Cambois Connection – Marine Scheme

Environmental Statement – Volume 2

Chapter 15: Other Sea Users

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Acronyms

Acronym	Description
AIAA	Area of Intense Aerial Activity
AIS	Automatic Identification System
ARLHS	Amateur Radio Lighthouse Society
BBWF	Berwick Bank Wind Farm
BSAC	British Sub-Aqua Club
CaP	Cable Plan
CNS	Central North Sea
EEZ	Exclusive Economic Zone
EGL2	Eastern Green Link 2
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
ES	Environmental Statement
HVDC	High Voltage Direct Current
KIS-ORCA	Kingfisher Information Service – Offshore Renewable and Cable Awareness
NSTA	North Sea Transition Authority
MDS	Maximum design scenario
MHWS	Mean High Water Springs
MLWS	Mean Low Water Springs
MMO	Marine Management Organisation
MoD	Ministry of Defence
MD-LOT	Marine Directorate Licencing Operations Team
NSTA	North Sea Transition Authority
PEXA	Practice and Exercise Area
RYA	Royal Yachting Association
SEGL1	Scotland England Green Link 1
SPEN	Scottish Power Electricity Networks
SSEN	Scottish and Southern Electricity Networks
TCE	The Crown Estate

Acronym	Description
UK	United Kingdom
UKHO	UK Hydrographic Office

Units

Unit	Description
km	Kilometres
m	Metres
nm	Nautical miles
%	Percent

15. Other Sea Users

15.1. Introduction

6. This Chapter presents the assessment of the likely significant effects (as per the "Environmental Impact Assessment (EIA) Regulations"[1]) on the environment arising from the Cambois Connection (hereafter referred to as the 'Project') Marine Scheme on other sea users. Specifically, this chapter of the Marine Scheme Environmental Statement (ES) considers the potential impact of the Marine Scheme seaward of Mean High Water Springs (MHWS) during the construction, operation and maintenance, and decommissioning phases.

7. This assessment is informed by the following technical Chapters:

- Volume 2, Chapter 3: Environmental Impact Assessment Methodology;
- Volume 2, Chapter 4: Stakeholder Consultation and Engagement;
- Volume 2, Chapter 5: Project Description;
- Volume 2, Chapter 12: Commercial Fisheries;
- Volume 2, Chapter 13: Shipping and Navigation; and
- Volume 2, Chapter 14: Marine Archaeology and Cultural Heritage.

8. The potential social, operational and economic impacts on commercial fishery receptors is considered fully in Volume 2, Chapter 12: Commercial Fisheries. Navigational safety and risk to vessels, including recreational vessels, is considered fully in Volume 2, Chapter 13: Shipping and Navigation. The assessment presented in this chapter only considers impacts that will potentially affect marine activities or the operations of marine infrastructure within the other sea users study area, as defined in section 15.3.

15.2. Purpose of this chapter

9. This chapter:

- Presents the existing environmental baseline established from desk studies and feedback obtained during technical engagement with stakeholders;
- Identifies any assumptions and limitations encountered in compiling the environmental information;
- Presents the potential environmental impacts on other sea users arising from the Marine Scheme, and reaches a conclusion on the likely significant effects on other sea users based on the information gathered and the analysis and assessments undertaken;
- Identifies where impacts are relevant to Scottish waters, English waters, or both. Where there is no separation of assessment of impacts, the assessment for the Marine Scheme (as a whole entity) applies to the Marine Scheme in each of Scottish waters and English waters and
- Highlights any necessary monitoring and/or mitigation measures recommended to prevent, minimise, reduce or offset the likely significant adverse environmental effects of the Marine Scheme on other sea users.

[1] For the Marine Scheme, this is The Marine Works (Environmental Impact Assessment) Regulations 2007 (as amended).

15.3. Study Area

10. The other sea users study area is defined as the area that will be directly impacted by the introduction of the Offshore Export Cables and associated cable protection, as well as a buffer of 10 nm (approximately 18 km) (see Volume 4, Figure 15.1: Other Sea Users Study Area). This buffer has been applied to consider the movement of mobile other sea users receptors as agreed through Scoping.

15.4. Policy and Legislative Context

11. A summary of the policy and legislative provisions relevant to other sea users is provided in Table 15.1 below.

Table 15.1 Summary of the policy and legislation relevant to other sea users

Relevant Policy	Summary of Relevant Policy Framework	How and Where Considered in the ES
Scotland		
Scottish National Marine Plan	**Oil and Gas Policy** - A) Maximise the recovery of reserves through a focus on industry-led innovation, enhancing the skills base and supply chain growth. B) An industry which delivers high-level risk management across all its operations and that it is especially vigilant in more testing current and future environments. C) Continued technical development of enhanced oil recovery and exploration, and the associated seismic activity carried out according to the principles of the Best Available Technique (BAT) and Best Environmental Practice approach. D) Where possible, to work with emerging sectors to transfer the experience, skills and knowledge built up in the oil and gas industry to allow other sectors to benefit and reduce their environmental impact.	Oil and gas interests have been identified through a desktop study and are detailed in the baseline section of this chapter (section 15.7.1).
Scottish National Marine Plan	**Carbon Capture and Storage Policy** - A) Safe, cost-effective, and timely deployment of Carbon Capture and Storage (CCS), assisting the delivery of Scotland's climate change objectives and positioning the North Sea as Europe's principal hub for surplus CO2 storage, servicing electricity generators and heavy industry from sources throughout Europe. B) CCS available as a realistic low carbon deployment option for electricity generation in advance of 2020, and support the decarbonisation of electricity generation by 2030, without affecting the security of supply. C) Scotland at the forefront of the development and deployment of CCS technology, putting in place successful commercialisation projects, which promote the utilisation of existing infrastructure. D) To further develop CCS technology as a potential source of large-scale CO2 supply for use in Enhanced Oil Recovery processes in the North Sea. E) Initiate an Environmental Assessment, with relevant agencies, to allow early consideration of the environmental issues with deployment of CCS.	CCS interests have been identified through a desktop study and are detailed in the baseline section of this chapter (section 15.7.1)
Scottish National Marine Plan	**Dredging and Disposal Policy** – Dredging is an essential activity to maintain existing shipping channels, establish safe approaches to new ports or open up routes to old ports. Dredged material may be disposed of at licensed marine disposal sites or used for	Dredging and disposal interests have been identified through a desktop study and are detailed in the baseline section of this chapter (section 15.7.1).

Relevant Policy	Summary of Relevant Policy Framework	How and Where Considered in the ES
	alternative purposes such as land reclamation or coastal nourishment, if suitable, to minimise seabed disposal. Licensed areas may change – normally as a result of disuse, monitoring information or the need for sites in additional locations. The consideration of both dredged navigation channels and disposal sites in marine planning and decision making is important to support safe access to ports and the disposal of dredged material in appropriate locations.	An impact assessment which considers potential impacts to dredge and disposal receptors in the other sea users study area as a result of the Marine Scheme has been carried out and is detailed in section 15.12.
Scottish National Marine Plan	**Aggregate Policy** – A) Growth of the marine aggregates industry in Scotland, ensuring supply is available to meet demand should it arise while taking account of environmental impacts.	Marine aggregate interests have been identified through a desktop study and are detailed in the baseline section of this chapter (section 15.7.1).
Scottish National Marine Plan	**Submarine Cable Policy** - A) Protect submarine cables whilst achieving successful seabed user co-existence. B) Achieve the highest possible quality and safety standards and reduce risks to all seabed users and the marine environment. C) Support the development of a Digital Fibre Network, connecting Scotland's rural and island communities and contributing to world-class connectivity across Scotland. D) Safeguard and promote the global communications network. E) Support the generation, distribution and optimisation of electricity from traditional and renewable sources to Scotland, UK and beyond.	Subsea cable interests have been identified through a desktop study and are detailed in the baseline section of this chapter (section 15.7.1). Third party crossings have been considered and the Applicant is in discussions with the owners of third party assets to minimise disruption and agree crossing and proximity agreements. An impact assessment which considers potential impacts to subsea cable receptors in the other sea users study area as a result of the Marine Scheme has been carried out and is detailed in section 15.12.
England		
National Policy Statement[2,3]	**Overarching National Policy Statement for Energy NPS EN-1:** Where the Project may have an effect on civil or military aviation and/or other defence assets an assessment of potential effects should be set out in the ES.	Aviation and defence interests have been identified through a desktop study and are detailed in the baseline section of this chapter (section 15.7.1).

[2] Whilst it is acknowledged that neither BBWF nor the Marine Scheme comprise or form part of an NSIP (please see Volume 2: Chapter 2: Policy and Legislative Context), NPSs are however a statement of government intention relating, in this case, to renewable energy projects, therefore can be taken into consideration during the preparation of the Marine Scheme ES.

3 A suite of draft revised Energy NPSs were published and consulted on by the UK Government in March 2023, and consultation closed on 23rd June. The consultation responses will be subject to consideration and the draft revised NPSs may now be revised before the NPSs are formally adopted. There is currently no date for the next stage of the review process and therefore this ES presents the current adopted NPSs which have been considered during the preparation of this ES. It is however noted by the Applicant that the new draft NPSs state that they may be material considerations in other applications which are not considered under the Planning Act (2008), this includes the Marine Scheme. Further detail on the consideration of the draft NPSs in this ES is provided in Volume 2 Chapter 2 Policy and Legislation.

Relevant Policy	Summary of Relevant Policy Framework	How and Where Considered in the ES
	Any assessment of aviation or other defence interests should include potential impacts of the project upon the operation of CNS infrastructure, flight patterns (both civil and military), other defence assets and aerodrome operational procedures. It should also assess the cumulative effects of the project with other relevant projects in relation to aviation and defence	An impact assessment which considers potential impacts to MoD receptors in the other sea users study area as a result of the Marine Scheme has been carried out and is detailed in section 15.12.
National Policy Statement	**Overarching National Policy Statement for Energy NPS EN-1:** The applicant should consult the MoD, CAA, NATS and any aerodrome – licensed or otherwise – likely to be affected by the proposed development in preparing an assessment of the proposal on aviation or other defence interests.	The Applicant has undertaken significant consultation throughout the EIA process. This is detailed in Chapter 4: Consultation and Stakeholder Engagement. Consultation specific to other sea users is detailed in section 15.5 of this chapter.
National Policy Statement	**Overarching National Policy Statement for Energy NPS EN-1:** The effects on tourism should be considered in the ES.	An assessment of the potential impacts on recreation (including those with tourist interests) as a result of the Marine Scheme has been undertaken and is detailed in section 15.12.1 Impacts of the Marine Scheme on socio-economics and tourism have been scoped out of the EIA, as agreed with the MMO (please see Table 15.2).
National Policy Statement	**Statement for Renewable Energy Infrastructure NPS EN-3:** Offshore Wind Siting - There may be constraints imposed on the siting or design of offshore wind farms because of restrictions resulting from the presence of other offshore infrastructure or activities.	The Marine Scheme is a subsea cable which will be located completely under the seabed (or protected with cable protection where required), the Marine Scheme is not an offshore wind farm. The location of existing infrastructure was considered as part of the site selection process and is detailed in Chapter 6: Route Appraisal and Consideration of Alternatives.
National Policy Statement	**Statement for Renewable Energy Infrastructure NPS EN-3:** Offshore Wind Farm Impacts – Oil, gas and other offshore infrastructure and activities. 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 effect of the proposed development on such existing or permitted infrastructure or activities. The assessment should be undertaken for all stages of the lifespan of the proposed wind farm in accordance with the appropriate policy for offshore wind farm EIAs.	Although not a wind farm, the Marine Scheme will offer a route for power output from BBWF and as such for the purposes of this policy is considered as a stage of the lifespan of the wind farm. An assessment of the potential impacts to other sea users as a result of the Marine Scheme has been carried out and is presented in section 15.12 of this chapter.

Relevant Policy	Summary of Relevant Policy Framework	How and Where Considered in the ES
National Policy Statement	**Statement for Renewable Energy Infrastructure NPS EN-3:** Applicants should engage with interested parties in the potentially affected offshore sectors early in the development phase of the proposed offshore wind farm, with an aim to resolve as many issues as possible prior to the submission of an application. Such stakeholder engagement should continue throughout the life of the development including construction, operation, and decommissioning phases where necessary. As many of these offshore industries are regulated by Government, the relevant Secretary of State should also be a consultee where necessary. Such engagement should be taken to ensure that solutions are sought that allow offshore wind farms and other uses of the sea to successfully co-exist.	The Applicant has undertaken significant consultation throughout the EIA process. This is detailed in Chapter 4: Stakeholder Consultation and Engagement. Consultation specific to other sea users is detailed in section 15.5 of this chapter.
Northeast Inshore and North East Offshore Marine Plan	**Co-existence NE-CO-1:** Proposals that optimise the use of space and incorporate opportunities for co-existence and cooperation 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.	An assessment of the potential impacts to other sea users as a result of the Marine Scheme has been carried out and is presented in section 15.12 of this chapter.
Northeast Inshore and North East Offshore Marine Plan	**Aggregates NE-AGG-1:** Proposals in areas where a licence for extraction of aggregates has been granted or formally applied for should not be authorised, unless it is demonstrated that the proposal is compatible with aggregate extraction.	Marine aggregate interests have been identified through a desktop study and are detailed in the baseline section of this chapter (section 15.7.1).
Northeast Inshore and North East Offshore Marine Plan	**Aggregates NE-AGG-2:** Proposals within an area subject to an Exploration and Option Agreement with The Crown Estate should not be supported unless it is demonstrated that the proposal is compatible with aggregate extraction.	Marine aggregate interests have been identified through a desktop study and are detailed in the baseline section of this chapter (section 15.7.1).
Northeast Inshore and North East Offshore Marine Plan	**Aggregates NE-AGG-3:** Proposals in areas of high potential aggregate resource that may have significant adverse impacts on future aggregate extraction should demonstrate that they will, in order of preference: A) Avoid B) Minimise **C)** Mitigate significant adverse impacts so they are no longer significant. If it is not possible to mitigate significant adverse impacts, proposals should state the case for proceeding.	Marine aggregate interests have been identified through a desktop study and are detailed in the baseline section of this chapter (section 15.7.1).

Relevant Policy	Summary of Relevant Policy Framework	How and Where Considered in the ES
Northeast Inshore and North East Offshore Marine Plan	**Aquaculture NE-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 so they are no longer significant. If it is not possible to mitigate significant adverse impacts, proposals should state the case for proceeding.	An assessment of the potential impacts to aquaculture as a result of the Marine Scheme has been carried out and is presented in section 15.12 of this chapter.
Northeast Inshore and North East Offshore Marine Plan	**Cables NE-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.	Subsea cables interests have been identified through a desktop study and are detailed in the baseline section of this chapter (section 15.7.1). An assessment of the potential impacts to existing subsea cables as a result of the Marine Scheme has been carried out and is presented in section 15.12 of this chapter.
Northeast Inshore and North East Offshore Marine Plan	**Dredging NE-DD-1:** In areas of authorised dredging activity, including those subject to navigational dredging, proposals for other activities will not be supported unless they are compatible with the dredging activity.	Dredging and disposal interests have been identified through a desktop study and are detailed in the baseline section of this chapter (section 15.7.1). An assessment of the potential impacts to dredging and disposal activities in the other sea users study area as a result of the Marine Scheme has been carried out and is presented in section 15.12 of this chapter.
Northeast Inshore and North East Offshore Marine Plan	**Dredging NE-DD-2:** Proposals that cause significant adverse impacts on licensed disposal sites should not be supported. Proposals that may have significant adverse impacts on licensed disposal sites must demonstrate that they will, in order of preference: Avoid Minimise 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.	Dredging and disposal interests have been identified through a desktop study and are detailed in the baseline section of this chapter (section 15.7.1). An assessment of the potential impacts to dredging and disposal activities in the other sea users study area as a result of the Marine Scheme has been carried out and is presented in section 15.12 of this chapter.
Northeast Inshore and North East Offshore Marine Plan	**Oil And Gas NE-OG-1:** Proposals in areas where a licence for oil and gas has been granted or formally applied for should not be authorised unless it is demonstrated that the other development or activity is compatible with the oil and gas activity.	Oil and gas interests have been identified through a desktop study and are detailed in the baseline section of this chapter (section 15.7.1).

