (MPCP) will be produced as part of the Offshore CEMP and will include measures to minimise the impact of any events as well as compliance with the International Convention for the Prevention of Pollution from Ships (MARPOL).	Pre-requisite contractor requirement - secured via final Offshore CEMP.
For compliance with the requirements of MARPOL, all Project vessels with a gross tonnage (GT) above 400 tonnes would require a Shipboard Oil Pollution Emergency Plan (SOPEP) detailing the emergency actions to be taken in the event of an oil spill.	Pre-requisite contractor requirement - secured via final Offshore CEMP.
Development of a Vessel Management Plan which would set out pre-agreed vessel routes, speeds, safety measures, communication expectations, etc.	Pre-requisite contractor requirement - secured via final Offshore CEMP.
Promulgation of information via Notices to Mariners, Kingfisher, KIS-ORCA, Radio Navigational Warnings on Very High Frequency (VHF) radio, NAVTEX, and/or broadcast warnings in advance of and during the offshore works. Details to be set out in the Vessel Management Plan.	Pre-requisite contractor requirement - secured via final Offshore CEMP.
The cable will be clearly marked on Admiralty Charts with associated note/warning about anchoring, trawling or seabed preparation.	Ongoing consultations and commitments to data sharing with The Maritime and Coastguard Agency (MCA) and Trinity House. Data sharing commitment to the UK Hydrographic Office (UKHO) direct as required to update Admiralty Charts. Data sharing commitment secured via DCO.
Compliance with international legislation, both for Project vessels and third-party vessels. This includes the COLREGs and SOLAS.	Pre-requisite contractor requirement - secured via final Offshore CEMP.
Guard vessel(s) will be employed to work alongside the installation vessel(s) during the construction period. These will alert third-party vessels to the presence of the installation activity and provide support in the event of an emergency.	Pre-requisite contractor requirement - secured via final Offshore CEMP.
Passing vessels will be requested to maintain a “safe” distance from installation vessels restricted in manoeuvrability. This will be monitored by guard vessels.	Pre-requisite contractor requirement and presence of a Fisheries Liaison Officer (FLO) - secured via final Offshore CEMP.
Sequential installation of cable, aiming to have cable laying vessels rotating on-site campaigns, minimising down time and requirement for guard vessels and safe passage distances.	Pre-requisite contractor requirement - secured via final Offshore CEMP.

6.8 Preliminary Assessment of Construction Effects

6.8.1 The impacts of the construction of the Proposed Development have been assessed. The preliminary potential impacts arising from the construction phase

of the Proposed Development are listed in **Table 6.20**, with a full description of each identified impact in this section.

Increased vessel traffic

6.8.2 The installation of the Proposed Development will increase vessel movements within the area, with assumptions described in Volume 3, Chapter 5: Shipping and Navigation. Project related vessel movements are associated with activities such as seabed preparation works (including sandwave clearance and boulder clearance) and the installation of the cable (cable lay and protection).

6.8.3 Larger installation vessels (such as CLVs) are likely to transit directly to the Offshore Cable Corridor from cable collection ports. Those vessels more likely to operate out of local UK harbours are the smaller, non-specific vessels, such as Guard Vessels.

6.8.4 The relevant construction phase contractors will be required (under contract) to deploy a number of embedded environmental measures that are listed in **Table 6.18**. Those that are relevant to vessel movements are:

- Notice to Mariner publications (minimum weekly and 5 days ahead of any proposed works).
- Adherence to a Vessel Management Plan (VMP), which will form part of the CEMP, and which will identify mitigation measures included as part of best practice guidance and legislative or policy requirements.
- The use of guard vessels to work alongside installation vessels and in collaboration with the FLO, to alert-third party vessels to the installation activities, help to maintain the rolling safe passage area, and to support in the event of an unforeseen emergency.

Sensitivity of the Receptor

Offshore Wind

6.8.5 Offshore wind infrastructure in the Celtic Sea is currently limited to White Cross OWF and no wind farm developments present within the study area. Therefore, the receptor has minor value to the national economy, and due to the absence of infrastructure at this early stage of development the receptor has been deemed to have a high recoverability.

6.8.6 Sensitivity of the OWF receptors to the increased vessel movement is therefore considered **low**.

Military Activity and Munitions

6.8.7 The military exercise airspace off the coast of Cornwall, Devon, and the Isles of Scilly is unlikely to be influenced by the increased vessel numbers associated with the construction of the Proposed Development due to construction activities occurring only at sea surface (or below).

6.8.8 The firing areas off the Cornwall and Devon Coastline are outwith the 5 nm study area, however, they may subject to increased vessel presence, as these areas operate a clear range procedure and increased vessel numbers in the vicinity may

preclude the use for these ranges for short periods during transit of vessels to and from the Proposed Development. It is however considered that the current baseline levels of vessel traffic will see a minimal increase in vessel movements as a result of the construction of the scheme due to the high intensity of vessel activity in the region as described in Volume 3, Chapter 5: Shipping and Navigation.

6.8.9 The Applicant will ensure to consult specifically with the MoD to confirm any management measures required to limit impacts on the use of the PEXA. It is envisaged that the impact will be sufficiently mitigated through the use of a VMP and advanced warning of construction activities through NtM.

6.8.10 The sensitivity of the Military Activity and Munitions receptors to the increased vessel movement is therefore considered **negligible**, on the basis that the PEXA area is substantial and alternative locations within it can be utilised, and the receptor has a high recoverability. This is a preliminary assessment and the Applicant will consult with the MOD to identify further defence interests, which will be included in the OMU baseline and assessment at ES stage.

Subsea Cables

6.8.11 Impacts from increased vessel movement have the potential to disrupt maintenance activities for the cables crossed by the Proposed Development (there are no identified pipelines in the study area). Out of service (OOS) cables will (following agreement) be cut and a section removed during pre-lay activities; therefore, OOS cables are not considered further. The sensitivity of subsea cables receptors to the increased vessel movement is considered **negligible**, on the basis the receptor is not generally vulnerable to impacts which may arise with embedded mitigations through the management of vessel movements via the VMP and there will be advanced warning of vessel transits through NtM.

Recreational boating and sailing

6.8.12 There is potential for temporary disruption of some sailing routes and general recreational boating in the area. The greatest potential for impact will be on nearshore environment around Bideford Bay and the general boating area through which the Offshore Cable Corridor passes, however, this will be limited spatially to the locations where construction vessels are present and of temporary duration.

6.8.13 The Applicant will engage with clubs and associations in order to minimise the potential for disturbance, and the adoption of the VMP, with advanced warning of vessel transits through the NtM as an embedded environmental measure to be used during construction will minimise this impact.

6.8.14 Recreational boating and sailing receptors are unlikely to be sensitive to this impact. As described in Volume 3, Chapter 5: Shipping and Navigation of the PEIR, the area receives high vessel activity during peak summer months. It is considered likely that recreational boating and sailing craft will be able to utilise other sailing routes within and around the Offshore Cable Corridor (including Bideford Bay). This will reduce the sensitivity of recreational boating and sailing receptors to temporary increase in vessel numbers during construction of the Proposed Development where wide availability of alternative routes exist.

6.8.15 The sensitivity of the Recreational Boating and Sailing receptors to the increased vessel movement associated with the Proposed Development's construction is therefore considered **low**, on the basis that receptors are deemed to be of limited vulnerability to temporary construction activities, with high recoverability and minor value.

Diving and Water Sports

6.8.16 Impacts from the increased related vessel traffic associated with the Proposed Development could potentially interfere with any diving or water sport activity within the study area.

6.8.17 The greatest potential for interaction is expected to be in the nearshore environment of Bideford Bay. As described within the baseline environment (**section 6.5**), there are a number of dive centres based along the coast, many of which run dive trips to locations in the area around the Proposed Development, though few are located within the Offshore Cable Corridor.

6.8.18 The sensitivity of the Diving receptors to the increased vessel movement is therefore considered to be **low** as there is already a relatively high baseline level of vessel traffic in the Offshore Cable Corridor, and numerous alternative diving sites in the south west can be accessed during any short-term interruption that will be reversible.

6.8.19 The remaining water sports activities take place inshore and therefore are unlikely to be sensitive to the potential impacts of increased vessel traffic as they will not be affected by the increased vessel movements.

6.8.20 The sensitivity of the receptor is therefore considered to be **low** for diving and **negligible** for all other activities.

Recreational Fishing and Aquaculture

6.8.21 Impacts arising from increased vessel traffic during construction could potentially interfere with recreational boat based and charter fishing activities within the area. However, given the established high baseline vessel movements within the area (Volume 3, Figure 5.7) it is understood that this receptor is unlikely to be sensitive to increased vessel movements associated with the Proposed Development.

6.8.22 The most sensitive receptor to the temporary increase in vessel movements is likely to be the Bideford Bay Seaweed Farm; vessel movements may hinder access to the aquaculture site during construction. The Sensitivity of the seaweed farm is therefore anticipated to be **low** due to the site having minor importance, with high recoverability once construction is complete.

6.8.23 Shore based fishing and terrestrial seaweed harvesting is not considered to be sensitive as it will not be affected by the increase in vessel movements on the basis of the shoreline locations from which this activity is undertaken and noting that the use of HDD at the landfall means no vessel movements within approximately 500 m of the shore.

6.8.24 The sensitivity of the receptor is therefore considered to be **low** for boat based recreational fishing and aquaculture and **negligible** for all shore-based fishing and aquaculture activities.

Magnitude of the Impact

Offshore Wind

6.8.25 As described in the baseline section (**section 6.5**), the area remains yet to see significant OWF development beyond White Cross OWF operated by Flotation Energy and Cobra. Therefore, the magnitude of the impact arising from construction activity vessel movements relating to OWF in the study area is anticipated to be **low** on the basis that increased vessel traffic will lead to a slight adverse change from baseline conditions for a short-term duration.

