Morven North Offshore Wind Array Project

Environmental Impact Assessment Report

Volume 2, Chapter 16: Other Sea Users and Communications

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Table of contents

List of tables

List of figures

16 Other Sea Users and Communications

16.1 Introduction

16.1.1.1 This chapter of the Morven North Offshore Wind Array Project (hereafter "Morven North") Environmental Impact Assessment (EIA) Report (hereafter the "EIA Report") presents the assessment of Likely Significant Effects (LSE[1]) (as required by the EIA Regulations as defined in Volume 1, Chapter 2: Policy and Legislation) on other sea users and communications. Specifically, this chapter considers the potential impacts of Morven North seaward of Mean High Water Springs (MHWS) during the construction, operation and maintenance (O&M) and decommissioning phases. Where relevant, this chapter also assesses the LSE[1]of Morven North on receptors landward of Mean Low Water Springs (MLWS) during the construction, O&M and decommissioning phases.

16.1.1.2 The assessment presented in this chapter has relied upon, or informed the following technical chapters:

- Volume 2, Chapter 7: Physical Processes;
- Volume 2, Chapter 12: Commercial Fisheries;
- Volume 2, Chapter 13: Shipping and Navigation.

16.1.1.3 Many of the potential impacts to other sea users and communications relate to navigational safety, collision risk and impacts to commercial fisheries. To avoid duplication, impacts relating to risk to all vessel types and safety of navigation (including for port activities) are considered within Volume 2, Chapter 13: Shipping and Navigation. Specific impacts relating to commercial fishing vessels are covered in Volume 2, Chapter 12: Commercial Fisheries, while those concerning physical processes are discussed in Volume 2, Chapter 7: Physical Processes. The assessment presented within this chapter only considers impacts which may affect marine activities or infrastructure within the Other Sea Users and Communications Study Areas.

16.1.1.4 Other sea users and communications was reported on in the Scoping Report for the Morven Option Lease Agreement Site (hereafter the "Morven Site Scoping Report") (Morven Offshore Wind Limited (MvOWL), 2023). As described in Volume 1, Chapter 3: Site Selection and Consideration of Alternatives, the Morven Option Lease Agreement Site (hereafter "Morven Site") has since been divided into two smaller projects, Morven South Offshore Wind Array Project (hereafter "Morven South") and Morven North.

16.1.1.5 The potential impacts to other sea users and communications are considered to generally be the same (or less) for Morven North as identified in the Morven Site Scoping Report. Consequently, there has been no change in the methodology or impacts that were scoped in or out in the Morven Site Scoping Report for other sea users and communications. The advice provided by the Marine Directorate Licensing Operations Team (MD-LOT) in the Morven Option Lease Agreement Site Scoping Opinion (hereafter 'Morven Site Scoping Opinion') (MD-LOT, 2023) relevant to Morven North, has therefore been considered for the development of this chapter.

16.1.1.6 This chapter presents and assesses up to date parameters for Morven North and explains if and how any assessment aspects differ from the information set out in the Morven Site Scoping Report.

16.2 Study areas

16.2.1.1 Two study areas have been defined for other sea users and communications:

- The Morven North Other Sea Users and Communications Local Study Area (hereafter the "Local Other Sea Users and Communications Study Area").
- The Morven North and Morven South Regional Other Sea Users and Communications Study Area (hereafter the "Regional Other Sea Users and Communications Study Area").

16.2.1.2 The study areas defined for other sea users and communications are shown in Figure 16.1 and defined as follows:

- The Local Other Sea Users and Communications Study Area includes the Morven North Boundary, plus a buffer extending 1km from the Morven North Boundary. Oil and gas infrastructure, cables and pipelines and offshore renewables projects undergoing maintenance require 500m safety zones around any works area. The Local Other Sea Users and Communications Study Area extent ensures that any potential direct and indirect impacts are captured. This area includes the extent of direct physical overlap, and any safety zones, between Morven North and the following receptors:
  - recreational activities (including receptors carrying out sailing, motor cruising and recreational fishing from boats);
  - offshore energy projects (including Offshore Wind Farms (OWF), oil and gas activities, and Carbon Capture And Storage (CCS));
  - cable and pipeline operators;
  - Offshore Microwave Fixed Communication Links (OMFCL);
  - Radar Early Warning Systems (REWS).
- The Regional Other Sea Users and Communications Study Area includes a buffer of one spring tidal excursion approximately 5km to 14km from the Morven Site Boundary. This is considered to be the maximum area within which increases in Suspended Sediment Concentrations (SSCs) could arise from activities associated with Morven North. The following receptors are considered within this Regional Other Sea Users and Communications Study Area:
  - marine aggregate extraction and disposal sites;
  - recreational SCUBA (Self Contained Underwater Breathing Apparatus) diving.

16.2.1.3 The study areas for other sea users and communications for the Morven Site were presented and agreed during the scoping process for the Morven Site. The underlying principles used to define the study area(s) for Morven North have not changed, other than the limits have been applied relative to the Morven North Boundary, rather than the Morven South Boundary. The study areas for Morven North for other sea users and communications were presented to and confirmed by the Marine Directorate Licensing Operations Team (MD-LOT) via a “Targeted Consultation Exercise” undertaken in March 2025 and as detailed in Table 16.5.

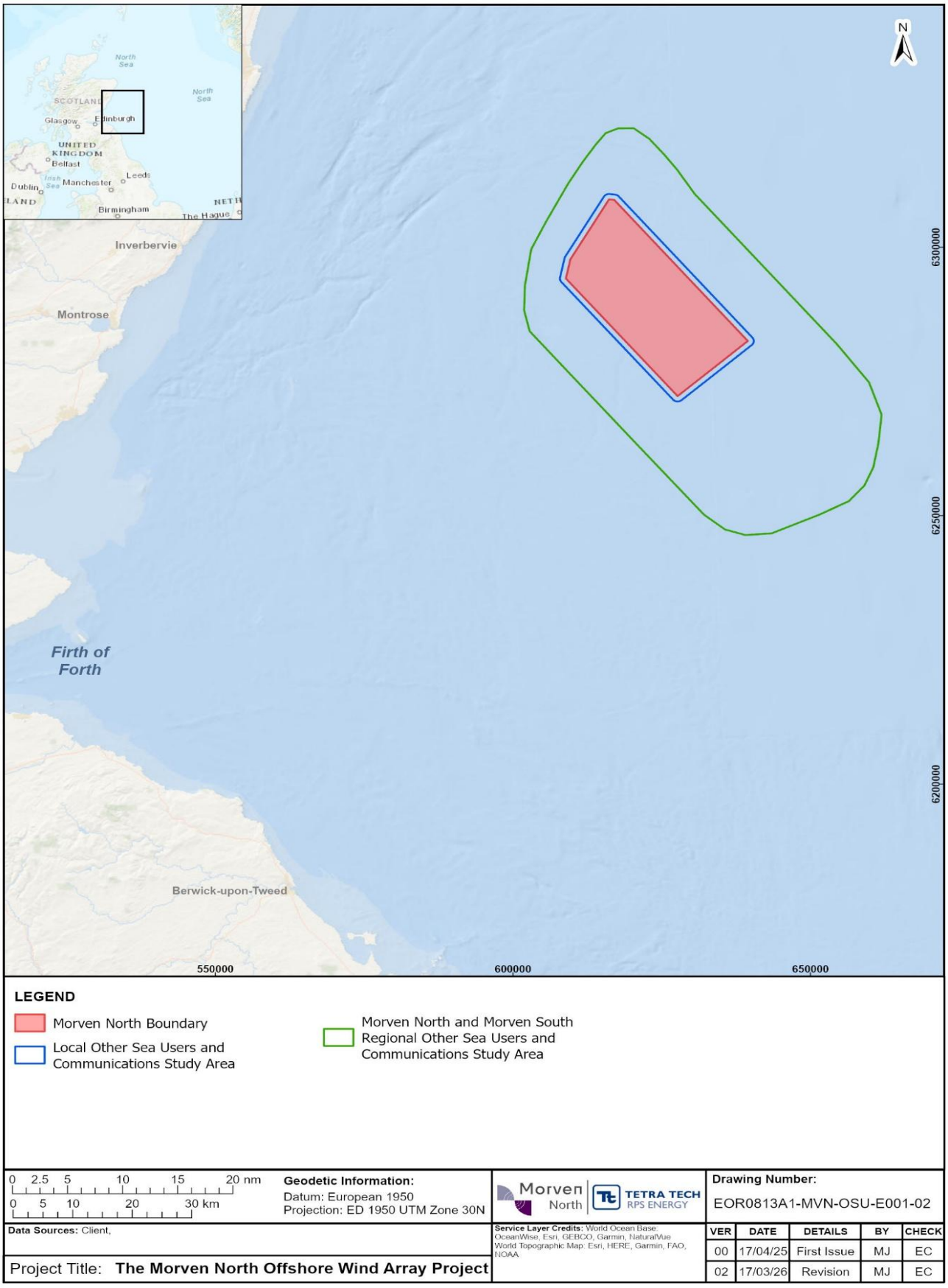

Figure 16.1: Other Sea Users and Communications Study Areas for Morven North

16.3 Legislative and policy context

16.3.1.1 Policy and legislation on renewable energy infrastructure is presented in Volume 1, Chapter 2: Policy and Legislation. Policy and legislation specific to other sea users and communications is contained in the Sectoral Marine Plan (SMP) for Offshore Wind Energy (Scottish Government, 2020; Scottish Government, 2025a (update in draft)), the Scottish National Marine Plan (NMP) (Scottish Government, 2015a) and the United Kingdom (UK) Marine Policy Statement (MPS) (His Majesty's (HM) Government, 2011) and the Initial Plan Framework SMP for Offshore Wind for Innovation and Targeted Oil and Gas Decarbonisation (INTOG) (Scottish Government, 2022). A summary of the policy provisions relevant to other sea users and communications are provided in Table 16.1 below, with other relevant policy provisions set out in Table 16.2, Table 16.3 and Figure 16.4.

16.3.1.2 It is noted that work is underway to develop Scotland's National Marine Plan 2 (NMP2). In November 2024, the Scottish Government published a Planning Position Statement for consultation, setting out proposed high-level objectives and policy directions for the updated plan, summarising work completed to date, and consolidating early stakeholder feedback (Scottish Government, 2024a). The consultation ran from 05 November 2024 to 07 February 2025.

16.3.1.3 The NMP2: Planning Position Statement Consultation Analysis Report was subsequently published on 29 August 2025 and summarises the feedback received during the consultation and outlines how this will inform the next stages of NMP2's development (Scottish Government, 2025b).

Table 16.1: Summary of provisions within the Sectoral Marine Plan (Scottish Government, 2020; Scottish Government, 2025a) for Offshore Wind Energy of relevance to other sea users and communications

Summary of relevant policy	How and where considered in the EIA Report
General Policies (Scottish Government, 2020)	
Paragraph 2.1: Minimise the potential adverse effects on other marine users and economic sectors resulting from further commercial scale offshore wind development.	The potential adverse effects on other marine users are discussed in Section 16.7 of this EIA Report. Economic sectors are discussed in Volume 2, Chapter 17: Socio-Economics and Volume 3, Annex 17.1: Socio-Economics Shared Economics Technical Report.
Community and Stakeholder Engagement (Scottish Government, 2020)	
Paragraph 5.1.1: Developers will be expected to undertake further and ongoing engagement with the renewables, commercial fishing, shipping, defence and aviation stakeholders. Engagement should have a particular focus on cumulative assessment, socio-economic impacts and commercial fisheries.	Other renewable projects are discussed in paragraph 16.7.1.21 to paragraph 16.7.1.34 in this chapter. Commercial fisheries are discussed in Volume 2, Chapter 12: Commercial Fisheries and Volume 3, Annex 12.1: Commercial Fisheries Shared Technical Report. Shipping is discussed in Volume 2, Chapter 13: Shipping and Navigation and Volume 3, Annex 13.1: Shipping and Navigation Shared Navigational Risk Assessment. Defence and aviation are discussed in Volume 2, Chapter 15: Aviation (Military and Civil) and Volume 3, Annex 15.1: Aviation (Military and Civil) Shared Technical Report. Cumulative effects are discussed in Section 16.13 and discussed further in Volume 3, Annex 6.1: Cumulative Effects Screening. Engagement with relevant stakeholders on each of these topics is documented within the respective chapters and annexes referenced above.
Cumulative and in-combination Effects (Scottish Government, 2020)	

Summary of relevant policy	How and where considered in the EIA Report
Paragraph 5.1.3: Further assessment work will be required to identify and address cumulative and in-combination effects of offshore wind developments. Scheduling of work and the effects should be carefully monitored and addressed at a project level and taken into account in the iterative plan review process.	Cumulative and in-combination effects of offshore wind developments are discussed in Section 16.13 of this EIA Report with schedules and effects at a project level addressed in Table 16.16. Further details can be found in Volume 3, Annex 6.1: Cumulative Effects Screening.
Mitigation measures (Scottish Government, 2025a)	
Page 53 of the Draft Updated SMP for Offshore Wind Energy: Proposed mitigation measures to be implemented at project level to minimise impacts to other marine sectors include: early engagement with other sectors, ensuring sufficient cable burial depths, and utilising smaller turbines in important tourism areas.	Consultation undertaken with relevant stakeholders and marine sectors is discussed in Section 16.4. Mitigation measures proposed are described and summarised in Section 16.10, and in Table 16.14.

Table 16.2: Summary of provisions within the National Marine Plan (Scottish Government, 2015a) of relevance to other sea users and communications

Summary of relevant policy	How and where considered in the EIA Report
Oil and gas	
Oil and Gas Policy Objectives– 1) Maximise the recovery of reserves through a focus on industry-led innovation, enhancing the skills base and supply chain growth. 2) An industry which delivers high-level risk management across all its operations and that is especially vigilant in more testing and current environments. 3) 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 (BEP). 4) 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 discussed in paragraph 16.7.1.25 through to paragraph 16.7.1.33 of this EIA Report.
Offshore wind, wave and tidal projects	
Offshore wind and marine renewable energy policy Objectives – 1) Sustainable development of offshore wind, wave and tidal renewable energy in the most suitable locations. 2) Economic benefits from offshore wind, wave and tidal energy developments maximised by securing a competitive local supply chain in Scotland. 3) Alignment of marine and terrestrial planning and efficient consenting and licensing processes	Offshore wind projects have been identified through a desktop study and are discussed in paragraph 16.7.1.21 through to paragraph 16.7.1.23. Offshore wave and tidal projects are discussed in paragraph 16.7.1.24.

Summary of relevant policy	How and where considered in the EIA Report
including but not limited to data sharing, engagement, and timings, where possible. 4) Aligned marine and terrestrial electricity transmission grid planning and development in Scottish waters. 5) Contribute to achieving the renewable targets to generate electricity equivalent to 100% of Scotland's gross annual electricity consumption from renewable sources by 2020. 6) Contribute to achieving the decarbonisation target of 50g Carbon Dioxide (CO_2)/kWh by 2030 (to cut carbon emissions from electricity generation by more than four-fifths). 7) Sustainable development and expansion of test and demonstration facilities for offshore wind and marine renewable energy devices. 8) Co-ordinated government and industry-wide monitoring.	
Submarine Cables	
Submarine Cable Policy Objectives– 1) Protect submarine cables whilst achieving successful seabed user co-existence. 2) Achieve the highest possible quality and safety standards and reduce risks to all seabed users and the marine environment. 3) Support the development of a Digital Fibre Network, connecting Scotland's rural and island communities and contributing to world-class connectivity across Scotland. 4) Safeguard and promote the global communications network. 5) Support the generation, distribution and optimisation of electricity from traditional and renewable sources to Scotland, UK and beyond.	Submarine cables have been identified through a desktop study and discussed in paragraph 16.7.1.36 through to paragraph 16.7.1.42.

Table 16.3: Summary of provisions within the United Kingdom Marine Policy Statement (HM Government, 2011)of relevance to other sea users and communications

Summary of relevant policy	How and where considered in the EIA report
General policies	
2.3.2.1 When considering potential benefits and adverse effects, decision makers should take into account any multiple and cumulative impacts of proposals, in the light of other projects and activities.	Cumulative effects are discussed in Section 16.13 of this EIA Report.

Summary of relevant policy	How and where considered in the EIA report
General policies	
Box 1: The high level marine objectives There is equitable access for those who want to use and enjoy the coast, seas and their wide range of resources and assets and recognition that for some island and peripheral communities the sea plays a significant role in their community.	Other marine users are discussed in Section 16.7 of this EIA Report.

Table 16.4: Summary of provisions relevant to other sea users and communications within the Initial Plan Framework SMP for Offshore Wind for Innovation and Targeted Oil and Gas Decarbonisation (INTOG) (Scottish Government, 2022)

Summary of relevant policy	How and where considered in the EIA report
General policies	
3.2 Minimise the potential adverse effects on other marine users, economic sectors and the environment resulting from further commercial scale offshore wind development.	The potential adverse effects on other marine users are discussed in Section 16.7 of this EIA Report. Economic sectors are discussed in Volume 2, Chapter 17: Socio-Economics and Volume 3, Annex 17.1: Socio-Economics Shared Economics Technical Report. The potential adverse effects on the environment are discussed in several disciplines of the EIA including Volume 2, Chapter 18: Climate Change.

16.4 Consultation

16.4.1.1 The approach to consultation for Morven North is set out in Volume 1, Chapter 5: Consultation. A summary of the issues raised during consultation activities undertaken to date, and of relevance to other sea users and communications is presented in Table 16.5, together with how these issues have been considered within the assessment. Further detail on consultation is presented within Volume 3, Annex 5.1: Consultation.

Table 16.5: Summary of key consultation issues raised during consultation activities undertaken for Morven North of relevance to other sea users and communications

Date	Consultee and type of consultation	Summary of issue(s) raised	Applicant's response to issue raised and, if applicable, where considered in this chapter
30 November 2023	Morven Site Scoping Opinion: MD-LOT	Paragraph 5.13.1 of the Scoping Opinion: MD-LOT confirmed their agreement with the scope of the assessment that is set out within the Scoping Report (MD-LOT, 2023)	The Applicant notes this response.

Date	Consultee and type of consultation	Summary of issue(s) raised	Applicant's response to issue raised and, if applicable, where considered in this chapter
30 November 2023	Morven Site Scoping Opinion: MD-LOT	Paragraph 5.13.2 of the Scoping Opinion: Table 9.18 of the Scoping Report presents the impacts the Developer proposes to scope in to the assessment in the EIA Report during the different phases of the Proposed Development, while impacts proposed to be scoped out are outlined in Table 9.19. The Scottish Ministers are broadly content with the impacts scoped in and out for assessment in the EIA Report.	The Applicant notes this response.
30 November 2023	Morven Site Scoping Opinion: MD-LOT	Paragraph 5.13.3 of the Scoping Opinion: The Scottish Ministers note the representation from SSEN Transmission which outlines nearby licensed and future subsea transmission infrastructure. The Scottish Ministers request that the Developer fully considers the SSEN Transmission representation and its nearby transmission infrastructure in the EIA Report.	The Applicant notes this response and has responded to Scottish and Southern Electricity Networks (SSEN) Transmission below.
30 November 2023	Morven Site Scoping Opinion: MD-LOT	Paragraph 5.13.4 of the Scoping Opinion: For completeness, the Scottish Ministers draw the Developer's attention to the representation from BT regarding minimum clearance from any structure to the radio link path. The Scottish Ministers request that the representation from BT is fully considered in the EIA Report in so far as it relates to the Proposed Development	The Applicant notes this response and has responded to British Telecommunication (BT) below.
30 November 2023	Morven Site Scoping Opinion: MD-LOT	Paragraph 5.13.5 of the Scoping Opinion: The Scottish Ministers emphasise the importance of engaging with other marine users, including developers of ScotWind and INTOG projects, during all phases of the Proposed Development.	The Applicant notes this response.
30 November 2023	Morven Site Scoping Opinion: SSEN Transmission	SSEN Transmission stated: "EGL2 HVDC link, the project has been granted consent in 2023 and we are in discussion with applicant on this".	The Applicant notes this response and information relating to EGL2 can be found in paragraph 16.7.1.37 and assessed cumulatively in Section 16.13.

Date	Consultee and type of consultation	Summary of issue(s) raised	Applicant's response to issue raised and, if applicable, where considered in this chapter
30 November 2023	Morven Site Scoping Opinion: SSEN Transmission	SSEN Transmission stated: "EGL3 HVDC link, the applicant is aware of the project and we would welcome its inclusion and consideration in further studies undertaken by the applicant".	The Applicant notes this response and information relating to the EGL3 HVDC link can be found in paragraph 16.7.1.38 and assessed cumulatively in Section 16.13.
30 November 2023	Morven Site Scoping Opinion: SSEN Transmission	SSEN Transmission stated: "The area in the report identified by the applicant as "Local and regional sea users" encompasses areas of the marine region which overlap with areas being considered for the development of future transmission infrastructure. We would welcome the applicant's co-operation and engagement on this".	The Applicant notes this response and information relating to the baseline environment, specifically cables can be found in paragraph 16.7.1.36 through to 16.7.1.42 and future transmission infrastructure has been assessed cumulatively in Section 16.13.
30 November 2023	Morven Site Scoping Opinion: SSEN Transmission	SSEN Transmission stated: "We would request that provision is made in the scoping response, such that the Applicant considers future development by others positively and works with others in a mutually beneficial manner, including but not limited to the development, installation and operation of, Transmission power cables, Tele communication cables, and associated offshore structures."'	The Applicant notes SSEN Transmission's scoping representation and will continue to positively engage with relevant stakeholders.
30 November 2023	Morven Site Scoping Opinion: British Telecommunication (BT)	BT stated: "We have studied this Morven Offshore Wind Farm scoping proposal with respect to EMC and related problems to BT point-to-point microwave radio links. The conclusion is that the offshore site shown in the "Figure 8.22" should not cause interference to BT's current and presently planned radio network."	The Applicant notes this response.
30 November 2023	Morven Site Scoping Opinion: Royal Yachting Association (RYA) Scotland	RYA Scotland stated: "I have no comments to make on the scoping report and agree that Shipping and Navigation should be scoped in and would wish to be involved with the Navigational Risk Assessment."	The Applicant notes this response.
17 August 2023	Morven Site Scoping Consultation: Joint Radio Company (JRC)	Potential interference with OMFCL.	No response was received from JRC and a follow up request for comment was sent.