Relevant Policy	Summary of Relevant Policy Framework	How and Where Considered in the ES
Northeast Inshore and North East Offshore Marine Plan	**Oil And Gas NE-OG-2:** Proposals within areas of geological oil and gas extraction potential demonstrating compatibility with future extraction activity will be supported.	Oil and gas interests have been identified through a desktop study and are detailed in the baseline section of this chapter (section 15.7.1).
Northeast Inshore and North East Offshore Marine Plan	**Ports, Harbours and Shipping NE-PS-1:** In line with the National Policy Statement for Ports, sustainable port and harbour development should be supported. Only proposals demonstrating compatibility with current port and harbour activities will be supported. Proposals that may have a significant adverse impact upon future opportunity for sustainable expansion of port and harbour activities, must demonstrate that they will, in order of preference: Avoid Minimise Mitigate adverse impacts so they are no longer significant. If it is not possible to mitigate significant adverse impacts, proposals should state the case for proceeding.	Ports And Harbour interests have been identified through a desktop study and are detailed in the baseline section of this chapter (section 15.7.1). An assessment of the potential impacts to ports and harbours can be found in Volume 2, Chapter 13: Shipping and Navigation
Northeast Inshore and North East Offshore Marine Plan	**Renewables NE-REN-3:** Proposals for the installation of infrastructure to generate offshore renewable energy, inside areas of identified potential and subject to relevant assessments, will be supported.	Renewable energy interests have been identified through a desktop study and are detailed in the baseline section of this chapter (section 15.7.1). An assessment of the potential impacts to other renewable energy generating projects in the other sea users study area as a result of the Marine Scheme has been undertaken and is presented in section 15.12 of this chapter.
Northeast Inshore and North East Offshore Marine Plan	**Access NE-ACC-1:** Proposals demonstrating appropriate enhanced and inclusive public access to and within the marine area, including the provision of services 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.	An assessment of the potential impacts to public access (in the form of marine recreation) in the other sea users study area as a result of the Marine Scheme has been carried out and is presented in section 15.12 of this chapter.
Northeast Inshore and North East Offshore Marine Plan	**Defence NE-DEF-1:** Proposals in or affecting Ministry of Defence areas should only be authorised with agreement from the Ministry of Defence.	MoD have been consulted during scoping. MoD interests have been identified through a desktop study and are detailed in the baseline section of this chapter (section 15.7.1). An assessment of the potential impacts to MoD areas as a result of

Relevant Policy	Summary of Relevant Policy Framework	How and Where Considered in the ES
		the Marine Scheme has been carried out and is presented in section 15.11 of this chapter.
Northeast Inshore and North East Offshore Marine Plan	**Cumulative NE-DEF-1:** Proposals which may have adverse cumulative effects with other existing, authorised, or reasonably foreseeable proposals must demonstrate that they will, in order of preference: A) Avoid B) Minimise C) Mitigate - adverse cumulative and/or in-combination effects so they are no longer significant.	A Cumulative Impact Assessment has been carried out and is presented in section 15.13 of this chapter.

15.5. Consultation and Technical Engagement

12. A summary of the key issues raised during consultation and technical engagement activities undertaken to date specific to other sea users is presented in Table 15.2 below, together with how these issues have been considered in the production of this Other Sea Users chapter. Further detail is presented in Volume 2, Chapter 4: Stakeholder Consultation and Engagement.

Table 15.2 Summary of key consultation and technical engagement undertaken for the Marine Scheme relevant to other sea users

Date	Consultee and Type of Consultation	Issue(s) Raised	Response to Issue Raised and/or Where Considered in this Chapter
Relevant consultation and engagement undertaken to date			
14 February 2023	Asset Owner: Scottish Eastern Green Link (SEGL 1)	A project update was provided regarding surveys, the proposed Offshore Export Cable Corridor, and programme.	Information is considered in ongoing Marine Scheme design. Subsea cables interests have been identified through a desktop study and are detailed in the baseline section of this chapter (section 15.7.3.4). An assessment of the potential impacts to existing subsea cables in the other sea users study area as a result of the Marine Scheme has been carried out and is presented in section 15.11 of this chapter.
28 March 2023	Asset Owner – North Sea Link		
13 April 2023	Asset Owner – EDF Energy (Blyth Offshore Wind Farm)		
13 April 2023	Asset Owner – Eastern Green Link 2 (EGL2)		
17 April 2023	Marine Management Organisation (MMO)	A project update meeting was held to discuss the Scoping Opinion provided by the MMO. The Applicant noted the MMO did not provide a Scoping Opinion with regard to Other Sea Users. In this meeting the MMO confirmed they had no further comments on Other Sea Users and agreed with the scope outlined within the Scoping Report.	Noted.
02 May 2023	Ministry of Defence (MoD)	Discussed military receptors of relevance to the Marine Scheme and other sea users study area.	An assessment of the potential impacts to MoD receptors in the other sea users study area as a result of the construction and operation and maintenance phases of the Marine Scheme has been undertaken and is presented in section 15.12.1.
16th May 2023	Asset Owner - Northumbria Water	A project update was provided regarding surveys, the proposed Offshore Export Cable Corridor, and programme.	Information is considered in ongoing Marine Scheme design. Pipelines have been identified through a desktop study and are detailed in the baseline section of this chapter (section 15.7.3.4). An assessment of the potential impacts to existing projects in the other sea users study area as a result of the Marine Scheme has

Date	Consultee and Type of Consultation	Issue(s) Raised	Response to Issue Raised and/or Where Considered in this Chapter
			been carried out and is presented in section 15.11 of this chapter.
23 February 2023	MD-LOT: Scoping comments	With regards to the designed in measures described at Section 15.6 of the Scoping Report, the Scottish Ministers are content that these provide a suitable means for managing and mitigating the potential effects of the Proposed Works; however advise that navigational warnings be expanded to include notification to the MOD operator of the Danger Areas that the Proposed Works may affect, as supported by the MOD representation. The Scottish Ministers would also highlight the representation from SSEN Transmission recommending engagement should the potential for the Proposed Works to cross the proposed SSEN Transmission Eastern Green Link 2 project.	Relevant areas have been added to Volume 4, Figure 15.2: Other Sea Users Infrastructure including PEXAs, Danger Areas and AIAAs. The Applicant has consulted with the MoD (please refer to row above) on potential impacts arising from the Marine Scheme upon Military interests. An assessment of the potential impacts to MoD receptors in the other sea users study area as a result of the Marine Scheme has been undertaken and is presented in section 15.12.1. UK Air Information Publication (AIP) contains information relating to aeronautical interests and is therefore not considered relevant for the Marine Scheme as no aviation receptors will be impacted. The Applicant has also engaged with EGL2 (as discussed above). The Marine Scheme does not cross the EGL2 proposed cable corridor but is in proximity to it, which is discussed further in section 15.7.1.
23 February 2023	MD-LOT: Scoping comments	The Scottish Ministers highlight the NLB representation that AIS is a poor tool for assessing recreational vessel density and advise that this is taken into consideration in the EIA Report.	Since the vessel traffic data for the Marine Scheme consists of AIS only, it is acknowledged that the data has limitations associated with non-AIS targets. However, as outlined in Table 13.3 of Volume 2, Chapter 13: Shipping and Navigation, the Applicant has undertaken further engagement with the Marine Coastguard Agency (MCA), Northern Lighthouse Board (NLB) and Trinity House who have confirmed they were content with the methodology for vessel traffic data collection for the Marine Scheme . It is acknowledged that AIS likely presents an underestimation due to the lack of requirement

Date	Consultee and Type of Consultation	Issue(s) Raised	Response to Issue Raised and/or Where Considered in this Chapter
			for recreational vessels, as detailed in section 15.7.4 (and also Volume 2, Chapter 13: Shipping and Navigation) where this is acknowledged and addressed.
19 December 2022	Ministry of Defence (MoD); Scoping comments	The MoD states Thank you for inviting the Salvage and Marine Operations (SALMO) Wreck Management Programme team to comment on the Berwick Bank Cambois Connection - Marine Scheme reference EIA/2022/00043. The MoD highlights SALMO is responsible for the environmental and safety risks associated with Ministry of Defence (MOD)-owned shipwrecks. As such, I would like to draw the applicant's attention to the fact that some of the wrecks identified in the scoping area could contain hazardous materials, primarily fuel oil and munitions, which should be considered during the EIA and subsequent work in the area. The MoD states they have left a separate note to request you also contact the Royal Navy 3rd Sector team to comment on the heritage aspects of MOD-owned wrecks.	An assessment of the potential impacts to MoD receptors in the other sea users study area as a result of the construction and operation and maintenance phases of the Marine Scheme has been undertaken and is presented in section 15.11.1. As detailed in Volume 2, Chapter 14: Marine Archaeology and Cultural Heritage, appropriate mitigation measures including avoidance of known wrecks by Archaeological Exclusion Zones have been recommended. Any potential for the presence of hazardous material will be reviewed and assessed by appropriate consultants, however an Environmental Management Plan (EMP) will be employed to ensure potential release for pollutants will be reduced as far as practicable. This will include a Marine Pollution Contingency and Control Plan. An outline EMP has been provided as part of this application (Volume 5, Appendix 5.1) and will be updated for submission to MMO and MD-LOT prior to construction. No protected wrecks were identified within the baseline (within the Marine Archaeological Study Area specifically) and therefore the Royal Navy 3rd Sector team have not been contacted.
21 December 2022	MoD: Scoping comments	The marine scoping area identified for the proposed cable connection development does extend over a number of safeguarded defence assets and interests.	An assessment of the potential impacts to MoD receptors as a result of the construction and operation and maintenance phases of the

Date	Consultee and Type of Consultation	Issue(s) Raised	Response to Issue Raised and/or Where Considered in this Chapter
			Marine Scheme has been undertaken and is presented in section 15.12.1. The Applicant has consulted with the MoD (please refer to earlier row within this table) on potential impacts arising from the Marine Scheme upon Military interests.
21 December 2022	MoD; Scoping comments	The applicant has recognised the need to take MOD operations into account in their scoping assessment. Military and defence activities are identified as a relevant receptor in the other sea users section of the scoping report submitted (ref. 15.5.4). The applicant has appropriately identified the diverse nature of defence activities that may be conducted in the marine environment. The applicant has made use of Practise and Exercise Area (PEXA) data published by the UK Hydrographic Office to inform their baseline assessment of the study area. This is a relevant key data source. The applicant has accurately identified the Navy Exercise Area (X5642) that the study area extends over. In addition, it has been identifyed that the study area passes through the MOD Danger Area complex D513 – Druridge Bay. In conjunction with PEXA data, it would be appropriate for the applicant to also make use of information contained in the UK Air Information Publication (AIP) to identify the airspace designations for prohibited, restricted and Danger Areas that the study area overlaps. Figure 15-1 which depicts other sea users assets relevant to the study area does not define PEXA data. It would be beneficial for this to be included in further submissions.	Relevant areas have been added to Figure 15.1 including PEXAs, Danger Areas and AIAAs. An assessment of the potential impacts to MoD receptors as a result of the construction and operation and maintenance phases of the Marine Scheme has been undertaken and is presented in section 15.12.1. The Applicant has consulted with the MoD (please refer to earlier row within this table) on potential impacts arising from the Marine Scheme upon Military interests. AIP contains information relating to aeronautical interests and is therefore not considered relevant for the Marine Scheme as no aviation receptors will be impacted
21 December 2022	MoD; Scoping comments	The study area identified in the submission does coincide with certain defence maritime navigational interests. When more details of the proposed cable route and construction methodologies are provided the MOD will be able to advise if this will have any adverse effects upon these defence interests and identify measures that may be necessary to safeguard them.	An assessment of the potential impacts to MoD receptors as a result of the construction and operation and maintenance phases of the Marine Scheme has been undertaken and is presented in section 15.12.1. The Applicant has consulted with the MoD (please refer to earlier row within this table) on

Date	Consultee and Type of Consultation	Issue(s) Raised	Response to Issue Raised and/or Where Considered in this Chapter
			potential impacts arising from the Marine Scheme upon Military interests.
21 December 2022	MoD; Scoping comments	A number of 'designed in measures' are identified at Section 15.6 of the report to mitigate potential impacts to other sea users. It is noted that this includes the timely issuance of relevant Notice to Mariners (NtM) notifications along with other navigational warnings. It would be appropriate for this latter category to include notification to the MOD operator of the Danger Areas that the development scheme may affect.	MoD will be informed in a timely manner or any activities relating to the Marine Scheme which may impact on MoD receptors. The Applicant has consulted with the MoD (please refer to earlier row within this table) Hon potential impacts arising from the Marine Scheme upon Military interests.
21 December 2022	MoD; Scoping comments	At Section 15.7 of the scoping report, the applicant has completed a scoping appraisal of the potential impacts identified to other sea users. In this the applicant has identified the potential for the works to install and decommission the cable connection to cause temporary obstruction to other infrastructure or activities including defence. The MOD endorses the identification of this as a topic that needs to scoped in and considers that the applicant has identified appropriate means of assessing this. In relation to the operation and maintenance of the Project, the potential for these activities to cause obstruction or disturbance to other sea users has been scoped out. The MOD recognises this an appropriate appraisal of potential impacts associated with the operational phase of the development outlined.	An assessment of the potential impacts to MoD receptors as a result of the construction and operation and maintenance phases of the Marine Scheme has been undertaken and is presented in section 15.12.1. The Applicant has consulted with the MoD (please refer to earlier row within this table) on potential impacts arising from the Marine Scheme upon Military interests
09 January 2023	Centre for Environment, Fisheries and Aquaculture Science (Cefas); Scoping Comment	Cefas notes Section 15 of the scoping report discusses the potential impacts the project may have on other sea users. This includes reference to dredging and disposal operations, specifying (in Section 15.5.7) the proximity of the works to three licenced disposal sites: TY042 (BLYTH A + B) and TY043 (Blyth OWF Demo), both of which have been operational since 2017, and Tyne Industrial, which is currently closed. Although the report mentions the presence of these disposal sites within the "other users" study area, it makes no reference to the potential impact to other users of these sites. Dredge and disposal operations are also not	Consideration of dredge and disposal sites in the vicinity of the Marine Scheme have been considered in section 15.7.1.

Date	Consultee and Type of Consultation	Issue(s) Raised	Response to Issue Raised and/or Where Considered in this Chapter
		included within Table 15.1, which details the scoping of potential impacts for other sea users. According to the UK disposal returns data held by Cefas, a total of 149,348 tonnes of material was disposed to TY042 in 2021 (although no material was reported as being disposed to TY043), indicating the site is still being actively used for disposal operations. Cefas SEAL recommend to consider the potential impacts to, and cumulative impacts from, these operations within the ES. It is, however, outside Cefas remit to comment on the likelihood of this project to interfere with other ongoing dredging operations, and therefore Cefas defer to the MMO with regards to their knowledge of dredging and disposal operations within the area.	

15.6. Methodology to Inform Baseline

15.6.1. Desktop Study

13. Information on other sea users within the other sea users study area was collected through a detailed desktop review of existing studies and datasets. These are summarised in Table 15.3 below. The desktop study was supplemented with information provided during stakeholder consultation, as detailed in Table 15.2.