Military Activity and Munitions

6.8.26 The overlap of the Offshore Cable Corridor with the south west PEXA is approximately 250 km^2. This is a minor area in comparison to the wider practice area which covers almost all of the South West Marine Plan area reducing the sensitivity of the PEXA to project activities. Furthermore, it is anticipated that the sea surface vessels associated with the construction phase are unlikely to interfere with military practice airspace due to the separation of aviation and maritime activities. The impact of increased vessel traffic is also transient, temporary, and short term. Therefore, the magnitude of impact is anticipated to be **low.**

Subsea Cables

6.8.27 Impacts from increased vessel movement have the potential to disrupt maintenance activities for the cables crossed by the Proposed Development. These maintenance activities are anticipated to be infrequent, and the likelihood of interaction with other subsea cables, in respect of the coincidence of location and timing of repair, is deemed remote. Should maintenance of these cables be required during the construction phase, management of vessel movements via the VMP and advanced warning of vessel transits through NtM, will ensure any risks of collision or disturbance impacts are appropriately managed, limiting the potential magnitude of any impact.

6.8.28 It is likely that similar controls and commitments will be applied to the Celtic Interconnector cable. Specific consultations will continue and crossing agreements will also be in place. Overall, impacts are considered to be short to medium-term (throughout the construction phase), of local extent, intermittent and reversible. The magnitude of increased vessel movements arising from the construction activity of the Proposed Development is therefore considered to be **low** for subsea cables within the study area.

Recreational Boating and Sailing

6.8.29 As identified in Volume 3, Chapter 5: Shipping and navigation, the increase in vessels from the construction of the Proposed Development will be small against baseline levels of vessel movements within the area, however, there is potential for recreational sailing and boating activities to overlap with construction vessel activities. Much of the smaller recreational activity will be concentrated relatively close to the coastline and inshore of the majority of the Offshore Cable Corridor, and in the vicinity of the general boating area of Bideford Bay, with interaction possible in the nearshore parts of the Offshore Cable Corridor. However, the

vessel transit route data also indicates that vessels, likely the larger motorboats and yachts, utilise areas further offshore and across the Offshore Cable Corridor. There is thus potential for a **low** magnitude of impact from vessel encounter and/or disruption from construction vessels.

6.8.30 Notwithstanding that the potential for impact is limited by the relatively minor increase in baseline vessel numbers in the area as a result of the phased construction works, the potential impact magnitude will also be limited by the controls and notifications of works related to the Proposed Development's construction vessel activity. Even so, whilst recreational craft activity could be affected by construction vessel activity, the potential for impact will be short to medium-term (throughout the construction phase), of local extent, intermittent and reversible. The magnitude is therefore considered to be **low** for both vessels using the offshore areas (with the mitigation measures in place) and smaller craft in the nearshore zone (on the basis of a lower likelihood of encounter together with the management controls).

Diving and Water Sports

6.8.31 Impacts from the increased vessel traffic could potentially interfere with any diving or water sport activity within the area.

6.8.32 The greatest impact is expected to be in the nearshore environment of Bideford Bay. There are a number of dive centres based along the coast, many of which run dive trips to locations within the area around the Proposed Development, though few are known to be located within the Offshore Cable Corridor.

6.8.33 Impacts to other sea-based recreational activities (surfing, kite surfing, wind surfing, bathing and canoeing/kayaking) are not likely to be affected by construction vessel activity given the inshore locations of the majority of such pursuits and the temporary nature of the inshore works of the Proposed Development.

6.8.34 Overall, the impact is considered to be short to medium-term (throughout the construction phase), of local extent, intermittent and reversible and there will be no impact arising on the long-term viability of any of these activities. Therefore, the magnitude of the impact from construction activity vessel movements is assessed as being **low** for diving and **negligible** for other activities.

Recreational Fishing and Aquaculture

6.8.35 A relatively minor increase in baseline vessel numbers as a result of the construction phase works is expected. The increase in vessels during the construction phase will likely be Tolerable against baseline levels of vessel movements within the Offshore Cable Corridor and study area.

6.8.36 There is potential for some disruption to the use of recreational fishing sites within the Offshore Cable Corridor; however, the areas subject to active construction works (and therefore increased vessel movements) at any one time will be small and therefore any attendant restriction on boat-based angling activities will be similarly limited in extent. As a result, and with reference to the provisions for advance notification of the specific locations of construction work during the construction phase of the Proposed Development and the implementation of the VMP it is considered that any risks of collision or disruption to recreational (boat based) angling activities will be minimised and **low**.

6.8.37 It is anticipated that increased vessel traffic will have a measurable impact on shore-based angling or aquaculture as a result of increased vessel movements. However, the impact is considered to be short to medium-term (based on transient and temporary disruption throughout the construction phase), of local extent, intermittent and reversible and the magnitude of impact is therefore **low** for boat-based angling and shore-based angling and aquaculture.

Significance of the Effect

Offshore Wind

6.8.38 Overall, the magnitude of the impact is **low,** and the sensitivity of the receptor is **low**. The effect will, therefore, be of **negligible or minor** adverse significance, which is **not significant**.

Military Activity and Munitions

6.8.39 Overall, the magnitude of the impact is **low,** and the sensitivity of the receptor is **negligible**. The effect will, therefore, be of **negligible to minor** adverse significance, which is **not significant**.

Subsea Cables

6.8.40 Overall, the magnitude of the impact is **low,** and the sensitivity of the receptor is **negligible**. The effect will, therefore, be of **negligible to minor** adverse significance, which is **not significant**.

Recreational Boating and Sailing

6.8.41 Overall, the magnitude of the impact is **low,** and the sensitivity of the receptor is **low**. The effect will, therefore, be of **negligible to minor** adverse significance, which is **not significant**.

Diving and Water Sports

6.8.42 Overall, the magnitude of the impact is **low** for diving and **negligible** for other water sports**,** and the sensitivity of the receptors is **low**. The effect will, therefore, be of **negligible or minor** adverse significance, which is **not significant**.

Recreational Fishing and Aquaculture

6.8.43 Overall, the magnitude of the impact is **low,** and the sensitivity of the receptor is **low** for boat-based fishing and aquaculture activities and **negligible** shore-based fishing and aquaculture activities. The effect will, therefore, be of **negligible or minor** adverse significance, which is **not significant**.

Further Mitigation

6.8.44 As the significance of the effects have been determined to be not significant, no further mitigation measures are proposed at the time of writing the PEIR.

Future Monitoring

6.8.45 As the significance of the effects have been determined to be not significant, no further monitoring measures are proposed at the time of writing the PEIR.

Physical Presence of Infrastructure and Safe Passing Zones

6.8.46 The physical presence of infrastructure has been assessed as the maximum potential physical presence of the sub-tidal infrastructure (i.e. the Offshore Cable Corridor). Temporary safe passing zones will be applied during construction to provide a safe area of work around e.g. cable lay operations and any temporarily unprotected cables.

Sensitivity of the Receptor

Offshore Wind

6.8.47 Physical presence of infrastructure and safe passing zones are not anticipated to impact upon White Cross OWF due to the construction of this infrastructure being complete at the time of construction of the Proposed Development. Therefore, the receptor has been assessed as not being generally vulnerable to the impacts associated with construction.

6.8.48 The sensitivity of the receptor is therefore considered to be **negligible** for offshore wind on the understanding that the Proposed Development does not overlap with the array area of White Cross OWF. The export cable is considered under subsea cables below.

Military Activity and Munitions

6.8.49 Impacts are expected to be in the form of disruption to military activities within the study area.

6.8.50 The greatest impact is expected to be on the southwest PEXA which encompasses much of the south west marine region up to the UK EEZ. This PEXA is extremely large in scale and therefore the Proposed Development transects the PEXA for most of the route in UK territorial waters. The overlap with the offshore cable corridor is approximately 250km^2. This is a minor area in comparison to the wider PEXA.

6.8.51 The exercise airspace off the northern coast of Cornwall is not anticipated to be significantly influenced by the physical infrastructure and application of temporary safe passing zones due to the separation of medium between airspace activities and the majority of construction related infrastructure. This includes the safe passing zones which are not anticipated to interfere with airspace activities.

6.8.52 The Applicant will undergo consultation and communication with the MoD to ensure effective information sharing around activities and programme. The PEXA is not anticipated to be sensitive to the physical presence of the cable infrastructure at and below the seabed. The use of the PEXA is not anticipated to be particularly sensitive to the presence of the temporary safe passing zones, as

the PEXA is likely to continue to operate in the normal fashion, taking account of vessel presence and movements in the wider area.

6.8.53 The sensitivity of military activity and munition receptors to displacement from the presence of physical infrastructure and application of temporary safe passing zones is considered to be **negligible.**

Subsea cables

6.8.54 Impacts may arise from any interruption of construction and maintenance activities for the relevant subsea cables in the study area. The subsea cables crossing the Offshore Cable Corridor are particularly vulnerable to impacts that may arise from the Proposed Development, the vulnerability is therefore anticipated to be high, and recoverability may not be possible during the operational phase due to the complexities of cable repair.

6.8.55 The sensitivity of subsea cable receptors to the presence of physical infrastructure and use of safe passing zones is considered to be **medium** on the basis that the cables are of moderate value with recovery difficult in some cases.

Recreational Boating and Sailing

6.8.56 The recreational boating and sailing receptors have potential to be impacted by the temporary construction works including physical presence of infrastructure and safe passing zones.

6.8.57 The greatest potential for impact will be in the nearshore environment around Bideford Bay and the general boating area through which the Offshore Cable Corridor passes, however, interactions will be limited spatially to the locations where construction vessels are present and any associated safe passage zones which will be of temporary duration.

6.8.58 For recreational and public users of the area in the vicinity of the Proposed Development, public notifications outlining the timing and scale of construction operations, as well as NtM for users of nearshore areas, will be provided well in advance of construction works commencing and throughout the construction phase.

6.8.59 The sensitivity of the recreational boating and sailing receptors to the physical presence of infrastructure and safe passing zones is therefore considered **medium**, on the basis that receptors are deemed to be of moderate vulnerability, with high recoverability and medium value on the understanding that the receptors will be able to undertake these activities elsewhere within the area and the impact is temporary and reversable.

Diving and Water Sports

6.8.60 Impacts from displacement arising from use of safe passage zones and physical presence of infrastructure could interfere and restrict access to diving and water sports activities within the area.

6.8.61 The greatest impact is expected to be on any dive sites and recreational activities which are usually undertaken within Bideford Bay and within 500 m of the offshore cable corridor, such as dive trips to the SS Thistlemore and therefore diving activities may be displaced.

6.8.62 There are a number of dive centres based along the coast, many of which dive at locations across the study area, though few appear to be located within the offshore cable corridor itself.