Date	Consultee and type of consultation	Summary of issue(s) raised	Applicant's response to issue raised and, if applicable, where considered in this chapter
26 August 2025	Email Correspondence: JRC	Potential interference with OMFCL.	The Applicant notes JRC's response and welcomes the scoping out of offshore microwave links in principle. The Applicant continued engagement with JRC and provided site boundary files as requested (see further correspondence on 18 September 2025 below).
18 September 2025	Email Correspondence: JRC	JRC stated, in relation to Morven North and Morven South, that: "Having reviewed the site boundaries, JRC can confirm that neither development envelope impacts on our protected links."	The Applicant notes JRC's response and welcomes the scoping out of offshore microwave links.
21 July 2025	Email Correspondence: MD-LOT	MD-LOT reviewed the information contained in the targeted consultation letter of 13 March 2025 setting out the revised consenting strategy in light of the division of the Morven Site into Morven North and Morven South and noted MvOWL's proposed way forward. MD-LOT is of the view that there are no additional aspects for MvOWL to consider however, as a result of the revised consenting strategy, MD-LOT would advise discussing further with NatureScot with regards to the cumulative and in-combination assessments and in light of the recent discussion that took place during the quarterly update meeting held on 02 July 2025.	The Applicant notes this response. The approach to cumulative assessment was further discussed and agreed with NatureScot and MD-LOT, as detailed within Volume 1, Chapter 6: EIA Methodology.

16.5 Scope of the assessment

16.5.1 Impacts scoped into the assessment

16.5.1.1 The scope of this EIA Report has been developed in consultation with relevant statutory and non-statutory consultees as detailed in Table 16.5. The Morven Site Scoping Opinion was received on 30 November 2023, and MD-LOT confirmed that they were in agreement with the scope of the assessment for the Morven Site which is now used to represent Morven North. Table 16.6 summarises the potential impacts which have been scoped into this assessment. Where an impact is likely to occur within a specific development phase of the project, this is indicated within each relevant topic chapter (a '✓' is used to denote the phase the potential impact can occur, conversely a '✗' outlines there is no impact within this project phase), where relevant.

Table 16.6: Potential impacts scoped into the other sea users and communications assessment

C= Construction, O= Operations and Maintenance, D= Decommissioning phases

"✓" is used to denote the phase the potential impact can occur, "X" outlines there is no impact within this project phase

Potential impact	Phase			Activity
	C	O	D	
Displacement of recreational activities (including recreational sailing, cruising and recreational fishing).	✓	✓	✓	Site preparation (e.g. sandwave clearance, boulder clearance, etc).
				Foundation installation
				Cable installation
				O&M activities
				Decommissioning activities
Impacts to cables or pipelines or restrictions on access to cables or pipelines[1]	✓	✓	✓	Site preparation (e.g. sandwave clearance, boulder clearance, etc).
				Foundation installation
				Cable installation
				O&M activities
				Decommissioning activities

16.5.2 Impacts scoped out of the assessment

16.5.2.1 A summary of the impacts scoped out, together with justification for scoping them out and whether the approach has been agreed with key stakeholders through either scoping or consultation, is presented in Table 16.7.

Table 16.7: Impacts scoped out of the assessment for other sea users and communications

C= Construction, O= Operations and Maintenance, D= Decommissioning phases

"✓" denotes the impact has been scoped out for this phase, "X" denotes the impact has not been scoped out for this phase

Potential impact	Phase			Justification
	C	O	D	
Increased SSC and associated deposition affecting recreational diving sites.	✓	✓	✓	There are no recreational diving sites within the Regional Other Sea Users and Communications Study Area, as described in Section 16.7. As such, there is no potential impact pathway and, therefore, it is proposed that this impact is scoped out of this EIA Report. MD-LOT has agreed this within their Morven Site Scoping Opinion.

[1] Note that the impact wording in the Scoping Report was "Impacts to early development cables or pipelines or restrictions on access to cables or pipelines". The wording change to this impact is due to Eastern Green Link 2 acquiring consent and now considered part of the baseline, see Section 16.7.1.35.

Potential impact	Phase			Justification
	C	O	D	
Increased SSC and associated deposition affecting aggregate extraction areas.	✓	✓	✓	There are no aggregate extraction areas within the Regional Other Sea Users and Communications Study Area, as described in Section 16.7. As such, there is no potential impact pathway and, therefore, it is proposed that this impact is scoped out of this EIA Report. MD-LOT has agreed this within their Morven Site Scoping Opinion.
Alterations to sediment transport pathways affecting aggregate extraction areas.	✓	✓	✓	There are no aggregate extraction areas within the Regional Other Sea Users and Communications Study Area, as described in Section 16.7. As such, there is no potential impact pathway and, therefore, it is proposed that this impact is scoped out of this EIA Report. MD-LOT has agreed this within their Morven Site Scoping Opinion.
Impact on marine disposal sites.	✓	✓	✓	There are no marine disposal sites within the Regional Other Sea Users and Communications Study Area, as described in Section 16.7. As such, impacts on marine disposal sites have been scoped out of this EIA Report. MD-LOT has agreed this within their Morven Site Scoping Opinion.
Reduction or restriction of oil and gas exploration activities (including surveys, drilling and the placement of infrastructure).	✓	✓	✓	There are no active oil and gas exploration blocks within the Regional Other Sea Users and Communications Study Area, as described in Section 16.7. As such, there is no potential impact pathway and, therefore, it is proposed that this impact is scoped out of this EIA Report. MD-LOT has agreed this within their Morven Site Scoping Opinion.
Impacts on CCS.	✓	✓	✓	There are no CCS projects within the Regional Other Sea Users and Communications Study Area, as described in Section 16.7. As such, there is no potential impact pathway and, therefore, it is proposed that this impact is scoped out of this EIA Report. MD-LOT has agreed this within their Morven Site Morven Site Scoping Opinion.
Interference with the performance of REWS located on oil and gas platforms.	✓	✓	✓	There are no REWS within the Regional Other Sea Users and Communications Study Area, as described in Section 16.7. As such, there is no potential impact pathway and, therefore, it is proposed that this impact is scoped out of this EIA Report. MD-LOT has agreed this within their Morven Site Scoping Opinion.
Interference with OMFCL.	✓	✓	✓	Whilst interference with OMFCL was scoped in for the operational phase in the scoping report, interference with OMFCL has been scoped out of this EIA Report across all phases. This is based on information received from the JRC (Table 16.5) and that no issues were confirmed in BT's representation in the Morven Site Scoping Opinion (Table 16.5). Please see Section 16.7.1.43 for more detail.

16.6 Approach to baseline characterisation

16.6.1.1 The other sea users and communications baseline environment has been characterised through site specific data and a literature review of key desktop datasets and reports (see Table 16.8).

16.6.2 Relevant guidance

16.6.2.1 The following relevant guidance documents have been considered throughout the other sea users and communications impact assessment:

- The RYA Scotland's Position on Offshore Renewable Energy Developments: Paper 1 (of 4) – Wind Energy, June 2019 (RYA, 2019).
- International Cable Protection Committee (ICPC) Recommendations:
  - Recommendation No.2-11B: Cable Routing and Reporting Criteria (ICPC, 2015);
  - Recommendation No.3-10C: Telecommunications Cable and Oil Pipeline/Power Cables Crossing Criteria (ICPC, 2014);
  - Recommendation No.13-2C: The Proximity of Offshore Renewable Wind Energy Installations and Submarine Cable Infrastructure in National Waters (ICPC, 2013).
- European Subsea Cables Association (ESCA) Guideline No. 6, The Proximity of Offshore Renewable Energy Installations and Submarine Cable Infrastructure in UK Waters (ESCA, 2023).
- Pipeline Crossing Agreement and Proximity Agreement Pack (Oil and Gas UK, 2021).

16.6.3 Desktop study

16.6.3.1 Information on other sea users and communications within the Other Sea Users and Communications Study Areas was collected through a detailed desktop review of existing studies and datasets. These are summarised in Table 16.8 below.

Table 16.8: Summary of key desktop reports used to characterise the other sea users and communications baseline

Title	Source	Year	Author
Offshore renewable and cable access	Kingfisher Information Service – Offshore Renewable & Cable Awareness project (KIS-ORCA)	2025	KIS-ORCA
Vessel Traffic Survey Data	MarineTraffic	2025	MarineTraffic
Webmap Service – Carbon Storage Licences	North Sea Transition Authority (NSTA)	2025	NSTA
Webmap Service – Offshore oil and gas activity	NSTA	2025	NSTA
Designated Bathing Waters	Scottish Government	2024	Scottish Government
Recreational Fishing	British Sea Fishing	2024	British Sea Fishing
Webmap Service – Offshore wind farms	4C Offshore	2024	4C Offshore
Webmap Service – Various Layers	National Marine Plan Interactive (NMPi)	2024	NMPi
Data from site specific two 14-day marine Vessel Traffic Surveys (see Section 16.7.1.11)	Anatec (commissioned by the Applicant)	2023	Anatec
Webmap Service – Disposal Sites and Aggregate Extraction Areas	European Marine Observation and Data Network (EMODnet)	2023	EMODnet
General Boating Areas	UK Coastal Atlas of Recreational Boating	2019	RYA
Recreational Activities	UK Coastal Atlas of Recreational Boating	2019	RYA
RYA Clubs, Training Centres and Marinas	UK Coastal Atlas of Recreational Boating	2019	RYA
Scottish Marine Recreation and Tourism Survey	Scottish Government	2015	Marine Directorate
Scotland's National Marine Plan	Scottish Government	2015	Marine Directorate
Identifying Recreational Cruising Routes, Sailing and Racing Areas	RYA	2005	RYA

16.6.4 Site specific surveys

16.6.4.1 Receptor information and data related to other sea users and communications has primarily been obtained through desktop study and data provided through stakeholder consultation (see Table 16.8). In addition to this, primary survey data from two of the five 14-day Vessel Traffic Surveys (VTS) conducted by Anatec at Morven North in June/July 2024 and November/December 2024 (collected to inform Volume 2, Chapter 13: Shipping and Navigation) has been referenced within this chapter where relevant. It should be noted that although five VTS surveys were conducted, only the two most recent surveys have been used for the purposes of this assessment (compliant with Marine Guidance Note (MGN) 654 guidance) (MCA, 2021). The additional surveys have been used as validation of the primary data sources.

16.7 Baseline environment

16.7.1 Overview of baseline environment

16.7.1.1 The following sections provide an overview of the baseline recreational boating activities (including sailing, motor cruising and fishing), in addition to other recreational activities, offshore energy projects, offshore cables and pipelines, CCS, oil and gas activities, marine aggregate extraction and marine disposal sites within the Local Other Sea Users and Communication Study Areas.

Local Other Sea Users and Communications Study Area

Ports, harbours and marinas

16.7.1.2 The main ports in proximity to the Morven North Boundary are Aberdeen, Montrose and Peterhead. The Port of Aberdeen and Peterhead are located northwest of the Morven North Boundary at 63km and 78km, respectively from the Local Other Sea Users and Communications Study Area (Figure 16.2). Montrose Port is located west of the Morven North Boundary at 76km from the Local Other Sea Users and Communications Study Area (Figure 16.2). The Port of Aberdeen is Scotland's largest berthage port at 2800m and a maximum depth of 14.8m MHWS with the ability to handle a significant number of vessels simultaneously (Port of Aberdeen, 2025a). Peterhead is regarded as the largest fishing port in Europe and services a varied range of commercial traffic (Peterhead Port Authority, 2025). Both ports of Peterhead and Montrose are strategically placed to work in a broad range of sectors, from renewable energy to leisure, accommodating cruise ship vessels (Montrose Port Authority, 2025; Peterhead Port Authority, 2025). Peterhead Bay Marina is a district within Peterhead Port and offers a purpose-built leisure facility catering for local and visiting boatowners (Peterhead Port Authority, 2025).

16.7.1.3 Additional information relating to harbours in the vicinity of Morven North is presented in Volume 2, Chapter 13: Shipping and Navigation.

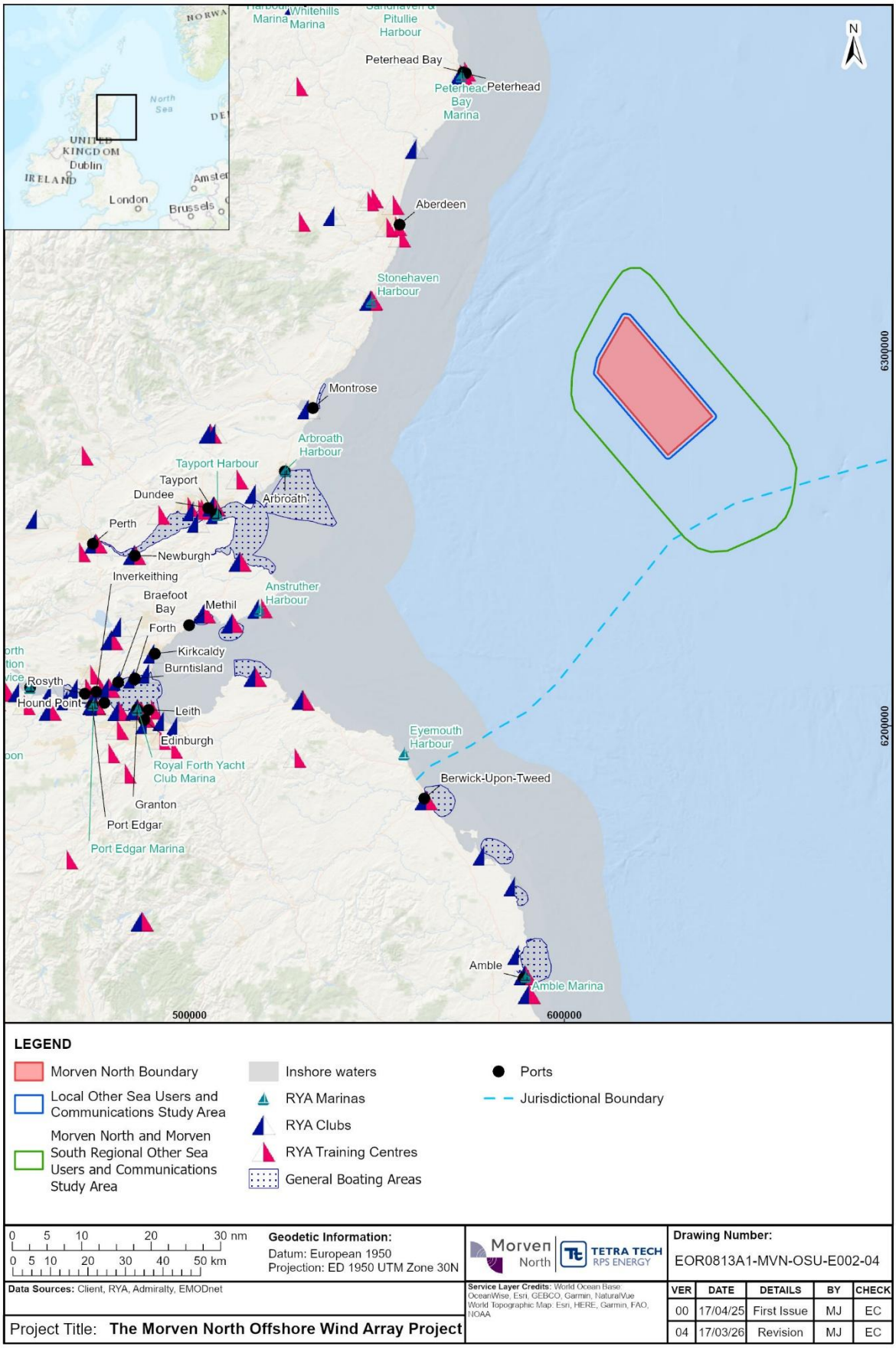

Figure 16.2: Ports, harbours and marinas in the vicinity of the Other Sea Users and Communications Study Areas

Recreational sailing and motor cruising

16.7.1.4 This section provides an overview of the recreational sailing, boating and motor cruising activity within the vicinity of Morven North (**Figure 16.3**). It should be noted that the other sea users and communications EIA chapter considers receptors undertaking recreational sailing, boating and motor cruising as an activity only and does not assess the risks associated with vessel movements. Navigational risk is considered within Volume 3, Annex 13.1: Shipping and Navigation Shared Navigational Risk Assessment where recreational sailing and motor cruising are considered as a specific vessel size category to inform the shipping and navigation assessment (Volume 2, Chapter 13: Shipping and Navigation).

16.7.1.5 Marine tourism plays a crucial role in Scotland's economy, contributing £594 million in Gross Value Added (GVA) and supporting 28,300 jobs in 2017 (Marine Scotland, 2020). Furthermore, a 2015 survey of 279 businesses involved in marine recreation and tourism indicated that general recreation, sailing, and other boating activities were the second most served category by these businesses (Marine Directorate, 2015). Scottish residents show a strong connection to the marine environment, with 89% of those surveyed in 2020 having visited the Scottish coast within that year (Marine Directorate, 2020).

16.7.1.6 General boating areas are utilised daily by various recreational boating enthusiasts, including those with sailboards, dinghies, watercraft, and small cruisers. These areas encompass general sailing areas, sailing schools, sailing clubs and racing areas, and are derived from Automatic Identification System (AIS) tracks and club locations to map areas of higher recreational use (Figure 16.2). Recreational activities can be unpredictable, influenced by weather conditions, and typically do not involve point-to-point travel like larger commercial vessels (RYA, 2005). Cruising activities usually consist of day trips launched from local ports, with a return to the home port on the same day. Recreational boating is generally seasonal and predominantly occurs during daylight hours, with a higher concentration of vessels present during the summer months (RYA, 2005). Offshore sailing is typically undertaken by yachts, either for cruising or participating in organised offshore races. Conversely, inshore sailing generally involves smaller vessels, such as dinghies and recreational boats, which are utilised for leisurely cruising or competitive racing.

16.7.1.7 Scotland is a renowned destination for acquiring sailing skills, gaining practical experience, and obtaining sailing certifications. Sailing and boating tourism in Scotland is a significant contributor to the economy. According to the Economic Value of Boating Tourism in Scotland Survey 2022, sailing and boating activities contribute approximately £84 million in GVA and support 3,100 Full Time Equivalent (FTE) jobs (EKOS, 2023). Profits from sailing areas along the east coast of Scotland account for 10% of the total revenue, whilst the west coast and Clyde regions contribute 29% and 44%, respectively (Scottish Government, 2015a). RYA Scotland is a membership organisation that offers facilities to the public, clubs, and teams for learning to sail, gaining experience, and obtaining sailing qualifications at their 180 recognised training centres across Scotland (RYA, 2021), of which 40 are on the east coast of Scotland. The organisation also offers various forms of sailing in Scotland, including racing, sail cruising and powerboating (RYA, 2025). The sailing season typically extends from May to August, with peak activity occurring in July. The Aberdeen and Stonehaven Yacht Club (ASYC) holds races on a regular basis from June to November at Stonehaven Bay (ASYC, 2020). The Peterhead Sailing Club (PSC) holds races from May to September at Peterhead Harbour (PSC, 2025). The Montrose Sailing Club (MSC) operates races from April to October and typically run races on weekends (MSC, 2025). The majority of sailing activity from these clubs is held in coastal regions, approximately 64km, 77km northwest and 75km west of the Morven North Boundary, respectively.

16.7.1.8 Racing areas are typically utilised on weekends and during holiday periods by sailing, boating, and motor cruising enthusiasts. These zones are managed by nearby sailing clubs and often feature temporary or permanent marker buoys. Racing routes are usually established on the day of the event and must follow customised racing guidelines, whilst still adhering to standard collision regulations when competing vessels are involved (RYA, 2005). Further details about these collision regulations can be found in Volume 2, Chapter 13: Shipping and Navigation, including Convention on the

International Regulations for Preventing Collisions at Sea (COLREG) and International Convention for the Safety of Life at Sea (SOLAS). Racing areas are exclusively situated in coastal regions. Given the distance of the Morven North Boundary from the shoreline, it can be concluded that there are no known racing areas within the Local Other Sea Users and Communications Study Area (NMPi, 2024). However, racing areas are subject to change. It is important to note that the coastal regions around the Morven North Boundary are extensively used for various recreational activities, including sailing, boating, and motor cruising (Figure 16.2).

16.7.1.9 The Local Other Sea Users and Communications Study Area is not in close proximity to general boating areas associated with RYA Clubs (Figure 16.2). The ASYC and PSC are located approximately 64km and 77km northwest and 75km west from the Local Other Sea Users and Communications Study Area, respectively. General boating areas are located to the south of Arbroath. The closest general boating area is located at Montrose, approximately 74km west of the Local Other Sea Users and Communications Study Area (NMPi, 2024). Motor cruising areas do not extend to the Morven North Boundary (NMPi, 2024).