Table 15.3 Summary of key desktop studies & datasets

Title	Source	Year
Scottish Marine Recreation and Tourism Survey	https://marine.gov.scot/information/scottish-marine-recreation-tourism-survey-2015	2015 In 2014, the Scottish Government commissioned Land Use Consultants to undertake a study to fill data gaps on marine recreation and tourism activity in Scotland. The study has not been repeated, therefore the 2015 report has been used to inform this chapter as it is the most up to date version.
Northeast Diving Site: Dive-site descriptions	http://www.dcordes.eu5.net/welcome.htm	2017 Most recent dive site specific to the Northeast area, relevant to the Marine Scheme.
UK Coastal Atlas of Recreational Boating	https://www.rya.org.uk/knowledge/planning-licensing/uk-coastal-atlas-of-recreational-boating	2019 Date of most recent update.
British Sub-Aqua Club: Find a Club or Centre	Find a club or centre - British Sub-Aqua Club (bsac.com)	2023
EMODnet Human Activities	https://emodnet.ec.europa.eu/geoviewer/	2023
Bathing Water Quality	https://environment.data.gov.uk/bwq/profiles/	2023
UK Dive Map	https://www.finstrokes.com/dive-map	2023
Offshore Renewables and Cables Awareness online mapping tool	https://kis-orca.org/map/	2023
Leisure Activities – UK and Ireland Surf Reports and Forecasts	https://magicseaweed.com/	2023
Scotland National Marine Plan Interactive (NMPi)	https://marinescotland.atkinsgeospatial.com/nmpi/	2023
Offshore Oil and Gas Activity	Offshore Oil and Gas Activity (arcgis.com)	2023

Title	Source	Year
Exercise Joint Warrior	https://www.royalnavy.mod.uk/news-and-latest-activity/operations/united-kingdom/exercise-joint-warrior	2023
The Crown Estate (TCE) Asset Map	https://www.crownestatescotland.com/resources/map	2023
Beaches in Northumberland	https://www.thebeachguide.co.uk/north-east-england/northumberland/	2023
Explore Marine Plans	https://explore-marine-plans.marineservices.org.uk/	2023
UK Practice and Exercise Areas (PEXA) Marine Limits App	Explore ADMIRALTY Web Services (arcgis.com)	2023
UK Ports Map	https://uk-ports.org/uk-ports-map/	2023
Berwick Bank Offshore Windfarm ES: Chapter 17 Infrastructure and Other Users	https://berwickbank-eia.com/offshore-eia/vol2-ch17-Infrastructure-and-Other-Users/part-1.html#17.-Infrastructure-and-Other-Users	2022
Seagreen Alpha and Bravo Offshore Windfarms ES	https://marine.gov.scot/data/environmental-statement-volume-1-main-text-seagreen-alpha-and-bravo-offshore-wind-farms	2020 This ES was referenced as the other sea users study area overlaps this project.
Neart na Gaoithe Wind Farm ES	https://marine.gov.scot/data/environmental-statement-neart-na-gaoithe	2019 This ES was referenced as the other sea users study area overlaps this project.
Inch Cape Offshore Wind Farm ES	https://marine.gov.scot/data/inch-cape-offshore-windfarm-revised-design-eia-report	2018 This ES was referenced as the other sea users study area overlaps this project.
Eastern Green Link 1 Marine Scheme	https://marinelicensing.marinemanagement.org.uk/mmofox5/fox/live/MMO_PUBLIC_REGISTER/ [MLA/2022/00231]	2022. Both Environmental Assessments were considered as they are recent examples of comparable development nearby (they also provide opportunities to cross-check baseline findings).
Eastern Green Link 2 Marine Scheme	https://marinelicensing.marinemanagement.org.uk/mmofox5/fox/live/MMO_PUBLIC_REGISTER/ [MLA/2022/00273]	

15.6.2. Site-specific Surveys

14. No site-specific surveys have been undertaken to inform the EIA for other sea users. This is because receptor information and suitable data related to other sea users is publicly available, and the other sea users assessment has been undertaken as a desk-based study informed through consultation with relevant stakeholders. There is no additional modelling or assessment required to characterise the baseline for the other sea users study area. This is consistent with consultation to date and the Scoping Opinion received for other sea users.

15.7. Baseline Environment

15.7.1. Overview of Baseline Environment

15. This section provides an overview of the baseline for recreational boating (including sailing and motor cruising), recreational fishing, other recreational activities, offshore energy projects, offshore cables and pipelines, carbon capture, natural gas storage and underground gasification, oil and gas, coal deposits, and marine aggregate extraction and disposal sites, within the other sea users study area (Volume 4, Figure 15.2: Other Sea Users Infrastructure).

15.7.1.1. MARINE RECREATION

15.7.1.1.1 Recreational sailing, boating and motor cruising

16. This section provides an overview of recreational sailing, boating and motor cruising within the other sea users study area for the Marine Scheme. An assessment of the potential impacts to navigational safety and risk to all vessels is provided in Volume 2, Chapter 13: Shipping and Navigation.

17. Recreational sailing, boating and motor cruising (hereafter referred to as 'recreational boating') is highly seasonal and varies depending on the weather, with the highest concentration of recreational boating activity during the summer months.

18. Automatic Identification System (AIS) data can be used to provide an insight into the average vessel density in other sea users study area. However, it should be noted that AIS is not compulsory[4] for recreational vessels and therefore there is a risk of under-representation with non-AIS targets. The limitations associated with this are detailed in section 15.7.4.

19. The Royal Yachting Association (RYA) UK Coastal Atlas of Recreational Boating (RYA, 2019) provides data on the recreational boating intensity around the UK using AIS data (Volume 4, Figure 15.3: Other Sea Users Marine Recreation - RYA). For this dataset, the total count of AIS intersections over two summer periods were used and then a log10 taken of the relative density counts to give what is referred to as the intensity of use. A log10 scale gives a visualisation of the areas utilised for boating.

20. Using the data from the RYA it can be seen that recreational boating occurs at a low to moderate intensity within the other sea users study area. Within the Scottish EEZ, recreational boating activity is concentrated in territorial waters (MHWS to 12 nm). As the Marine Scheme is located entirely in offshore waters (e.g. beyond 12 nm) it therefore will not disrupt the areas of highest recreational boating intensity.

21. Offshore within the English EEZ, within the other sea users study area and the Marine Scheme, there is limited recreational boating. The Marine Scheme then enters an area of low intensity recreational boating activity that extends to approximately 10 km off the coast before entering an area of moderate intensity on the approach to the English coast.

[4] The compulsory carriage requirements for AIS are covered in the SOLAS V regulations under which compulsory carriage of AIS is limited to "all ships of 300 gross tonnage and upwards engaged on international voyages and cargo ships of 500 gross tonnage and upwards not engaged on international voyages and passenger ships irrespective of size. There is no requirement for small commercial vessels or cruising yachts to carry AIS, however, should they choose to do so they should be fitted with an AIS B transponder or receiver".

22. Along the Northumberland coast there are a number of recreational boating activities. The Port of Blyth Marina and Royal Northumberland Yacht Club are located on the coast of Blyth and within the other sea users study area. The coast of Blyth is also a general boating area (UK Government, 2023). The general boating areas are utilised on a day-to-day basis by a variety of recreational boating users, including dinghies, sailboards, watercraft, and small cruisers. There are sailing clubs present in the vicinity of the Marine Scheme, including the Newbiggin-by-the-Sea sailing club and Tynemouth sailing club.

23. Recreational boat traffic is considered in Volume 2, Chapter 13: Shipping and Navigation. It highlights that the majority of recreational traffic was recorded in proximity to the coast, with vessels recorded transiting to/from Blyth Harbour. There was an average of one unique vessel per day recorded over the winter period and an average of five vessels per day during the summer period. The baseline in Volume 2, Chapter 13: Shipping and Navigation also supports the description in paragraph 14, describing a generally low level of recreational activity along the section of coastline close to the Marine Scheme, with higher levels of activity concentrated at the ports and harbours and a higher level of recreational activity close to the cable Landfall north of Blyth.

24. Consultation with recreational user groups as discussed in Volume 2, Chapter 13: Shipping and Navigation, Table 13.4, indicated that some recreational craft on east coast trips would cross over the Marine Scheme but that most recreational craft are expected to pass slightly inshore of the Marine Scheme heading north-south.

15.7.1.1.1 Recreational fishing

25. This section provides an overview of the recreational fishing activity within the other sea users study area and the Marine Scheme. For the purpose of this section, recreational fishing considers non-commercial fishing activity. Fishing activity associated with aquaculture is discussed below. Further information on shellfish is provided within Volume 2, Chapter 9: Fish and Shellfish Ecology, and all other commercial fishing activity is addressed within Volume 2, Chapter 12: Commercial Fisheries.

26. Recreational fishing effort is highly seasonal and varies depending on the weather.

27. Recreational sea angling also provides local and national economic benefit through spending at bait and tackle shops, charter boat hire, and club membership (Smart, 2021). The most recent sea angling in the UK report was published by Cefas in 2021 examining participation and catches of sea anglers in 2018 and 2019 (Hyder et al., 2021). The total economic impact of sea anglers in the UK (2016 – 2017) was £1.94 million in expenditure and resulted in 16,300 jobs (Hyder et al., 2021). In 2019, sea anglers fished for 6.1 million days with most effort from the shore (contributing to 45.2% of all sea anglers).

28. According to the Scottish Marine Recreation and Tourism Survey (2015), sea angling (including from shore and from charted or private boats) activity is concentrated within the territorial waters of the Scottish EEZ. Thus, there will be an insignificant level of recreational fishing activity in the other sea users study area and limited potential interaction between the Marine Scheme and recreational sea angling activity in the Scottish EEZ.

29. Within the English EEZ, for the majority of the other sea users study area the recreational sea angling activity is low, with patches of medium activity in offshore waters. Recreational sea angling activity is highest inshore and the Marine Scheme overlaps with an area of medium to high activity near the landfall (UK Government, 2023).

30. According to the Association of Inshore Fisheries and Conservation Authorities, recreational sea angling is a popular activity in the Northumberland district. There are a variety of fin fish species of interest to recreational sea anglers along the Northumberland coast, including cod, mackerel, whiting, saithe and flounder. Recreational sea angling activities include fishing from the shore and

from kayaks and private or chartered boats (Association on Inshore Fisheries and Conservation Authorities, 2023).

15.7.1.1.1 Other recreational activities

31. This section provides a high-level overview of the other recreational activities that may occur within the other sea users study area, which include (but are not limited to) diving, water sports, and beaches / bathing waters. These other recreational activities are sporadic in nature and therefore it is difficult to predict the extent at which these activities might occur. Furthermore, it is anticipated that these other recreational activities will be confined to the territorial waters close to the coastline, which will result in limited interaction with the Marine Scheme and within the other sea users study area.

Diving

32. According to the Scottish Marine Recreation and Tourism Survey (2015), diving activity in the Scottish EEZ is concentrated within the territorial waters. In the Scottish EEZ, the Marine Scheme is located entirely in offshore waters so there is no direct overlap with diving activity. Notwithstanding, there is no diving activity within the other sea users study area

33. The Northumberland coastline is a popular area for diving, with the Farne Islands recognised as one of the best dive sites in the UK featuring ship wreck sites (Landscapes for Life.org, 2023). According to the British Sub-Aqua Club, there are three diving clubs present in Northumberland which may utilise the waters of the Northumberland coast: Hexham Sub-Aqua Club; Durham Divers; and Tyneside (BSAC, 2023).

34. There are several dive sites along the Northumberland coast, from St. Abb's and Eyemouth in the north to St. Mary's Island in the south (Northeast Diving Site, 2017). St. Mary's Island is the closest dive site to the Marine Scheme and the only site located within the study area (approximately 9 km from the nearest point of the Marine Scheme. The site features a range of small reefs and debris from shipwrecks to the north and east of the Island (Finstrokes, 2023).

Water sports

35. There are a variety of water sports that take place in various forms both along the coast and at sea. Water sports include activities such as canoeing, kayaking, surfing, windsurfing and kite surfing as well as a wide range of other activities such as paddleboarding, rowing, the use of personal watercraft (i.e., jet skis), waterskiing, and wakeboarding. These water sports are highly seasonal with greatest activity during the summer months and are weather-dependent. Given the variation in potential activities, it is difficult to predict the extent to which these water sports may occur.

36. The Scottish Marine Recreation and Tourism Survey (2015) provides the density of personal watercraft (jet skis) at sea, water-skiing and wakeboarding in the sea, rowing and sculling in the sea, canoeing and kayaking in the sea, windsurf and kite surfing at the coast, and surfing, surf kayaking or paddleboarding in the sea. For all water sports activities, activity was confined to the territorial waters of the Scottish EEZ, with the highest density of activities being along the coast and limited activity approaching the 12 nm limit. Therefore, the other sea users study area does not overlap with any notable water sports activities in the Scottish EEZ.

37. Modelled recreational activity for personal watercraft in the English EEZ indicates that activity is concentrated in territorial waters in the wider other sea users study area, there is a region of medium to high activity near Whitley Bay. The Marine Scheme overlaps with an area that is of low to moderate intensity (UK Government, 2023).

38. Based on the UK and Ireland Surf Reports and Surf Forecasts map (Magic Seaweed, 2023), there are two surfing areas in the other sea users study area: Seaton to Blyth and Whitley Bay. Seaton to Blyth is described as a fairly exposed beach break which rarely gets crowded (Surf-forecast.com, 2023a), indicating the level of usage for surfing is relatively low in comparison to other surf locations. Whitley Bay is described as a fairly exposed beach break that has inconsistent surf. Winter is the optimum time of year for surfing here and when the surf conditions are optimal, it can get relatively busy in the water (Surf-forecast.com, 2023b). The Marine Scheme does not directly overlap with either of these surfing areas.

Beach users and bathing waters

39. There are numerous beaches and bathing waters scattered along the coastlines throughout the UK. Bathing waters are protected under the EU Bathing Water Directive (2006/7/EC), as implemented into UK and Scottish law via the Bathing Water Regulations 2013 and the Bathing Water (Scotland) Regulations 2008. As these beaches and bathing waters are confined to coast, the other sea users study area and the Marine Scheme will not interact with any beaches in the Scottish EEZ.

40. The beaches and bathing waters along the Northumberland coast that are within the other sea users study area are provided in Table 15.4 along with their water quality status from 2018 through 2022 (Environment Agency, 2023; UK Beach Guide, 2023). Overall, there are 10 beaches and seven designated bathing waters within the other sea users study area. The Marine Scheme does not directly overlap with any designated bathing waters; however, there is overlap with two beaches: Cambois North and Cambois South. All designated bathing waters within the other sea users study area are in good or excellent condition.

Table 15.4 A list of beaches and bathing waters (as designated under the UK Bathing Water Regulations 2013) that are within the other sea users study area, along with the water quality status from 2018 to 2022 (Environment Agency, 2023; UK Beach Guide, 2023).

41.	Beach / Bathing Water[5]	42.	Water Quality					
		43.	2018	44.	2019	45.	2021	46.	2022
47.	Amble Links	48.	Excellent	49.	Excellent	50.	Excellent	51.	Excellent
52.	Druridge Bay North	53.	Excellent	54.	Excellent	55.	Excellent	56.	Excellent
57.	Druidge Bay South	58.	Excellent	59.	Excellent	60.	Excellent	61.	Excellent
62.	Cresswell*	63.	-	64.	-	65.	-	66.	-
67.	Newbiggin North	68.	Excellent	69.	Excellent	70.	Excellent	71.	Excellent

[5] All designated bathing waters are listed as beaches (UK Beach Guide, 2023); however, the Cresswell, Cambois North, and Cambois South beaches are not designated as bathing waters and therefore do not have a water quality status available.