6.8.63 The remaining water sports activities take place inshore and are unlikely to be sensitive to the majority of potential impacts arising from changes in displacement or access issues.

6.8.64 Details on the timings and schedules of works will be declared ahead of works to allow for recreational activities to plan to avoid these construction areas.

6.8.65 The sensitivity of the receptor is considered to be **low** for diving, on the understanding that the receptors will be able to undertake these activities elsewhere within the area and the impact is reversible, and **negligible** for all other water sports.

Recreational Fishing and Aquaculture

6.8.66 Impacts arising from displacement associated with safe passage zones and physical presence of infrastructure could potentially interfere with recreational fishing activities within the area.

6.8.67 Boat based angling will potentially be sensitive to exclusion from favoured fishing spots within the offshore cable corridor, however the areas subject to active construction works (and therefore temporary safe passing zones) at any one time will be small and there are a wide range of alternative locations and areas that will remain unaffected during construction, both inside and outside the offshore cable corridor.

6.8.68 As a result of the provisions for advance notification of the specific locations of construction work during the Proposed Development and the implementation of the VMP, angling boat operators will be kept fully informed regarding the location and duration of any potential restricted areas during the construction phase. Details on the timings and schedules of works will be disseminated ahead of works to allow for recreational fishermen to avoid these construction areas and account for safe passage zones. Therefore, these provisions, alongside the flexibility to fish in alternative and available locations, reduces the potential for these receptors to be sensitive to these potential impacts.

6.8.69 The most sensitive receptor is likely to be the Bideford Bay Seaweed Farm. However, due to early micro-routing of the offshore cable corridor, this receptor has been avoided at the initial design stages of the Proposed Development and consultation with the registered owners of the site is anticipated at the statutory consultation phase.

6.8.70 There are no anticipated impacts on shore-based angling as a result of the implementation of physical infrastructure and safe passing zones.

6.8.71 The sensitivity of the receptor is therefore considered to be **medium** for boat based recreational fishing and aquaculture, **negligible** for all shore-based activities.

Magnitude of Impact

Offshore Wind

6.8.72 The White Cross OWF is unlikely to be subject to large magnitude impacts due to the temporal differences in construction programmes between the OWF receptors and the Proposed Development. The Applicant will continue engagement with the operators of White Cross OWF (Flotation Energy & Cobra) in order to manage the manage the impact in conjunction with a host of mitigations such as the use of a VMP and advanced warning of construction activities through NtM. Any impacts will therefore be of short term duration (throughout the construction phase), of minor extent, intermittent and reversible. The magnitude is therefore considered to be **negligible** once mitigations are applied.

Military Activity and Munitions

6.8.73 The overlap of the Offshore Cable Corridor with the south west PEXA is approximately 250 km^2. This is a minor area in comparison to the wider practice area which covers almost all of the South West Marine Plan area.

6.8.74 Furthermore, the physical presence of infrastructure and safe passing zones is not anticipated to impact upon use of military airspace due to the separation of mediums between the marine and aerospace environments. Further consultation with the MoD is anticipated to further inform the assessment of impacts at ES stage.

6.8.75 There are a number of embedded mitigation measures that will be deployed, for example, circulation of information and notice to mariners, and burial of the cable where conditions allow. It is likely that the construction activities and methodologies will be taken into consideration by the MoD. Therefore, the magnitude of impact from the physical presence of the infrastructure and safe passing zones is anticipated to be **low** as impacts are spatially localised, and of short duration.

Subsea Cables

6.8.76 Impacts from the physical presence of the infrastructure and safe passage zones have the potential to disrupt maintenance activities for the operational cables crossed by the Proposed Development, should maintenance of these be required during the construction phase of the Proposed Development. Management of vessel movements via the VMP and advanced warning of vessel transits through NtM during construction of the Proposed Development, including construction vessel activity, will ensure any risks of collision or disturbance impacts are appropriately managed, limiting the potential magnitude of any impact.

6.8.77 Overall, impacts are considered to be short to medium-term (throughout the construction phase), of local extent, intermittent and reversible. The impact from physical presence of infrastructure and the safe passing zones of the Proposed Development is therefore considered to be **low** magnitude on other subsea cables within the study area.

Recreational Boating and Sailing

6.8.78 As identified in Volume 3, Chapter 5: Shipping and navigation of the PEIR, the implementation of physical infrastructure is unlikely to influence recreational boating and sailing as it occurs at the seabed. However, the temporary safe passage zones during the construction of the Proposed Development have the potential to impact on recreational boating and sailing by restricting access to boating areas and could lead to some deviation from sailing and boating routes. Much of the smaller recreational activity will be concentrated relatively close to the coastline and inshore of the Proposed Development, and in the vicinity of the general boating area of Bideford Bay, with interaction principally possible in the nearshore parts of the export cable corridor. However, the vessel transit route data also indicates that vessels, likely the larger motorboats and yachts, utilise areas further offshore and across the Proposed Development's Offshore Cable Corridor. There is thus potential for a **low** magnitude of impact from the implementation of physical infrastructure and safe passing zones at the site.

6.8.79 The magnitude of potential impacts will be reduced by the controls and notifications of works related to the Proposed Development's construction vessel activity. Even so, whilst recreational craft activity could be affected by displacement from some areas during the construction phase, the potential for impact will be short to medium-term, of local extent, intermittent and reversible.

6.8.80 The magnitude is therefore considered to be **low** for both vessels using the offshore areas (with the management commitments in place) and smaller craft in the nearshore zone (on the basis of a lower likelihood of encounter together with the management controls).

Diving and Water Sports

6.8.81 The use of safe passing zones and the implementation of physical infrastructure during construction has the potential to restrict access to dive sites and recreation activities. The majority of dive sites visited in the area fall outside the Offshore Cable Corridor (shown in Volume 3 Figure 6.4) and therefore the majority of dive activities (at wreck or feature locations) are unlikely to be impacted. As a result, and with the implementation of the notifications for planned works that will be issued such as control of vessel routeing under the VMP, it is considered that any risks of exclusion from dive locations or displacement of diving activities will be effectively minimised.

6.8.82 Impacts to other sea-based recreational activities (surfing, kite surfing, wind surfing, bathing and canoeing/kayaking) are not likely to be significantly affected by safe passing zones during construction of the Proposed Development given the inshore locations of the majority of such pursuits.

6.8.83 The impact from the presence of safe passing zones and the physical presence of infrastructure during construction activities relating to Proposed Development is short to medium-term (throughout the construction phase), of local extent, intermittent and reversible and there will be no impact arising on the long-term viability of any of these activities. The magnitude of the impact is therefore considered to be **low** for diving and **negligible** for all other water sports.

Recreational Fishing and Aquaculture

6.8.84 The use of safe passing zones from the construction of the Proposed Scheme has the potential to exclude boat-based angling from certain areas of the Proposed Development within the Offshore Cable Corridor. Therefore, there is also potential for some disruption to the use of fishing sites within the Offshore Cable Corridor; however, the areas subject to active construction works (and therefore safe passing zones) at any one time will be small and therefore any attendant restriction on boat-based angling activities will be similarly limited in extent. As a result, and with reference to the provisions for advance notification of the specific locations of construction work during the construction phase of the Proposed Development and the implementation of the VMP it is considered that any risks of disruption to recreational (boast based) angling activities will be minimised to **low** magnitude.

6.8.85 Implementation of physical infrastructure is only anticipated to result in exclusion of fishing areas on a temporary and transient basis as the cable will undergo burial as part of the construction methodology and is therefore intended to be protected from recreational fishing activities such as angling immediately post construction.

6.8.86 There are limited anticipated impacts on shore-based angling or aquaculture because of safe passing zones and physical infrastructure imposed on the small section of inshore cable within Bideford Bay. The impact is considered to be short to medium-term (throughout the construction phase), of local extent, intermittent and reversible and the magnitude of impact is therefore **low** for boat-based angling, shore-based angling, and aquaculture.

Significance of the Effect

Offshore Wind

6.8.87 Overall, the magnitude of the impact is **negligible,** and the sensitivity of the receptor is **negligible**. The effect will, therefore, be of **negligible** adverse significance, which is not significant.

Military Activity and Munitions

6.8.88 Overall, the magnitude of the impact is **low,** and the sensitivity of the receptor is **negligible**. The effect will, therefore, be of **negligible to minor** adverse significance, which is not significant.

Subsea Cables

6.8.89 Overall, the magnitude of the impact is **low,** and the sensitivity of the receptor is **medium**. The effect will, therefore, be of **minor** adverse significance, which is **not significant**.

Recreational Boating and Sailing

6.8.90 Overall, the magnitude of the impact is **low,** and the sensitivity of the receptor is **medium**. The effect will, therefore, be of **minor** adverse significance, which is **not significant**.

Diving and Water Sports

6.8.91 Overall, the magnitude of the impact is **low** for diving and **negligible** for other water sports**,** and the sensitivity of the receptor is **low** for diving and **negligible** for other water sports. The effect will, therefore, be of **negligible or minor** adverse significance, which is **not significant**.

Recreational Fishing and Aquaculture

6.8.92 Overall, the magnitude of the impact is **low,** and the sensitivity of the receptor is **medium** for boat based fishing and aquaculture and **negligible** for shore based fishing and aquaculture. The effect will, therefore, be of **minor** adverse significance, which is **not significant**.

Further Mitigation

6.8.93 As the significance of the identified effects are not significant, no further mitigation measures are proposed at PEIR stage.

Future Monitoring

6.8.94 As the significance of the identified effects are not significant, no further monitoring measures are proposed at PEIR stage.

Temporary Increase in Suspended Sediment Concentrations and Deposition of Sediment

6.8.95 Seabed preparation (e.g. for sandwave clearance), cable trenching, and HDD drilling are all predicted to cause temporary mobilisation of sediment.

6.8.96 Volume 3, Chapter 8: Physical Processes of the PEIR provides a full description of the offshore physical environment assessment, with a summary of the maximum design scenario associated with the impact.