16.7.1.10 AIS for recreational craft identifies vessels transiting predominantly in a parallel direction to the Scottish coastline (Figure 16.3). Fitting of AIS is not a requirement for small recreational vessels, but many do so voluntarily for safety purposes. The majority of vessel traffic in the Firth of Forth and therefore offshore of North Berwick originates from South Queensferry, Newhaven, Burntisland, Anstruther and Eyemouth. Based on the AIS data available, the majority of vessel tracks to the northwest and west of the Morvern North Boundary depart or arrive into the major ports of Aberdeen and Peterhead. Vessel tracks are found to very rarely intersect the Local Other Sea Users and Communications Study Area. Despite this, vessel tracks are seen to reach the vicinity of the Regional Other Sea Users and Communications Study Area from several origins, including north of Fraserburgh (MarineTraffic, 2025) (Figure 16.3).

16.7.1.11 Two 14-day AIS, Radar and visual observation VTS were undertaken to inform the Navigational Risk Assessment for Morven North in compliance with Marine Guidance Note (MGN) 654 (Maritime and Coastguard Agency (MCA), 2021). The dataset from each VTS was supplemented with AIS collected from alternate AIS receivers to ensure optimal coverage. Data has been extracted from the VTS reports to inform the recreational vessel activity within a 10nm buffer survey area around the Morven North Boundary. Recreational vessels were only observed during the summer survey period with activity noted between 20 June and 4 July 2024. During the survey period, recreational vessels were generally recorded transiting northwest/southeast within the 10nm buffer survey area. There were low levels of recreational vessels recorded, with an average of one unique recreational vessel movement per day within the Regional Other Sea Users and Communications Study Area during the survey period, and one every two days within the Morven North Boundary.

16.7.1.12 Additional information related to recreational sailing, boating and motor cruising is presented in Volume 2, Chapter 13: Shipping and Navigation.

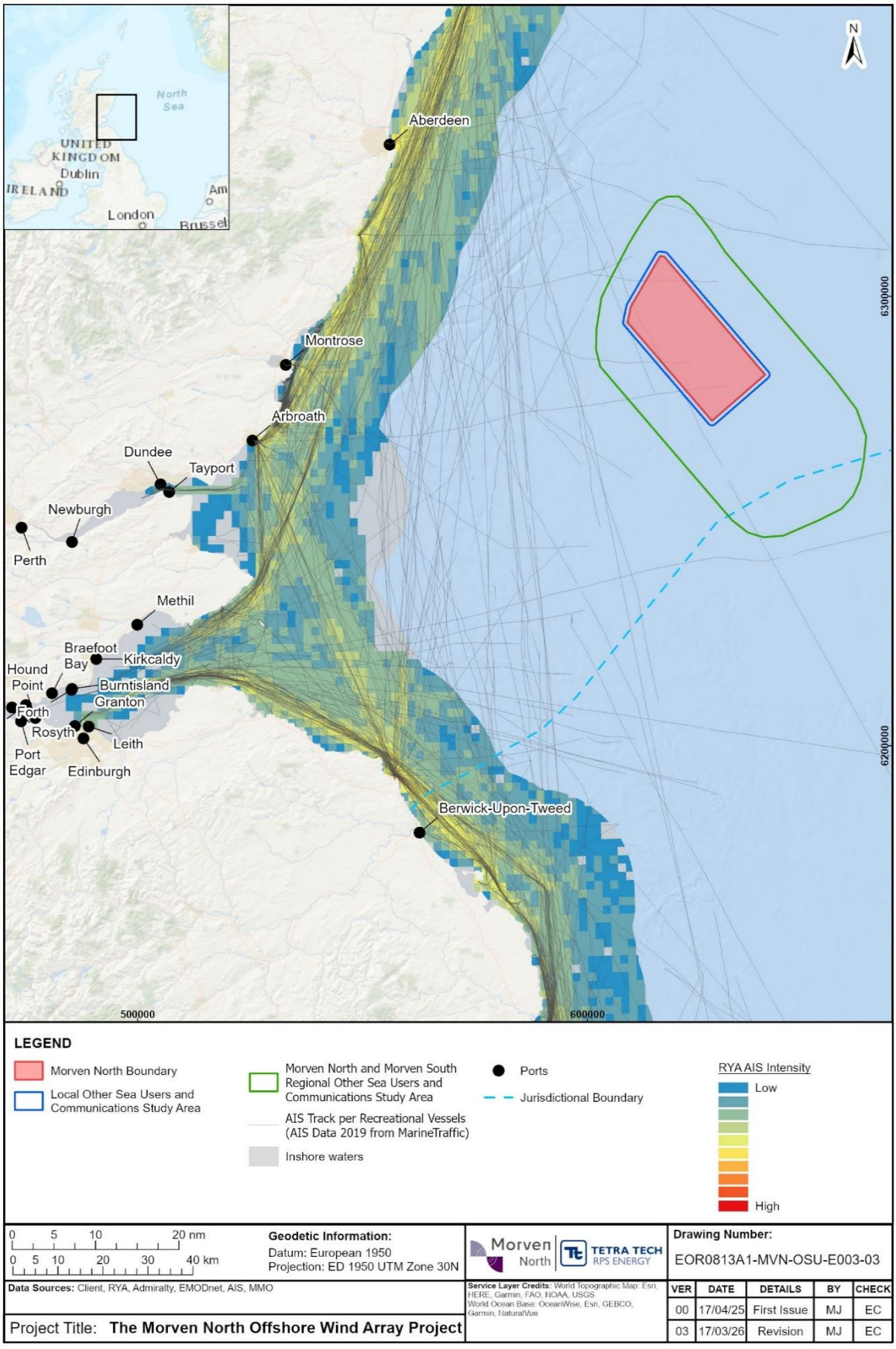

Figure 16.3: Recreational vessel intensity in the vicinity of Other Sea Users and Communications Study Areas

Recreational fishing

16.7.1.13 This section provides an overview of recreational fishing activity within the vicinity of Morven North (i.e. fishing for pleasure rather than commercial reasons). A description of commercial fishing activity is provided within Volume 2, Chapter 12: Commercial Fisheries and Volume 3, Annex 12.1: Commercial Fisheries Shared Technical Report. It should be noted that the other sea users and communications EIA chapter considers receptors undertaking recreational fishing as an activity only and does not assess the risks associated with vessel movements. Navigational risk is considered within Volume 3, Annex 13.1: Shipping and Navigation Shared Navigational Risk Assessment, where recreational fishing vessels are considered as a specific vessel size category to inform the shipping and navigation assessment (Volume 2, Chapter 13: Shipping and Navigation).

16.7.1.14 Recreational sea angling occurs along most regions of the Scottish coastline and generates an estimated £140.9 million for the Scottish economy whilst supporting over 3,000 FTE jobs (Scottish Government, 2015b). A wide range of species are targeted during recreational sea angling and can include cod (*Gadus morhua)*, tope (*Galeothinus galeus*), bass *(Dicentrarchus labrax*), pollock (*Pollachius pollachius*), rays (*Raja sp*)., mackerel (*Scomber scombrus*), spurdog (*Squalus acanthias*), Atlantic salmon (*Salmo salar)* and sea trout (*Salmo trutta*) (NMPi, 2024).

16.7.1.15 The eastern coast of Scotland is a favoured destination for recreational sea anglers fishing from the shore. Peterhead Pier is well-known for its sea fishing, particularly for species such as cod, dab (*Pleuronectidae sp*)., saithe (*Pollachius virens*) and wrasse (*Labrus bergylta*). The mouth of the River Don in Aberdeenshire holds flatfish (*Pleuronectiformes sp*)., cod, whiting (*Merlangius merlangus*) and European eel (*Anguilla anguilla*). Gourdon Harbour and Crawton Rock Marks are also popular for cod and saithe. These two popular sites are located approximately 64km and 62km from the Local Other Sea Users and Communications Study Area. Other popular sites for recreational fishing include various harbours, rock marks and beaches in Arbroath, Montrose, Dundee, St Andrews, Edinburgh and Musselburgh (British Sea Fishing, 2024).

16.7.1.16 The northeast of Scotland is far more popular with sea angling from the shore than sea angling from a private or chartered boat due to the lack of quality sheltered areas to conduct sea angling from boats (Scottish Government, 2009). Recreational sea angling activity by boat is highest near to the coast (Figure 16.4). Specific to Morven North, the highest concentration of recreational sea angling by boat (red area in Figure 16.4) is approximately 67km southwest of the Local Other Sea Users and Communications Study Area (NMPi, 2024) (Figure 16.4). Arbroath, Stonehaven, and Peterhead are well-known launch sites for sea anglers, with Arbroath particularly recognised as a prime location for boat fishing (Scottish Government, 2009). Cod is the most commonly targeted species for boat fishing in northeast Scotland, followed by pollock and mackerel (Scottish Government, 2009). There are numerous opportunities for offshore recreational charter fishing, with trips departing from Edinburgh, Dundee, Aberdeen, and Peterhead, located northwest and west of the Morven North Boundary (Charter Boats UK (CBUK), 2023).

16.7.1.17 It should be noted that data for recreational fishing activity was sourced from the Scottish Marine Recreation & Tourism Survey[2]. This was a web-based survey which ran from August to October in 2015 and gathered spatial information on the activities people had undertaken during the previous twelve months. Whilst online surveys in the marine and tourism sectors are valuable for collecting spatial and experiential data, they are prone to errors such as participants entering incorrect geographic coordinates, which can compromise the accuracy of location-based analyses. Recreational fishing effort is highly seasonal and dependent on specific weather conditions. Additional information pertaining to recreational fishing is presented in Volume 2, Chapter 12: Commercial Fisheries

[2] Scottish Marine Recreation & Tourism Survey 2015 | marine.gov.scot

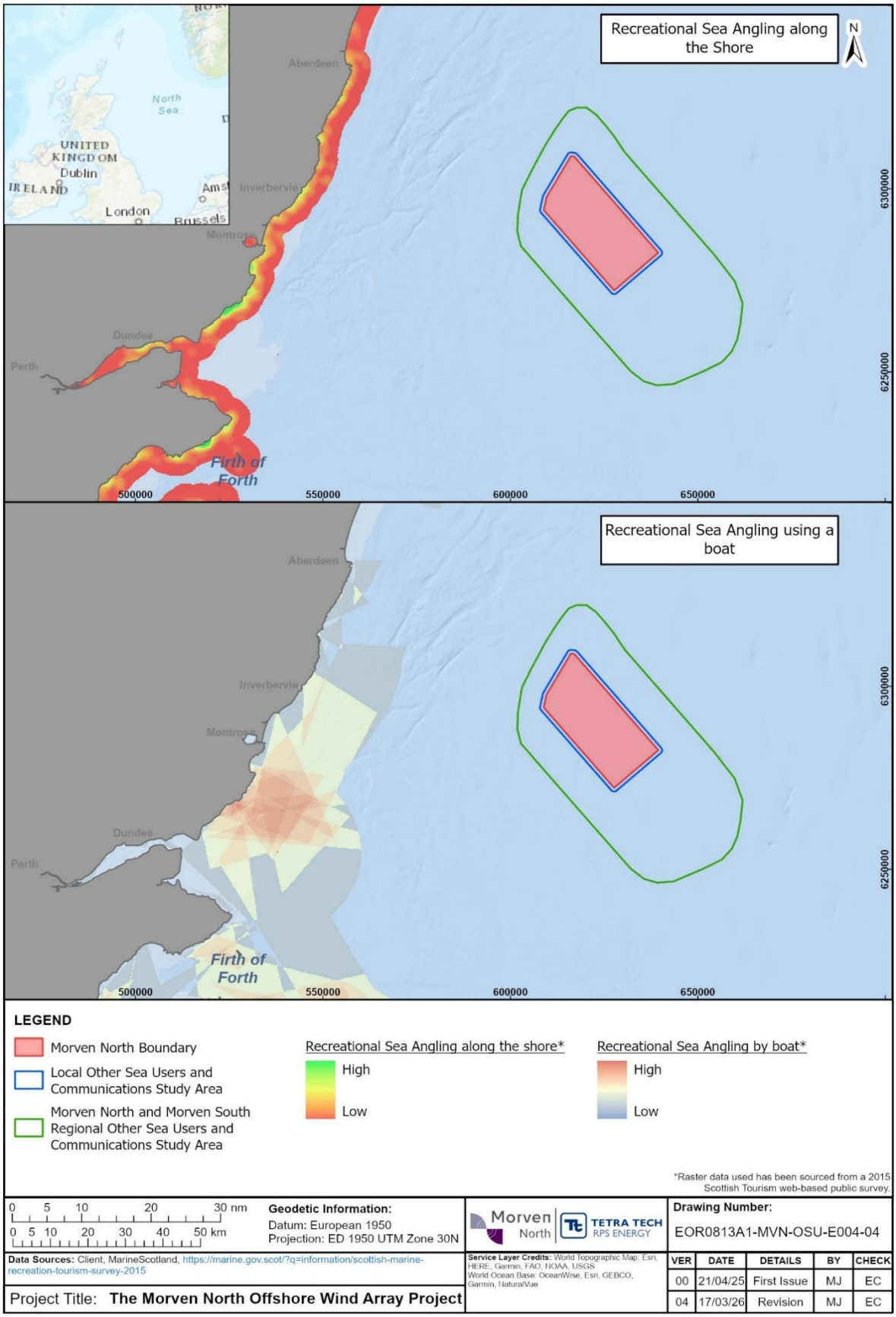

Figure 16.4: Recreational sea angling in the vicinity of Other Sea Users and Communications Study Areas

Other recreational activities

16.7.1.18 According to the British Marine Federation, the marine leisure industry, including waterborne recreational pursuits, supports nearly 1,800 FTE jobs in Scotland (Scottish Government, 2015b). It is noted that the marine leisure industry is supported by a solid local market with contribution to the rural economy, specifically along the west coast of Scotland (Scottish Government, 2015b).

16.7.1.19 There are 87 designated and former bathing waters located in waters surrounding Scotland according to 2024 Scottish Government findings (Scottish Government, 2024b). Scottish ministers determine the length of the bathing season and designate bathing waters where they expect large numbers of people to bathe. These areas are given special protection to ensure they are safe for people to swim in during the bathing season, which typically runs from 01 June to 15 September (Scottish Government, 2024b). The closest designated bathing waters to the Morven North Boundary are located at Stonehaven, approximately 62km from the Local Other Sea Users and Communications Study Area. Due to the distance between Morvern North and the shoreline, impacts to designated bathing waters have been scoped out and are not considered further in this EIA Report.

16.7.1.20 Moreover, coastal and inshore recreational activities, including watersports (such as canoeing, kayaking, paddleboarding, surfing, windsurfing, and kite surfing), and beachgoers, are not further considered in this chapter due to the distance between Morven North and the shore (Figure 16.5; Figure 16.6). Please see paragraph 16.7.1.17 for more information pertaining to the origins of the data used to inform recreational activity.

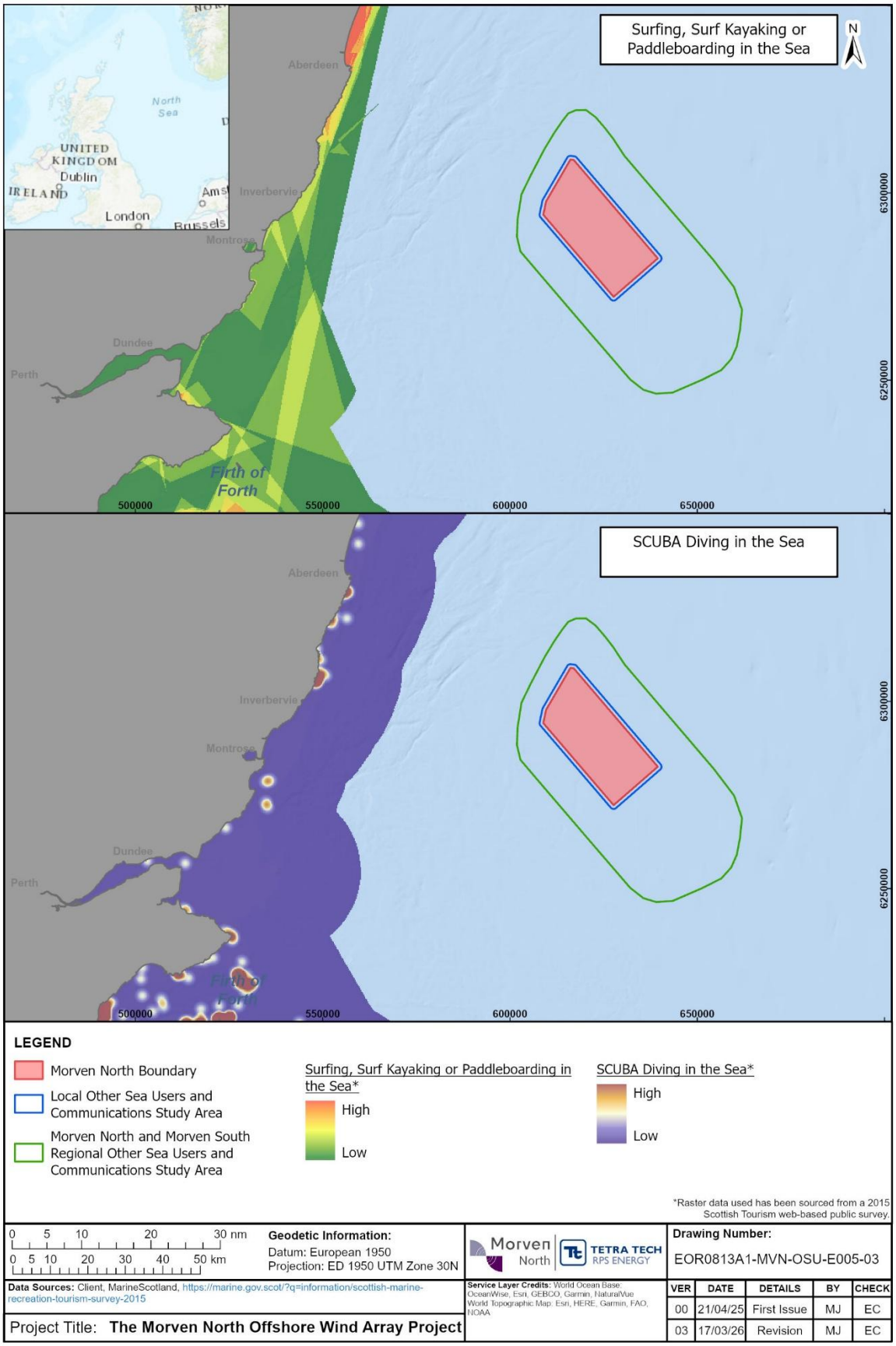

Figure 16.5: Surfing, sea kayaking, paddleboarding and scuba diving in the vicinity of Other Sea Users and Communications Study Areas

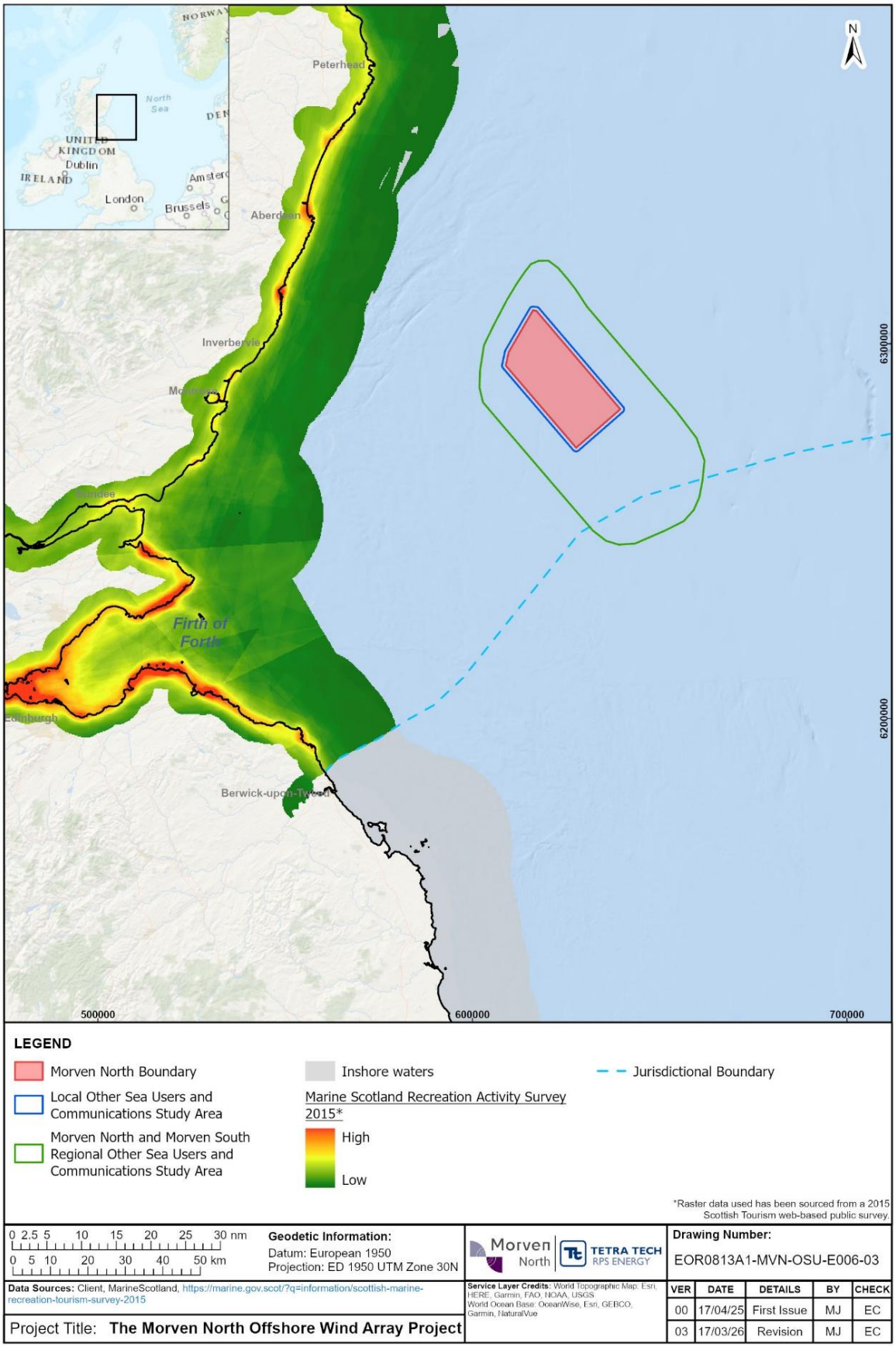

Figure 16.6: Recreational density in the vicinity of the Other Sea Users and Communications Study Areas

Offshore energy projects

Offshore wind

16.7.1.21 There are a number of existing and proposed OWF projects within the vicinity of the Morven North Boundary, as shown in Figure 16.7 and listed in Table 16.9. Figure 16.7 depicts wind farm projects in the vicinity of the Morven North Boundary which should be considered as part of the baseline environment. Forthwind, Methil Demo (also known as Levenmouth Demonstration) have been included with their distances as 129km, and Green Volt OWF with 103km respectively (4C Offshore, 2024).