41.	Beach / Bathing Water[5]	42.	Water Quality					
		43.	2018	44.	2019	45.	2021	46.	2022
72.	Newbiggin South	73.	Excellent	74.	Good	75.	Good	76.	Good
77.	Cambois North*	78.	-	79.	-	80.	-	81.	-
82.	Cambois South*	83.	-	84.	-	85.	-	86.	-
87.	Blyth South Beach	88.	Excellent	89.	Excellent	90.	Excellent	91.	Excellent
92.	Seaton Sluice	93.	Excellent	94.	Excellent	95.	Excellent	96.	Excellent

15.7.1.2. MARINE INDUSTRY

15.7.1.1.1 Dredging and licenced spoil disposal sites

97. Dredging and licenced spoil disposal sites are primarily located in territorial waters, and therefore the other sea users study area does not overlap with any dredging areas or licenced spoil disposal sites in the Scottish EEZ. Therefore, dredge and disposal sites in Scotland are not considered any further in this chapter.

98. In the English EEZ, the following are the open/active licenced spoil disposal sites and dredging sites within the other sea users study area (see Volume 4, Figure 15.2: Other Sea Users Infrastructure) (EMODnet, 2023; UK Government, 2023):

- Licenced spoil disposal:
  - Blyth A + B (ID: TY042) (operational since 2017);
  - Blyth Offshore Wind Farm Demo (ID: TY043) (operational since 2017); and
  - North Tyne ID: TY070).
- Dredging activity:
  - Coquet River (estuary dredging; 21,166 tonnes in 2009);
  - Blyth Harbour (maintenance dredging; 222,407 tonnes in 2016); and
  - Tyne River (maintenance dredging; 209,818 tonnes in 2016).

15.7.1.1.1 Marine aggregate extraction

99. Marine aggregate licences have historically been issued to two sites in Scotland: Middle Bank in the Forth of Forth, and Tay Estuary in the Firth of Tay; however, these sites are now inactive (Marine Scotland, 2023). There are currently no licences for marine aggregate extraction (Scottish Government, 2015). According to Scotland's National Marine Plan (2015) (*currently being updated*) regarding aggregates (policy 16):

"there is potential for further activity if extraction becomes viable under different economic conditions or if increased dredging capability (in terms of ability to dredge in deeper water depths) offers opportunity for extraction in new areas. There may also be increased demand for

aggregate in Scotland for use in gravity bases for the emerging renewables industry and in coastal defence and adaptation schemes" (16.2)."

100. There are currently no marine aggregate extraction activity areas (including exploration options, TCE production licences and options areas, and application areas) within the other sea users study area in the English EEZ (UK Government, 2023). As the other sea users study area and the Marine Scheme enter into the English EEZ, they overlap with an area identified by TCE as potential marine aggregate opportunities in the offshore waters (Volume 4, Figure 15.2: Other Sea Users Infrastructure). These areas represent what are considered Key Resource Areas for marine aggregates in England and Wales (TCE, 2022). The other sea users study area overlaps with approximately 689 km^2 of Key Resource Area and the Marine Scheme overlaps with approximately 16 km^2, representing approximately 0.92 % and 0.02% respectively of the total (75,035 km^2) area designated in UK waters.

101. According to the Northeast Inshore and North East Offshore Marine Plan (Policy: Aggregates NE-AGG-3):

102. "Proposals in areas of high potential aggregate resource that may have significant adverse impacts on future aggregate extraction should demonstrate that they will, in order of preference:

- Avoid
- Minimise
- Mitigate significant adverse impacts so they are no longer significant.

103. If it is not possible to mitigate significant adverse impacts, proposals should state the case for proceeding."

104. Whilst it is noted that there is an overlap with this key resource area, as previously stated, there are no current or planned marine aggregate extraction activities in this area, therefore marine aggregate extraction is not considered further in this chapter. Impacts on marine aggregate extraction was not raised by consultees during scoping and therefore this approach is considered appropriate.

15.7.1.1.1 Marine Renewable energy

105. A detailed description of the relevant export cables for renewable energy developments is provided below.

106. Within the Scottish EEZ, the other sea users study area overlaps with the Berwick Bank Wind Farm (BBWF) array area and BBWF Branxton Connection (Volume 4, Figure 15.2: Other Sea Users Infrastructure). As discussed in Volume 2, Chapter 1: Introduction, the BBWF forms a separately consented application.

107. Also within the Scottish EEZ, the other sea users study area overlaps with three additional offshore wind farm developments: Seagreen, Inch Cape, and Neart na Gaoithe. The Marine Scheme does not directly overlap with these sites nor their associated export cables.

108. The Seagreen Offshore Wind Farm is located approximately 5 km north of the Marine Scheme (measured from the nearest point of the Marine Scheme as per Volume 4, Figure 15.2: Other Sea Users Infrastructure) and is currently under construction. Seagreen is being developed by Seagreen Wind Energy Limited. Seagreen has been consented for 150 turbines; however, 114 turbines are currently being installed. First power was generated in August 2022. At the time of writing all 114 jackets have been installed and the project is planned to be completed by Q2 2023. The remaining 36 turbines form Seagreen 1A which comprises a second grid connection at Cockenzie was granted a Marine Licence in December 2021. In January 2022, the Seagreen 1A project submitted a Screening Report to increase the size of the 36 turbines.

109. Inch Cape Offshore Wind Farm is located approximately 8 km north-west of the Marine Scheme (measured from the nearest point of the Marine Scheme as per Volume 4, Figure 15.2: Other Sea Users Infrastructure) and is in late-stage development. Inch Cape is being developed by Inch Cape Offshore Limited. The Inch Cape Offshore Wind Farm will consist of up to 72 turbines. The Inch Cape grid connection is located at the Cockenzie Power Station in East Lothian.

110. Neart na Gaoithe Offshore Wind Farm is located approximately 16 km west of the Marine Scheme (measured from the nearest point of the Marine Scheme as per Volume 4, Figure 15.2:Other Sea Users INfrastructure) and is currently under construction. Neart na Gaoithe is owned by EDF Renewables. The Neart na Gaoithe Wind Farm has a maximum of 54 turbines. The onshore construction began in November 2019, with offshore construction as of August 2020, and full commissioning expected to be completed in 2023.

111. In the English EEZ, there are no renewable developments in the offshore waters of the other sea users study area. In the territorial waters, the Marine Scheme intersects the Blyth Offshore Demonstrator Wind Farm (hereafter 'Blyth Wind Farm'), which is owned by Blyth Offshore Demonstrator Limited. The Blyth Offshore Demonstrator Wind Farm – Phase 1 ('Blyth Demo Phase 1') has been in operation since 2018 and consists of five turbines (WEAMEC, 2017). The Blyth Demo Phase 1 is located approximately 2 km from the Marine Scheme.

112. The Blyth Demo Phase 2 development is planned to consist of five floating turbines that will be operational by 2025 (WEAMEC, 2017). In 2020, EDF submitted a Screening Request to MMO for a Marine Licence and Section 36 Variation to enable the deployment of floating turbines for Phase 2 over the previously consented gravity-based foundations (MMO, 2020).

15.7.1.1.1 Oil and gas

113. The other sea users study area is located within the Central North Sea (CNS) which is a well-developed area for oil and gas activity (BEIS, 2022). There is no oil and gas infrastructure (e.g., pipelines, wells, surface and subsurface infrastructure) relating to active licenses or boreholes present within the other sea users study area. The nearest inactive borehole (26/12-1) (NSTA, 2023) is located approximately 114 km from the Marine Scheme. Furthermore, there are no offshore installations within the other sea users study area, nor any within 50 km of the Marine Scheme (EMODnet, 2023).

114. In October 2022, the North Sea Transition Authority (NSTA) launched the 33rd Offshore Oil and Gas Licensing Round comprising of 898 blocks and part-blocks available for new development and exploration opportunity. The application period ran through January 2023, and licenses are expected to be awarded from the second quarter of 2023[6] (NSTA, 2022a)). As shown in Volume 4, Figure 15.2 Other Sea Users Infrastructure, within the English EEZ, the other sea users study area overlaps with an area of the 33rd Rounds Blocks on Offer and Offshore Petroleum Licenses (NSTA, 2022b). There is no overlap with the Marine Scheme. As no licence announcement has been made atAt the time of writing this Marine Scheme ES, no further assessment of the 33rd licensing round is made.

115. There is potential for transit vessels associated with the decommissioning of oil and gas infrastructure in the wider CNS to overlap with the other sea users study area in both Scottish and English waters during the construction, operation and maintenance, and decommissioning of the

[6] No announcements have been confirmed at the time of writing this Marine Scheme ES.

Marine Scheme. Detail on potential impacts to transiting vessels are described in Volume 2, Chapter 13: Shipping and Navigation.

116. As there is no active oil and gas infrastructure within the other sea users study area and there is currently no planned activity associated with the 33rd Offshore Oil and Gas Licensing Round, Oil and gas interests are not considered further in this chapter.

15.7.1.1.1 Carbon capture and storage

117. No carbon capture and storage (CCS) sites are located in the other sea users study area. The closest (Northern Endurance) is located approximately 160 km south-east of the other sea users study area. Therefore, CCS sites are not considered further in this chapter.

15.7.1.1.1 Offshore cables, subsea communications infrastructure and Pipelines

118. The subsea cables throughout the North Sea provide telecommunications and power between offshore and onshore infrastructure, nationally, and internationally. The other sea users study area and Marine Scheme overlap or are in close proximity to a number of cables as detailed in Table 15.5.

119. There are also three active outfall pipelines located at the Landfall at Cambois, as shown in Volume 4, Figure 15.2: Other Sea Users Infrastructure, all located within the Marine Scheme boundary.

Table 15.5 Offshore cables relevant to the Marine Scheme

Cable	Description	Distance (km)		Agreement required with developer/operator
		Other Sea Users Study Area	Marine Scheme	
Operational subsea power cables (only occur within the English EEZ)				
Northern Sea Link (NSL)	NSL is the world's longest subsea interconnector cable at approximately 720 km in length, linking Blyth, UK to Kvilldal, Norway. NSL has been operational since 2021 and was developed by National Grid North Sea Link Limited, a wholly owned subsidiary of National Grid plc., and Statnett in Norway. The Marine Scheme will overlap with the North Sea Link in the nearshore area. Therefore, there is potential for the construction, operation, maintenance and decommissioning of the Marine Scheme to overlap with the operation, maintenance, and decommissioning of the NSL.	0	0	Crossing Agreement will be required.
Blyth Offshore Windfarm – Blyth Demo Phase 1	Owned by EDF Renewables, Blyth Demo Phase 1 has been in operation since 2018. The Marine Scheme intersects the Blyth Offshore Demonstrator Wind Farm ('Blyth Demo Phase 1') export cable. Therefore, there is potential for the construction, operation,	0	0	Crossing Agreement will be required.

Cable	Description	Distance (km)		Agreement required with developer/operator
		Other Sea Users Study Area	Marine Scheme	
	maintenance, and decommissioning of the Marine Scheme to overlap with the operation, maintenance, and decommissioning of the Blyth Offshore Demo Phase 1 export cable.			
America – Europe Connect (UK): North Sea Connect	Operational interconnector routing between Newcastle and Blaabjerg (Denmark). Operational since March 2022. Joint owned by Aqua Comms, Bulk Fiber Networks and Meta (Facebook). The North Sea Connect is part of a wider cable system comprising three segments; one in the Irish Sea, one in the North Sea, and a terrestrial link linking these both. The other sea users study area intersects the North Sea segment of North Sea Connect. Therefore, there is potential for the construction, operation, maintenance, and decommissioning of the Marine Scheme to overlap with the operation, maintenance, and decommissioning of this cable.	0	3.5	N/A
In planning subsea power cables (Occur both in Scottish and English EEZs)				
The SEGL (also known as the Eastern Link projects) comprise of two High Voltage Direct Current (HVDC) subsea cables: one from Torness in East Lothian, Scotland to Hawthorn Pit in Durham, England (SEGL1), and one from Peterhead in Aberdeenshire, Scotland to Drax in North Yorkshire, England (EGL2). The SEGL project is being developed by Scottish Power Energy Networks (SPEN) and National Grid Electricity Transmission (NGET) and EGL2 is being developed by Southern Electricity Networks (SSEN) and NGET.				

Cable	Description	Distance (km)		Agreement required with developer/operator
		Other Sea Users Study Area	Marine Scheme	
Scotland to England Green Link (SEGL) 1	**Status of consent applications:** ***Onshore Scotland - Torness*** A planning application has been submitted for the consent for the onshore elements in Torness, Scotland and a decision is anticipated in Spring 2023. ***Offshore*** A Marine Licence application was submitted to MD-LOT and MMO (Reference: MLA/2022/00231) in June 2022 for the offshore element, a 176 km subsea cable; MD-LOT have determined the Marine Licence and MMO is expected to determine imminently. ***Onshore England - Durham*** Granted Outline Planning Permission by Durham City Council in November 2022 (Case Reference: DM/22/01663/OUT). Construction activities for SEGL 1 are planned for 2026 – 2027. Connection is planned for 2027. There is potential for the construction, operation, maintenance, and decommissioning of the Marine Scheme to overlap with the construction, operation, maintenance, and decommissioning of SEGL 1.	0	0	The Marine Scheme will cross this cable once and therefore a Crossing Agreement will be required.
Eastern Green Link 3	Both EGL 3 and EGL 4 will run in the same north south direction as SEGL 1 and EGL 2. Currently, there is no information in the public domain as to the construction and operational timescales for these cables. It is therefore unknown whether the Marine Scheme will be constructed in advance of these cable projects. It is however acknowledged based on currently publicly available information these cables projects have the potential to cross the Marine Scheme. As there is such uncertainty regarding these cables and currently no useable definition to support geographical spread and timescales, EGL 3 and EGL 4 will not be considered further in this chapter.	Unknown	Unknown	As yet unknown, once further details are released, the requirement for Proximity and or Cable Crossing Agreements will be explored.
Eastern Green Link 4		Unknown	Unknown	As yet unknown, once further details are released, the

Cable	Description	Distance (km)		Agreement required with developer/operator
		Other Sea Users Study Area	Marine Scheme	
				requirement for Proximity and or Cable Crossing Agreements will be explored.
Blyth Offshore Wind Farm – Blyth Demo Phase 2	The Blyth Demo Phase 2 development (developed by EDF Renewables) is planned to consist of five floating turbines that will be operational by 2025 (WEAMEC, 2017). **Status of consent applications:** In 2020, EDF Renewables submitted a Screening Request to MMO for a Marine Licence and Section 36 Variation to enable the deployment of floating turbines for Phase 2 over the previously consented gravity-based foundations (Reference: EIA/2020/00026). It is anticipated that there will be an overlap with the export cable for the Blyth Demo Phase 2 and the Marine Scheme, however currently there is no information available on construction and operation timescales. There is therefore potential for the construction, operation, maintenance, and decommissioning of the Marine Scheme to overlap with the construction, operation, maintenance, and decommissioning of Blyth Demo Phase 2 export cable.	0	0	Whether the Marine Scheme crosses Blyth Demo Phase 2 export cable or vice versa will be dependent on construction schedules for the two developments. once further details are released, the requirement for Proximity and or Cable Crossing Agreements will be explored.

15.7.1.1.1 Military and defence

120. The MoD operates throughout UK territorial waters and adjacent seas where they carry out maritime and aerial training activities and surveillance of any potential threats to national security. Offshore defence activities include the operation of naval vessels, navigational interests, underwater acoustic ranges, maritime exercise areas, amphibious exercises, coastal training ranges and coastal test and evaluation ranges. The other sea users study area overlaps with the following military and defence practice exercise areas (PEXA) and Areas of Intense Aerial Activity (AIAA):

- Within Scottish EEZ:
  - D613C (AIAA) and D613D (AIAA) which are both utilised for aerial training consisting of military aircraft undertaking high velocity manoeuvres; and
  - X5641: Forth Outer which is a surface exercise area available for Naval and Military vessels and may also be utilised by submarines.
- Within English EEZ:
  - D513 and D513A (Druridge Bay), which is a military practice area flagged for surface danger and firing danger. The MoD have confirmed that the D513 zone reaches the surface and is used for air to air gunnery. The surface space zoning of the designation is required to allow for munitions to fall into the sea.