6.8.97 The maximum design scenario for SSC and deposition during the construction phase of the Proposed Development is anticipated to result in a plume dispersion of sediment over approximately 3.9km and is anticipated to remain in suspension for up to 5 hours. It is noted that this is based on worst case calculations (that apply in shallow water depths); the majority of the Offshore Cable Corridor have lower bed currents and water depths and lower associated suspended sediment dispersion predictions. Assessments undertaken for White Cross OWF concluded that increases in SSC from works in the Celtic Sea would likely be within the range of natural variability of the system, with sedimentation localised to the disturbance activity due to coarse sediments aiding in accelerated sediment deposition around the site of disturbance (White Cross OWF, 2022).

Sensitivity of the Receptor

Diving and Water Sports

6.8.98 Impacts from temporary increases in SSC have the potential to interfere with any diving and water sports activities within the area through reduced water clarity.

The greatest impact is expected to be on dive sites within the Offshore Cable Corridor and specifically within the inshore waters of Bideford Bay where wreck sites such as the SS Thistlemore are located. Although these inshore dive sites are also subject to changes in SSC from more turbulent inshore coastal waters

6.8.99 Impacts within the areas of increased SSC could displace recreational divers from dive sites during these intermittent construction phase activities, preventing dives being undertaken in close vicinity of the works. However, the displacement of recreational divers will be temporary, and it is anticipated these OMU will be able to utilise further dive sites around the Devon and Cornwall coastline during the transient construction works.

6.8.100 The majority of the other water sport activities including those such as snorkelling, take place close to the coast and therefore will not be affected by the potential increases in SSC and subsequent deposition. The sensitivity of other water sports is therefore considered to be **negligible** on the basis that the receptor is not generally vulnerable to impacts that may arise.

6.8.101 The sensitivity of the receptor is considered to be **low** for diving water sport activities on the understanding that the receptors will be able to undertake these activities elsewhere within the area and the impact is temporary and reversable.

Magnitude of Impact

6.8.102 The extent of SSC uplift and deposition from construction activities is expected to extend up to approximately 3.9km from source, over an estimated maximum time period of 5 hours. It is therefore not considered that the temporary impacts on water clarity will affect recreational diving as these impacts will be short-term, intermittent and of relatively localised extent (mostly within the Offshore Cable Corridor) and reversible. The magnitude of the impact is therefore considered to be **low**, indicating that there is no potential for the impact to threaten the long-term viability of the receptor.

Significance of the Effect

Diving and Water Sports

6.8.103 Overall, the magnitude of the impact is **low,** and the sensitivity of the receptor is **low** for diving and **negligible** for all other water sports. The effect will, therefore, be of **negligible or minor** adverse significance, which is **not significant**.

Further Mitigation

6.8.104 As the significance of the effect is determined to be not significant, no further mitigation measures are proposed at PEIR stage.

Future Monitoring

6.8.105 As the significance of the effect is not significant, no further monitoring measures are proposed at PEIR stage.

Increased Subsea Noise

6.8.106 Activities such as cable laying and vessel movements will result in non-impulsive underwater noise, these have the potential to affect a very localised extent only, in the immediate vicinity of activities and with limited effect to human receptors due to the continuous nature of the noise generating activities.

Sensitivity of the Receptor

Diving and Water Sports

6.8.107 Although there are a range of dive sites that may be subject to increased subsea noise generated during the construction phase, there will also be a range of alternative dive sites that will remain unaffected. Furthermore, divers will not be particularly sensitive to continuous noise given the nature of construction activities and the 500m temporary safe passing zone where no diving would be undertaken. The dive sites available, or constrained, during the construction phase of the Proposed Development will change during the construction period so although impacts may arise across a relatively wide area over the entirety of the construction phase, there will also be a wide range of alternative dive sites for the activity to continue throughout this time.

6.8.108 The sensitivity of other water sports is anticipated to be reduced in comparison to diving. This is partly due to the reduced period of time spent underwater during activities such as surfing and SUP. This therefore reduces the vulnerability of these receptors to increased subsea noise. For some activities the time spent underwater is negligible, and therefore the impacts of subsea noise are considered to be **negligible**.

6.8.109 Safe passing zones will be centred on construction activity and will therefore move as construction work moves. This is likely to result in only temporary limitation to some dive sites at any given time, and clear and proactive communication on such restricted sites, including a schedule detailing any restricted locations, will be co-ordinated via a NtM.

6.8.110 On the basis that the diving and water sports receptor is of a minor importance and has a high level of recoverability, the diving and water sports in the study area are considered to be of **low** sensitivity to increased subsea noise.

Recreational Fishing and Aquaculture

6.8.111 The fish and shellfish assessment identified that construction related underwater noise represents a temporary and intermittent impact, affecting a relatively small portion of the relevant species receptors in the fish and shellfish study area. Overall, it is predicted that the sensitivity of fish and shellfish receptors is low, and the magnitude of impact is deemed to be low. The effect, therefore, was predicted to be of minor adverse significance, which is not significant.

6.8.112 Whilst fish and other motile species can be affected by underwater noise, and some temporary changes to species distribution may occur, such effects are temporary and intermittent and will be relatively localised in extent. Potential avoidance reactions of fish from intermittent construction noise may mean that fish are temporarily displaced from an area. Theoretically this movement could be both away from, and towards, recreational fishers. The associated sensitivity of

recreational angling receptors will therefore mirror the predicted range and extent of effects on the target species and is therefore considered to be of **low** sensitivity**.**

6.8.113 Aquaculture is deemed to be of **low** sensitivity due to increases in underwater noise on the basis that the value is of minor importance to the value of the local economy but is likely to show high recoverability.

Magnitude of Impact

Diving and Water Sports

6.8.114 The study area supports a relatively high level of recreational diving in the nearshore area and a wide variety of dive spots. However, it is not anticipated that the increased noise levels generated from the cable laying, dredging and vessel movements will significantly impact divers in the vicinity of the Offshore Cable Corridor and therefore the magnitude of impact is considered to be **low**.

6.8.115 For all other water sports, the nearshore focus of the activities and the relatively shorter periods spent submerged, and thus potentially subject to underwater noise emissions, the magnitude of the potential impact is considered to be **negligible**.

Recreational Fishing and Aquaculture

6.8.116 The fish and shellfish assessment identified that construction related underwater noise represents a temporary and intermittent impact, affecting a relatively small portion of the relevant species receptors in the fish and shellfish study area. Overall, it is predicted that the sensitivity of fish and shellfish receptors is low, and the magnitude of impact is deemed to be low. The effect, therefore, was predicted to be of minor adverse significance, which is not significant.

6.8.117 Therefore, whilst fish and other motile species could potentially be affected by underwater noise, and some temporary changes to species distribution may occur, such effects are temporary and intermittent and will be relatively localised in extent. The significance of effect for fish species as a result of the construction noise is not significant for any species in terms of mortality, mortal injury or recoverable injury. Potential avoidance reactions of fish from intermittent construction noise may mean that fish are temporarily displaced from an area.

6.8.118 The lack of significant effect for the vast majority of species indicates that the potential magnitude of impacts on recreational fishing and aquaculture will be **low** for all boat based and shore-based anglers, on the basis of the availability of other locations and species, and the short term transient nature of impacts.

Significance of the Effect

Diving and Water Sport

6.8.119 Overall, the magnitude of the impact is **low** for diving and **negligible** for all other water sports**,** and the sensitivity of the receptor is **low** for diving and **negligible** for all other water sports. The effect will, therefore, be of **minor** adverse significance, which is **not significant**.

Recreational Fishing and Aquaculture

6.8.120 Overall, the magnitude of the impact is **low,** and the sensitivity of the receptor is **low** for boat based fishing and aquaculture and **negligible** for all shore based recreational fishing and aquaculture. The effect will, therefore, be of **minor** adverse significance, which is **not significant**.

Further Mitigation

6.8.121 As the significance of the effect is determined to be not significant, no further mitigation measures are proposed at PEIR stage.

Future Monitoring

6.8.122 As the significance of the effect is determined to be not significant, no further monitoring measures are proposed at PEIR stage.

6.9 Preliminary Assessment of Operational Effects

6.9.1 The impacts of the Operational phase of the Proposed Development has been assessed. The preliminary potential impacts arising from the Operational phase of the Proposed Development are summarised in **Table 6.20**, with a full description of each identified impact in this section.

Increased Vessel Traffic

6.9.2 Increases in vessel traffic during the Operational phase will be negligible, associated only with infrequent surveys (to confirm no cable exposure or movement). Where repair activities are required (Operational-repair) the activities will be similar in nature, but of smaller extent (smaller geographic and temporal scale) compared to the construction phase.

6.9.3 The sensitivities of OMU receptors to increased vessel movements are described in detail in **section 6.8**. The magnitude of impact for an increase in vessel traffic during construction has been assessed as **low** for all receptors, with the maximum sensitivity of the receptors being **medium**.

Significance of the Effect

6.9.4 Mitigation will also be implemented during the operation phase of the Proposed Development as outlined in **Table 6.18**. Therefore, the significance of effect from increased vessel movements from operation of the Proposed Development will be **minor adverse** and **not significant**.

Further Mitigation

6.9.5 As the significance of the effect is determined to be not significant, no further mitigation measures are proposed at PEIR stage.

Future Monitoring

6.9.6 As the significance of the effect is determined to be not significant, no further monitoring measures are proposed at PEIR stage.

Physical Presence of Infrastructure and Safe Passing Zones

6.9.7 As set out in Volume 1, Chapter 3: Project Description of the PEIR, the design parameters for the Proposed Development state that the Offshore Cable Corridor has a nominal width of 500m extending up to 1500m at some crossing locations.

6.9.8 The Applicant will implement a number of embedded environmental measures during the operational phase, notably the physical infrastructure will be detailed on all navigational charts and maps. This infrastructure will also have the relevant marking in accordance with Trinity House (TH) and the International Association of Marine Aids to Navigation (AtoN) and the International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA).

6.9.9 The sensitivities of OMU receptors to the physical presence of infrastructure and safe passing zones during operation are considered the same as described for construction in **Section 6.8**. Impacts during operation are anticipated to be of a lesser magnitude than construction and are therefore described below.

Magnitude of Impact

Offshore Wind

6.9.10 There are no operational offshore wind farms within the Offshore Cable Corridor or Study Area. However, the pre-construction OWF site of White Cross overlaps with the study area. This designated area for offshore White Cross OWF overlaps with the 5nm study area and it is anticipated that with ongoing consultation and micro routing to avoid the array area and export cable corridor as far as practicable, the magnitude of the impact from physical presence of infrastructure on the White Cross OWF is considered to be **negligible**.