16.7.1.22 The closest operational OWF to the Morven North Boundary is the Seagreen 1 OWF located approximately 25km west of the Local Other Sea Users and Communications Study Area. The Seagreen offshore export cable route is located to the west of the Seagreen 1 Offshore Wind Farm and the landfall site is located at Carnoustie. To note that the Morven South OWF is being taken forward as a separate consent application, therefore the closest proposed OWF is Ossian OWF, located approximately 9km from the Morven North Boundary (4C Offshore, 2024). The proposed Ossian offshore export cable route will be located south of the Ossian Array with landfall indicated to be in Lincolnshire.

16.7.1.23 No other infrastructure associated with the existing or proposed OWF is located within the Local Other Sea Users and Communications Study Area.

Table 16.9: Offshore Wind Energy Projects within the broader marine environment around the Morven North Boundary

Project name	Operator	Distance to Morven North Boundary (km)
Operational		
Seagreen 1 OWF	Scottish and Southern Electricity (SSE) Renewables	25
Kincardine OWF	Cobra Wind	43
Aberdeen OWF (European Offshore Wind Deployment Centre)	Vattenfall	63
Hywind Buchan Deep Demo (hereafter referred to as “Hywind”)	Equinor	64
Neart na Gaoithe OWF	Électricité de France (EDF) Renewables UK/EESB Group	80
Under Construction		
Inch Cape OWF	Red Rock Renewables/Electricity Supply Board (ESB) Group	61
Consented		
Berwick Bank OWF	SSE Renewables	32
Seagreen 1A Project	SSE Renewables	41
Salamander OWF	Ørsted/Simply Blue Group/Subsea7	75
Application submitted/Awaiting decision		

Project name	Operator	Distance to Morven North Boundary (km)
Morven South Offshore Wind Array Project	British Petroleum (bp) and Energie Baden-Württemberg (EnBW)	0
Ossian OWF	SSE Renewables/Marubeni Corporation/Copenhagen Infrastructure Partners (CIP)	9
Muir Mhor OWF	Fred. Olsen Renewables Ltd/Vattenfall	58
Aspen OWF	Cerulean Winds	93
Consenting/Pre-Construction		
Bowdun Offshore Wind (previously Cluaran Deas Ear Offshore Wind Farm)	Thistle Wind Partners (TWP)	10
Bellrock OWF	BlueFloat Energy/Renantis Partnership	37
Flora OWF	bp	63
Cedar OWF	Cerulean Winds	89

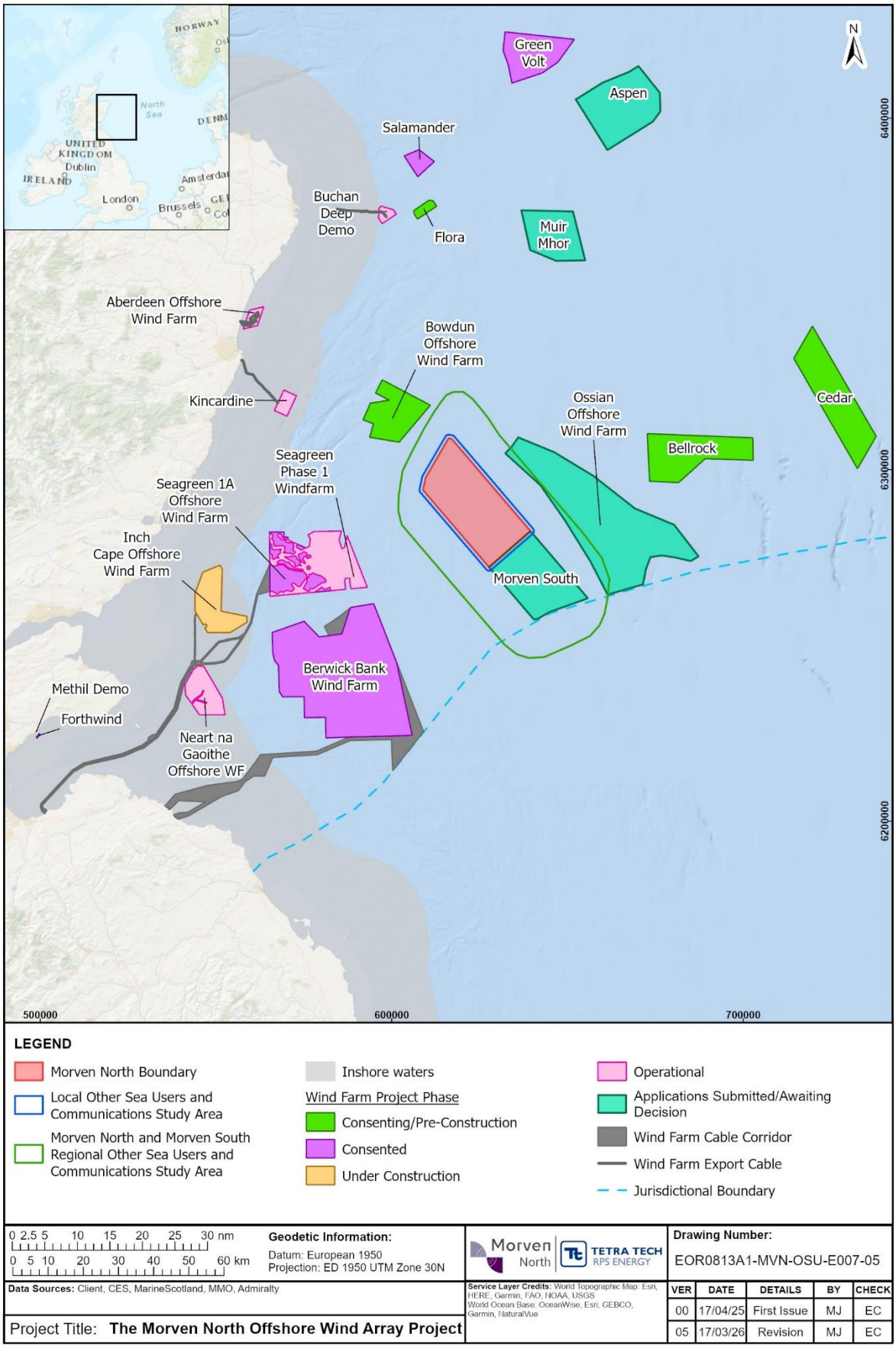

Figure 16.7: Offshore wind projects in the vicinity of the Other Sea Users and Communications Study Areas

Wave and tidal

16.7.1.24 The closest tidal energy project is the Ness of Duncansby which is currently in the planning stage and located in the Pentland Firth approximately 225km from the Local Other Sea Users and Communications Study Area. The closest wave energy project is the European Marine Energy Centre (EMEC) Scapa Flow test site located approximately 246km from the Local Other Sea Users and Communications Study Area. Tidal and wave energy projects have therefore not been considered further in this EIA Report.

Oil and gas

16.7.1.25 Licences for the exploration and extraction of oil and gas on the United Kingdom Continental Shelf (UKCS) have been offered since 1964 and are granted by the North Sea Transition Authority (NSTA) (formally the Oil and Gas Authority (OGA)). These licences are granted for identified geographical United Kingdom Hydrographic Office (UKHO) areas (blocks and part-blocks) in consecutive rounds.

16.7.1.26 The east coast of Scotland supports oil and gas activities, with the Port of Aberdeen being recognised as Europe's leading port for the oil and gas industry, offering a strategic location with direct access to an unparalleled energy supply chain (Port of Aberdeen, 2025b). Additionally, the Port of Dundee is strategically positioned to serve the North Sea oil and gas sector, providing deep-water berths and extensive landside project areas. The port frequently handles projects destined for operations in the North Sea and the Norwegian sector (Forth Ports, 2025). There is currently no active licence blocks located within the Local Other Sea Users and Communications Study Area.

16.7.1.27 The Local Other Sea Users and Communications Study Area overlaps with several non-active hydrocarbon licence blocks, including Blocks 26/5, 26/9, 26/10, 27/1a and 27/6a (NSTA, 2025). The closest active licenced hydrocarbon block to Morven North is Block 27/3a (Figure 16.8) operated by North Sea Natural Resources Ltd (Licence Number: P2321), approximately 24km northeast of the Local Other Sea Users and Communications Study Area (NSTA, 2025).

16.7.1.28 In October 2022, the NSTA launched the 33rd UK Offshore Licensing Round with 931 blocks or part-blocks on offer across the main producing areas of UKCS (NSTA, 2023a). The 33rd UK Offshore Licensing Round closed for applications on January 12, 2023, with the awards announced in multiple tranches throughout 2023 and 2024. The closest block on offer in the 33rd UK Offshore Licensing Round to the Morvern North Boundary is Block 27/8 located approximately 6.6km east of the Local Other Sea Users and Communications Study Area and on the boundary of the Regional Other Sea Users and Communications Study Area (Figure 16.8).

16.7.1.29 There is potential for further exploration or development in this area of the North Sea due to future UK Offshore Licensing Rounds. The frequency of these rounds can vary, but they generally occur every few years and are based on industry needs and regulatory considerations.

16.7.1.30 At present no recent exploration, appraisal or production wells have been drilled within the Local Other Sea Users and Communications Study Area (NSTA, 2025). There are currently no hydrocarbon related wells within the Regional Other Sea Users and Communications Study Area. The closest well to the Morven North Boundary is Forth Approaches (Well Registration Number: 26/04-1) and is located approximately 17km northwest from the Local Other Sea Users and Communications Study Area (Figure 16.8). This well was drilled in 2001 to investigate the geological formations and potential hydrocarbon reserves in the Forth Approaches Basin. However, this well was plugged and abandoned in 2005 by Shell U.K. Limited (NSTA, 2025).

16.7.1.31 The following services are associated with the oil and gas industry:

- helicopters: the oil and gas industry rely on helicopters for personnel transfer and emergency evacuation. Helicopter and associated aviation considerations are addressed separately in Volume 2, Chapter 15: Aviation (Military and Civil);

- vessels: the oil and gas industry require supply or support vessels for its operations. Vessels and associated navigational considerations are addressed separately in Volume 2, Chapter 13: Shipping and Navigation.

16.7.1.32 There are no active or currently licenced hydrocarbon blocks within the Local Other Sea Users and Communications Study Area. Whilst Block 27/8 is on the boundary of the Regional Other Sea Users and Communications Study Area, there is no pathway of potential impact, as such, oil and gas is not considered further in this chapter.

Pipelines

16.7.1.33 There are no oil and gas pipelines located within the Local Other Sea Users and Communications Study Area. The closest pipeline (Forties crude oil pipeline) is located approximately 61km from the Local Other Sea Users and Communications Study Area (Figure 16.8). The Forties crude oil pipeline is currently not in use (NSTA, 2025); therefore, pipelines have not been considered further in this chapter.

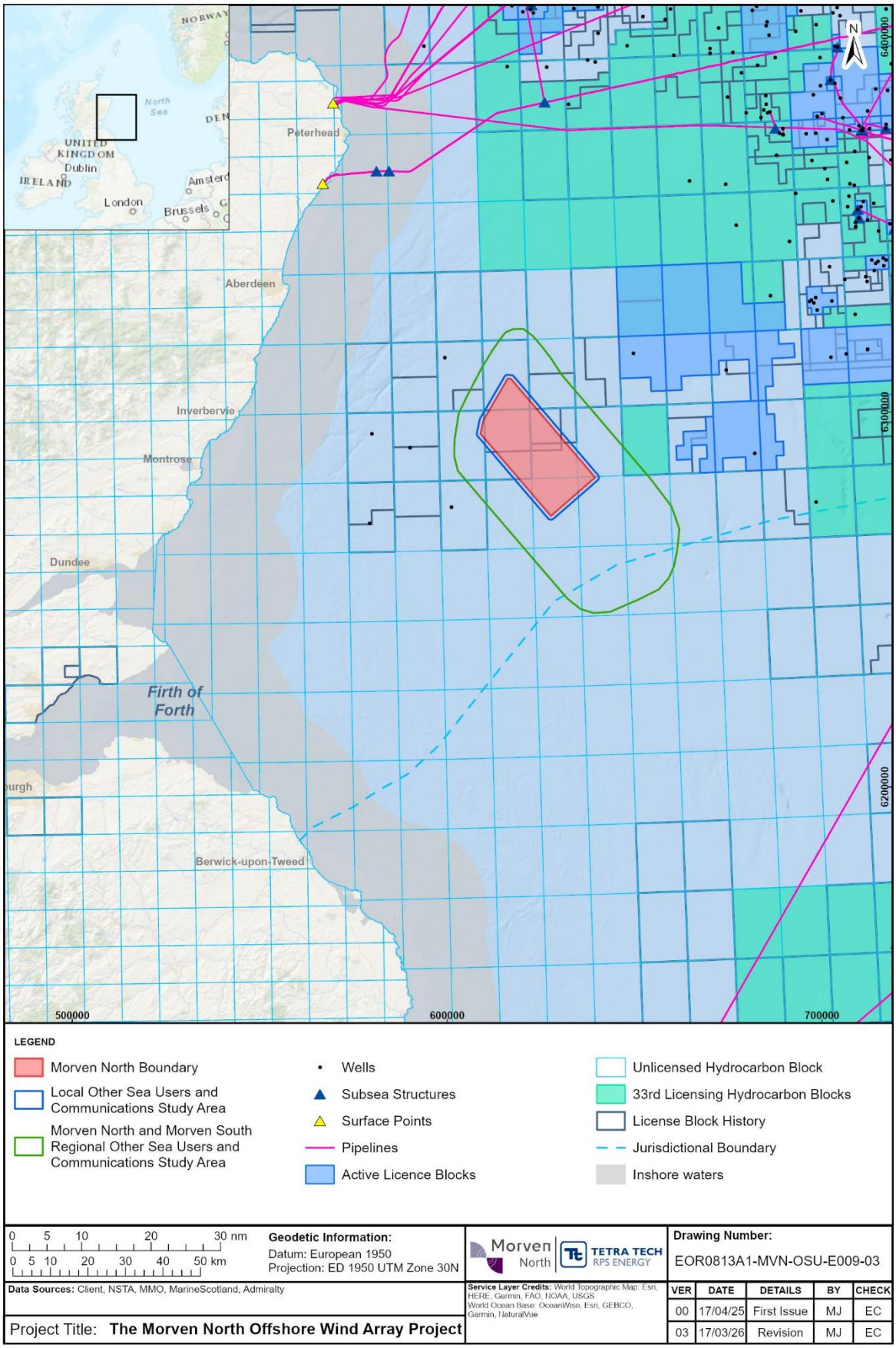

Figure 16.8: Oil and gas infrastructure in the vicinity of the Other Sea Users and Communications Study Areas

Carbon capture and storage

16.7.1.34 Carbon capture and storage is seen as a viable technology for mitigating the effects of climate change. There are no CCS sites located within the Local Other Sea Users and Communications Study Area (Figure 16.9). The closest licenced CCS area to Morven North is in St Fergus located approximately 119km north of the Local Other Sea Users and Communications Study Area. As a National Transmission System (NTS) entry point, St Fergus has been recognised as an optimal location for the development of low carbon hydrogen due to its strategic delivery point, approved CO_2 licence, and proximity to UK CO_2 storage reservoirs (Pale Blue Dot, 2019). In 2019, a feasibility study took place for the Acorn Hydrogen Project, to be developed in this licenced area in St Fergus. The project will deliver an energy and cost-efficient process for hydrogen production from North Sea Gas, whilst capturing and sequestering CO_2 emissions to help prevent climate change. The project would be potentially the first operational low carbon hydrogen plant in Europe, with plans to be operational by 2030 (Pale Blue Dot, 2019).

16.7.1.35 The Scottish Ministers oversee the licensing authority for offshore carbon storage within the territorial sea adjacent to Scotland. The NSTA is responsible for regulating offshore carbon storage in all other UK territorial waters and serves as the licensing authority that approves and issues storage permits. It is important to note that, in support of the goal to achieve net zero carbon emissions by 2050, the NSTA is committed to collaborating with the government, industry, and other relevant stakeholders to promote future opportunities for offshore carbon dioxide storage. Consequently, although the current Carbon Dioxide Appraisal and Storage Licensing Round has concluded, there is potential for the NSTA to conduct future licensing rounds in the near future (NSTA, 2023b).

Cables

16.7.1.36 More than 95% of international telecommunications are facilitated through subsea cabling networks, with approximately 40% of the UK's active international telecommunication cables situated along the Scottish seabed (Scottish Government, 2015a).

16.7.1.37 There are currently no active cables that intersect the Local Other Sea Users and Communications Study Area (KIS-ORCA, 2025). Scoping referred to the potential impact on early development cables, this is in relation to two subsea power cables which are currently under construction; the Eastern Green Link 1 (EGL1) Project and the Eastern Green Link 2 (EGL2) Project. EGL1 is a 2GW High Voltage Direct Current (HVDC) subsea power cable running 196km between Torness in East Lothian, to Hawthorn Pit in County Durham and is operated as a joint venture between National Grid Electricity Transmission (NGET) and ScottishPower (SP) Energy Networks (Eastern Green Link 1, 2025). Construction of EGL1 began March 2025 and is scheduled to be operational by 2029 (Eastern Green Link 1, 2025). EGL2 is a 2GW HVDC subsea cable running 505km between Peterhead in Aberdeenshire and Drax in North Yorkshire and is operated as a joint venture between SSEN Transmission and NGET (Eastern Green Link 2, 2024a). Construction of EGL2 began in September 2024 and is scheduled to be operational by 2029. Construction dates of Morven North are not currently known. However, for the purposes of the assessment it has been assumed that construction for Morven North will commence in 2033 and have a duration of five years (as per the high-level indicative construction programme described in Volume 1, Chapter 3: Project Description). It is anticipated that EGL2 will be operational at the time of Morven North construction (Eastern Green Link 2, 2024b).

16.7.1.38 The proposed Eastern Green Link 3 (EGL3) Project is currently in the Consenting/Pre-Construction phase and consists of a subsea cable route from Peterhead, Aberdeenshire to Lincolnshire with an indicative construction date of 2028 and to be fully operational by 2033 (National Grid, 2024a). Similarly, the proposed Eastern Green Link 4 (EGL4) Project is currently in the Consenting/Pre-Construction phase and involves a subsea cable route from Fife to Norfolk, following the same timeline as EGL3 (National Grid, 2024b). The Eastern Green Link 5 (EGL5) Project, also in early development, will connect Scotland to England, making landfall at Anderby Creek in Lincolnshire (National Grid, 2025). As these projects are in Consenting/Pre-Construction phase, they are not

considered part of baseline for other sea users and communications but are considered further in the cumulative assessment in Section 16.13.

16.7.1.39 ELG2 intersects the Local Other Sea Users and Communications Study Area and the Morven North Boundary at its western corner (Figure 16.9). It is intended that a commercial “crossing and proximity agreement” on standard industry terms will be entered into with the cable operator. This is a formal arrangement that establishes the responsibilities and obligations of both parties and allows operations to be managed safely.

16.7.1.40 A review of additional active and disused subsea cables and pipelines has identified no other active cables or pipelines in the Local Other Sea Users and Communications Study Area (KIS-ORCA, 2025).

16.7.1.41 There are currently no subsea cables associated with OWFs located in the Local Other Sea Users and Communications Study Area. The closest Offshore Export Cable is the Kincardine OWF cable route is located approximately 47km north from the Local Other Sea Users and Communications Study Area.

16.7.1.42 There are no active or disused subsea cables located within the Local Other Sea Users and Communications Study Area (Figure 16.9). The nearest active cable is the Tampnet telecommunication cable located approximately 62km north from the Local Other Sea Users and Communications Study Area.