15.7.1.1.1 Aquaculture

121. There are no active finfish or shellfish aquaculture sites within the other sea users study area. The closest aquaculture site is located approximately 40 km from the Marine Scheme and is a seaweed harvesting site, located within the Scottish EEZ. A Native oyster shellfish production is located on Holy Island, approximately 42 km south from the Marine Scheme (Scottish EEZ).

122. The North East Inshore and Offshore Marine Plan (MMO, 2021) has identified 'strategic areas of sustainable aquaculture production', as per the following NE-AQ-1 policy:

"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: avoid, minimise, 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 (MMO, 2021)."

123. The 'strategic areas of sustainable aquaculture production' are located wholly within inshore English waters. The other sea users study area overlaps with these areas where the Marine Scheme is within 12 nm of the coast.

124. Aquaculture sites are not discussed further in this chapter as there are currently no active sites within the other sea users study area.

15.7.1.1.1 Ports and other infrastructure

125. The other sea users study area does not overlap with any ports or other infrastructure in the Scottish EEZ. Within the English EEZ, there are three ports present: the Warkworth Harbour, located in Amble on the northern boundary of the other sea users study area, the Port of Blyth South Harbour, and the Port of Tyne located on the southern boundary of the other sea users study area (UK-Ports, 2023). The following are the at-sea lighthouses that are still in place (*i.e.*, have a status of 'not

removed, relocated or destroyed') (EMODnet, 2023) that are located within the other sea users study area:

- Warkworth Harbour North Pier / Amble North Pier, Northumberland (ID[7]: ENG 178);
- Warkworth Harbour South Pier / Amble South Pier, Northumberland (ID: ENG 179);
- St Mary's Island, Tyne & Wear (ID: ENG 145);
- Blyth East Pier Head, Northumberland (ID: ENG 013);
- Herd Groyne, Tyne & Wear (ID: ENG 330);
- Tyne North Pier Head/Tynemouth, Tyne & Wear (ID: ENG 159); and
- Tyne South Pier Head, Tyne & Wear (ID: ENG 158).

126. Ports and associated infrastructure are not discussed further in this chapter. Further details on potential impacts to ports and harbours is presented in Chapter 13: Shipping and Navigation.

15.7.2. Summary of Baseline and Key Receptors for Assessment

Receptor	Location/Jurisdication	
	Scotland	England
Marine recreation	✓	✓
Dredging and disposal sites	✓	✓
Marine aggregate extraction	X	X
Marine renewable projects	✓	✓
Oil and gas	X	X
Carbon Capture and Storage	X	X
Submarine cables and pipelines	✓	✓
Ministry of Defense interests	✓	✓
Aquaculture	X	X
Ports and Harbours	X	X

15.7.3. Future Baseline Scenario

127. The existing baseline described above considers both existing and projects and activities. The future baseline conditions described in this section are based on the receptors and topics covered in the baseline, in the event that the Marine Scheme does not occur.

128. The future baseline scenario for recreational activities is considered unlikely to change substantially from that discussed. The future baseline scenario for recreational sailing and motor cruising, recreational fishing and other recreational activities is likely to gradually increase in line with population growth in Scotland and England, however this is unlikely to represent a substantial change in the short term.

129. The future baseline for offshore renewable energy and subsea cables and infrastructure is subject to change as the projects described are currently seeking consent or under construction, and it is anticipated that offshore renewable energy projects and the associated grid transmission projects will increase in the future to meet energy demands and net zero targets.

[7] Amateur Radio Lighthouse Society (ARLHS) Number.

130. Although the oil and gas sector is seen as a critical component of the economy, support for oil and gas programmes in the future will depend to some extent on the ability of the industry to facilitate a sustainable energy transition. It is possible that as a result of the 33rd Offshore Oil and Gas Licensing Round oil and gas activity in the region may expand; however, this is contrasted by the gradual increase in decommissioning which may also result in a slight increase in vessel presence and activity, however this is not considered likely to represent a significant increase. Taking these factors into consideration it is likely the short to medium term future baseline will not deviate largely from that described in section 15.7.1.

131. There is the potential for marine aggregate extraction requirements to increase in line with demand associated with marine renewable development and coastal defences. However, there are no active aggregate extraction areas in the other sea users study area and this is not expected to change in the short term. It is also anticipated that the level of dredge and disposal activity in the other sea users study area will not increase significantly from the current baseline.

132. The future baseline is subject to gradual change as new developments and plans are proposed and progressed, and the baseline will evolve with or without the Marine Scheme being in place. Therefore, the future baseline is considered broadly comparable to the existing baseline as described in section 15.7.

133. Any changes that may occur during the design life span of the Marine Scheme should be considered in the context of both greater variability and sustained trends occurring on national and international scales in the marine environment.

15.7.4. Data Assumptions and Limitations

134. The baseline environment of the other sea users within the other sea users study area has been informed by the most relevant up-to-date publicly available data sources and literature (Table 15.3) in addition to data and information collected through consultation and stakeholder engagement (Table 15.2). The data used are the most up to date publicly available information which can be obtained from the applicable data sources as cited at the time of writing. Therefore, the baseline and data used to inform the baseline is considered to be robust and sufficient for the purpose of the impact assessment.

15.7.4.1. AIS DATA

135. Since the vessel traffic data for the Marine Scheme consists of AIS only, the data has limitations associated with non-AIS targets. With regards to the Shipping and Navigation assessment (Volume 2, Chapter 13: Shipping and Navigation), vessel traffic data was collected from additional data sources (such as VMS data, the UK Coastal Atlas of Recreational Boating (RYA, 2019), consultation feedback and third party planning documentation) was incorporated to suitably characterise the vessel traffic movements for the shipping and navigation baseline. This data has been drawn on for this other sea users impact assessment and is considered to be suitably comprehensive and adequate for the assessment.

136. With regard to recreational boating activity, it is acknowledged that AIS likely presents an underestimation due to the lack of requirement for recreational vessels.

15.8. Scope of Assessment

15.8.1. Impacts Scoped into the Assessment

137. The following impact pathways have been scoped into the assessment, as agreed through the Scoping process and follow up consultation with stakeholders and consultees[8]:

- Temporary obstruction to other marine renewable energy projects (wind, wave and tidal) (C & D);
- Temporary obstruction to marine recreation (C & D);
- Temporary obstruction to MoD interests (C & D);
- Temporary obstruction to marine cables and pipelines (C & D); and
- Temporary obstruction to dredging and disposal interest (C & D).

15.8.2. Impacts Scoped Out of the Assessment

138. Impacts scoped out of the assessment were agreed with key stakeholders through consultation following receipt of the Scoping Opinion from MD-LOT and MMO in February and March 2023 respectively. These are summarised below for completeness:

- Temporary obstruction to oil and gas assets (C& D);
- Risk of damage to / interference with other third-party assets (not including subsea cables) (C & D);
- Temporary disturbance to coastal tourism during construction (C & D);
- Obstruction to other sea users arising from the presence of the Marine Scheme (O&M); and
- Disturbance to other sea users arising from operation and maintenance activity, including vessel movements (O&M).

139. Following compilation of the baseline, the following receptors and potential impact pathways have been identified:

- Temporary obstruction to dredging and disposal interests (O&M).

140. There may be temporary obstruction to these receptors and sites during construction of the Marine Scheme. Once construction has concluded, the Marine Scheme will be entirely subsea. The presence of infrastructure and the implementation of safety distances around project maintenance vessels has limited potential to obstruct activities of nearby third party developments. Therefore, temporary disruption to these receptors as a result of operation and maintenance of the Marine Scheme has been scoped out of further assessment in the EIA.

15.9. Key Parameters for Assessment

15.9.1. Maximum Design Scenario

141. The maximum design scenario(s) (MDS) summarised here 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 details provided in Chapter 5: Project Description. Effects of greater adverse significance are not predicted to arise should any other development scenario,

[8] C = Construction, O = Operation and maintenance, D = Decommissioning

based on details within the Project Description (e.g., different infrastructure layout), to that assessed here, be taken forward in the final design scheme.

142. Given that the MDS is based on the design option (or combination of options) that represents the greatest potential for change, confidence can be held that development of any alternative options within the design parameters will give rise to no worse effects than assessed in this impact assessment. Table 15.6 presents the MDS for potential impacts on other sea users during construction, operation and maintenance, and decommissioning.

143. Site preparation works, in advance of construction, are predicted to commence in Q4 of 2026 and will continue until all installation activities have ceased. Landfall construction is expected to occur between Q4 of 2027 until Q4 of 2028. Export cable installation is expected to begin in Q3 2028 and is expected to last until Q4 of 2029. All activities associated with the Marine Scheme are predicted to conclude by the end of 2029. Until detailed design of the Marine Scheme is progressed and further refined pre-construction, this programme for the Marine Scheme as a whole is indicative and is subject to further refinement, but is used to inform assessment of construction phase impacts for the Marine Scheme.

Table 15.6 Maximum design scenario specific to other sea users impact assessment

Potential Impact	Maximum Design Scenario	Maximum Design Scenario – Scottish water and English waters	Justification
Construction (Including site preparation)			
Temporary obstruction to marine renewable energy projects (wind, wave and tidal) Temporary obstruction to marine recreation Temporary obstruction MoD interests Temporary obstruction to other infrastructure including cables Temporary obstruction to dredging and disposal interests	Construction of up to four Offshore Export Cables; Offshore Export Cable Corridor length up to 180 km. Construction of the Offshore Export Cable Corridor is expected to take up to 18 months with an overall programme of up to 39 months, including site preparation Up to two pre-installation boulder removal / clearance vessels on site at any one time Up to two cable installation vessels on site at any one time Up to 10 guard vessels on site at any one time Up to two survey / Offshore Construction Vessel (OCV) vessels on site at any one time Up to two cable protection installation vessels on site at any one time A 500 m advisory safe clearance zone ('clearance zones') will be maintained around the construction vessels. Assumed up to 20 vessels on site at any one time.	**English waters** In addition to MDS presented for whole Marine Scheme, a jack up vessel may be used to support Landfall works **Scottish waters** As presented for whole Marine Scheme	The greatest number of vessels and the greatest extent of clearance zones and distances, over the longest construction period.
Operation and Maintenance			
All impacts during Operations and Maintenance have been scoped out.			
Decommissioning			
Temporary obstruction to marine renewable energy projects (wind, wave and tidal)	At the end of the operational lifetime of the Marine Scheme, the operator of the Marine Scheme will develop and agree a solution for the onward handling of the Offshore Export Cables with the regulator. This decision will be based on the advice from the marine regulator at the time and informed by the prevailing environmental regulatory requirements at that time, and relevant best-practice.	Applies to the whole Marine Scheme.	The greatest amount of the largest infrastructure, the greatest number of vessels and the

Potential Impact	Maximum Design Scenario	Maximum Design Scenario – Scottish water and English waters	Justification
Temporary obstruction to marine recreation	An assessment has been undertaken on a maximum design scenario of removing all Offshore Export Cables. The decommissioning sequence would generally be the reverse of the construction sequence and involve similar (but no greater than) types and numbers of vessels and equipment.		greatest extent of clearance zones and distances, over the longest construction period.
Temporary obstruction to MoD interests			
Temporary obstruction to dredging and disposal interests			

15.10. Methodology for Assessment of Effects

15.10.1. Overview

144. The other sea users assessment of effects has followed the methodology set out in Chapter 3: EIA Methodology. Specific to the assessment of other sea users, the following guidance documents have also been considered:

- The RYA Scotland's Position on Offshore Renewable Energy Developments: Paper 1 (of 4) – Wind Energy, June 2015 (RYA, 2015);
- Assessment of Impact of Offshore Wind Energy Structures on the Marine Environment (Marine Institute, 2000);
- Guidance on Environmental Impact Assessment of Offshore Renewable Energy Development on Surfing Resources and Recreation (Surfers Against Sewage (SAS), 2009);
- European Subsea Cables Association (ESCA) Guideline No 6, The Proximity of Offshore Renewable Energy Installations and Submarine Cable Infrastructure in UK Waters (ESCA, 2016);
- International Cable Protection Committee (ICPC) recommendations:
  - Recommendation No. 2. Cable Routing and Reporting Criteria (ICPC, 2015);
  - Recommendation No.3. Telecommunications Cable and oil Pipeline/Power Cables Crossing Criteria (ICPC, 2014); and
  - Recommendation No.13. The Proximity of Offshore Renewable Wind Energy Installations and Submarine Cable Infrastructure in National Waters (ICPC, 2013).
- The Crown Estate (TCE) and Crown Estate Scotland (CES) Agreements and Oil and Gas Licences (OGA, 2017);
- Oil and Gas UK, Pipeline Crossing Agreement and Proximity Agreement Pack (Oil and Gas UK, 2015);
- TCE Guidance: Export transmission cables for offshore renewable installations – Principles of cable routeing and spacing (TCE, 2012); and
- TCE Guidance: TCE Guidance: Submarine cables and offshore renewable energy installation – Proximity study (TCE, 2012).

15.10.2. Impact Assessment Criteria

145. Information about the Marine Scheme and the proposed activities with all phases of the Marine Scheme (construction, operation and maintenance, and decommissioning) shall be considered along with information about the environmental baseline to identify the potential interactions between the Marine Scheme and the environment.

146. To ensure consistency across the assessment, the terms effect and impact are defined below. The definitions are based on the glossary of the Introduction to Environmental Assessment (Highways England, 2019):

- Impact: Change that is caused by an action; for example, the laying of an export cable (action) is likely to result in seabed disturbance. Impacts can be defined as direct, indirect, temporary, irreversible, secondary, cumulative and inter-related. They can also be either positive or negative, although the relationship between them is not always straightforward; and

- Effect: Term used to express the consequence of an impact (expressed as the 'significance of effect'), which is determined by correlating the magnitude of the impact to the sensitivity of the receptor or resource in accordance with defined significance criteria.

147. Determining the significance of effects is a two-stage process that involves defining the magnitude of the potential impacts and the sensitivity of the receptors. This section should describe 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 3: EIA Methodology of the Marine Scheme ES.

148. The criteria for defining magnitude in this chapter are outlined in Table 15.7 below.

Table 15.7 Definition of terms relating to the magnitude of an impact

Impact Magnitude	Criteria
High	The impact occurs over a large spatial extent resulting in widespread, and/or long-term, permanent changes in baseline conditions or affects a proportion of a receptor population. The impact is very likely to occur and/or will occur at a high frequency or intensity.
Medium	The impact occurs over a local to regional spatial extent and/or a short- to medium-term change to baseline conditions or affects a moderate proportion of a receptor population. The impact is likely to occur and/or will occur at a moderate frequency or intensity.
Low	The impact is localised and/or temporary or short-term, leading to a detectable change in baseline conditions or a noticeable effect on a small proportion of a receptor population. The impact is unlikely to occur or may occur but at low frequency or intensity.
Negligible	The impact is highly localised and/or short-term, with full rapid recovery expected to result in very slight or imperceptible changes to baseline conditions or a receptor population. The impact is very unlikely to occur; if it does, it will occur at a very low frequency or intensity.

149.

150. The criteria for defining sensitivity in this chapter are outlined in Table 15.8 below.

Table 15.8 Definition of terms relating to the sensitivity of the receptor

Value (Sensitivity of the Receptor)	Description
Very High	Very high importance and rarity, international receptor with no capability to ‘absorb’ or accommodate change and no ability to recover or adapt.
High	High importance and rarity, international and/or national receptor and very limited capability to ‘absorb’ or accommodate change without fundamentally altering the character of the receptor.
Medium	High or medium importance and rarity, regional receptor with some capacity to absorb or accommodate change without significantly altering character, however some damage to the receptor is anticipated to occur.
Low	Low or medium importance and rarity and the receptor is considered tolerant to change without significant detriment to its character; some limited or minor change may occur.
Negligible	Very low importance and rarity, local receptor and is tolerant to change with no effect on its fundamental character.