Military Activity and Munitions

6.9.11 The potential impact relating to the presence of the Proposed Development arises from the risk that any installation within the PEXA that could impact on freedom of movement for military exercises. The relatively minor proportion of the PEXA that will be occupied by the Proposed Development (approximately 250km^2 of the PEXA) suggests that the potential disruption to military exercises is likely to be limited; this is reinforced through burial of the cable which is not anticipated to preclude MoD activities once operational. The MoD operates the PEXA around the constraints of current vessel activity and any short-term, transient effects on the PEXA are likely to be negligible in comparison to baseline activities.

6.9.12 The military exercise airspace of the north Cornwall coastline is similarly not anticipated to be subject to significant impacts, in this case due to the air-sea-interface separating much of the Proposed Development from the exercise airspace.

6.9.13 On this basis, the magnitude of this impact is therefore considered to be **low**.

Subsea Cables

6.9.14 The operation of the Proposed Development, including relevant safe passing zones associated with maintenance, may restrict access to the existing subsea cables, of which the Proposed Development crosses. There is the potential that repair, or maintenance works are required to existing cables in the vicinity of the Offshore Cable Corridor during the operational phase.

6.9.15 Restriction of access to an active cable for inspection and maintenance activities could be critical to the operation of that cable. Cable proximity agreements and crossings are common across the UK Continental Shelf (UKCS), and there are established mechanisms for controlling the level of impact to both parties. Cable crossing and proximity agreements with recognised subsea cables will be obtained and crossing designs will adhere to international best practice. As such, the magnitude of impact is considered to be **negligible**.

Recreational Boating and Sailing

6.9.16 There will be no surface or near-surface infrastructure in the Offshore Cable Corridor where recreational boating and sailing activities occur. Volume 3, Chapter 5: Shipping and Navigation of the PEIR considers any navigational risks from the Proposed Development arising on all vessels.

6.9.17 Maintenance activities within the Offshore Cable Corridor may be required during the operational phase; however, any loss of access associated with occurrence of maintenance activities and safe passing zones is considered to be limited in extent and infrequent. There will therefore be minimal change from current baseline conditions during O&M phase of the Proposed Development. Such restrictions will be highly localised to the immediate location of maintenance or repair and therefore will be of **negligible** magnitude.

Diving and Water Sports

6.9.18 The majority of water sport users, including divers, will not be impacted by the presence of the offshore infrastructure as either the receptor activities are undertaken inshore, away from the location of the majority of the Proposed Development or the activities will be able to continue much as before across the area, the main change being the need to avoid any safe passing zones.

6.9.19 The presence of the Proposed Development's operational infrastructure, is not considered likely to affect diving or the majority of inshore and coastal water sports given continued access to the study area for recreation once fully operational.

6.9.20 The implementation of safe passing zones may impact upon the diving and water sports receptors. However, the impact is anticipated to be short term and temporary. There will therefore be minimal change from current baseline conditions during operational phase of the Proposed Development. Such restrictions will be highly localised to the immediate location of maintenance or repair and therefore will be **negligible.**

Recreational Fishing and Aquaculture

6.9.21 The physical presence of infrastructure and safe passing zones has the potential to impact recreational fishing. Through increased hard substrate and structural complexity due to the presence of subsea cable crossings and external cable protection resulting in changes to fish and shellfish receptors. This suggest that fish and shellfish species (as receptors) will be subject to low level impacts and therefore the magnitude of effect on recreational fishing will be **low**.

6.9.22 Access to fishing locations and the Bideford Bay Seaweed Farm within the Offshore Cable Corridor will be maintained. Boat based angling will still be possible within the Offshore Cable Corridor area, with the exception of safety areas around maintenance vessels and no likely significant effects on the availability or distribution of targeted species is predicted. Therefore, overall, it is considered that the magnitude of impact on recreational fishing and aquaculture is anticipated to be **low.**

Significance of Effect

Offshore Wind

6.9.23 Overall, the magnitude of the impact is **low,** and the sensitivity of the receptor is **low**. The effect will, therefore, be of negligible to **minor** adverse significance, which is **not significant**.

Military Activity and Munitions

6.9.24 Overall, the magnitude of the impact is **low,** and the sensitivity of the receptor is **low**. The effect will, therefore, be of negligible to **minor** adverse significance, which is **not significant**.

Subsea Cables

6.9.25 Overall, the magnitude of the impact is **negligible,** and the sensitivity of the receptor is **low**. The effect will, therefore, be of **negligible or minor** adverse significance, which is **not significant**.

Recreational Boating and Sailing

6.9.26 Overall, the magnitude of the impact is **negligible,** and the sensitivity of the receptor is **low**. The effect will, therefore, be of **negligible or minor** adverse significance, which is **not significant**.

Diving and Water Sports

6.9.27 Overall, the magnitude of the impact is **negligible,** and the sensitivity of the receptor is **negligible**. The effect will, therefore, be of **negligible** adverse significance, which is **not significant**.

Recreational Fishing and Aquaculture

6.9.28 Overall, the magnitude of the impact is **low,** and the sensitivity of the receptor is **low**. The effect will, therefore, be of **negligible or minor** adverse significance, which is **not significant**.

Further Mitigation

6.9.29 As the significance of the effect is not significant, no further mitigation measures are proposed at PEIR stage.

Future Monitoring

6.9.30 As the significance of the effect is not significant, no further monitoring measures are proposed at PEIR stage.

Temporary Increase in Suspended Sediment Concentrations and Deposition of Sediment.

6.9.31 Increases in SSC and sediment deposition from the operational phase are anticipated to be negligible during normal operation due to low to nil seabed disturbance from the Proposed Development. Maintenance or repair of the Proposed Development may require similar methods used in construction for the removal and burial of repaired cable. Any such activity would be in discrete, localised locations, therefore temporary increases in suspended sediment concentrations and deposition of sediment are anticipated to be minimal.

6.9.32 The sensitivities of OMU receptors to the temporary increases in SSC and deposition of sediment during operation are considered the same as described for construction in **section 6.8**. Impacts during operation are anticipated to be of a lesser magnitude than construction and are therefore described below.

Magnitude of Impact

Diving and Water Sports

6.9.33 In the situation of maintenance, works are considered to be of a lesser magnitude than construction, given their localised an infrequent nature. The mobilisation of suspended sediments as a result of maintenance activities may temporarily decrease water clarity which could affect the visibility for diving and water sports such as snorkelling within the Offshore Cable Corridor. Despite this, any increases in suspended sediment concentrations will be temporary in nature and other locations for diving and water sports will be available.

6.9.34 The magnitude of the impact to increased SSC and sediment deposition are anticipated to be **low** in magnitude.

Significance of Effect

Diving and Water Sports

6.9.35 The magnitude of the impact has been assessed as **low**, with the maximum sensitivity of the receptors being **low**. Therefore, the significance of effect from changes in SSC and associated sediment deposition occurring as a result of maintenance activities in the subtidal and intertidal area has a maximum of **negligible to minor** adverse significant effect, which is not significant.

Further Mitigation

6.9.36 As the significance of the effect is not significant, no further mitigation measures are proposed at PEIR stage.

Future Monitoring

6.9.37 As the significance of the effect is not significant, no further monitoring measures are proposed at PEIR stage.

Increased Subsea Noise

6.9.38 The operation of the Proposed Development will under normal conditions require very few vessels, limited to infrequent survey. No other noise generating activities are planned. Should repair activities be required, similar vessels and methods to those outlined in the construction phase will be utilised, however the magnitude would reasonably be expected to be much reduced.

Sensitivity of the receptor

Diving and Water Sports

6.9.39 The greatest impact is expected to be on dive sites within the Offshore Cable Corridor and specifically within the inshore waters of Bideford Bay where wreck sites such as the SS Thistlemore are located. The Offshore Cable Corridor has high levels of shipping and marine activities, therefore the sensitivity of the receptor is therefore considered to be **low**.

Magnitude of Impact

Diving and Water Sports

6.9.40 Continuous noise sources may be noticed by divers in the vicinity, however given that safe passing zones will be required around any vessels or maintenance activities, it is unlikely that divers and water sports will take place within 500 m of these activities.

6.9.41 The magnitude of the impact to diving and water sports is considered **low** in magnitude.

Significance of Effect

Diving and Water Sports

6.9.42 The magnitude of the impact has been assessed as **low**, with the maximum sensitivity of the receptors being **low**. Therefore, the significance of effect from increases in subsea noise as a result of maintenance activities has a maximum of **negligible to minor** adverse significant effect, which is not significant.

Further Mitigation

6.9.43 As the significance of the effect is not significant, no further mitigation measures are proposed at PEIR stage.

Future Monitoring

6.9.44 As the significance of the effect is not significant, no further monitoring measures are proposed at PEIR stage.

6.10 Preliminary Assessment of Decommissioning Effects

6.10.1 In the event that the Proposed Development is removed from the seabed as part of decommissioning, the associated impacts are considered to be of a similar magnitude to construction. Should the Proposed Development be left in-situ, impacts will be of a lesser magnitude or negligible for OMU.

6.10.2 An Offshore Decommissioning Plan would be developed prior to decommissioning in a timely manner and will be developed in accordance with latest guidance, legislation, and technologies at the time of preparation.

6.10.3 The impacts of the decommissioning phase of the Proposed Development have been assessed. The potential impacts arising from the decommissioning phase of the Proposed Development are listed in **Table 6.20**, with a description of the effects below. The effects presented relate to the removal of the Proposed Development as this is considered the maximum design scenario.

Increased Vessel Traffic

6.10.4 As per the construction phase, there is potential that decommissioning activities cause disruption to OMU. The magnitude of impacts and the sensitivities of OMU receptors to increased vessel traffic are described in detail in **section 6.8**.

6.10.5 The magnitude of impact has been assessed as **low**, with the maximum sensitivity of the receptors being **low**.

6.10.6 Mitigation will be implemented during the decommissioning of the Proposed Development as identified in **Table 6.18**. Considering this, the significance of effect from increased vessel traffic from the decommissioning of the Proposed Development will be **negligible to minor adverse**, which is **not significant**.