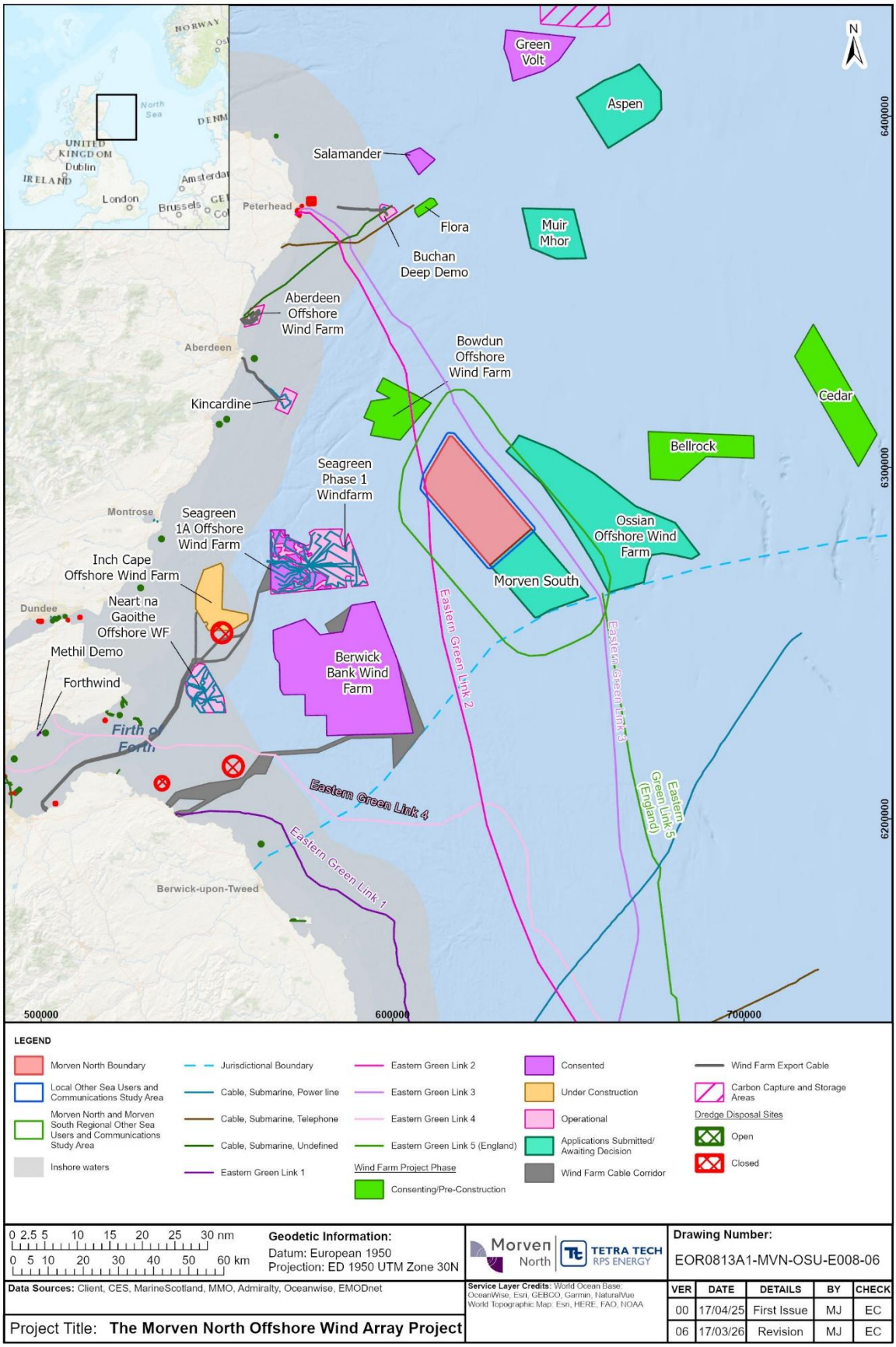

Figure 16.9: Offshore energy projects, disposal sites, carbon storage, and cables in the vicinity of the Other Sea Users and Communications Study Areas

Offshore Microwave Fixed Communication Links (OMFCL)

16.7.1.43 Offshore microwave fixed links are used in the oil and gas industry to facilitate communication between offshore oil and gas platforms. It should be noted that marine navigation, communications and position-fixing equipment is presented in Volume 2, Chapter 13: Shipping and Navigation.

16.7.1.44 Due to the location of Morven North (Figure 16.1), it is unlikely that microwave fixed telecommunications links between offshore oil and gas platforms cross the Local Other Sea Users and Communications Study Area. This can also be applied to radio networks in the vicinity of the Morven North Boundary, as no impacts have been identified during consultation with key stakeholders (Table 16.5). Following the feedback from stakeholder consultation, it is unlikely that microwaves could be impacted by Morven North. Microwave fixed telecommunications links have therefore not been considered further within this chapter.

Radar Early Warning Systems (REWS)

16.7.1.45 The physical presence of wind turbines has the potential to interfere with the performance of REWS, through effects such as high radar returns, shadowing (effectively a shadow is cast by the wind turbines, which creates a region where the radar beam is unable to fully illuminate an object), increased number of detections and false alarm/track generation. This system is sometimes used by oil and gas operators as an integral part of their anti-collision safety systems for their offshore platforms.

16.7.1.46 The nearest manned offshore platform is Forth Approaches (Well Registration Number: 26/04-1) and is located approximately 17km northwest from the Local Other Sea Users and Communications Study Area (Figure 16.8). Due to the distance and location of the Morven North Boundary, it is considered unlikely that REWS could be impacted by Morven North. REWS, have therefore not been considered further within this chapter.

Regional Other Sea Users and Communications Study Area

Marine aggregate extraction

16.7.1.47 Scotland possesses a significant marine sand and gravel resource. However, the marine aggregate industry has historically been underdeveloped due to the extensive availability of land-based supplies and more easily accessible marine resources elsewhere in UK waters. As of 2015, the Scottish Government has issued marine aggregate licences for two sites: one in the Firth of Forth and another in the Firth of Tay. The closest Marine Aggregate Area to the Local Other Sea Users and Communications Study Area is located approximately 115km west in the Firth of Tay (NMPi, 2024). There are no marine aggregate licenced areas within the Regional Other Sea Users and Communications Study Area (Figure 16.9). Marine aggregate extraction sites have, therefore, not been considered further within this chapter.

Marine disposal sites

16.7.1.48 A review of potential active or closed marine disposal sites identified no active or closed disposal sites within the Regional Other Sea Users and Communications Study Area (EMODnet, 2023). The closest marine disposal site to Morven North is located approximately 60km northwest of the Local Other Sea Users and Communications Study Area off Stonehaven (Dredge ID: FO003). Marine disposal sites have, therefore, not been considered further within this chapter.

Recreational diving

16.7.1.49 There are no recreational diving sites within the Regional Other Sea Users and Communications Study Area (Figure 16.5). The closest recreational diving site is located approximately 92km west of the Regional Other Sea Users and Communications Study Area. Therefore, as well as coastal and inshore SCUBA diving, diving further offshore is not considered further in this EIA Report. Details of wrecks, including non-charted wrecks is provided in Volume 2, Chapter 14: Marine Archaeology.

16.7.2 Future baseline scenario

16.7.2.1 The EIA Regulations require the following to be included within the EIA Report: "a description of the relevant aspects of the current state of the environment (baseline scenario) and an outline of the likely evolution thereof without implementation of the development as far as natural changes from the baseline scenario can be assessed with reasonable effort, on the basis of the availability of environmental information and scientific knowledge."

16.7.2.2 In the event that Morven North does not come forward, an assessment of the future baseline conditions has been carried out and is described within this section.

16.7.2.3 The future baseline scenario for recreational activities is considered unlikely to change substantially from that presented in Section 16.7 in the absence of Morven North. 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, however this is unlikely to represent a substantial change in the short term.

16.7.2.4 There is significant potential for growth in offshore wind energy in Scotland. The Scottish Government has outlined plans to increase offshore wind capacity up to 40GW by 2040 (Scottish Government, 2026a). In June 2020, Crown Estate Scotland (CES) initiated the first ScotWind Leasing Round for commercial scale offshore wind energy projects in Scottish waters (Scottish Government, 2020). Additional information and an overview of the ScotWind Leasing Round are available in in Volume 1, Chapter 4: Site Selection and Consideration of Reasonable Alternatives. As part of the ScotWind Leasing Round, 20 Plan Option lease agreements were offered, of which 17 development sites, including Morven North, with a combined generating capacity of nearly 27.6GW were awarded. Other renewable energy sources, such as wave and tidal energy devices, are currently in the early stages of research and development.

16.7.2.5 Oil and gas are crucial to Scotland, accounting for nearly 90% of the country's primary energy in 2015 (Scottish Government, 2021). Although the sector is considered a critical and integral part of the economy, future support for oil and gas programmes will be contingent on the sector's efforts to facilitate sustainable energy transitions (Scottish Government, 2021). The draft Energy Strategy and Just Transition Plan (2023) sets out a route map of actions the Scottish Government will take onboard to deliver a robust net zero energy system for Scotland to become a "*renewable powerhouse*" (Scottish Government, 2023). The draft plan states that Scotland must limit its dependence on oil and gas and that "Scotland is well positioned to do so in a way that ensures we have sufficient, secure and affordable energy to meet our needs, to support economic growth and to capture sustainable export opportunities" (Scottish Government, 2023). The draft Energy Strategy and Just Transition Plan consultation was closed on 09 May 2023 with 1,598 responses received. Although the Scottish Government had previously indicated that the final Plan would be published by summer 2024, it remains forthcoming and has not yet been formally issued.

16.7.2.6 Additionally, the INTOG round allowed developers to apply for seabed rights to develop offshore wind projects aimed at either reducing emissions from the North Sea oil and gas sector by supplying renewable electricity directly to oil and gas infrastructure (TOG) or creating small-scale innovative projects (IN) of 100MW or less. This unique offshore wind leasing is unlike any other previously conducted in the UK or globally (CES, 2023). Further details can be found in Volume 1, Chapter 2: Policy and Legislation. Therefore, as the shift towards greater utilisation of renewable energy sources continues, the baseline environment for oil and gas activity (including platforms, wells and pipelines) near the Morven North Boundary is unlikely to alter.

16.7.2.7 There is currently potential for marine aggregate extraction to increase, driven by the rising demand for aggregates in gravity bases for marine renewable energy infrastructure and coastal defence construction (Scottish Government, 2015a). However, marine aggregate extraction from the seabed last occurred before 2005 in two historical areas within the Firth of Forth and Firth of Tay Scottish Marine Region. There are currently no areas currently licenced for marine aggregate extraction and

therefore the baseline environment for marine aggregates mining activity in proximity to the Morven North Boundary is unlikely to change.

16.7.2.8 In the first licensing round by the NSTA, no CCS areas were identified or awarded in the vicinity of the Morven North Boundary. In 2023, the NSTA offered for award 21 carbon storage licences at offshore sites in the North Sea, which combined could store up to 30 million tonnes of CO_2 per year by 2030 (NSTA, 2023c). It is expected that as many as 100 storage licences may be required to reach net zero targets and the volume of applications received for the first round demonstrated the industry's desire for future CCS developments (NSTA, 2023c). Therefore, the future baseline environment for CCS is subject to gradual change as potential future licensing opportunities arise.

16.7.2.9 The future baseline scenario for offshore cables is subject to progressive change as new projects and sites are identified.

16.7.3 Data limitations and assumptions

16.7.3.1 The data sources used in this chapter are detailed in Table 16.8. The data used is the most up to date publicly available information which can be obtained from the applicable data sources as cited, and data that has been provided through consultation as detailed in Table 16.8. The data are therefore limited by what is available and by what has been made available, at the time of writing this assessment. It is considered that the data employed in the assessment are robust and sufficient for the purposes of the assessment of effects presented.

16.8 Methodology for assessment of effects

16.8.1 Overview

16.8.1.1 The other sea users and communications assessment of LSE[1] has followed the methodology set out in Volume 1, Chapter 6: EIA Methodology. specific to the other sea users and communications assessment of effects, 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 2019 (RYA, 2019);
- Assessment of Impact of Offshore Wind Energy Structures on the Marine Environment (Marine Institute, 2000);
- International Cable Protection Committee (ICPC) Recommendations:
  - Recommendation No.2-11B: Cable Routing and Reporting Criteria (ICPC, 2015);
  - Recommendation No.3-10C: Telecommunications Cable and Oil Pipeline/Power Cables Crossing Criteria (ICPC, 2014);
  - Recommendation No.13-2C: The Proximity of Offshore Renewable Wind Energy Installations and Submarine Cable Infrastructure in National Waters (ICPC, 2013).
- European Subsea Cables Association (ESCA) Guideline No. 6, The Proximity of Offshore Renewable Energy Installations and Submarine Cable Infrastructure in UK Waters (ESCA, 2023).
- The Crown Estate (TCE) and CES Agreements and Oil and Gas Licences (NSTA, 2025);
- Pipeline Crossing Agreement and Proximity Agreement Pack (Oil and Gas UK, 2021).
- TCE Guidance: Submarine cables and offshore renewable energy installation – Proximity study (TCE, 2012)

16.8.2 Assessment criteria

16.8.2.1 The approach for 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 describes the criteria applied in this chapter to assign values to the magnitude of potential impacts

and the sensitivity of the receptors. The terms used to define magnitude and sensitivity are based on those which are described in further detail in Volume 1, Chapter 6: EIA Methodology.

16.8.2.2 The criteria for defining magnitude in this chapter are outlined in Table 16.10 below.

Table 16.10: Definition of terms relating to the magnitude

Magnitude of impact	Definition
High	Total loss of ability to carry on activities and/or impact is of extended physical extent and/or long-term duration (i.e. total lifetime of project) and/or frequency of repetition is continuous and/or effect is not reversible for the project (Adverse).
Medium	Loss or alteration to significant portions of key components of current activity and/or physical extent of impact to moderate and/or medium term duration (i.e. operational period) and/or frequency of repetition is medium to continuous and/or effect is not reversible for project phase (Adverse).
Low	Minor shift away from baseline, leading to a reduction in level of activity that may be undertaken and/or physical extent of impact is low and/or short to medium term duration (i.e. construction period) and/or frequency of repetition is low to continuous and/or effect is not reversible for project phase (Adverse).
Negligible	Very slight change from baseline condition and/or physical extent of impact is negligible and/or short term duration (i.e. less than two years) and/or frequency of repetition is negligible to continuous and/or effect is reversible (Adverse).

16.8.2.3 The criteria for defining sensitivity in this chapter are outlined in Table 16.11 below.

Table 16.11: 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 potential or very limited potential for recovery.
High	High importance and rarity, international and/or national receptor and limited potential for recovery.
Medium	High or medium importance and rarity, regional receptor and high potential for recovery.
Low	Low or medium importance and rarity, local receptor and high potential for recovery.
Negligible	Very low importance and rarity, local receptor and very high potential for recovery.

16.8.2.4 The significance of the effect upon other sea users and communications is determined by correlating the magnitude of the impact and the sensitivity of the receptor. The particular method employed for this assessment is presented in Table 16.12.

16.8.2.5 In cases where a range is suggested for the significance of effect, there remains the possibility that this may span the significance threshold (i.e. the range is given as minor to moderate). In such cases the final significance is based upon the expert's professional judgement as to which outcome delineates the most likely effect, with an explanation as to why this is the case.

16.8.2.6 For the purposes of this assessment:

- a level of effect of moderate or more will be considered a “significant” effect in terms of the EIA Regulations;
- a level of effect of minor or less will be considered “not significant” in terms of the EIA Regulations.

Table 16.12: Matrix used for the assessment of the significance of the effect

Sensitivity of receptor	Magnitude of impact				
		Negligible	Low	Medium	High
	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

16.9 Parameters for assessment

16.9.1 Maximum Design Scenario

16.9.1.1 The Maximum Design Scenarios (MDSs) identified in Table 16.13 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 Volume 1, Chapter 3: Project Description. Effects of greater adverse significance are not predicted to arise should any other development scenario, based on details within the Project Design Envelope (PDE) (e.g. different infrastructure layout), to that assessed here, be taken forward in the final design scheme.

Table 16.13: Maximum Design Scenario considered for the assessment of potential impacts on other sea users and communications

C= construction, O= O&M, D= decommissioning phases

"✓" is used to denote the phase the potential impact can occur, "X" outlines there is no impact within this project phase

Potential impact	Phase			Maximum design scenario	Justification
	C	O	D		
Displacement of recreational activities (including recreational sailing, cruising and recreational fishing)	✓	✓	✓	**Construction phase** • Five year construction duration • Installation of up to 96 wind turbines with a minimum spacing of 1,000m, up to five Offshore Substation Platforms (OSPs), up to 424km inter-array cables with up to 5 cable crossings, up to 484km of interconnector cables with up to 5 cable crossings. • Construction safety zones: 500m safety zones around wind turbines and OSPs during their construction. 50m exclusion zone around each infrastructure during the construction phase where no construction works are taking place on that infrastructure (for example, where a wind turbine is incomplete or is in the process of being tested before commissioning). Rolling advisory clearance distances of 500m around vessels installing inter-array cables and interconnector cables. • Construction vessels: up to 3060 installation vessel movements (return trips) during construction (488 main installation/support vessels, 416 tug/anchor handlers, 162 cable lay installation and support vessels, 172 guard vessels, 156 survey vessels, 50 seabed preparation vessels, 1460 crew transfer vessels (CTVs), and 156 scour protection installation vessels). Maximum number of 41 construction vessels on site at any one time. **O&M phase** • 35 year O&M duration. • Presence of up to 96 wind turbines with a minimum spacing of 1,000m and up to five OSPs. • Operational safety zones: 500m around infrastructure (e.g. wind turbines) during periods of major maintenance. Rolling advisory	The greatest amount of the largest infrastructure and associated minimum spacing, greatest number of vessels and the greatest extent of advisory safety zones and advisory clearance distances, over the longest construction, operation and decommissioning periods represents the greatest potential for displacement of recreational activities.

Potential impact	Phase			Maximum design scenario	Justification
	C	O	D		
				clearance distances of 500m around cable repair vessels during maintenance. • Vessels: up to a total of 15 vessels on site at any given time with a total of 293 vessel return trips from local ports or transiting from a previously operational location. • Cable repair activities: – Inter-array cables: repair of up to 10km of cable in two events every five years (140km over project lifetime). – Interconnector cables: repair of up to 2km of cable in fourteen events every 2.5 years (28km over project lifetime). • Cable reburial activities: – Inter-array cables: reburial of up to 17km of cable per event with 1 event every 5 years (119km over project lifetime). – Interconnector cables: reburial of up to 19km of cable per event with 1 event every 5 years (133km over project lifetime). **Decommissioning phase** • Removal of up to 96 wind turbines and up to five OSPs. • Associated safety zones and advisory clearance distances, as per the construction phase. • Decommissioning vessel movements. • At the end of the operational lifetime of the project, it is anticipated that all structures above the seabed or ground level will be completely removed where this is feasible and practicable. This will be kept under review depending on current legislation and guidance requirements, best practice and other options may be required including cutting structures below the seabed. The decommissioning sequence will generally be the reverse of the construction sequence and involve similar types and numbers of vessels and equipment.	

Potential impact	Phase			Maximum design scenario	Justification
	C	O	D		
Impacts to cables or pipelines or restrictions on access to cables or pipelines	✓	✓	✓	As for "Displacement of recreational activities (including recreational sailing, cruising and recreational fishing)" – see above.	The greatest amount of the largest infrastructure and associated minimum spacing, greatest number of vessels and the greatest extent of advisory safety zones and advisory clearance distances, over the longest construction, operation and decommissioning periods represents the greatest potential for impacts to cables or pipelines or restriction on access to cables or pipelines.

16.10 Designed-in measures and mitigation

16.10.1.1 As part of the project design process, a number of measures (primary and tertiary) have been adopted to reduce the potential for impacts on other sea users and communications (see Table 16.14). For the purposes of the EIA process, the term "designed-in measure" is used to include the following measures (adapted from IEMA, 2016 and IEMA, 2024):

- Measures included as part of the design of Morven North. These include modifications to the location or design of Morven North, which are integrated into the application for consent. These measures are considered standard industry practice for this type of development and are referred to as primary mitigation in IEMA, 2016 and IEMA, 2024.
- Measures required to meet legislative requirements, or actions that are generally standard practice used to manage commonly occurring environmental effects. These measures are secured through the conditions of the marine licences and referred to as tertiary mitigation in IEMA, 2016 and IEMA, 2024.

16.10.1.2 As there is a commitment to implementing these measures, they are considered inherently part of the design of Morven North and have therefore been considered in the assessment presented in Section 16.10 (i.e. the determination of magnitude and therefore significance assumes implementation of these measures).

16.10.1.3 The requirement for any additional mitigation measures is dependent on the significance of the effects on other sea users and communications. Where significant effects have been identified, further mitigation measures (referred to as secondary mitigation in IEMA, 2016 and IEMA, 2024) have been identified to reduce the significance of effect to acceptable levels following the initial assessment. These are measures that could further prevent, reduce and, where possible, offset any adverse effects on the environment. These measures are set out, where relevant, in Section 16.10.