151. The significance of the effect upon other sea users is determined by correlating the magnitude of the impact and the sensitivity of the receptor, as outlined in Table 15.9 below.

Table 15.9 Matrix used for the assessment of the significance of the effect

		Magnitude of Impact			
		Negligible	**Low**	**Medium**	**High**
Sensitivity of Receptor	**Negligible**	Negligible	Negligible to Minor	Negligible to Minor	Minor
	Low	Negligible to Minor	Negligible to Minor	Minor	Minor to Moderate
	Medium	Negligible to Minor	Minor	Moderate	Moderate to Major
	High	Minor	Minor to Moderate	Moderate to Major	Major
	Very High	Minor	Moderate to Major	Major	Major

152. In line with the request from MD-LOT through Scoping, the Assessment of Impacts identifies where impacts are relevant to Scottish waters, English waters, or both. Where there is no separation of assessment of impacts, the assessment for the Marine Scheme (as a whole entity) applies to the Marine Scheme in each of Scottish waters and English waters.

15.11. Measures Adopted as part of the Marine Scheme

153. As part of the Marine Scheme design process, a number of measures have been proposed to reduce the potential for impacts on other sea users (see Table 15.10). These include measures which have been incorporated as part of the Marine Scheme's design (referred to as 'designed in measures') and measures which will be implemented regardless of the impact assessment (referred to as 'tertiary mitigation'). As there is a commitment to implementing these measures, they are considered inherently part of the design of the Marine Scheme and have therefore been considered in the assessment presented in section 15.12 below (i.e. the determination of magnitude and therefore significance assumes implementation of these measures). These measures are considered standard industry practice.

Table 15.10 Measures adopted as part of the Marine Scheme (designed in measures & tertiary mitigation)

Mitigation Measure	Justification	Applicable Jurisdication
Cable protection.	The use of cable protection will be minimised as far as practicable, and only used where required. Additional external cable protection (e.g. rock placement) will only be used where the minimum target burial depth cannot be achieved, for example in areas of hard ground or at third-party crossings. This will be informed by outputs from the Cable Burial Risk Assessment completed by the installation contractor(s) prior to the commencement of installation. Rock utilised in berms will be clean with low fines. Use of graded rock and 1:3 profile berms at areas of rock protection will reduce potential fishing gear snagging risk.	Scottish and English waters
Cable burial depth.	Cables will be buried to a minimum target depth of 0.5 m and only protected using external protection (e.g., rock berms) where minimum target burial depth is not achieved or at third-party crossings. Application of target cable burial depth will reduce the potential for cable exposure from interactions between metocean regimes (e.g. wave, sand, and currents) and will reduce interaction with fishing gear. Cable burial also reduces risk of interference with magnetic position fixing equipment.	Scottish and English waters
Monitoring of cable burial and protection.	Infrastructure will be monitored through post lay and burial inspection surveys to identify exposures and any requirements for repair and reburial, with remedial action taken as appropriate and as soon as practicable. Findings will be shared with the fishing industry in order to facilitate co-existence, prevent potential damage to and from fishing gear, and minimise potential safety risks.	Scottish and English waters
The location, extent and nature of the cable protection measures used will be communicated to the relevant stakeholders including UKHO, relevant fishing industry representatives and Kingfisher Information Service.	Provides information to all other legitimate users of the sea are aware of the location, extent and nature of cable protection.	Scottish and English waters
Crossing Agreements.	Crossing and proximity agreements with the owners of third party assets will be developed and agreed to maintain safety to infrastructure.	Scottish and English waters
Guard vessels and clearance distances	Project vessels will implement a 500 m advisory safe passing distances with third party vessels during periods of construction or major repair or maintenance. During operation, where cable exposures exist that would result in significant risk, guard vessels will be used where appropriate until the risk has been mitigated by burial and/or other protection methods. Guard vessels will use Automatic RADAR Plotting Aid (ARPA) to monitor vessel activity and predict possible interactions whilst alongside the construction vessel(s). This facilitates engagement with fisheries stakeholders	Scottish and English waters

Mitigation Measure	Justification	Applicable Jurisdication
	during specific project works, reduces potential for interactions between the Marine Scheme and fishing activities, as well as maximising awareness of temporary hazards.	
Route Selection and Avoidance.	The Marine Scheme has been specifically refined to avoid interactions with key designations, environmental sensitivities, and notable inshore fishing grounds as far as reasonably practicable. On the approach to the Landfall at Cambois, the route has been selected to minimise the footprint within European Sites. Nearshore routes with greater levels of interactivity with European Sites along the English and Scottish coast have been de-selected. Further detail on this is provided in Volume 2, Chapter 6: Route Appraisal and Consideration of Alternatives	Scottish and English waters
Environmental Management Plan (EMP).	An EMP will be developed and employed to ensure potential release for pollutants will be reduced as far as practicable. This will include a Marine Pollution Contingency and Control Plan (MPCCP) and an Invasive and Non-Native Species Management Plan (INNSMP). An outline EMP has been provided as part of this application (Volume 5, Appendix 5.1) and will be updated for submission to MMO and MD-LOT prior to construction.	Scottish and English waters
Promulgation of information for vessel routes, timings and locations, Safety Zones and advisory safe passing distances as required via Kingfisher Bulletins.	Maximises awareness of the Marine Scheme allowing vessels to passage plan in advance.	Scottish and English waters
Promulgation of information (such as, position and nature of works, vessel routes, Safety Zones, advisory safe passing distances, navigational warnings) as required via Kingfisher Bulletins.	The construction of infrastructure and implementation of safety distances around construction vessels may displace recreation vessels. Likewise, maintenance and decommissioning activities may also displace recreation vessels. Circulation of information via Notices to Mariners (NtM), Kingfisher, Radio Navigational Warnings, Navigational Telex (NAVTEX), and/or broadcast warnings as soon as reasonably practicable in advance of and during the offshore works to inform the commercial fishing industry of vessels routes, timing and locations of construction works, and relevant details the construction activities. These will be augmented with NAVTEX and Radio Navigation Warning broadcasts as appropriate. Maximises awareness of the Marine Scheme allowing vessels to passage plan in advance, in the interests of safety to infrastructure and other users receptors.	Scottish and English waters
Compliance of all project vessels with international marine regulations as adopted by the Flag State, notably the Convention on the International	Reduces the risk introduced due to the presence of project vessels.	Scottish and English waters

Mitigation Measure	Justification	Applicable Jurisdication
Regulations for Preventing Collisions at Sea, 1972 (COLREGs) (IMO, 1972/77) and Safety of Life at Sea (SOLAS) (IMO, 1974).		
Marine Pollution Contingency and Control Plan (MPCCP).	An MPCCP will be implemented to ensure that, in the unlikely event that a pollution event occurs, any spillage is reduced as far as reasonably practicable and effects on the environment are ideally avoided or reduced as far as reasonably practicable. Implementation of these measures will reduce the accidental release of contaminants from vessels as far as reasonably practicable, thus providing protection for marine life across all phases of the Marine Scheme. This will include but may not be limited to: designated areas for refuelling where spillages can be easily contained; storage of chemicals in secure designated areas in line with appropriate regulations and guidelines; only using substances approved on Cefas list under the Offshore Chemical Regulations (UK Government, 2002); double skinning of pipes and tanks containing hazardous substances; and storage of these substances in impenetrable bunds. This will control the potential release of contaminants from supply and service vessels. An outline MPCCP has been provided as part of this application (Volume 5, Appendix 5.1.A) and will be updated for submission to MMO and MD-LOT prior to construction.	Scottish and English waters
Shipboard Oil Pollution Emergency Plan (SOPEP).	All vessels to be used as part of any phase of the Project will adopt a waste management plan in line with the requirements set out as part of the International Convention for the Prevention of Pollution from Ships (MARPOL) and the SOPEP.	Scottish and English waters
Vessel best-practice / MARPOL.	Compliance with MARPOL regulations and best-practice protocols to prevent and manage incidents of accidental release of marine contaminants.	Scottish and English waters
Marine coordination and communication to manage project vessel movements.	Ensures project vessels are suitably managed to reduce the likelihood of involvement in incidents and maximise the ability to assist in the event of a third-party incident.	Scottish and English waters
As-Built Information.	The location, extent and nature of the cable protection measures used will be communicated to the relevant stakeholders including the UK Hydrographic Office (UKHO), relevant fishing industry representatives and Kingfisher Information Service. Provides information so all other legitimate users of the sea are aware of the location, extent and nature of cable protection.	Scottish and English waters

15.12. Assessment of Effect Significance

154. The potential impacts arising from the construction and decommissioning phases of the Marine Scheme are listed in Table 15.6 along with the maximum design scenario against which each impact has been assessed.

155. As laid out at the Scoping stage, no impacts associated with the operations and maintenance phase of the Marine Scheme will be assessed. Once installation has concluded, the Marine Scheme will be entirely subsea, therefore with limited scope for impacting on other sea users identified in the other sea users study area. The presence of infrastructure and Marine Scheme vessels relating to operation and maintenance works has the potential to obstruct marine recreational activities. However, the scope and duration of vessel presence will be highly limited. No infrastructure installation is planned as part of the Marine Scheme during the operation and maintenance phase. Additionally, all vessels will be subject to key mitigation (including NtMs as outlined in the preceding sections). Overall, due to the mitigation measures in place and the spatially and temporally limited presence of vessels, the potential for any disturbance impacts was scoped out.

156. An assessment of the likely significance of the effects of the Marine Scheme on other sea users receptors caused by each identified impact is given below.

157. As previously discussed, in line with the request from MD-LOT through Scoping, the Assessment of Impacts identifies where impacts are relevant to Scottish waters, English waters, or both. Where there is no separation of assessment of impacts, the assessment for the Marine Scheme (as a whole entity) applies to the Marine Scheme in each of Scottish waters and English waters. A decision on whether to assess for Scotland, England or both has been made on an individual impact basis. Expert judgement has been applied based on information presented in the baseline and information regarding the proposed activities in terms of location and duration etc. For example if an impact only occurs in English waters and has limited geographical range and duration it is unlikely to impact other sea users receptors associated with the Marine Scheme and therefore would not require assessment. Likewise where a receptor is restricted to Scotland or England rather than occurring across the entire study area, it may be deemed relevant to only assess for Scotland or England.

15.12.1. Potential Effects During Construction

15.12.1.1. TEMPORARY OBSTRUCTION TO OFFSHORE RENEWABLE ENERGY PROJECTS

158. As shown in (Volume 4, Figure 15.2: Other Sea Users Infrastructure) and detailed in section 15.7.1 there are four renewable energy developments which the other sea users study area overlaps with (none overlap with the Marine Scheme):

- Blyth Offshore Demonstration Wind Farm;
- Seagreen Offshore Wind Farm;
- Inch Cape; and
- Neart na Gaoithe Offshore Wind Farm.

159. Relevant export cables associated with renewable energy projects are considered in a separate section (Temporary Obstruction to Marine Cables and Pipelines).

160. Seagreen Offshore Wind Farm, Neart na Gaoithe Wind Farm and Inch Cape Wind Farm are further than 500 m from the Marine Scheme and thus access will not be restricted as a result of the 500 m

safety exclusion zone. However, there is the possibility that increased vessel presence, construction activities and the associated presence of 500 m clearance zones may temporarily obstruct access to other offshore renewable energy projects, resulting in the potential requirement to take an alternative route to access sites.

161. Blyth Offshore Demonstration Wind Farm (Blyth Demo Phase 2) is approximately 480 m from the Marine Scheme Boundary. Whilst exact timescales are unknown, the Blyth Demonstrator Phase 2 development is anticipated to operational from 2027. The earliest potential commencement of installation of the Offshore Export Cables is Q3 2028. Based on the programme information available, there is no possibility for an overlap in construction-phase activity to the extent that an assessment of impact is required.

162. However currently there is no information available on construction and operation timescales. It is therefore considered that construction associated with the Marine Scheme will not have an impact on this yet to be developed site.

163. The maximum design scenario for this impact includes up to 20 vessels being present in the Marine Scheme at any time during the construction phase, each with an clearance zone of 500 m.

164. Discussions with the developers and operators of the other renewable projects which could be impacted will take place to allow plans to be in place for times of obstruction.

165. It should be acknowledged that whilst the Marine Scheme overlaps with the array area for BBWF, BBWF is a separately consented project and it will not be affected by the Marine Scheme Safety zones. As the Marine Scheme and BBWF are both being progressed by the Applicant, it is expected that both developments will be jointly coordinated using the same Marine Coordination Centre for all phases of each development. It is therefore not considered further within this project alone impact assessment.

15.7.1.1.1 Magnitude of impact

166. The Marine Scheme does not overlap with Seagreen Offshore Wind Farm, Neart na Gaoithe Wind Farm and Inch Cape Wind Farm. The Marnie Scheme is located approximately 480 m from Blyth Offshore Demonstration Wind Farm (Blythe Demo Phase 2), however timelines for development of this site are uncertain. Export cables associated with renewable energy projects are considered in a separate assessment below: Temporary Obstruction to Marine Cables and Pipelines.

167. The impact is predicted to be of local spatial extent, short to medium term duration, intermittent and high reversibility. It is predicted that the impact will affect the receptor directly. The magnitude is therefore, considered to be low for the Marine Scheme as a whole.

15.7.1.1.1 Sensitivity of the receptor

168. Access to the offshore renewable energy projects is required for construction and ongoing routine inspections and maintenance to ensure effective operation of these developments.

169. Other offshore renewable developments are considered to be of medium vulnerability, high recoverability, and high value. The sensitivity of the receptor is therefore considered to be medium.

15.7.1.1.1 Significance of the effect

170. Overall, the magnitude of the impact is deemed to be **low** and the sensitivity of the receptor is considered to be **medium**. The effect will, therefore, be of **minor** adverse significance for the Marine Scheme as a whole, which is not significant in EIA terms.

15.7.1.1.1 Secondary mitigation and residual effect

171. Given that there are no likely significant effects in EIA terms, secondary mitigation is not required.

15.12.1.2. TEMPORARY OBSTRUCTION TO MARINE RECREATION

172. Construction activities and associated clearance zones for the Marine Scheme may lead to a temporary obstruction for marine recreational activities in the vicinity. These activities are discussed in section 15.7.1 and include offshore recreational fishing, diving, kayaking and surfing. The maximum design scenario for this impact includes up to 20 vessels being present in the Marine Scheme at any one time during the construction phase, each with an clearance zone of 500 m.

15.12.1.2.1. Magnitude of impact

173. Section 15.7.1 provides a detailed account of the marine recreation which takes place in the Marine Scheme and the other sea users study area. Recreational boating takes place to a greater extent in the territorial waters (MHWS up to 12 nm) and therefore in Scottish waters the highest areas of boating recreation will not be disturbed. In the English EEZ, the Marine Scheme will cross an area of moderate recreational boating near the Landfall but beyond this recreational boating only occurs at a low intensity.

174. Recreational fishing in the Scottish EEZ is concentrated in the territorial area and therefore construction of the Marine Scheme will not impact these areas as it is located entirely outwith the inshore area in Scotland. Within the English EEZ, recreational fishing is also considered more important in the territorial waters, with scattered areas of medium importance in the offshore area. For the majority of the other sea users study area, recreational sea angling activity is low, with patches of medium activity in the offshore waters.

175. No surfing sites are located within the Marine Scheme, however two are located within the other sea users study area. No dive sites occur within the Marine Scheme or the other sea users study area.

176. The Marine Scheme overlaps with an area that is of low to moderate intensity for personal watercraft within the English EEZ. All known watercraft activity in the Scottish EEZ is confined to the territorial waters, outwith the Marine Scheme and the other sea users study area for the Marine Scheme in Scottish waters.