Physical Presence of Infrastructure and Safe Passing Zones

6.10.7 The physical presence of infrastructure and temporary safe passing zones surrounding the decommissioning activities will be similar to those use for construction and will therefore be of a similar magnitude. The magnitude of the impact and sensitivities of OMU receptors is described in detail within **section 6.8**.

6.10.8 The magnitude of impact has been assessed as **low**, with the maximum sensitivity of the receptors being **medium**.

6.10.9 Mitigation will be implemented during the decommissioning of the Proposed Development as identified in **Table 6.18**. Considering this, the significance of effect from the physical presence of infrastructure and safe passing zones from the decommissioning of the Proposed Development will be **minor adverse**, which is **not significant**.

Temporary Increase in Suspended Sediment Concentrations and Deposition of Sediment

6.10.10 Temporary increases in SSC and sediment deposition from decommissioning are likely to be of a lesser magnitude that construction. However, given the unpredictability of future seabed conditions and associated decommissioning activities, decommissioning activities have been considering the same magnitude as construction. The magnitude of the impact and sensitivities of OMU receptors is described in detail within **section 6.8**.

6.10.11 The magnitude of impact has been assessed as **low**, with the maximum sensitivity of the receptors being **low**.

6.10.12 Mitigation will be implemented during the decommissioning of the Proposed Development as identified in **Table 6.18**. Considering this, the significance of effect from temporary increases in SSC and sediment deposition from the decommissioning of the Proposed Development will be **negligible to minor adverse**, which is **not significant**.

Increased Subsea Noise

6.10.13 Increased subsea noise associated with decommissioning of the Proposed Development will be similar to that of construction and are of a similar magnitude. The magnitude of the impact and sensitivity of the receptor of OMU receptors to increased subsea noise are described in detail in **section 6.8**.

6.10.14 The magnitude of impact has been assessed as **low**, with the maximum sensitivity of the receptors being **medium**. The significance of effect from increased subsea noise from the decommissioning of the Proposed Development will be **minor adverse**, which is **not significant**.

6.11 Cumulative Effects Assessment

6.11.1 The Cumulative Effects Assessment (CEA) takes into account the impact associated with the Proposed Development together with other projects and

plans. The projects and plans selected as relevant to the CEA presented within this chapter are based upon the results of a screening exercise (see Volume 1, Appendix 5.3: CEA screening matrix). Each project has been considered on a case-by-case basis for screening in or out of this chapter's assessment based upon data confidence, effect-receptor pathways and the spatial/temporal scales involved.

6.11.2 The OMU CEA methodology has followed the methodology set out in Volume 1, Chapter 5: EIA Methodology of the PEIR. As part of the assessment, all projects and plans considered alongside the Proposed Development have been allocated into 'tiers' reflecting their current stage within the planning and development process (as advocated under the Planning Act, 2008).

- Tier 1
  - Under construction
  - Permitted application(s), but not yet implemented;
  - Submitted application(s) not yet determined
  - Those currently operational that were not operational when baseline data were collected, and/or those that are operational but have an ongoing impact
- Tier 2
  - Scoping report has been submitted
- Tier 3
  - Scoping report has not been submitted
  - Identified in the relevant Development Plan
  - Identified in other plans and programmes.

6.11.3 This tiered approach is adopted to provide a clear assessment of the Proposed Development alongside other projects, plans and activities.

6.11.4 The specific projects, plans and activities scoped into the CEA, are outlined in **Table 6.19**

Table 6.19: List of cumulative developments considered within the CEA.

Project	Status	Distance from Proposed Development (nearest point, km)	Description	Dates of Construction (if available)	Dates of Operation (if available)	Overlap with the Proposed Development?
Tier 1						
White Cross Floating Offshore Windfarm (EIA/2022/00002)	Permitted	7.8 (with the Offshore Cable Corridor overlapping / directly adjacent to the White Cross Cable Corridor)	Proposed offshore windfarm located in the Celtic Sea with a capacity of up to 100MW. The Windfarm Site is located over 52km off the North Cornwall and North Devon coast (west-north-west of Hartland Point), in a water depth of 60m – 80m. The Windfarm Site covers 50km^2. The current wind turbine design envelope for the project is a WTG capacity of 12-24MW, 6-8 three bladed horizontal axis turbines with a rotor diameter of 220 – 300m.	Mid 2024	2026	No overlap with construction, however there will be overlap with operational phase of the Proposed Development
Celtic Interconnector (MLA/2021/00323)	Permitted	Crosses Offshore Cable Corridor	700 MW high-voltage direct current submarine power cable under construction between the southern coast of Ireland and the north-west coast of France. The UK elements of the Celtic Interconnector comprise: • A submarine cable within the UK EEZ approximately 211km in length placed on or beneath the seabed. It passes approximately 30km west of the Isles of Scilly and approximately 75km west of Land's End, but does not enter UK Territorial Waters. • Secondary rock protection using rock placement (if required), where target depth of cable lowering is not fully achieved or at cable	2024-2027	2027	No overlap with construction, however there will be overlap with operational phase of the Proposed Development

Project	Status	Distance from Proposed Development (nearest point, km)	Description	Dates of Construction (if available)	Dates of Operation (if available)	Overlap with the Proposed Development?
			crossings, with a linear extent of between 0km and 80km or 0 to 270 tonnes. • A fibre optic link shall be laid along the cable route for operational control, communication, and telemetry purposes.			
Tier 2						
None identified						
Tier 3						
The Crown Estate's Celtic Sea Floating Offshore Wind Leasing Round 5 – PDA 3	Future planned development	Overlaps with portion of the Offshore Cable Corridor	PDA 3 sits within English Governance and is one of three suitable PDAs identified within the Celtic Sea for floating offshore wind development, each of which having a potential capacity of up to 1.5 GW.	Unknown (the schedule for PDA 3 is unknown, however, pre-consent metocean surveys are planned for early 2024 and geotechnical investigations are planned for summer 2024)	Unknown	As the schedule for PDA 3 is currently unknown, there is the potential for both construction and operational phases to overlap with the Proposed Development

6.11.5 A description of the significance of cumulative effects upon OMU receptors arising from construction, operation and maintenance and decommissioning is provided below.

Construction

6.11.6 All the projects listed (under Tier 1) have an estimated construction programme starting in 2024 (**Table 6.19**). There should therefore be no projects with overlapping construction periods, in which case the risk of adverse effect on OMU receptors is not greater than that described in **section 6.8**.

Operation and Maintenance

Tier 1 Projects

Cumulative Increase in Vessel Traffic

6.11.7 The White Cross OWF and Celtic Interconnector are Tier 1 planned projects in the study area. These projects will overlap with the Proposed Development's construction and operation phases. Adopting a precautionary assessment with respect to OMU, the additive impact from construction vessels of the Proposed Development and the O&M phase of the White Cross OWF and the Celtic Interconnector is anticipated to be greater than that of the individual projects. The sensitivity of receptors to these impacts has been identified in **section 6.8**.

6.11.8 The theoretical cumulative magnitude of impact is anticipated to increase relative to the independent impacts of either scheme, given that vessel traffic associated with each scheme may use similar transit routes. However, the scale of any cumulative increase is deemed negligible in EIA terms (would not constitute an increase in the measured magnitude in EIA terms) and is broadly consistent with the baseline environment which features many in-service cables (with associated, infrequent vessel survey requirement).

6.11.9 Nonetheless, the Applicant will continue to engage with the operator of these Tier 1 Projects and manage works to avoid any significant cumulative effect. The applicant will be vigilant to any project schedule changes which may cause overlap of Tier 1 project construction phases with that of the Proposed Development.

6.11.10 Any additive impacts are anticipated to remain at **low** magnitude. Taking into consideration the maximum sensitivity of OMU receptors to increased vessel traffic being **medium**, and the localised, short-term nature of the additive vessel traffic impacts, it is concluded that the significance of effect from temporary disturbance arising from the Proposed Development cumulatively with Tier 1 projects / developments is of **minor** adverse significance, which is **not significant**.

Cumulative increase in infrastructure (physical presence) and safe passing zones

6.11.11 During the operational phase of the identified Tier 1 projects there is very little predicted impact on vessel access to OMU receptors. The infrastructure associated with these schemes is suitably far removed and of small scale to result in combined impact. There is a theoretical negligible increase in magnitude of

impact compared to the Proposed Development operational phase assessments in isolation. The crossing of the Celtic Interconnector cable will be undertaken under crossing agreement, designed to best practice in the same way that all other existing crossings are designed. There is no / negligible additional impact identified on OMU receptors compared to the Proposed Development assessments in isolation.

6.11.12 The maximum sensitivity of receptors to the increased presence of infrastructure and safe passing zones has been identified in **section 6.8** as a **medium**. The additive / cumulative magnitude is considered to be **low** (no increase relative to the Proposed Development in isolation). Thus, it is concluded that the significance of effect arising from the Proposed Development cumulatively with Tier 1 projects/developments is of **minor** adverse significance, which is **not significant**.

Cumulative increase in suspended sediment concentrations and sediment deposition

6.11.13 There is potential for cumulative increases in SSC and deposition should O&M activities associated with the Tier 1 projects overlap with construction or O&M activities associated with the Proposed Development. For the purpose of this assessment, the additive impact has been assessed within the OMU ZOI which extends 5 nm around the Offshore Cable Corridor, and the furthest distance significant sediment concentrations may travel from the site resulting in impacts on OMU.

6.11.14 The maximum sensitivity of OMU receptors to an increase in suspended sediment concentrations and sediment deposition has been assessed as medium in **section 6.8**.

6.11.15 The White Cross OWF EIA anticipates a low level of sediment resuspension during construction (worst case activities investigated) due to particle size analysis of sediment samples taken within the Offshore Export Cable Corridor, which showed sediments were dominated by sand. Therefore, it was suggested that dispersion of fine sediment from these areas would be very low. In reality the White Cross O&M phase will only generate suspended sediments during infrequent, repair works and any additive impacts are assessed as low magnitude. Similar conclusions were drawn for the Celtic Interconnector, where, in Irish waters, seabed sediments are sand dominated, with maximum levels of approximately 90% recorded at some sampling stations, resulting in the assessment of additive impact magnitude also being low for this tier 1 project.

6.11.16 The likelihood of any coincident sediment generating activities is considered unlikely, which will limit the potential for cumulative effects.