16.10.1.4 All designed-in measures and mitigation are detailed in Volume 3, Annex 6.3: EIA Commitments Register.

Table 16.14: Designed-in (primary and tertiary) measures adopted as part of Morven North

Reference number	Designed-in measures adopted as part of Morven North	Justification	Primary or tertiary
MM-7	Development of and adherence to a Navigation Safety Plan and Vessel Management Plan (NSPVMP).	A NSPVMP will be developed to reduce the risk introduced due to the presence of project vessels. The NSPVMP will describe the measures related to navigational safety, including information on Safety Zones, charting, construction buoyage, temporary lighting and marking and means of notification of Morven North activity to other sea users (e.g. via Notices to Mariners (NtMs)). It will confirm the types and numbers of vessels engaged in Morven North and consider vessel coordination, including indicative transit route planning. To ensure Morven North project vessels are suitably managed to	Primary

Reference number	Designed-in measures adopted as part of Morven North	Justification	Primary or tertiary
		reduce the likelihood of involvement in incidents and maximise the ability to assist in the event of a third-party incident. The NSPVMP will include the requirement for Morven North vessels to comply with international marine regulations as adopted by the Flag State, including the International Regulations for Preventing Collisions at Sea (COLREGs) (International Maritime Organization (IMO), 1972/77) and the International Convention for the Safety of Life at Sea (SOLAS) (IMO, 1974) through the NSPVMP.	
MM-11	Timely and efficient distribution of information via NtMs, Kingfisher notifications and other navigational warnings of the position and nature of works.	To ensure other sea users and marine infrastructure receptors are aware of Morven North, to allow relevant vessels to plan passage and thereby reduce potential for allision.	Tertiary
MM-12	Consultation with oil and gas operators and other energy infrastructure operators, as required.	To promote and maximise cooperation between parties and reduce spatial and temporal interactions between conflicting activities.	Tertiary
MM-20	Installation of infrastructure over or adjacent to existing cables will be subject to crossing or proximity agreements between Morven North and other parties, prior to the start of the construction phase.	To ensure close communication and planning between both parties to ensure disruption of activities is reduced.	Tertiary
MM-37	Appropriate marking on UKHO Admiralty charts.	To maximise awareness of Morven North, allowing other vessels, sea users and marine infrastructure receptors to plan activities in advance.	Tertiary

16.11 Assessment of significant effects

16.11.1.1 The potential impacts arising from the construction, O&M and decommissioning phases of Morven North are listed in Table 16.13, along with the MDS against which each potential impact has been assessed.

16.11.1.2 An assessment of the likely significance of the effects of Morven North on other sea users and communications receptors caused by each identified potential impact is given below.

16.11.2 Displacement of recreational activities (including recreational sailing, cruising and recreational fishing)

Construction phase

Magnitude of impact

16.11.2.1 The installation of infrastructure and the presence of safety zones and advisory clearance distances may result in the displacement of recreational craft and recreational fishing vessels from the Morven North Boundary.

16.11.2.2 Morven North may be constructed over a period of up to five years (Table 16.13). The spatial extent of the Morven North Boundary is 511.1km^2. There is also potential for safety zones and advisory clearance distances to extend 500m beyond this area. The MDS is represented by the installation of up to 96 wind turbines, up to 5 OSPs, up to 5 cable crossings of 424km inter-array cabling and up to 484km of interconnector cabling, with associated safety zones and/or advisory clearance distances. There may be up to 41 vessels on site within the Morven North Boundary (including site preparation activities) at any one time with up to 3060 installation vessel movements (return trips) during the construction phase. This includes 488 main installation/support vessels, 416 tug/anchor handlers, 162 cable lay installation and support vessels, 172 guard vessels, 156 survey vessels, 50 seabed preparation vessels, 1460 CTVs and 156 scour protection installation vessels. Construction activities are expected to be concentrated in specific areas at various times during the construction phase. Therefore, it is important to note that although 41 vessels may be present on site simultaneously, the impact and associated safety zones in place will not be uniformly distributed across the 511.1km^2 area of the Morven North Boundary.

16.11.2.3 As outlined in Section 16.7, various recreational activities take place near the Morven North Boundary. However, since most of these activities are concentrated closer to the shore, it is unlikely they will intersect with the Morven North Boundary. General sailing areas associated with ASYC, PSC and MSC are located 64km, 77km and 75km northwest and west of the Local Other Sea Users and Communications Study Area, respectively. The closest general boating area is located at Montrose, approximately 74km west Local Other Sea Users and Communications Study Area (NMPi, 2024).

16.11.2.4 The scope of the potential impact on boating activities will be relatively limited in the context of the available sailing and sea angling areas in the vicinity of Morven North. However, there may be potential for localised displacement of recreational marine craft from the 500m safety zones and/or advisory clearance distances around the infrastructure being actively installed within the Boundary. The impact of safety zones and advisory clearance distances in place during the construction period is mostly reversible as once each structure has been installed and commissioned these will be removed. The Morven North Boundary is 61km from the nearest coastline (Stonehaven), and accordingly the level of recreational activity within the Morven North Boundary is low, and recreational fishing is likely to be limited. The frequency of impact within the Morven North Boundary is therefore considered to be low.

16.11.2.5 As outlined in Table 16.14, NtMs will be promulgated throughout the construction phase. These notices will provide information on the location, nature and timing of installation activities related to the Morven North Boundary, and associated safety zones and advisory clearance distances, ensuring that recreational activities can be planned accordingly. The Applicant will also distribute Kingfisher Bulletins detailing the position and nature of works related to the Morven North Boundary.

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

Sensitivity of the receptor

16.11.2.7 As described in Section 16.7.1.9, the level of recreational activity within the Morven North Boundary is considered to be low. Recreational vessels are able to alter their route or transit (dependent on the target destination) past installation activities and associated safety zones and advisory clearance distances given the adequate available sea room around Morven North. In the absence of these options, alternative locations for sailing, motor cruising and sea angling are available, providing options if needed during installation works.

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

Significance of the effect

16.11.2.9 Overall, for recreational sea users, 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** significance, which is not significant in EIA terms.

Secondary mitigation and residual effect

16.11.2.10 No secondary mitigation measures for other sea users and communications are considered necessary because the likely effect in the absence of further mitigation (beyond the designed-in measures outlined in Table 16.14), is not significant in EIA terms.

Operations and maintenance phase

Magnitude of impact

16.11.2.11 The presence of infrastructure, including wind turbines and OSPs, and safety zones and advisory clearance distances associated with O&M activities, may result in the displacement of recreational craft and recreational fishing vessels.

16.11.2.12 Morven North will be operational for a period of up to 35 years. The spatial extent of the Morven North Boundary is 511.1km^2 and there is also potential for temporary 500m safety zones and advisory clearance distances around infrastructure such as wind turbines during periods of major maintenance activities. There may be up to a total of 15 vessels, comprising of eight CTVs, two Jack-up vessels, two cable repair vessels, and three other vessels on site at any given time with a total of 293 vessel return trips from local ports or transiting from a previously operational location. Major maintenance activities are expected to be concentrated in specific areas at various times during the O&M phase. Therefore, it is important to note that although 15 vessels may be present on site simultaneously, the impact and associated safety zones in place will not be uniformly distributed across the 511.1km^2 area of the Morven North Boundary.

16.11.2.13 As outlined in Section 16.7, various recreational activities take place near the Morven North Boundary. However, since most of these activities are concentrated closer to the shore, it is unlikely they will intersect with the Morven North Boundary. The scope of the impact on boating activities will be relatively limited in the context of the available sailing and sea angling areas in the vicinity of Morven North. In addition, the minimum 1000m spacing of the wind turbines would allow access for small vessels transiting within the Morven North Boundary. However, there may be potential for localised displacement of recreational marine craft around installed structures and from the 500m safety zones and/or advisory clearance distances deployed around the infrastructure during periods of major maintenance activities. The Morven North Boundary is 61km from the nearest coastline (Stonehaven), and accordingly the level of recreational activity within the Morven North Boundary is low, and recreational fishing is likely to be limited. The frequency of impact within the Morven North Boundary is therefore considered to be low.

16.11.2.14 As outlined in Table 16.14, NtMs will be promulgated throughout the O&M phase. These notices will provide information on the location, nature and timing of maintenance activities related to

Morven North, and associated safety zones and advisory clearance distances, ensuring that recreational activities can be planned accordingly. The Applicant will also distribute Kingfisher Bulletins detailing the position and nature of works related to Morven North.

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

Sensitivity of the receptor

16.11.2.16 As described in Section 16.7.1.9, the level of recreational activity within the Morven North Boundary is considered to be low. Recreational vessels are able to alter their route or transit (dependent on the target destination) past installation activities and associated safety zones and advisory clearance distances given the adequate available sea room around the Morven North Boundary. In the absence of these options, alternative locations for sailing, motor cruising and sea angling are available, providing options if needed during maintenance works.

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

Significance of the effect

16.11.2.18 Overall, for recreational sea users, 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** significance, which is not significant in EIA terms.

Secondary mitigation and residual effect

16.11.2.19 No secondary mitigation measures for other sea users and communications are considered necessary because the likely effect in the absence of further mitigation (beyond the designed-in measures outlined in Table 16.14), is not significant in EIA terms.

Decommissioning phase

Magnitude of impact

16.11.2.20 The effects of decommissioning activities are expected to be the same or similar to the effects from construction. The operational lifetime of Morven North is expected to be 35 years. At the end of the operational lifetime of Morven North, it is expected that any displacement of recreational activities would gradually decrease from the operational MDS as structures will be removed and any driven piles or anchors will be cut just below the seabed level and foundations removed. This will be continuously reviewed in accordance with current legislation and guidance requirements, and best practices and other options may be necessary. The decommissioning process will typically follow the reverse order of the construction sequence, utilising similar vessel types, quantities and equipment.

16.11.2.21 As outlined in Table 16.14, NtMs will be promulgated throughout the decommissioning phase. These notices will provide information on the location, nature and timing of decommissioning activities related to Morven North, and associated safety zones and advisory clearance distances, ensuring that recreational activities can be planned accordingly. The Applicant will also distribute Kingfisher Bulletins detailing the position and nature of works related to Morven North.

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

Sensitivity of the receptor

16.11.2.23 As described in Section 16.7.1.9, the level of recreational activity within the Morven North Boundary is considered to be low. Recreational vessels are able to alter their route or transit (dependent on the target destination) past installed structures, decommissioning activities and associated safety zones and advisory clearance distances given the adequate available sea room around the Morven North Boundary. In the absence of these options, alternative locations for sailing, motor cruising and sea angling are available, providing options if needed during decommissioning works.

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

Significance of the effect

16.11.2.25 Overall, for recreational sea users, 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** significance, which is not significant in EIA terms.

Secondary mitigation and residual effect

16.11.2.26 No secondary mitigation measures for other sea users and communications are considered necessary because the likely effect in the absence of further mitigation (beyond the designed-in measures outlined in Table 16.14), is not significant in EIA terms.

16.11.3 Impacts to cables or pipelines or restrictions on access to cables or pipelines

Construction phase

Magnitude of impact

16.11.3.1 Construction, O&M, and decommissioning of wind turbines, OSPs and cables may lead to impacts on cables or pipelines, or restriction of access to cables and pipelines. The MDS is represented by the greatest amount of the largest infrastructure and associated minimum spacing and the greatest extent of safety zones and advisory clearance distances, over the longest construction, O&M, and decommissioning phases. This is summarised in Table 16.13.

16.11.3.2 The installation of infrastructure and presence of associated safety zones and advisory clearance distances during the Morven North construction phase may impact upon cables or pipelines or restrict access to existing cables and pipelines. The impact of safety zones is mostly reversible as once each structure has been installed and commissioned these will be removed.

16.11.3.3 As described in Section 16.7.1.39, there is one power cable (EGL2) that intersects the Local Other Sea Users and Communications Study Area. This cable is currently under construction with plans to be operational by 2029, therefore it is anticipated that EGL2 will be operational at the time of Morven North construction. The MDS includes for a number of cable crossings within the Morven North Boundary, as set out in Table 16.13. There are no pipelines within the Local Other Sea Users and Communications Study Area.

16.11.3.4 A cable crossing and proximity commercial agreement will be established with the relevant cable operator to minimise the potential for any impact in accordance with recognised industry good practice (Table 16.14). The agreement will ensure close communication and planning between both parties to ensure disruption of activities is minimised and allows construction to be managed safely with the ability of the cable operator to access their infrastructure during the construction of Morven North as far as practical. Additionally, as outlined in Table 16.14, NtMs will be promulgated throughout the construction phase. These notices will provide information on the location, nature and timing of installation activities related to Morven North, and associated safety zones and advisory clearance distances, ensuring that maintenance works on cables can be planned

accordingly. The Applicant will also distribute Kingfisher Bulletins detailing the position and nature of works related to Morven North.

16.11.3.5 The potential impact is predicted to affect the receptor directly and be of local spatial extent, short to medium term duration, intermittent and medium reversibility. The magnitude is therefore considered to be low.

Sensitivity of the receptor

16.11.3.6 Restriction of access to an active cable for inspection and maintenance activities could be critical to the operator of that cable. However, any potential impacts to cables will be mitigated through crossing and proximity agreements, which are common across the UKCS, to ensure communications between both parties and that loss of access is minimised. The Applicant will account for cable infrastructure within the Morven North Boundary at the detailed design stage with regard to the positioning of the wind turbines, OSPs and cable routing.

16.11.3.7 It is anticipated that third-party vessel operations on cables in the vicinity of Morven North will be aware of the project construction activities and they will be able to plan and re-route with minimal interference to access.

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

Significance of the effect

16.11.3.9 Overall, for cable infrastructure, 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.

Secondary mitigation and residual effect

16.11.3.10 No secondary mitigation measures for other sea users and communications are considered necessary because the likely effect in the absence of further mitigation (beyond the designed-in measures outlined in Table 16.14), is not significant in EIA terms.

Operations and maintenance phase

Magnitude of impact

16.11.3.11 The presence and maintenance of infrastructure and associated safety zones and advisory clearance distances during the Morven North O&M phase may impact upon cables or pipelines or restrict access to cables and pipelines. The impact of safety zones is mostly reversible as following the completion of any maintenance works these will be removed.

16.11.3.12 As described in Section 16.7.1.39, there is one power cable (EGL2) that intersects the Local Other Sea Users and Communications Study Area. This cable is currently under construction with plans to be operational by 2029, therefore it is anticipated that EGL2 will be operational at the time of Morven North construction. The MDS includes for a number of cable crossings within the Morven North Boundary, as set out in Table 16.13. There are no pipelines within the Local Other Sea Users and Communications Study Area.

16.11.3.13 A cable crossing and proximity commercial agreement will be established with the relevant cable operator to minimise the potential for any impact in accordance with recognised industry good practice (Table 16.14). The agreement will ensure close communication and planning between both parties to ensure disruption of activities is minimised and allows O&M activities to be managed safely with the ability of the cable operator to access their infrastructure during periods of major maintenance activities of the Morven North as far as practical. Additionally, as outlined in Table 16.14, NtMs will be promulgated throughout the O&M phase. These notices will provide information on the location, nature and timing of major maintenance activities related to Morven North, and

associated safety zones and advisory clearance distances, ensuring that maintenance works on cables can be planned accordingly. The Applicant will also distribute Kingfisher Bulletins detailing the position and nature of works related to Morven North.

16.11.3.14 Any loss of access to cables associated with temporary safety zones and advisory clearance distances during the O&M phase is considered to be limited in spatial extent and infrequent in nature. Any loss of access to cables associated with the presence of installed structures would be considered in the crossing and proximity agreement to the extent that such a scenario would not be an impediment to operations.

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

Sensitivity of the receptor

16.11.3.16 Restriction of access to an active cable for inspection and maintenance activities could be critical to the operator of that cable. However, any potential impacts to cables will be mitigated through crossing and proximity agreements, which are common across the UKCS, to ensure communications between both parties and that loss of access is minimised.

16.11.3.17 It is anticipated that third-party vessel operations on cables in the vicinity of Morven North will be aware of the project maintenance activities and they will be able to plan and re-route with minimal interference to access.

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

Significance of the effect

16.11.3.19 Overall, for cable infrastructure, 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.

Secondary mitigation and residual effect

16.11.3.20 No secondary mitigation measures for other sea users and communications are considered necessary because the likely effect in the absence of further mitigation (beyond the designed-in measures outlined in Table 16.14), is not significant in EIA terms.

Decommissioning phase

Magnitude of impact

16.11.3.21 The effects of decommissioning activities are expected to be the same or similar to the effects from construction. The operational lifetime of Morven North is expected to be 35 years. At the end of the operational lifetime of Morven North, it is expected that any displacement of recreational activities would gradually decrease from the operational MDS as structures will be removed and any driven piles or anchors will be cut just below the seabed level with the foundation removed. This will be continuously reviewed in accordance with current legislation and guidance requirements, and best practices and other options may be necessary. The decommissioning process will typically follow the reverse order of the construction sequence, utilising similar vessel types, quantities and equipment.

16.11.3.22 As outlined in Table 16.14, NtMs will be promulgated throughout the decommissioning phase. These notices will provide information on the location, nature and timing of decommissioning activities related to Morven North, and associated safety zones and advisory clearance distances, ensuring that maintenance works on cables can be planned accordingly. The Applicant will also distribute Kingfisher Bulletins detailing the position and nature of works related to Morven North.

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

Sensitivity of the receptor

16.11.3.24 Restriction of access to an active cable for inspection and maintenance activities could be critical to the operator of that cable. However, any potential impacts to cables will be mitigated through crossing and proximity agreements, which are common across the UKCS, to ensure communications between both parties and that loss of access is minimised.

16.11.3.25 It is anticipated that third-party vessel operations on cables in the vicinity of Morven North will be aware of the project decommissioning activities and they will be able to plan and re-route with minimal interference to access.

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

Significance of the effect

16.11.3.27 Overall, for cable infrastructure, 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.

Secondary mitigation and residual effect

16.11.3.28 No secondary mitigation measures for other sea users and communications are considered necessary because the likely effect in the absence of further mitigation (beyond the designed-in measures outlined in Table 16.14), is not significant in EIA terms.

16.11.4 Proposed monitoring

16.11.4.1 No other sea users and communications monitoring to test the predictions made within the assessment of likely significant effects on other sea users and communications is considered necessary.

16.12 Whole project assessment and Cumulative Effects Assessment methodology

16.12.1 Methodology

16.12.1.1 The Morven Programme comprises four distinct projects: Morven North, Morven South, Morven Hawthorn Pit Grid Connection Project (MHPGC Project), and Morven Branxton Area Grid Connection Project (MBAGC Project).

16.12.1.2 The following assessment scenarios have been considered to identify the LSE[1] of Morven North in-combination with other projects on the same receptor, as follows (and summarised in Table 16.15):

- Whole project assessment: to identify the potential impacts associated with Morven North together with each grid connection option in turn, (Scenario 1: MHPGC and Scenario 2: MBAGC Project), each of which would comprise a “whole project”;
- Morven Programme assessment: to identify potential impacts associated with all four components of the Morven Programme together with other relevant projects, plans and activities (Scenario 3);
- Cumulative Effects Assessment (CEA): to identify the potential impacts associated with Morven North, together with other relevant projects, plans and activities, including other components of the Morven Programme, using a tiered approach (Scenario 4).

16.12.1.3 The whole project assessment and CEA have been undertaken in accordance with the methodology described in Volume 1, Chapter 6: EIA methodology.

Table 16.15: Scenarios to be considered in the Morven North whole project assessment and Cumulative Effects Assessment for other sea users and communications

Whole project assessment		Morven Programme assessment (Offshore Ornithology and Shipping and Navigation chapters only)	Cumulative effects assessment
Scenario 1	**Scenario 2**	**Scenario 3**	**Scenario 4**
Morven North + MHPGC Project	Morven North + MBAGC Project	Morven North + Morven South + MHPGC Project + MBAGC Project	Morven North + Tier 1, Tier 2 and Tier 3 Plans/Projects screened in

16.12.1.4 For the purposes of this other sea users and communications chapter, Scenarios 1, 2, and 4 have been taken forward for assessment; Scenario 3 has not been included as it is not applicable to this chapter. As discussed in Volume 1, Chapter 6: EIA Methodology, the Morven Programme assessment (Scenario 3) is only required for specific chapters to provide further context to, and to support, the conclusions of the CEA scenario (Scenario 4), in agreement with the relevant stakeholders for these topics. As Scenario 3 does not form the basis of the CEA conclusions, it is considered a supplementary assessment to the CEA scenario (Scenario 4) for these specific topics. The approach to CEA presented in this other sea users and communications chapter complies with the requirements under the EIA Regulations to assess the LSE[1] on the environment arising from a project cumulatively with other relevant plans, projects and activities, and no supplementary assessment of the Morven Programme (Scenario 3) is required or has been requested by relevant stakeholders with regard to other sea users and communications.

16.12.1.5 The projects and plans selected as relevant to the CEA presented within this chapter are based upon the results of a screening exercise (see Volume 3, Appendix 6.1: Cumulative Effects Screening). Each project or plan 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.

16.12.1.6 In undertaking the CEA for Morven North, it should be noted that other projects and plans under consideration will have differing potential for proceeding to an operational stage and hence a differing potential to ultimately contribute to a cumulative impact alongside Morven North. Therefore, a tiered approach has been adopted, whereby all third-party projects and plans considered have been allocated into 'tiers' reflecting their current stage within the planning and development process. This provides a framework for placing relative weight upon the potential for each project/plan included in the CEA to ultimately be realised, based upon the project/plan's current stage of maturity and certainty in the project/plan's parameters. The tiered approach utilised within the Morven North CEA employs the following tiers:

- Tier 1 assessment – Existing developments either built (operational) or under construction[3]; approved developments awaiting implementation; and permitted/submitted application(s), but not yet determined, plus Morven South.
- Tier 2 assessment – All plans/projects assessed under Tier 1, plus MHPGC Project, and plans/projects where a Scoping Report has been submitted and is in the public domain.
- Tier 3 assessment – All plans/projects assessed under Tier 1 and 2, plus MBAGC Project, and plans/projects that are reasonably foreseeable (e.g. projects identified in development plans, projects in other plans and programmes, offshore renewable energy projects that have a Crown Estate Scotland Lease Option Agreement).