177. In Scottish waters the impact on marine recreation is predicted to be of highly localised spatial extent, short to medium term duration (restricted only to the construction period), with full rapid recovery. It is predicted that the impact will affect the receptor directly. The impact is expected to result in very slight or imperceptible changes to baseline conditions or a receptor population. The magnitude of impact in Scottish waters is therefore considered to be negligible.

178. In English waters the impact on marine recreation is predicted to be of local spatial extent, short to medium term duration (restricted only to the construction period), continuous and high reversibility. It is predicted that the impact will affect the receptor directly. The magnitude in English waters is therefore, considered to be low.

15.12.1.2.2. Sensitivity of the receptor

179. It is anticipated that any recreational marine activities will be able to alter their location or transit past construction activities and associated clearance zones, given the adequate sea room and

coastal area around the Marine Scheme. Additionally, the area of the Marine Scheme is not known to be a unique or highly utilised area for any marine recreation and other locations can therefore be utilised during periods of construction when clearance zones are in place.

180. The receptor is deemed to be of medium vulnerability, high recoverability, and medium value. The sensitivity of the receptor is therefore, considered to be medium.

15.12.1.2.3. Significance of the effect

181. In Scottish waters the magnitude impact is deemed to be **negligible** and the sensitivity of the receptor is considered to be medium. The effect will, therefore, be of **negligible to minor** adverse significance, which is **not significant** in EIA terms.

182. In English waters the magnitude of the impact is deemed to be **low** and the sensitivity of the receptor is considered to be medium. The effect will, therefore, be of **minor** adverse significance, which is **not significant** in EIA terms.

15.12.1.2.4. Secondary mitigation and residual effect

183. Given that there are no likely significant effects in EIA terms, secondary mitigation is not required.

15.12.1.3. TEMPORARY OBSTRUCTION TO MINISTRY OF DEFENCE INTERESTS

184. Construction of the Marine Scheme and associated presence of clearance zones may restrict access to MoD activities in the vicinity of the Marine Scheme.

185. Any restriction of access to sites important for defence activities is considered to be temporary and limited in spatial extent. Consultation will continue with the MoD and they will be notified prior to any construction activities being undertaken in PEXAs. The maximum design scenario for this impact includes up to 20 vessels being present in the Marine Scheme at any one time, during the construction phase each with a clearance zone of 500 m.

15.12.1.3.1. Magnitude of impact

186. Section 15.7.1 details MoD activities in the vicinity of the Marine Scheme. Two of the sites discussed are noted as AIAAs (D613C and D613D). As these sites are used for aerial training purposes, the construction of the Marine Scheme will not impact on any activities undertaken and they are therefore not considered any further. The Marine Scheme will overlap with two PEXAs which are classed as surface and firing danger areas (Druridge Bay D513 and Druridge Bay D513B). A further PEXA (Outer Firth of Forth: X5641) is utilised as a submarine practice area for the surface fleet, the Marine Scheme slightly overlaps this area (Volume 4, Figure 15.2: Other Sea Users Infrastructure). For PEXAs D513, D513B and X5641 there is the possibility of temporary obstruction as a result of construction activities and the associated 500 m safety advisory zone.

187. The impact is predicted to be of local spatial extent, short to medium term duration, intermittent and of high reversibility. It is predicted that the impact will affect the receptor directly. The magnitude is therefore, considered to be low for the Marine Scheme as a whole.

15.12.1.3.2. Sensitivity of the receptor

188. PEXAs are essential areas for ongoing training and practice for the MoD. However, any temporary restriction from the PEXAs in question will be very short term and other PEXAs will still be available for training throughout the period of restriction. However, given that the 500 m safety advisory zone will move at the pace of the construction vessels, alternate PEXAs may not need to be utilised for planned training activities.

189. The MoD receptors with the potential to be obstructed as a result of construction associated with the Marine Scheme are considered to be of low vulnerability, high recoverability, and medium value. The sensitivity of the receptor is therefore considered to be low.

15.12.1.3.3. Significance of the effect

190. Overall, the magnitude of the impact is deemed to be **low** and the sensitivity of the receptor is considered to be **low**. The effect will, therefore, be of **minor** adverse significance for the Marine Scheme as a whole, which is **not significant** in EIA terms.

15.12.1.3.4. Secondary mitigation and residual effect

191. Given that there are no likely significant effects in EIA terms, secondary mitigation is not required.

15.12.1.4. TEMPORARY OBSTRUCTION TO MARINE CABLES AND PIPLINES

192. Construction of the Marine Scheme and associated presence of clearance zones may temporarily restrict access to cables (power and telecommunication including those related to renewable energy projects) and pipelines in the vicinity. The maximum design scenario for this impact includes up to 20 vessels being present in the Marine Scheme at any time during the construction phase, each with a clearance zone of 500 m.

15.12.1.4.1. Magnitude of impact

193. The occurrence of cables and proposed cable crossings are discussed in section 15.7.1. The construction activities associated with the Marine Scheme may cause temporary restrictions for construction, inspection, repairs and maintenance of a number of cables and pipelines as detailed in section 15.7.3.

194. The impact is predicted to be of local spatial extent, short to medium term duration, intermittent and of high reversibility. It is predicted that the impact will affect the receptor directly. The magnitude is therefore considered to be low.

15.12.1.4.2. Sensitivity of the receptor

195. Construction and ongoing operation and maintenance of the described cables and pipelines is essential to the integrity of the infrastructure and securing their ongoing power supply resulting in prolonged commercial operation.

196. Cable and pipeline receptors in the other sea users study area which may be impacted as a result of construction activities associated with the Marine Scheme are deemed to be of medium vulnerability, high recoverability, and high value. The sensitivity of the receptors is therefore, considered to be medium.

15.12.1.4.3. Significance of the effect

197. Overall, the magnitude of the impact is deemed to be **low** and the sensitivity of the receptor is considered to be **medium**. The effect will, therefore, be of **minor** adverse significance, which is **not significant** in EIA terms.

15.12.1.4.4. Secondary mitigation and residual effect

198. Given that there are no likely significant effects in EIA terms, secondary mitigation is not required.

15.12.1.5. TEMPORARY OBSTRUCTION TO DREDGING AND DISPOSAL SITES

199. Construction of the Marine Scheme and associated presence of clearance zones may temporarily restrict access to dredge and disposal sites in the English waters extent of the other sea users study area and obstruct vessels transiting to these sites. The maximum design scenario for this impact includes up to 20 vessels being present in the Marine Scheme at any one time during the construction phase, each with a clearance zone of 500 m.

200. No licenced dredge and disposal sites occur within the Scottish waters extent of the other sea users study area.

15.12.1.5.1. Magnitude of impact

201. There are six active/open dredge and dredge disposal sites which the other sea users study area overlaps in English waters (section 15.7.1).

202. In English waters the impact is predicted to be of local spatial extent, short to medium term duration, intermittent and of high reversibility. It is predicted that the impact will affect the receptor directly. The magnitude is therefore considered to be low.

15.12.1.5.2. Sensitivity of the receptor

203. Construction and ongoing operation and maintenance of the described cables is essential to the integrity of the infrastructure and securing their ongoing power supply resulting in prolonged commercial operation.

204. Dredge and disposal receptors in the other sea users study area which may be impacted as a result of construction activities associated with the Marine Scheme are deemed to be of low vulnerability, high recoverability, and medium value. The sensitivity of the receptor is therefore, considered to be low.

15.12.1.5.3. Significance of the effect

205. Overall, the magnitude of the impact is deemed to be **low** and the sensitivity of the receptor is considered to be **low**. The effect will, therefore, be of **negligible to minor** adverse significance, for the Marine Scheme in English waters which is not significant in EIA terms.

15.12.1.5.4. Secondary mitigation and residual effect

206. Given that there are no likely significant effects in EIA terms, secondary mitigation is not required.

15.12.2. Potential Effects During Decommissioning

207. At the end of the operational lifetime of the Marine Scheme, the Applicant will develop and agree a solution for the onward handling of the Offshore Export Cables with the regulator. For the purposes of assessing impacts to other sea users a MDS based on complete removal of the Offshore Export Cables is applied. As per construction, the maximum scenario includes a maximum number of 20 vessels present at any one time and 500 m safety advisory zones associated with each vessel.

208. The decommissioning sequence will generally be the reverse of the construction sequence and involve similar types and numbers of vessels and equipment.

209. It is considered that for all the receptors discussed above which may have impacts as a result of construction, the same magnitude, sensitivity and ultimately significance of effect is applicable when considering impacts from decommissioning of the Marine Scheme.

210. Therefore, for temporary obstruction to other renewable projects, marine recreation, MoD interests, subsea cables, dredge and disposal sites and marine aggregates caused as a result of decommissioning vessels and associated 500 m safety advisory zone, the significance of effect is **minor**, which is not significant in EIA terms.

15.13. Cumulative Effects Assessment

15.13.1. Methodology

211. The Cumulative Effects Assessment (CEA) takes into account the impact associated with the Marine Scheme together with other relevant plans, projects, developments and activities. Cumulative effects are therefore the complete set of effects arising from the Marine Scheme together with the effects from a number of different developments, on the same receptor or resource. Please see Volume 2, Chapter 3: EIA Methodology of the Marine Scheme ES for detail on CEA methodology.

212. The developments selected as relevant to the CEA presented within this chapter are based upon the results of a screening exercise and the development of a ‘long list’ of cumulative developments relevant to the Marine Scheme (see Volume 3, Appendix 3.2). Each development 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, to create the ‘short list’ as summarised in Table 15.11 This approach was agreed during Scoping and further consultation and technical engagement undertaken with consultees, as detailed in Table 15.2.

213. For other sea users a maximum Zone of Influence (ZoI) for cumulative impacts of 10 nm has been utilised. However, given the impacts identified relating to other sea users are largely restricted to temporary obstructions as a result of construction vessel presence and the associated 500 m safety advisory clearance zones, it is likely that any cumulative impacts will mostly be restricted to this area.

214. The specific projects scoped into the CEA for other sea users, are outlined in Table 15.11. Potential impacts to other sea users arising from the Marine Scheme are determined to be restricted to the construction and decommissioning phases of the development. No impacts are predicted during the operation and maintenance phase of the Marine Scheme. It is anticipated that the operations and maintenance activities of those projects listed in Table 15.11. will not impact other sea users in anything more than a negligible manner. Therefore, only projects which have the potential to

coincide with the construction and or the decommissioning phase of the Marine Scheme have been considered in the CEA.

215. The Cambois Connection Onshore Scheme has not been included for cumulative impact assessment as Other Sea Users receptors are marine in nature and the Onshore Scheme will not impact any of these receptors in a cumulative manner alongside the Marine Scheme. Similarly, the onshore elements of the Branxton Connection are not considered for this same reason.

Table 15.11 List of other developments considered within the CEA for other sea users

Development/Plan	Status	Distance from Study Area (km)	Description of Development /Plan	Dates of Construction (If Applicable)[9]	Dates of Operation (If Applicable)	Temporal overlap with the Marine Scheme
BBWF	Planning	Within the other sea users study area and directly overlaps the Marine Scheme.	Offshore Wind Farm	2025-2033	35 year lifespan	Yes, construction anticipated to be 2025 to 2033 so may coincide with construction of the Marine Scheme Possible overlap with decommissioning of this development and decommissioning activities associated with Marine Scheme
SEGL 1	Planning	Direct overlap with Marine Scheme.	Transmission infrastructure	2024-2027	50 year lifespan	Yes, construction anticipated to be 2024 to 2027 so may coincide with construction of the Marine Scheme No overlap with decommissioning activities anticipated
EGL 2	Planning	Within the other sea users study area and approximately 2.5 km from the Marine Scheme.	Transmission infrastructure	2026-2029	50 year lifespan	Yes, construction anticipated to be 2026 to 2029 so may coincide with construction of the Marine Scheme No overlap with decommissioning activities anticipated
Blyth Offshore Windfarm – Blyth Demo Phase 1	Operational	Within the other sea users study area and approximately 2 km from the Marine Scheme.	Offshore Wind Farm	NA	Unknown	Possible overlap with decommissioning of this development and decommissioning activities associated with Marine Scheme

[9] Construction programme for the Marine Scheme is anticipated to be from Q4 2026 to Q4 2029

Development/Plan	Status	Distance from Study Area (km)	Description of Development /Plan	Dates of Construction (If Applicable)[9]	Dates of Operation (If Applicable)	Temporal overlap with the Marine Scheme
Blyth Offshore Windfarm – Blyth Demo Phase 2 and 3	Planning	Within the other sea users study area and approximately 8 km from the Marine Scheme.	Offshore Wind Farm and transmission in infrastructure	Unknown	Unknown	Possible temporal overlap with construction of this development and the Marine Scheme Possible overlap with decommissioning of this development and decommissioning activities associated with Marine Scheme
Seagreen 1a Offshore Wind Farm	Planning	Within the other sea users study area and approximately 8 km from the Marine Scheme.	Offshore Wind Farm	2024 - 2026	Unknown	Possible temporal overlap with construction of this development and the Marine Scheme Possible overlap with decommissioning of this development and decommissioning activities associated with Marine Scheme

15.13.2. Cumulative Effects Assessment

216. The Cumulative Effects Assessment (CEA) takes into account the impacts scoped into the assessment for the Marine Scheme (refer to section 15.8.1), together with other relevant plans, projects and activities.

217. The developments selected as relevant to the CEA presented within this chapter are based upon the results of a screening exercise, as detailed in Table 15.2.

218. It should be noted that the Marine Scheme and BBWF overlap both spatially (within the BBWF array area) and temporally (with regards to construction, operation and maintenance and decommissioning). As the Marine Scheme and BBWF are both being progressed by the Applicant, it is expected that both developments will be jointly coordinated using the same Marine Coordination Centre for all phases of each development. Therefore, this allows potential cumulative effects between these developments to be managed through coordination.

219. As per section 15.8.2, operational impacts were scoped out for the Marine Scheme. It is also assumed that operational impacts from the developments listed in Table 15.11. will not negatively impact other sea users; this is based on the assumption that any operations and maintenance activities associated with the developments will be minimal and will not create a notable increase from baseline in terms of marine activity. Given the wide operational timescales for each development, the chances for overlaps in maintenance activities impacting the same marine areas simultaneously are very unlikely, and any temporal overlaps are not likely to coincide with geographical overlaps. Therefore, impacts are only considered from the construction and decommissioning phases.

15.13.2.1. POTENTIAL EFFECTS DURING CONSTRUCTION

15.13.2.1.1. Cumulative temporary obstruction to marine renewables

15.13.2.1.1.1. Magnitude of impact

220. As discussed in section 165, there is the potential for a temporary obstruction to access for other renewables projects in the other sea users study area. Those projects detailed in Table 15.11, which have a confirmed or potential overlap with their construction phase and the construction phase of the Marine Scheme, have the potential to cumulatively obstruct access to renewables projects in the other sea users study area. Given the wide timescales planned for these construction phases, the chances for overlaps in construction activities impacting the same marine areas simultaneously are possible but not likely, and any temporal overlaps are not likely to coincide with geographical overlaps. Where this does occur the duration and area of obstruction would be minimal as the 500 m safety advisory zone will only be in place in a particular area for as long as construction in that location takes place.

221. The cumulative impact is predicted to be of local spatial extent, short to medium term duration, intermittent and of high reversibility. It is predicted that the impact will affect the receptor directly. The magnitude is therefore considered to be low.

15.13.2.1.1.2. Sensitivity of receptor

222. Access to the offshore renewable energy projects is required for construction and ongoing routine inspections and maintenance to ensure effective operation of these developments.

223. Other offshore renewable developments are considered to be of medium vulnerability, high recoverability, and high value. The sensitivity of the receptor is therefore considered to be medium.

15.13.2.1.1.3. Significance of effect

224. Overall, the magnitude of the cumulative impact is deemed to be **low** and the sensitivity of the receptor is considered to be **medium**. The effect will, therefore, be of **minor** adverse significance, for the Marine Scheme as a whole, which is **not significant** in EIA terms.