6.11.17 Therefore, it is concluded that the significance of effect from temporary increases is SSC and deposition arising from the Proposed Development cumulatively with Tier 1 projects/developments is of **minor** adverse significance (no increase relative to the Proposed Development in isolation) to OMU receptors, which is **not significant**.

Cumulative increase in subsea noise

6.11.18 The potential for additive impact associated with increased subsea noise is likely to be limited, given limited potential for coincident activities generating subsea noise.

6.11.19 The greatest risk of cumulative impacts from underwater noise on OMU receptors such as divers has been identified as being that produced by the construction phase of the Proposed Development and maintenance of other infrastructure. Impacts will not be expected to occur cumulatively due to the small range within which potential effects are expected (i.e. predicted to occur within tens of km) and the limited potential for temporal overlap.

6.11.20 The cumulative impact of underwater noise on OMU receptors is predicted to be of regional spatial extent, short-term duration, intermittent and reversible. The magnitude of the cumulative impact is therefore considered to be **low** (no increase relative to the Proposed Development in isolation).

6.11.21 On the basis that the maximum sensitivity of OMU receptors to increased subsea noise has been assessed as **medium** in **section 6.8**, and the magnitude of impact has been assessed as **low**, it is concluded that the significance of effect from temporary disturbance arising from the Proposed Development cumulatively with Tier 1 projects/developments is of **minor** adverse significance, which is **not significant**.

Tier 2 Projects

6.11.22 There were no Tier 2 projects identified.

Tier 3 Projects

6.11.23 There is inherently less certainty associated with Tier 3 projects (with very few available details in terms of schedule and infrastructure design), however TCE's Celtic Sea Floating Offshore Wind Leasing Round 5 – PDA 3 should it be progressed, is identified as having the potential for cumulative impact within the Study area.

Cumulative Increase in Vessel Traffic

6.11.24 PDA 3, which is currently undergoing the pre-qualification phase for bidders and would likely undergo construction during the operational phase of the Proposed Development. The study area is therefore anticipated to see a cumulative increase in baseline vessel numbers resulting from the operational phase of the Proposed Development, and construction at the PDA 3 site. The maximum sensitivity of receptors to these increased vessel impacts has been identified in **section 6.8** as **medium**.

6.11.25 Controls and notifications of works that would be applied, as standard practice, to the Proposed Development's operational vessel activity, would ensure any risks of collision or disturbance impacts are appropriately managed (in combination with the construction and operation of the PDA 3 site). The Applicant will continue to engage with TCE and subsequent successful bidders of Round 5 PDAs to manage phasing, interactions, and the potential for cumulative impact. Ensuring, for example, a joined-up vessel management planning across the different schemes (if required). Cumulative impacts would be mitigated through the use of a VMP and advanced warning of construction (assumed PDA3 developer led), as well as Proposed Development activities at the time of any operational phase activity, including effective Notice to Mariners (NtM). Therefore, any potential cumulative impacts on OMU receptors associated with the Round 5 PDA OWFs and the Proposed Development will be appropriately managed.

6.11.26 The additive magnitude of the impact from construction and operation vessel movements relating to PDA 3, in combination with operational activities associated with the Proposed Development, is considered to be similar to that of construction of the Proposed Development and assessed to be **low**.

6.11.27 Taking into consideration the maximum sensitivity of OMU receptors to increased vessel traffic being **medium**, and the localised, short-term nature of the additive vessel traffic impacts, it is concluded that the significance of effect from temporary disturbance arising from the Proposed Development cumulatively with Tier 3 projects/developments is of **minor** adverse significance, which is **not significant**.

Cumulative increase in infrastructure and safe passing zones

6.11.28 The additive impact of physical presence of infrastructure and safe passing zones resulting from the development of the Round 5 PDA 3 area is anticipated to be low on the basis of general location and assumed appropriate infrastructure design. The Applicant will continue to consult with TCE and subsequent developers of the PDA 3 area in respect of potential for additive impacts including any constraints to OMU receptors in the study area. The likelihood of potential for additive or cumulative impacts is considered negligible / minor, i.e. is unlikely to be greater than those impacts associated with the individual developments in isolation.

6.11.29 Taking into consideration the maximum sensitivity of OMU receptors to the physical presence of infrastructure and safe passing zones being **medium**, and the localised, short-term nature of the additive impacts, it is concluded that the significance of effect from temporary disturbance arising from the Proposed Development cumulatively with Tier 3 projects/developments is of **minor** adverse significance, which is **not significant**.

Cumulative increase in suspended sediment concentrations and sediment deposition

6.11.30 The additive impact of increased SSC resulting from the development of the Round 5 PDA 3 area is anticipated to be low on the basis of a) limited potential for coincident sediment generating activities (particularly given the operational phase of the Proposed Development), and b) given the discussions around coarse sediments lending themselves towards low dispersal (as above). This is reinforced by the PDA 3 characterisation report which states PDA 3 is located approximately 500 m away from of the South-West Approaches to Bristol Channel Marine Conservation Zone (MCZ), which contributes to the protection of two broad-scale habitats: subtidal sand and subtidal coarse sediment. It is therefore anticipated the additive impact of the O&M phase of the Proposed Development, with limited SSC increases and deposition associated with the construction and O&M phases of PDA 3, will generate a **low** impact magnitude and very slight adverse change from baseline conditions (no change in EIA terms).

6.11.31 Taking into consideration the maximum sensitivity of OMU receptors to increases in SSC and sediment deposition being **medium**, and the localised, short-term nature of the (theoretical) additive impacts, it is concluded that the significance of effect from temporary disturbance arising from the Proposed Development cumulatively with Tier 3 projects/developments is of **minor** adverse significance, which is **not significant**.

Cumulative increase in subsea noise

6.11.32 There are no construction methods associated with the PDA3 development available at this time. It is therefore difficult to determine the potential for or the extent of any cumulative noise and vibration impact on OMU receptors. However, the Proposed Development will be operational at the time of any PDA3 construction works (PDA3 phase with greatest potential for noise and vibration generation) and the Proposed Development operational phase has very limited potential for generation of noise and vibration – associated principally with unplanned, infrequent repair works. There is limited potential therefore for any cumulative noise impacts.

6.11.33 The PDA3 site characterisation report suggests that consideration will need to be given to minimising the impacts from noise due to surrounding receptors and therefore impacts in combination with the Proposed Development are expected to be **low** (no increase compared to the Proposed Development in isolation). There is also a small range within which potential effects will be expected with regard to the study area of the Proposed Development (i.e. *any* cumulative effects would be limited to the vicinity of the PDA only).

6.11.34 On the basis that the maximum sensitivity of OMU receptors to increased subsea noise has been assessed as **medium** in **section 6.8**, and the magnitude of impact has been assessed as **low**, it is concluded that the significance of effect from temporary noise and vibration disturbance arising from the Proposed Development cumulatively with Tier 3 projects / developments is of **minor** adverse significance, which is **not significant**.

6.12 Transboundary Effects

6.12.1 A screening of transboundary impacts has been carried out and any potential for significant transboundary effects with regard to OMU from the Proposed Development upon the interests of other states has been assessed as part of this PEIR. The potential transboundary impacts assessed within Volume 1, Appendix 5.2: Transboundary screening is summarised below:

- Effects on recreational boat users are predicted to be of limited extent to within the close vicinity of the Offshore Cable Corridor; however, recreational boat users from EEA states (principally France) could be transiting to and from UK harbours and/or marinas within the south west of the UK. Overall, the sensitivity of recreational boating and sailing users to displacement was predicted to be **medium** and the magnitude was predicted to be **low** across all phases of the project. The effect was therefore considered to be a **minor** adverse significance, which is not significant.

6.12.2 No further transboundary effects are predicted.

6.13 Inter-related Effects

6.13.1 Inter-relationships are the impacts and associated effects of different aspects of the Proposed Development on the same receptor. These are as follows.

- Project lifetime effects: Assessment of the scope for effects that occur throughout more than one phase of the Proposed Development (construction, operational and decommissioning phases), to interact to potentially create a

more significant effect on a receptor than if just assessed in isolation in these three phases (e.g., construction noise effects taken in combination with operational substation noise).

- Receptor led effects: Assessment of the scope for all effects (including inter-relationships between environmental topics) to interact, spatially and temporally, to create inter-related effects on a receptor. As an example, all effects on OMU, such as access to Military PEXAs, may interact to produce a different, or greater effect on this receptor than when the effects are considered in isolation. Receptor-led effects may be short term, temporary or transient effects, or incorporate longer term effects.

6.13.2 A description of the likely interactive effects arising from the Proposed Development on OMU is provided in Volume 4, Chapter 5: Inter-related effects of the PEIR.

6.14 Summary of Impacts, Mitigation Measures and Monitoring

6.14.1 Information on OMU within the study area was collected through a desktop review of potential receptors and likely impact pathways for impacts arising from the Proposed Development and receptors within the Study Area.

6.14.2 **Table 6.20** presents a summary of the impacts, measures adopted as part of the Proposed Development and residual effects in respect to OMU. The impacts assessed include:

- Increased Vessel Traffic;
- Physical Presence of Infrastructure and Safe Passing Zones;
- Temporary Increases in Suspended Sediment Concentrations and Deposition of Sediment; and
- Increased Subsea Noise.

6.14.3 Overall, it is concluded that there will be no likely significant effects arising from the Proposed Development during the construction, Operational or decommissioning phases.

6.14.4 **Table 6.21** presents a summary of the potential cumulative impacts, mitigation measures and residual effects. The cumulative impacts assessed include:

- Increased Vessel Traffic;
- Presence of Infrastructure and Safe Passing Zones;
- Increased SSC and Deposition; and
- Increased Subsea Noise.

6.14.5 Overall, it is concluded that there will be no significant cumulative effects from the Proposed Development alongside other projects/plans.