16.12.1.7 The specific projects and plans screened into the CEA for other sea users and communications are outlined in Table 16.17 and shown in Figure 16.10.

16.12.1.8 All impacts considered for the Morven North alone assessment have been taken forward to the whole project and CEA assessment.

[3] Note that existing developments are included in Tier 1 CEA long list but are generally screened out of the CEA assessments, aside from the following exceptions:

1) Existing developments which were not present at the time of baseline characterisation, where a potential cumulative impact-receptor pathway has been identified.

2) Existing developments are screened into tier 1 assessments for specific topics where there is a large conceptual, temporal and spatial overlap between project impacts. In these instances, the potential for ongoing effects through cumulative impact-receptor pathways throughout project lifetime, across the development phases, means that they are considered within quantitative assessment for these topic CEAs (e.g., offshore ornithology assessments consider the cumulative effects of operational offshore wind farms).

Table 16.16: List of other projects and plans considered within the Cumulative Effects Assessment for other sea users and communications

Project/plan	Status	Distance from Morven North (km)	Description of project/plan	Estimated dates of construction (If applicable)	Estimated dates of operation (If applicable)	Overlap with Morven North
Tier 1						
Morven South Offshore Wind Array Project	Application submitted/awaiting decision	0	Morven South Offshore Wind Array Project is proposed for up to 95 wind turbines at an anticipated output capacity of 1500MW.	2033 - 2037[4]	2038 onwards	Predicted project construction, O&M and decommissioning phases overlaps with Morven North construction, O&M and decommissioning phases
Ossian OWF	Application submitted/Awaiting decision	9	The Ossian Floating Wind project is proposed for up to 3,610MW capacity.	2029 - 2038	2039 onwards	Predicted project construction and O&M phases overlaps with Morven North construction and O&M phases
Seagreen 1 OWF	Operational	25	Seagreen 1 OWF consists of up to 114 wind turbines at a capacity of 1,075MW.	-	Present - 2048	Project O&M phase overlaps with Morven North construction and O&M phases

[4] Construction dates of Morven South are not currently known. However, for the purposes of the assessment it has been assumed that construction for Morven South will commence in 2033 and have a duration of five years (as per the high-level indicative construction programme described in Volume 1, Chapter 3: Project Description).

Project/plan	Status	Distance from Morven North (km)	Description of project/plan	Estimated dates of construction (If applicable)	Estimated dates of operation (If applicable)	Overlap with Morven North
Seagreen Phase 1 - OWF Export Cable	Operational	40	Seagreen Phase 1 export cable is consented for up to 6 cables with no maximum capacity.	-	Present - 2048	Project O&M phase overlaps with Morven North construction and O&M phases
Seagreen 1A OWF	Consented	41	Seagreen 1A OWF is consented for up to 36 wind turbines with no maximum generating capacity.	2030 - 2031	2032 onwards	Project O&M phase overlaps with Morven North construction and O&M phases
Seagreen 1A - OWF Export Cable	Under Construction	41	Seagreen Phase 1A export cable is consented for up to 6 cables with no maximum capacity.	2025	2026 onwards	Project O&M phase overlaps with Morven North construction and O&M phases
Berwick Bank OWF	Consented	32	Berwick Bank OWF is proposed for up to 307 wind turbines with a capacity of up to 4,100MW.	2025 - 2032	2033 onwards	Predicted project O&M phase overlaps with Morven North construction and O&M phases
Cambois Connection	Under Construction	32	Cambois connection is an offshore export cable connecting Berwick Bank to	2025 - 2032	2033 onwards	Predicted project O&M phase overlaps with Morven North construction and O&M phases

Project/plan	Status	Distance from Morven North (km)	Description of project/plan	Estimated dates of construction (If applicable)	Estimated dates of operation (If applicable)	Overlap with Morven North
			the coast in Northumberland.			
Kincardine OWF	Operational	43	Kincardine OWF consists of 6 wind turbines at a capacity of 50MW.	-	Present - 2046	Project O&M phase overlaps with Morven North construction and O&M phases
Kincardine - OWF Export Cable	Operational	47	Kincardine export cable consists of 2 cables at a capacity of 33kV.	-	Present - 2046	Project O&M phase overlaps with Morven North construction and O&M phases
Eastern Green Link 2	Construction/Recommission	0	2 GW power cable running 505km between Peterhead in Aberdeenshire and Drax in North Yorkshire. Operated as a joint venture between SSEN Transmission and NGET.	2025- 2029	2030 onwards	Project O&M phase overlaps with Morven North construction and O&M phases
Navy Department X5641: Forth Outer	Operational	46	Military practice area - Submarine exercise area, practice and exercise area (surface fleet).	-	-	Project O&M phase overlaps with the Morven North construction and O&M phases.

Project/plan	Status	Distance from Morven North (km)	Description of project/plan	Estimated dates of construction (If applicable)	Estimated dates of operation (If applicable)	Overlap with Morven North
D613A - AIAA (EGD613A Central Complex)	Operational	0	Military practice and exercise area. Area of Intense Aerial Activity.	-	-	Project O&M phase overlaps with the Morven North construction and O&M phases.
D613B - AIAA (EGD613B Central Complex)	Operational	0	Military practice and exercise area. Area of Intense Aerial Activity.	-	-	Project O&M phase overlaps with the Morven North construction and O&M phases.
D613C - AIAA (EGD613C Central Complex)	Operational	0	Military practice and exercise area. Area of Intense Aerial Activity.	-	-	Project O&M phase overlaps with the Morven North construction and O&M phases.
D613D - AIAA (EGD613D Central Complex)	Operational	17	Military practice and exercise area. Area of Intense Aerial Activity.	-	-	Project O&M phase overlaps with the Morven North construction and O&M phases.
Tier 2						
Morven Hawthorn Pit Grid Connection Project (hereafter "MHPGC Project")	Consenting/Pre-Construction	0	Potential cable route of Morven North and Morven South.	Not available	Not available	Project construction phase, O&M and decommissioning phases may overlap with Morven North construction, O&M and decommissioning phases.
Ossian – OWF Export Cable	Consenting/Pre-Construction	9	Maximum 6 offshore export cables, no indicative construction start date or transmission capacity mentioned.	-	-	Potential for project construction and O&M phase to overlap with Morven North construction and O&M phases.

Project/plan	Status	Distance from Morven North (km)	Description of project/plan	Estimated dates of construction (If applicable)	Estimated dates of operation (If applicable)	Overlap with Morven North
Bellrock OWF	Consenting/Pre-Construction	37	Bellrock Floating OWF is proposed for up to 132 wind turbines at a capacity of 1,800MW.	2027 - 2030	2031 onwards	Predicted project O&M phase overlaps with Morven North construction and O&M phases.
Bowdun OWF	Consenting/Pre-Construction	10	Bowdun OWF is proposed for up to 67 wind turbines at a capacity of 1,008MW.	2029 - 2033	2034 onwards	Predicted project construction and O&M phases overlap with Morven North construction and O&M phases.
Eastern Green Link 3	Consenting/Pre-Construction	5	Proposed power cable from Peterhead, Aberdeenshire to Lincolnshire.	2028 - 2033	2034 onwards	Predicted project construction and O&M phases overlap with Morven North construction and O&M phases.
Eastern Green Link 5	Consenting/Pre-Construction	27	Proposed power cable from Scotland to England.	2030 - 2034	2035 onwards	Predicted project construction and O&M phases overlap with Morven North construction and O&M phases.
Tier 3						
Morven Branxton Area Grid Connection project (hereafter "MBAGC Project")[5]	In Planning	0	Potential cable route of Morven North and Morven South.	Not available	Not available	Project construction phase, O&M and decommissioning phases may overlap with Morven North construction, O&M and decommissioning phases.

[5] It should be noted that MBAGC Project does not yet have a defined boundary and therefore cannot be shown on Figure 16.10.

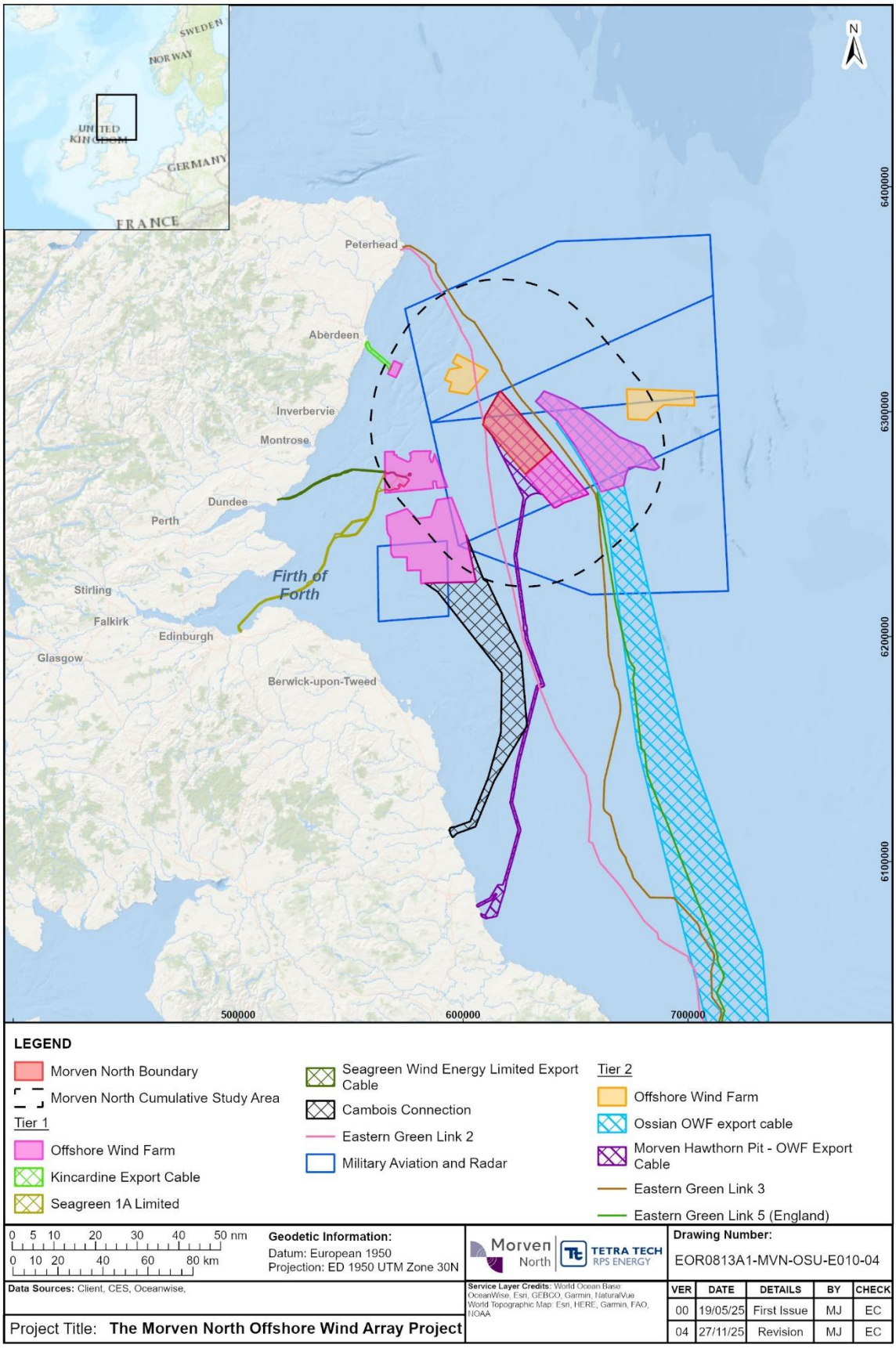

Figure 16.10: Other projects/plans screened into the cumulative effects assessment for other sea users and communications

16.12.2 Maximum Design Scenario

16.12.2.1 The cumulative MDSs identified in Table 16.17 have been selected as those having the potential to result in the greatest potential cumulative effect on an identified receptor or receptor group. The cumulative MDSs have been based on the Morven North alone assessment MDS (Table 16.13), the Morven South alone assessment MDS, the Project Description contained within the MHPGC Project Scoping Report and project information available for MBAGC Project, as well as publicly available information on other third-party projects and plans that have been screened into the CEA (Table 16.17).Where applicable, the Morven South alone assessment MDS, the Project Description contained within the MHPGC Project Scoping Report and project information available for MBAGC Project have also informed the cumulative MDSs outlined in Table 16.17.

Table 16.17: Maximum Design Scenario considered for the assessment of potential whole project and cumulative effects on other sea users and communications

C= Construction, O= Operations and maintenance, D= Decommissioning phases

"✓" is used to denote the phase the potential impact can occur, "X" outlines there is no impact within this project phase

Potential cumulative effect	Phase			Maximum Design Scenario	Justification
	C	O	D		
Displacement of recreational activities (including recreational sailing, cruising and recreational fishing).	✓	✓	✓	Scenario 1 MDS as described for Morven North (Table 16.13), assessed cumulatively with MHPGC Project. Scenario 2 MDS as described for Morven North (Table 16.13), assessed cumulatively with MBAGC Project. Scenario 4 MDS as described for Morven North (Table 16.13), assessed cumulatively with the following other projects and plans: Tier 1 • Morven South • Ossian OWF • Seagreen 1 OWF • Seagreen Phase 1 – OWF export cable • Seagreen 1A OWF • Seagreen 1A – OWF export cable • Berwick Bank OWF • Cambois Connection • Kincardine OWF • Kincardine – OWF export cable	Outcome of the CEA will be greatest when the activities of other projects/plans occur within the same recreational area creating the greatest area that will be restricted at any one time for any single receptor.

Potential cumulative effect	Phase			Maximum Design Scenario	Justification
	C	O	D		
				• EGL2 • Navy Department X5641: Forth Outer • D613A - AIAA (EGD613A Central Complex) • D613B - AIAA (EGD613B Central Complex) • D613C - AIAA (EGD613C Central Complex) • D613D - AIAA (EGD613D Central Complex) Tier 2 • MHPGC Project • Ossian – OWF export cable • Bellrock OWF • Bowdun OWF • EGL3 • EGL5 Tier 3 • MBAGC Project	
Impacts to cables or pipelines or restrictions on access to cables or pipelines	✓	✓	✓	Scenario 1 MDS as described for Morven North (Table 16.13), assessed cumulatively with MHPGC Project. Scenario 2 MDS as described for Morven North (Table 16.13), assessed cumulatively with MBAGC Project.	Outcome of the CEA will be greatest when the activities of other projects/plans occur concurrently within the same area creating the greatest area that will be restricted at any one time for any single receptor.

Potential cumulative effect	Phase			Maximum Design Scenario	Justification
	C	O	D		
				Scenario 4 MDS as described for Morven North (Table 16.13), assessed cumulatively with the following other projects and plans: Tier 1 • Morven South • Ossian OWF • Seagreen 1 OWF • Seagreen Phase 1 – OWF export cable • Seagreen 1A OWF • Seagreen 1A – OWF export cable • Berwick Bank OWF • Cambois Connection • Kincardine OWF • Kincardine – OWF export cable • EGL2 • Navy Department X5641: Forth Outer • D613A - AIAA (EGD613A Central Complex) • D613B - AIAA (EGD613B Central Complex) • D613C - AIAA (EGD613C Central Complex) • D613D - AIAA (EGD613D Central Complex) Tier 2	

Potential cumulative effect	Phase			Maximum Design Scenario	Justification
	C	O	D		
				• MHPGC Project • Ossian – OWF export cable • Bellrock OWF • Bowdun OWF • EGL3 • EGL5 Tier 3 • MBAGC Project	

16.13 Whole project assessment and Cumulative Effects Assessment

16.13.1 Overview

16.13.1.1 A description of the significance of whole project and cumulative effects upon other sea users and communications receptors arising from each identified impact is given below. The whole project assessment and CEA for Morven North is presented in Table 16.18 to Table 16.21 (one for each potential impact).

16.13.1.2 The Other Sea Users and Communications Cumulative Study Area (Figure 16.10) for Morven North differs from the Morven North alone assessment study areas as it takes into account projects/plans within 50km of the Morven North Boundary. This range presents a precautionary maximum distance at which effects from increased SSCs could occur. This encompasses potential overlap between other projects.

Displacement of recreational activities (including recreational sailing, cruising and recreational fishing)

16.13.1.3 The summary of the whole project assessment for displacement of recreational activities (including recreational sailing, cruising and recreational fishing) is presented in Table 16.18, and cumulative effects assessment for displacement of recreational activities (including recreational sailing, cruising and recreational fishing) is presented in Table 16.19.

Table 16.18: Morven North whole project assessment for displacement of recreational activities (including recreational sailing, cruising and recreational fishing)

Whole project assessment		
	Scenario 1: Morven North + MHPGC Project	**Scenario 2: Morven North + MBAGC Project**
Construction phase		
Magnitude of impact	The whole project assessment for Scenario 1 considers Morven North together with MHPGC Project. The spatial extent of the potential impact will be relatively small in the context of the available sailing, motor cruising and recreational fishing area in Scottish waters of the northern North Sea, with the potential for localised displacement of recreational craft from the individual safety zones and/or advisory clearance distances associated with the construction of each project. The whole project impact is predicted to be of regional spatial extent, short to medium term duration, intermittent and low reversibility. It is predicted that the impact will affect the receptor directly. The magnitude is therefore, considered to be low.	The whole project assessment for Scenario 2 considers Morven North together with MBAGC Project. Please see Scenario 1 in Table 16.18. The whole project impact is predicted to be of regional spatial extent, short to medium term duration, intermittent and low reversibility. It is predicted that the impact will affect the receptor directly. The magnitude is therefore, considered to be low.
Sensitivity of receptor	Recreational activities in the vicinity of the projects within offshore and inshore areas of Scottish waters in the northern North Sea are low to moderate intensity, as described in Section 16.11.2. NtMs will be published regularly during the construction phase of each project in line with industry standard, advising of the location and nature of construction works, ensuring that recreational activities can be planned accordingly. There are other locations available for recreational sailing, motor cruising and fishing in Scottish waters of the northern North Sea such that alternatives are available if required during the construction phase. The receptor is deemed to be of low vulnerability, high recoverability and low value. The sensitivity of the receptor is therefore, considered to be low.	

Whole project assessment		
Further mitigation and residual significance	No secondary mitigation measures for other sea users and communications are considered necessary because the likely effect in the absence of further mitigation (beyond the designed-in measures outlined in Table 16.14), is not significant in EIA terms.	
Operations and maintenance phase		
Magnitude of impact	The spatial extent of the potential impact will be relatively small in the context of the available sailing, motor cruising and recreational fishing area in Scottish waters of the northern North Sea, with the potential for localised displacement of recreational craft from the individual safety zones and/or advisory clearance distances associated with maintenance activities. The whole project impact is predicted to be of regional spatial extent, short to medium term duration, intermittent and low reversibility. It is predicted that the impact will affect the receptor directly. The magnitude is therefore, considered to be low.	Please see O&M phase for Scenario 1 in Table 16.18. The whole project impact is predicted to be of regional spatial extent, short to medium term duration, intermittent and low reversibility. It is predicted that the impact will affect the receptor directly. The magnitude is therefore, considered to be low.
Sensitivity of receptor	Recreational activities in the vicinity of the projects within offshore and inshore areas of Scottish waters in the northern North Sea are low to moderate intensity, as described in Section 16.11.2. NtMs will be published regularly during the O&M phase of each project in line with industry standard, advising of the location and nature of any maintenance works, ensuring that recreational activities can be planned accordingly. There are other locations available for recreational sailing, motor cruising and fishing in the North Sea such that alternatives are available if required during the O&M phase. The receptor is deemed to be of low vulnerability, high recoverability and low value. The sensitivity of the receptor is therefore, considered to be low.	
Significance of effect	Overall, the magnitude of the whole project impact is deemed to be low and the sensitivity of the receptor is considered to be low. The whole project effect will, therefore, be of **negligible** significance, which is not significant in EIA terms.	Overall, the magnitude of the whole project impact is deemed to be low and the sensitivity of the receptor is considered to be low. The whole project effect will, therefore, be of **negligible** significance, which is not significant in EIA terms.
Further mitigation and residual significance	No secondary mitigation measures for other sea users and communications are considered necessary because the likely effect in the absence of further mitigation (beyond the designed-in measures outlined in Table 16.14), is not significant in EIA terms.	

Whole project assessment		
Decommissioning phase		
Magnitude of impact	The effects of decommissioning activities are expected to be the same or similar to the effects from construction. The spatial extent of the potential impact will be relatively small in the context of the available sailing, motor cruising and recreational fishing area in Scottish waters of the northern North Sea, with the potential for localised displacement of recreational craft from the individual safety zones and/or advisory clearance distances associated with decommissioning activities. The whole project impact is predicted to be of regional spatial extent, short to medium term duration, intermittent and low reversibility. It is predicted that the impact will affect the receptor directly. The magnitude is therefore, considered to be low	Please see decommissioning phase for Scenario 1 in Table 16.18. The whole project impact is predicted to be of regional spatial extent, short to medium term duration, intermittent and low reversibility. It is predicted that the impact will affect the receptor directly. The magnitude is therefore, considered to be low.
Sensitivity of receptor	Recreational activities in the vicinity of Morven North within offshore and inshore areas of Scottish waters of the northern North Sea are low to moderate intensity, as described in Section 16.11.2. NtMs will be published regularly during the decommissioning phase of each project in line with industry standard, advising of the location and nature of decommissioning works, ensuring that recreational activities can be planned accordingly. There are other locations available for recreational sailing, motor cruising and fishing in Scottish waters of the northern North Sea such that alternatives are available if required during the decommissioning phase. The receptor is deemed to be of low vulnerability, high recoverability and low value. The sensitivity of the receptor is therefore, considered to be low.	
Significance of effect	Overall, the magnitude of the whole project impact is deemed to be low and the sensitivity of the receptor is considered to be low. The whole project effect will, therefore, be of negligible significance, which is not significant in EIA terms.	Overall, the magnitude of the whole project impact is deemed to be low and the sensitivity of the receptor is considered to be low. The whole project effect will, therefore, be of negligible significance, which is not significant in EIA terms.
Further mitigation and residual significance	No secondary mitigation measures for other sea users and communications are considered necessary because the likely effect in the absence of further mitigation (beyond the designed-in measures outlined in Table 16.14), is not significant in EIA terms.	