15.13.2.1.1.4. Secondary mitigation and residual effect

225. Given that there are no likely significant effects in EIA terms, secondary mitigation is not required.

15.13.2.1.2. Cumulative temporary obstruction to marine recreation

15.13.2.1.2.1. Magnitude of impact

226. Those projects detailed in Table 15.11, which have a confirmed or potential overlap with their construction phase and the construction phase of the Marine Scheme, have the potential to cumulatively obstruct access to marine recreation in the other sea users study area on a temporary basis. Given the wide timescales planned for these construction phases, the chances for overlaps in construction activities impacting the same marine recreation receptors simultaneously is considered possible but not likely and any temporal overlaps are not likely to coincide with geographical overlaps. Where this does occur, the duration and area of obstruction would be minimal as the 500 m safety advisory zone will only be in place in a particular area for as long as construction in that location takes place. Following the temporary obstruction, recreational activities will be able to resume. The area of exclusion associated with the Marine Scheme and the Marine Scheme and other projects cumulatively only represents a small area in the context of the available sea space for marine recreational activities in the wider vicinity.

227. The cumulative impact is predicted to be of local spatial extent, short to medium term duration, continuous and high reversibility. It is predicted that the impact will affect the receptor directly. The magnitude is therefore, considered to be low.

15.13.2.1.2.2. Sensitivity of the receptor

228. It is anticipated that any recreational marine activities will be able to alter their location or transit past installation activities and associated clearance zones, given the adequate sea room and coastal area around the Marine Scheme. Additionally, the area of the Marine Scheme is not known to be a unique or highly utilised area for any marine recreation and other locations can therefore be utilised during periods of construction when clearance zones are in place.

229. The receptor is deemed to be of medium vulnerability, high recoverability, and medium value. The sensitivity of the receptor is therefore, considered to be medium.

15.13.2.1.2.3. Significance of the effect

230. Overall, the magnitude of the impact is deemed to be **low** and the sensitivity of the receptor is considered to be **medium**. The effect will, therefore, be of **minor** adverse significance, which is **not significant** in EIA terms.

15.13.2.1.2.4. Secondary mitigation and residual effect

231. Given that there are no likely significant effects in EIA terms, secondary mitigation is not required.

15.13.2.1.3. Cumulative temporary obstruction to Ministry of Defence interests

15.13.2.1.3.1. Magnitude of impact

232. Construction activities associated with the construction activities of the Marine Scheme have the potential to temporarily obstruct access to three PEXAs in the other sea users study area (D513,

D513B and X5641). Those projects detailed in Table 15.11, which have a confirmed or potential overlap of their construction phase with the construction phase of the Marine Scheme, have the potential to cumulatively restrict access to these PEXAs on a temporary basis. Given the wide time scales planned for these construction phases, the chances for overlaps in construction activities are possible but not likely and any temporal overlaps are not likely to coincide with geographical overlaps. Where this does occur, the duration and area of obstruction would be minimal as the 500 m safety advisory zone will only be in place in a particular area for as long as construction in that location takes place. Following the temporary obstruction, access will return to normal.

233. The impact is predicted to be of local spatial extent, short to medium term duration, intermittent and of high reversibility. It is predicted that the impact will affect the receptor directly. The magnitude is therefore considered to be low.

15.13.2.1.3.2. Sensitivity of the receptor

234. PEXAs are essential areas for ongoing training and practice for the MoD. However, any cumulative temporary restriction to the PEXAs in question will be very short term and other PEXAs will still be available for training throughout the period of restriction.

235. The MoD receptors with the potential to be obstructed in a cumulative manner as a result of construction associated with the Marine Scheme and other cumulative developments, are considered to be of low vulnerability, high recoverability, and medium value. The sensitivity of the receptor is therefore considered to be low.

15.13.2.1.3.3. Significance of the effect

236. Overall, the magnitude of the cumulative impact is deemed to be **low** and the sensitivity of the receptor is considered to be **low**. The effect will, therefore, be of **minor** adverse significance, for the Marine Scheme as a whole, which is **not significant** in EIA terms.

15.13.2.1.3.4. Secondary mitigation and residual effect

237. No other sea users secondary mitigation is considered necessary because the likely effect in the absence of secondary mitigation is not significant in EIA terms.

15.13.2.1.4. Cumulative temporary obstruction to marine cables and Pipelines

15.13.2.1.4.1. Magnitude of impact

238. Construction of the Marine Scheme and associated presence of 500 m clearance zones may temporarily obstruct access to cables in the vicinity. Those projects detailed in Table 15.11, which have a confirmed or potential overlap with their construction phase and the construction phase of the Marine Scheme, have the potential to cumulatively restrict access to cables. Given the wide timescales planned for these construction phases, the chances for overlaps in construction activities are possible but not likely and any temporal overlaps are not likely to coincide with geographical overlaps. Where this does occur, the duration and area of obstruction would be minimal as the 500 m safety advisory zone will only be in place in a particular area for as long as construction in that location takes place. Following the temporary obstruction, cable access will resume to normal or as negotiated under cable crossing agreements where relevant.

239. The cumulative impact is predicted to be of local spatial extent, short to medium term duration, intermittent and of high reversibility. It is predicted that the impact will affect the receptor directly. The magnitude is therefore, considered to be low.

15.13.2.1.4.2. Sensitivity of the receptor

240. Construction and ongoing operation and maintenance of the described cables is essential to the integrity of the infrastructure and securing their ongoing power supply resulting in prolonged commercial operation.

241. Cable receptors which may be temporarily obstructed by construction of the Marine Scheme are deemed to be of medium vulnerability, high recoverability and high value. The sensitivity of the receptor is therefore, considered to be medium.

15.13.2.1.4.3. Significance of the effect

242. Overall, the magnitude of the cumulative impact is deemed to be **low** and the sensitivity of the receptor is considered to be **medium**. The effect will, therefore, be of **minor** adverse significance for the Marine Scheme as whole, which not significant in EIA terms

15.13.2.1.4.4. Secondary mitigation and residual effect

243. Given that there are no likely significant effects in EIA terms, secondary mitigation is not required.

15.13.2.1.5. Cumulative temporary obstruction to dredging and disposal sites

244. Construction of the Marine Scheme and associated presence of 500 m clearance zones may temporarily obstruct access to dredge and disposal sites in the English waters extent of the other sea users study area.

245. Those projects detailed in Table 15.11, which have a confirmed or potential overlap with their construction phase and the construction phase of the Marine Scheme, have the potential to cumulatively restrict access to dredge and disposal sites. Given the wide time scales planned for these construction phases, the chances for overlaps in construction activities are possible but not likely and any temporal overlaps are not likely to coincide with geographical overlaps. Where this does occur, the duration and area of obstruction will be minimal as the 500 m safety advisory zone will only be in place in a particular area for as long as construction in that location will take place. Following the temporary obstruction, access will resume to dredge and disposal sites.

246. No licenced dredge and disposal sites occur within the Scottish waters extent of the other sea users study area.

15.13.2.1.5.1. Magnitude of impact

247. There are six active/open dredge and dredge disposal sites which the other sea users study area overlaps in English waters (section 15.7.1).

248. In English waters the cumulative impact is predicted to be of local spatial extent, short to medium term duration, intermittent and of high reversibility. It is predicted that the impact will affect the receptor directly. The magnitude is therefore considered to be low.

15.13.2.1.5.2. Sensitivity of the receptor

249. Dredge and disposal receptors in the other sea users study area which may be impacted as a result of construction activities associated with the Marine Scheme are deemed to be of low vulnerability, high recoverability, and medium value. The sensitivity of the receptor is therefore, considered to be low.

15.13.2.1.5.3. Significance of the effect

250. Overall, the magnitude of the cumulative impact is deemed to be **low** and the sensitivity of the receptor is considered to be **low**. The effect will, therefore, be of **negligible to minor** adverse significance, for the Marine Scheme in English waters which is not significant in EIA terms.

15.13.2.1.5.4. Secondary mitigation and residual effect

251. Given that there are no likely significant effects in EIA terms, secondary mitigation is not required.

15.13.2.2. POTENTIAL EFFECTS DURING OPERATION

252. No cumulative impacts are predicted as a result of the operational phase of the Marine Scheme in combination with any other cumulative developments (during any phase of their development) as detailed in section 15.13.2.

15.13.2.3. POTENTIAL EFFECTS DURING DECOMMISSIONING

253. The decommissioning sequence for the Marine Scheme will generally be the reverse of the construction sequence and involve similar types and numbers of vessels and equipment. Given the wide time scales planned for these decommissioning phases, the chances for overlaps in decommissioning activities impacting the same marine recreation receptors simultaneously is considered possible but not likely and any temporal overlaps are not likely to coincide with geographical overlaps. Where this does occur, the duration and area of obstruction would be minimal as the 500 m safety advisory zone will only be in place in a particular area for as long as decommissioning in that location. Following the temporary obstruction, recreational activities will be able to resume. The area of exclusion associated with the Marine Scheme and the Marine Scheme and other projects cumulatively, only represents a small area or the context of the available sea space for marine recreational activities in the wider vicinity.

254. It is also considered that cumulative impacts as a result of the Marine Scheme and other projects during decommissioning (section 15.13.2) will be similar to cumulative impacts as a result of the Marine Scheme and other projects during decommissioning of either the Marine Scheme or other projects.

255. For all the receptors assessed above (section 15.12.1) which may experience impacts as a result of construction of the Marine Scheme, the same magnitude, sensitivity and ultimately significance of effect was determined when considering impacts from decommissioning of the Marine Scheme.

256. Therefore, for cumulative temporary obstruction to marine renewable energy projects, marine recreation, MoD interests, marine cables and dredging and disposal interests caused as a result of decommissioning of the Marine Scheme and either construction or decommissioning of other projects, the significance of effect is **minor**, for the Marine Scheme as a whole, which is not significant in EIA terms.

15.14. Inter-Related Effects

257. Inter-related effects are the potential effects of multiple impacts, affecting one receptor or a group of receptors. Inter-related effects include interactions between the impacts of the different stages of a project (i.e. interaction of impacts across construction, operation and maintenance and decommissioning), as well as the interaction between impacts on a receptor within a project stage. A description of the likely inter-related effects arising from the Marine Scheme on other sea users is provided below.

258. Across the lifetime of the Marine Scheme, the effects on other sea users are not anticipated to interact in a way as to result in combined effects of greater significance than the assessments presented for each individual phase, as described in section 15.12. Therefore, there are no significant adverse project lifetime effects predicted to other sea users as a result of the Marine Scheme.

259. In terms of receptor led effects there is the possibility that temporary obstruction as a result of construction and decommissioning activities acting on one set of other sea users (e.g. other renewable projects) may interact with the temporary obstruction of other receptors (MoD interests, marine recreation or cables). If multiple construction vessels (up to 20 on site at any one time) all with 500 m advisory zones simultaneously restrict access to all receptors, the area of restriction may be considered larger. However, as any obstruction will be very short in duration and there is a much wider resource available for some of the receptors (marine recreation and alternate PEXAs for MoD). Additionally, the impact of temporary obstruction during construction was found to be only minor and not significant for any of these receptors. Therefore, an interrelated effect is not expected.

260. The majority of any potential obstruction to other sea user receptors would occur during the construction stage, when the number of vessels and safety zones present in the Marine Scheme would be highest. There is no potential for the effects during other stages of the Marine Scheme to interact in a way that would result in combined effects of greater significance than the assessments for each individual stage.

261. An inter-related effect as a result of multiple impact pathways acting on other sea users receptors is also not expected as the only impact to these receptors has been discussed in this chapter and no other topic specific assessment is considered relevant in terms of other sea users receptors.

262. These inter-related effects as described above are not anticipated to interact in such a way as to result in combined effects of greater significance than the assessments presented for each individual phases. Therefore, these inter-related effects would not be significant in EIA terms.

15.15. Transboundary Effects

263. There is no potential for transboundary impacts upon other sea users receptors due to construction, operation and maintenance and decommissioning of the Marine Scheme as agreed through Scoping. The potential impacts are localised and are not expected to affect other EEA states. Therefore, transboundary effects for other sea users receptors do not need to be considered further.

15.16. Summary of Impacts, Mitigation Measures, Likely Significant Effects and Monitoring

264. Information on other sea users within the other sea users study area was collected through desktop review and consultation. Table 15.12 presents a summary of the potential impacts, mitigation measures and the conclusion of likely significant effects in EIA terms in respect to other sea users. The impacts assessed include:

- Temporary obstruction to marine renewable energy projects during construction and decommissioning;
- Temporary obstruction to marine recreation during construction and decommissioning;
- Temporary obstruction to MoD interests during construction and decommissioning;
- Temporary obstruction to marine cables and pipelines during construction and decommissioning; and
- Temporary obstruction to dredging and disposal interests during construction and decommissioning.

265. Overall, it is concluded that there will be no likely significant effects arising from the Marine Scheme during the construction, operation and maintenance or decommissioning phases. Table 15.13 presents a summary of the potential cumulative impacts, mitigation measures and the conclusion

of likely significant effects on other sea users in EIA terms. The cumulative effects assessed include:

- Temporary obstruction to marine renewable projects during construction and decommissioning;
- Temporary obstruction to marine recreation during construction and decommissioning;
- Temporary obstruction to MoD interests during construction and decommissioning;
- Temporary obstruction to cables and pipelines during construction and decommissioning; and
- Temporary obstruction to dredging and disposal interests during construction and decommissioning.

266. Overall, it is concluded that there will be no likely significant cumulative effects from the Marine Scheme alongside other developments/plans.

Table 15.12 Summary of potential likely significant environmental effects, mitigation and monitoring

Description of Impact	Phase			Magnitude of Impact	Sensitivity of Receptor	Significance of Effect	Secondary Mitigation	Residual Effect	Proposed Monitoring
	C	O	D						
Temporary obstruction to marine renewable energy projects									
Marine Scheme overall	✓	×	✓	Low	Medium	Minor, not significant	None proposed	Minor, not significant	None proposed
Temporary obstruction to marine recreation									
Scottish waters	✓	×	✓	Negligible	Low	Minor, not significant	None proposed	Minor, not significant	None proposed
English waters	✓	×	✓	Low	Low	Minor, not significant	None proposed	Minor, not significant	None proposed
Temporary obstruction to MoD interests									
Marine Scheme overall	✓	×	✓	Low	Low	Minor, not significant	None proposed	Minor, not significant	None proposed
Temporary obstruction to marine cables									
Marine Scheme overall	✓	×	✓	Low	Medium	Minor, not significant	None proposed	Minor, not significant	None proposed
Temporary obstruction to dredging and disposal interests									
English waters	✓	×	✓	Low	Low	Minor, not significant	None proposed	Minor, not significant	None proposed

Table 15.13 Summary of likely significant cumulative environment effects, mitigation and monitoring

Description of Impact	Phase			Magnitude of Impact	Sensitivity of Receptor	Significance of Effect	Secondary Mitigation	Residual Effect	Proposed Monitoring
	C	O	D						
Temporary obstruction to marine renewable projects									
Marine Scheme overall	✓	×	✓	Low	Medium	Minor, not significant	None proposed	Minor, not significant	None proposed
Temporary obstruction to marine recreation									
Marine Scheme overall	✓	×	✓	Low	Low	Minor, not significant	None proposed	Minor, not significant	None proposed
Temporary obstruction to MoD interests									
Marine Scheme overall	✓	×	✓	Low	Low	Minor, not significant	None proposed	Minor, not significant	None proposed
Temporary obstruction to marine cables and pipelines									
Marine Scheme overall	✓	×	✓	Low	Medium	Minor, not significant	None proposed	Minor, not significant	None proposed
Temporary obstruction to dredge and disposal activities									
English waters	✓	×	✓	Low	Low	Minor, not significant	None proposed	Minor, not significant	None proposed

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