6.14.6 Effects on recreational vessels was identified as a potential transboundary impact (not significant).

Table 6.20: Summary of potential environmental effects

Receptor	Sensitivity of receptor	Description of impact	Short / medium / long term	Magnitude of impact	Significance of effect	Significant / Not significant	Notes
Construction phase							
Offshore Wind	Low	Increased Vessel Traffic	Short term	Low	Negligible to Minor Adverse	Not significant	
	Negligible	Physical Presence of Infrastructure and Safe Passing Zones	Short term	Negligible	Negligible Adverse	Not significant	
Military Activity and Munitions	Negligible	Increased Vessel Traffic	Short term	Low	Negligible to Minor Adverse	Not significant	
	Negligible	Physical Presence of Infrastructure and Safe Passing Zones	Short term	Low	Negligible Adverse	Not significant	
Subsea Cables	Negligible	Increased Vessel Traffic	Short term	Low	Negligible to Minor Adverse	Not significant	
	Medium	Physical Presence of Infrastructure and Safe Passing Zones	Short term	Low	Minor Adverse	Not significant	
Recreational Boating and Sailing	Low	Increased Vessel Traffic	Short term	Low	Negligible to Minor Adverse	Not significant	
	Medium	Physical Presence of Infrastructure and Safe Passing Zones	Short term	Low	Minor Adverse	Not significant	
Diving and Water Sports	Low	Increased Vessel Traffic	Short term	Low – Diving Negligible – Other water sports	Negligible to Minor Adverse	Not significant	
	Low - Diving Negligible - Other water sports	Physical Presence of Infrastructure and Safe Passing Zones	Short term	Low - Diving Negligible - Other water sports	Negligible to Minor Adverse	Not significant	

Receptor	Sensitivity of receptor	Description of impact	Short / medium / long term	Magnitude of impact	Significance of effect	Significant / Not significant	Notes
	Low - Diving Negligible - Other water sports	Temporary Increase in Suspended Sediment Concentrations and Deposition of Sediment	Short term	Low	Negligible to Minor Adverse	Not significant	
	Low - Diving Negligible - Other water sports	Increased subsea Noise	Short term	Low - Diving Negligible - Other water sports	Negligible to Minor Adverse	Not significant	
Recreational Fishing and Aquaculture	Low – Boat based fishing and aquaculture Negligible – Shore based fishing and aquaculture	Increased Vessel Traffic	Short term	Low	Negligible to Minor Adverse	Not significant	
	Medium – Boat based fishing and aquaculture Negligible – Shore based fishing and aquaculture	Physical Presence of Infrastructure and Safe Passing Zones	Short term	Low	Minor Adverse	Not significant	
	Medium – Boat based fishing and aquaculture Negligible – Shore based fishing and aquaculture	Increased subsea Noise	Short term	Low	Minor Adverse	Not significant	
Operational phase							
Offshore Wind	Low	Increased Vessel Traffic	Short term	Low	Negligible or Minor Adverse	Not significant	Impacts during the O&M phase

Receptor	Sensitivity of receptor	Description of impact	Short / medium / long term	Magnitude of impact	Significance of effect	Significant / Not significant	Notes
	Negligible	Physical Presence of Infrastructure and Safe Passing Zones	Short term	Low	Negligible or Minor Adverse	Not significant	will usually be smaller to those for construction and are of a lesser magnitude.
Military Activity and Munitions	Negligible	Increased Vessel Traffic	Short term	Low	Negligible to Minor Adverse	Not significant	
	Negligible	Physical Presence of Infrastructure and Safe Passing Zones	Short term	Low	Negligible to Minor Adverse	Not significant	
Subsea Cables	Negligible	Increased Vessel Traffic	Short term	Low	Negligible to Minor Adverse	Not significant	
	Medium	Physical Presence of Infrastructure and Safe Passing Zones	Short term	Low	Minor Adverse	Not significant	
Recreational Boating and Sailing	Low	Increased Vessel Traffic	Short term	Low	Negligible to Minor Adverse	Not significant	
	Medium	Physical Presence of Infrastructure and Safe Passing Zones	Short term	Low	Minor Adverse	Not significant	
Diving and Water Sports	Low	Increased Vessel Traffic	Short term	Low	Negligible to Minor Adverse	Not significant	
	Low - Diving Negligible - Other water sports	Physical Presence of Infrastructure and Safe Passing Zones	Short term	Low	Negligible to Minor Adverse	Not significant	
	Low - Diving Negligible - Other water sports	Temporary Increase in Suspended Sediment Concentrations and Deposition of Sediment	Short term	Low	Negligible to Minor Adverse	Not significant	

Receptor	Sensitivity of receptor	Description of impact	Short / medium / long term	Magnitude of impact	Significance of effect	Significant / Not significant	Notes
	Low - Diving Negligible - Other water sports	Increased subsea Noise	Short term	Low	Negligible to Minor Adverse	Not significant	
Recreational Fishing and Aquaculture	Low – Boat based fishing and aquaculture Negligible – Shore based fishing and aquaculture	Increased Vessel Traffic	Short term	Low	Negligible or minor	Not significant	
	Medium – Boat based fishing and aquaculture Negligible – Shore based fishing and aquaculture	Physical Presence of Infrastructure and Safe Passing Zones	Short term	Low	Minor Adverse	Not significant	
	Medium – Boat based fishing and aquaculture Negligible – Shore based fishing and aquaculture	Increased subsea Noise	Short term	Low	Minor Adverse	Not significant	
Decommissioning phase							
Offshore Wind	Low	Increased Vessel Traffic	Short term	Low	Negligible to Minor Adverse	Not significant	Impacts during the decommissioning and phase will usually be similar to those experienced at
	Negligible	Physical Presence of Infrastructure and Safe Passing Zones	Short term	Negligible	Negligible Adverse	Not significant	
Military Activity and Munitions	Negligible	Increased Vessel Traffic	Short term	Low	Negligible to Minor Adverse	Not significant	

Receptor	Sensitivity of receptor	Description of impact	Short / medium / long term	Magnitude of impact	Significance of effect	Significant / Not significant	Notes
	Negligible	Physical Presence of Infrastructure and Safe Passing Zones	Short term	Low	Negligible Adverse	Not significant	construction phase, although if left in-site, the impacts will be akin to the O&M phase impacts of the Proposed Development.
Subsea Cables	Negligible	Increased Vessel Traffic	Short term	Low	Negligible to Minor Adverse	Not significant	
	Medium	Physical Presence of Infrastructure and Safe Passing Zones	Short term	Low	Minor Adverse	Not significant	
Recreational Boating and Sailing	Low	Increased Vessel Traffic	Short term	Low	Negligible to Minor Adverse	Not significant	
	Medium	Physical Presence of Infrastructure and Safe Passing Zones	Short term	Low	Minor Adverse	Not significant	
Diving and Water Sports	Low	Increased Vessel Traffic	Short term	Low – Diving Negligible – Other water sports	Negligible to Minor Adverse	Not significant	
	Low - Diving Negligible - Other water sports	Physical Presence of Infrastructure and Safe Passing Zones	Short term	Low - Diving Negligible - Other water sports	Negligible to Minor Adverse	Not significant	
	Low - Diving Negligible - Other water sports	Temporary Increase in Suspended Sediment Concentrations and Deposition of Sediment	Short term	Low	Negligible to Minor Adverse	Not significant	
	Low - Diving Negligible - Other water sports	Increased subsea Noise	Short term	Low - Diving Negligible - Other water sports	Negligible to Minor Adverse	Not significant	
Recreational Fishing and Aquaculture	Low – Boat based fishing and aquaculture	Increased Vessel Traffic	Short term	Low	Negligible to Minor Adverse	Not significant	

Receptor	Sensitivity of receptor	Description of impact	Short / medium / long term	Magnitude of impact	Significance of effect	Significant / Not significant	Notes
	Negligible – Shore based fishing and aquaculture						
	Medium – Boat based fishing and aquaculture Negligible – Shore based fishing and aquaculture	Physical Presence of Infrastructure and Safe Passing Zones	Short term	Low	Minor Adverse	Not significant	
	Medium – Boat based fishing and aquaculture Negligible – Shore based fishing and aquaculture	Increased subsea Noise	Short term	Low	Minor Adverse	Not significant	

Table 6.21: Summary of potential cumulative environmental effects

Receptor	Sensitivity of receptor	Description of impact	Short / medium / long term	Magnitude of impact	Significance of effect	Significant / Not significant	Notes
Operational Phase							
Offshore Wind, Military Activity and Munitions, Subsea Cables, Recreational Boating and Sailing, Diving and Water Sports, Recreational Fishing and Aquaculture	Medium	Increase in vessel traffic	Short-term	Low	Minor Adverse	Not significant	All OMU receptors considered to be of medium sensitive due to worst case assumptions

Receptor	Sensitivity of receptor	Description of impact	Short / medium / long term	Magnitude of impact	Significance of effect	Significant / Not significant	Notes
Offshore Wind, Military Activity and Munitions, Subsea Cables, Recreational Boating and Sailing, Diving and Water Sports, Recreational Fishing and Aquaculture	Medium	Presence of infrastructure and safe passing zones	Short-term	Low	Minor Adverse	Not significant	
Offshore Wind, Military Activity and Munitions, Subsea Cables, Recreational Boating and Sailing, Diving and Water Sports, Recreational Fishing and Aquaculture	Medium	Increases in SSC and deposition	Short-term	Low	Minor Adverse	Not significant	
Offshore Wind, Military Activity and Munitions, Subsea Cables, Recreational Boating and Sailing, Diving and Water Sports, Recreational Fishing and Aquaculture	Medium	Increases in subsea noise	Short-term	Low	Minor Adverse	Not significant	

6.15 Next Steps

6.15.1 Further work will be undertaken to support the OMU assessment and presented within the ES is set out below.

6.15.2 The ES baseline will be informed using the same baseline data sources as used within this PEIR, where data sources have been updated, the baseline data and conditions will be updated. In addition, recreational boating data will be requested from the Royal Yachting Association (RYA) to further inform the OMU assessment. The MOD will be consulted to identify further defence interests to be included in the OMU baseline and assessment for the ES.

6.15.3 The assessment methodology will be consistent with the EIA Scoping stage methodology and the PEIR methodology as presented in **section 6.4**. The methodology will be informed by the baseline and, where appropriate, will be revised as necessary following and updates to baseline data. The assessment methodology will be reviewed following responses during statutory consultation on the PEIR and will be revised where appropriate for the ES.

6.15.4 Further consultation and engagement will be undertaken to inform the OMU assessment presented within the ES. Further to the range of organisations that will contribute to the statutory consultation process, specific further engagements will include (but will not be limited to) the following:

- Cobra and Flotation Energy
- Algapelago Marine Ltd
- Royal Yachting Association.

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