Table 16.19: Morven North Cumulative Effects Assessment for displacement of recreational activities (including recreational sailing, cruising and recreational fishing)

	Cumulative Effects Assessment
	Scenario 4: Morven North and Tier 1, Tier 2 and Tier 3 Projects
Construction phase	
Magnitude of impact	The Cumulative Effects Assessment for Scenario 4 considers Morven North together with the Tier 1, Tier 2 and Tier 3 projects below. Tier 1 includes: • Morven South • Ossian OWF • Seagreen 1 OWF • Seagreen Phase 1 – OWF export cable • Seagreen 1A OWF • Seagreen 1A – OWF export cable • Berwick Bank OWF • Cambois Connection • Kincardine OWF • Kincardine – OWF export cable • EGL2 • Navy Department X5641: Forth Outer • D613A - AIAA (EGD613A Central Complex) • D613B - AIAA (EGD613B Central Complex) • D613C - AIAA (EGD613C Central Complex) • D613D - AIAA (EGD613D Central Complex) Tier 2 includes: • MHPGC Project • Ossian – OWF export cable • Bellrock OWF • Bowdun OWF

	Cumulative Effects Assessment
	Scenario 4: Morven North and Tier 1, Tier 2 and Tier 3 Projects
	• EGL3 • EGL5 Tier 3 includes: • MBAGC Project The installation of Morven North infrastructure, together with the other elements of Scenario 4 may displace recreational craft and recreational fishing vessels, resulting in a loss of recreational resource in Scottish waters of the northern North Sea. The spatial extent of the impact on recreational boating activities taking place in Scottish waters of the northern North Sea will be relatively limited in the context of the available sailing and sea angling areas in the wider vicinity, with the potential for localised displacement of recreational marine craft from the individual safety zones and/or advisory clearance distances around structures and vessels associated with each project. Potential impacts relating to safety zones implemented during the construction phase are mostly reversible, as once each piece of infrastructure has been installed and commissioned these will be removed. Advisory clearance distances around vessels will be transient as the vessel progressively completes the relevant installation, maintenance, and survey activity. It is improbable that the timelines of all projects would coincide in such a manner as to repeatedly displace the same recreational vessel. The cumulative effect is predicted to be of regional spatial extent, short to medium term duration, continuous and low reversibility. It is predicted that the impact will affect the receptor directly. The magnitude is therefore, considered to be low.
Sensitivity of receptor	Recreational activities in the vicinity of Morven North and Morven South within offshore and inshore areas of Scottish waters in the northern North Sea are low to moderate intensity, as described in Section 16.11.2, and noted in other relevant OWF projects including Ossian Offshore Wind Farm Limited. (2024), and Berwick Bank Wind Farm Limited. (2023)). It is anticipated that recreational vessels will have sufficient sea room around projects to modify their routes or transit past installation activities (dependent on the target destination). NtMs will be published regularly during the construction phase of each project in line with industry standard, advising of the location and nature of construction works, ensuring that recreational activities can be planned accordingly. Furthermore, alternative locations for recreational boating activities are available and are unlikely to be simultaneously impacted by multiple projects, ensuring options remain accessible for recreational users. The receptor is deemed to be of low vulnerability, high recoverability and low value. The sensitivity of the receptor is therefore, considered to be low.
Significance of effect	Overall, the magnitude of the cumulative impact is deemed to be low and the sensitivity of the receptor is considered to be low. The cumulative effect will, therefore, be of **negligible** significance, which is not significant in EIA terms.

	Cumulative Effects Assessment
	Scenario 4: Morven North and Tier 1, Tier 2 and Tier 3 Projects
Further mitigation and residual significance	No secondary mitigation measures for other sea users and communications are considered necessary because the likely effect in the absence of further mitigation (beyond the designed-in measures outlined in Table 16.14), is not significant in EIA terms.
Operations and maintenance phase	
Magnitude of impact	Tier 1 includes: • Morven South • Ossian OWF • Seagreen 1 OWF • Seagreen Phase 1 – OWF export cable • Seagreen 1A OWF • Seagreen 1A – OWF export cable • Berwick Bank OWF • Cambois Connection • Kincardine OWF • Kincardine – OWF export cable • EGL2 • Navy Department X5641: Forth Outer • D613A - AIAA (EGD613A Central Complex) • D613B - AIAA (EGD613B Central Complex) • D613C - AIAA (EGD613C Central Complex) • D613D - AIAA (EGD613D Central Complex) Tier 2 includes: • MHPGC Project • Ossian – OWF export cable • Bellrock OWF • Bowdun OWF

	Cumulative Effects Assessment
	Scenario 4: Morven North and Tier 1, Tier 2 and Tier 3 Projects
	• EGL3 • EGL5 Tier 3 includes: • MBAGC Project The presence of Morven North infrastructure, together with the other elements of Scenario 4 may displace recreational craft and recreational fishing vessels, resulting in a loss of recreational resource in Scottish waters of the northern North Sea. The spatial extent of the impact on recreational boating activities taking place in Scottish waters of the northern North Sea will be relatively limited in the context of the available sailing and sea angling areas in the wider vicinity, with the potential for localised displacement of recreational marine craft from the individual safety zones and/or advisory clearance distances around structures and vessels associated with major maintenance activities at each project. Once the infrastructure has been installed for each project, only temporary and infrequent maintenance is likely to be required over the projects' lifetimes, which is unlikely to take place concurrently at multiple project locations. It is improbable that the timelines of all projects would coincide in such a manner as to repeatedly displace the same recreational vessel. The cumulative effect is predicted to be of regional spatial extent, short to medium term duration, continuous and low reversibility. It is predicted that the impact will affect the receptor directly. The magnitude is therefore, considered to be low.
Sensitivity of receptor	Recreational activities in the vicinity of Morven North and Morven South within offshore and inshore areas of Scottish waters in the northern North Sea are low to moderate intensity, as described in Section 16.11.2, and noted in other relevant OWF projects including Ossian Offshore Wind Farm Limited. (2024) and Berwick Bank Wind Farm Limited. (2023)). It is anticipated that recreational vessels will have sufficient sea room around projects to modify their routes or transit past major maintenance activities (dependent on the target destination). NtMs will be published regularly during the O&M phase of each project in line with industry standard, advising of the location and nature of maintenance works, ensuring that recreational activities can be planned accordingly. Furthermore, alternative locations for recreational boating activities are available and are unlikely to be simultaneously impacted by multiple projects, ensuring options remain accessible for recreational users. The receptor is deemed to be of low vulnerability, high recoverability and low value. The sensitivity of the receptor is therefore, considered to be low.
Significance of effect	Overall, the magnitude of the cumulative impact is deemed to be low and the sensitivity of the receptor is considered to be low. The cumulative effect will, therefore, be of **negligible** significance, which is not significant in EIA terms.
Further mitigation and residual significance	No secondary mitigation measures for other sea users and communications are considered necessary because the likely effect in the absence of further mitigation (beyond the designed-in measures outlined in Table 16.14), is not significant in EIA terms.

	Cumulative Effects Assessment
	Scenario 4: Morven North and Tier 1, Tier 2 and Tier 3 Projects
Decommissioning phase	
Magnitude of impact	Tier 1 includes: • Morven South • Ossian OWF • Seagreen 1 OWF • Seagreen Phase 1 – OWF export cable • Seagreen 1A OWF • Seagreen 1A – OWF export cable • Berwick Bank OWF • Cambois Connection • Kincardine OWF • Kincardine – OWF export cable • EGL2 • Navy Department X5641: Forth Outer • D613A - AIAA (EGD613A Central Complex) • D613B - AIAA (EGD613B Central Complex) • D613C - AIAA (EGD613C Central Complex) • D613D - AIAA (EGD613D Central Complex) Tier 2 includes: • MHPGC Project • Ossian – OWF export cable • Bellrock OWF • Bowdun OWF • EGL3 • EGL5

	Cumulative Effects Assessment
	Scenario 4: Morven North and Tier 1, Tier 2 and Tier 3 Projects
	Tier 3 includes: • MBAGC Project The spatial extent of the impact on recreational boating activities taking place in Scottish waters of the northern North Sea will be relatively limited in the context of the available sailing and sea angling areas in the wider vicinity, with the potential for localised displacement of recreational marine craft from the individual safety zones and/or advisory clearance distances around structures and vessels associated with each project. Safety zones will be temporary until each structure has been decommissioned, and advisory clearance distances around vessels will be transient as the vessel progressively completes the relevant decommissioning activity. It is improbable that the timelines of all projects would coincide in such a manner as to repeatedly displace the same recreational vessel. The cumulative effect is predicted to be of regional spatial extent, short to medium term duration, continuous and low reversibility. It is predicted that the impact will affect the receptor directly. The magnitude is therefore, considered to be low.
Sensitivity of receptor	Recreational activities in the vicinity of Morven North and Morven South within offshore and inshore areas of Scottish waters in the northern North Sea are low to moderate intensity, as described in Section 16.11.2, and noted in other relevant OWF projects including Ossian Offshore Wind Farm Limited. (2024) and Berwick Bank Wind Farm Limited. (2023)). It is anticipated that recreational vessels will have sufficient sea room around projects to modify their routes or transit past decommissioning activities (dependent on the target destination). NtMs will be published regularly during the decommissioning phase of each project in line with industry standard, advising of the location and nature of decommissioning works, ensuring that recreational activities can be planned accordingly. Furthermore, alternative locations for recreational boating activities are available and are unlikely to be simultaneously impacted by multiple projects, ensuring options remain accessible for recreational users. The receptor is deemed to be of low vulnerability, high recoverability and low value. The sensitivity of the receptor is therefore, considered to be low.
Significance of effect	Overall, the magnitude of the cumulative impact is deemed to be low and the sensitivity of the receptor is considered to be low. The cumulative effect will, therefore, be of **negligible** significance, which is not significant in EIA terms.
Further mitigation and residual significance	No secondary mitigation measures for other sea users and communications are considered necessary because the likely effect in the absence of further mitigation (beyond the designed-in measures outlined in Table 16.14), is not significant in EIA terms.

Impacts to cables or pipelines or restrictions on access to cables and pipelines

16.13.1.4 The summary of the whole project assessment for impacts to cables or pipelines or restrictions on access to cables and pipelines is presented in Table 16.20, and Cumulative Effects Assessment for impacts to cables or pipelines or restrictions on access to cables and pipelines is presented in Table 16.21.

Table 16.20: Morven North whole project assessment for impacts to cables or pipelines or restrictions on access to cables or pipelines

	Whole project assessment	
	Scenario 1: Morven North + MHPGC Project	**Scenario 2: Morven North + MBAGC Project**
Construction phase		
Magnitude of impact	The whole project assessment for Scenario 1 considers Morven North together with MHPGC Project. The presence of safety zones and/or advisory clearance distances associated with the installation of infrastructure during the construction phase may impact cable operators and their access to their assets. However, the potential impact will be reversible and temporary in nature, as once each structure or section has been installed and commissioned these will be removed. The whole project impact is predicted to be of local spatial extent, short to medium term duration, intermittent and medium reversibility. It is predicted that the impact will affect the receptor directly. The magnitude is therefore, considered to be low.	The whole project assessment for Scenario 2 considers Morven North together with MBAGC Project. Please see Scenario 1 in Table 16.20. The whole project impact is predicted to be of local spatial extent, short to medium term duration, intermittent and medium reversibility. It is predicted that the impact will affect the receptor directly. The magnitude is therefore, considered to be low.
Sensitivity of receptor	Restriction of access to an active cable for inspection and maintenance activities could be critical to the operator of that cable. However, any potential impacts to cables will be mitigated through crossing and proximity agreements, which are common across the UKCS, to ensure communications between both parties and that loss of access is minimised. NtMs will be published regularly during the construction phase of each project in line with industry standard, advising of the location and nature of construction works, ensuring that maintenance works on cables in the area can be planned accordingly. It is anticipated that any third-party vessels operating on cables in the vicinity of Morven North will be aware of the project construction activities and be able to plan and re-route with minimal interference to access.	

	Whole project assessment	
	Scenario 1: Morven North + MHPGC Project	**Scenario 2: Morven North + MBAGC Project**
	The receptor is deemed to be of moderate vulnerability, moderate recoverability and high value. The sensitivity of the receptor is therefore, considered to be medium.	
Significance of effect	Overall, the magnitude of the whole project impact is deemed to be low and the sensitivity of the receptor is considered to be medium. The whole project effect will, therefore, be of **minor adverse** significance, which is not significant in EIA terms.	Overall, the magnitude of the whole project impact is deemed to be low and the sensitivity of the receptor is considered to be medium. The whole project effect will, therefore, be of **minor adverse** significance, which is not significant in EIA terms.
Further mitigation and residual significance	No secondary mitigation measures for other sea users and communications are considered necessary because the likely effect in the absence of further mitigation (beyond the designed-in measures outlined in Table 16.14), is not significant in EIA terms.	
Operations and maintenance phase		
Magnitude of impact	The presence of safety zones and/or advisory clearance distances associated with the maintenance of infrastructure during the O&M phase may impact cable operators and their access to their assets. However, the potential impact will be reversible and temporary in nature, as following the completion of any maintenance works these will be removed. The whole project impact is predicted to be of local spatial extent, short term duration, intermittent and medium reversibility. It is predicted that the impact will affect the receptor directly. The magnitude is therefore, considered to be low.	Please see O&M phase for Scenario 1 in Table 16.20. The whole project impact is predicted to be of local spatial extent, short term duration, intermittent and medium reversibility. It is predicted that the impact will affect the receptor directly. The magnitude is therefore, considered to be low.
Sensitivity of receptor	Restriction of access to an active cable for inspection and maintenance activities could be critical to the operator of that cable. However, any potential impacts to cables will be mitigated through crossing and proximity agreements, which are common across the UKCS, to ensure communications between both parties and that loss of access is minimised. NtMs will be published regularly during the O&M phase of each project in line with industry standard, advising of the location and nature of maintenance works, ensuring that maintenance works on cables in the area can be planned accordingly. It is anticipated that	

	Whole project assessment	
	Scenario 1: Morven North + MHPGC Project	**Scenario 2: Morven North + MBAGC Project**
	any third-party vessels operating on cables in the vicinity of Morven North will be aware of maintenance activities and be able to plan and re-route with minimal interference to access. The receptor is deemed to be of moderate vulnerability, moderate recoverability and high value. The sensitivity of the receptor is therefore, considered to be medium.	
Significance of effect	Overall, the magnitude of the whole project impact is deemed to be low and the sensitivity of the receptor is considered to be medium. The whole project effect will, therefore, be of **minor adverse** significance, which is not significant in EIA terms.	Overall, the magnitude of the whole project impact is deemed to be low and the sensitivity of the receptor is considered to be medium. The whole project effect will, therefore, be of **minor adverse** significance, which is not significant in EIA terms.
Further mitigation and residual significance	No secondary mitigation measures for other sea users and communications are considered necessary because the likely effect in the absence of further mitigation (beyond the designed-in measures outlined in Table 16.14), is not significant in EIA terms.	
Decommissioning phase		
Magnitude of impact	The effects of decommissioning activities are expected to be the same or similar to the effects from construction. The presence of safety zones and/or advisory clearance distances associated with the decommissioning of infrastructure during the decommissioning phase may impact cable operators and their access to their assets. However, the potential impact will be reversible and temporary in nature, as following the decommission of infrastructure these will be removed. The whole project impact is predicted to be of local spatial extent, short term duration, intermittent and medium reversibility. It is predicted that the impact will affect the receptor directly. The magnitude is therefore, considered to be low.	Please see decommissioning phase for Scenario 1 in Table 16.20. The whole project impact is predicted to be of local spatial extent, short term duration, intermittent and medium reversibility. It is predicted that the impact will affect the receptor directly. The magnitude is therefore, considered to be low.

	Whole project assessment	
	Scenario 1: Morven North + MHPGC Project	**Scenario 2: Morven North + MBAGC Project**
Sensitivity of receptor	Restriction of access to an active cable for inspection and maintenance activities could be critical to the operator of that cable. However, any potential impacts to cables will be mitigated through crossing and proximity agreements, which are common across the UKCS, to ensure communications between both parties and that loss of access is minimised. NtMs will be published regularly during the decommissioning phase of each project in line with industry standard, advising of the location and nature of decommissioning works, ensuring that maintenance works on cables in the area can be planned accordingly. It is anticipated that any third-party vessels operating on cables in the vicinity of Morven North will be aware of the project decommissioning activities and be able to plan and re-route with minimal interference to access. The receptor is deemed to be of moderate vulnerability, moderate recoverability and high value. The sensitivity of the receptor is therefore, considered to be medium.	
Significance of effect	Overall, the magnitude of the whole project impact is deemed to be low and the sensitivity of the receptor is considered to be medium. The whole project effect will, therefore, be of **minor adverse** significance, which is not significant in EIA terms.	Overall, the magnitude of the whole project impact is deemed to be low and the sensitivity of the receptor is considered to be medium. The whole project effect will, therefore, be of **minor adverse** significance, which is not significant in EIA terms.
Further mitigation and residual significance	No secondary mitigation measures for other sea users and communications are considered necessary because the likely effect in the absence of further mitigation (beyond the designed-in measures outlined in Table 16.14), is not significant in EIA terms.	

Table 16.21: Morven North Cumulative Effects Assessment for impacts to cables or pipelines or restrictions on access to cables or pipelines

	Cumulative effects assessment
	Scenario 4: Morven North and Tier 1, Tier 2 and Tier 3 Projects
Construction phase	
Magnitude of impact	The Cumulative Effects Assessment for Scenario 4 considers Morven North together with the Tier 1, Tier 2 and Tier 3 projects below. Tier 1 includes: • Morven South • Ossian OWF • Seagreen 1 OWF • Seagreen Phase 1 – OWF export cable • Seagreen 1A OWF • Seagreen 1A – OWF export cable • Berwick Bank OWF • Cambois Connection • Kincardine OWF • Kincardine – OWF export cable • EGL2 • Navy Department X5641: Forth Outer • D613A - AIAA (EGD613A Central Complex) • D613B - AIAA (EGD613B Central Complex) • D613C - AIAA (EGD613C Central Complex) • D613D - AIAA (EGD613D Central Complex) Tier 2 includes: • MHPGC Project • Ossian – OWF export cable • Bellrock OWF

	Cumulative effects assessment
	Scenario 4: Morven North and Tier 1, Tier 2 and Tier 3 Projects
	• Bowdun OWF • EGL3 • EGL5 Tier 3 includes: • MBAGC Project The spatial extent of the impact on cables or pipelines or access to these resources with Scenario 4 will be relatively small. Any restriction of access with any safety zones and/or advisory clearance distances placed around structures or vessels carrying out construction activities is expected to be temporary in nature, and it is unlikely that the activities of all the projects in Scenario 4 would temporarily coincide to restrict the access to cables or pipelines. The cumulative effect is predicted to be of regional spatial extent, short to medium term duration, intermittent and medium reversibility. It is predicted that the impact will affect the receptor directly. The magnitude is therefore, considered to be low.
Sensitivity of receptor	Restriction of access to an active cable for inspection and maintenance activities could be critical to the operator of that cable. However, any potential impacts to cables will be mitigated through crossing and proximity agreements, which are common across the UKCS, to ensure communications between both parties and that loss of access is minimised. NtMs will be published regularly during the construction phase of each project in line with industry standard, advising of the location and nature of construction works, ensuring that maintenance works on cables in the area can be planned accordingly. It is anticipated that any third-party vessels operating on cables in the vicinity will be aware of construction activities and be able to plan and re-route with minimal interference to access. The receptor is deemed to be of moderate vulnerability, moderate recoverability and high value. The sensitivity of the receptor is therefore, considered to be medium.
Significance of effect	Overall, the magnitude of the cumulative impact is deemed to be low and the sensitivity of the receptor is considered to be medium. The cumulative effect will, therefore, be of **minor adverse** significance, which is not significant in EIA terms.
Further mitigation and residual significance	No secondary mitigation measures for other sea users and communications are considered necessary because the likely effect in the absence of further mitigation (beyond the designed-in measures outlined in Table 16.14), is not significant in EIA terms.
Operations and maintenance phase	
Magnitude of impact	Tier 1 includes: • Morven South

	Cumulative effects assessment
	Scenario 4: Morven North and Tier 1, Tier 2 and Tier 3 Projects
	• Ossian OWF • Seagreen 1 OWF • Seagreen Phase 1 – OWF export cable • Seagreen 1A OWF • Seagreen 1A – OWF export cable • Berwick Bank OWF • Cambois Connection • Kincardine OWF • Kincardine – OWF export cable • EGL2 • Navy Department X5641: Forth Outer • D613A - AIAA (EGD613A Central Complex) • D613B - AIAA (EGD613B Central Complex) • D613C - AIAA (EGD613C Central Complex) • D613D - AIAA (EGD613D Central Complex) Tier 2 includes: • MHPGC Project • Ossian – OWF export cable • Bellrock OWF • Bowdun OWF • EGL3 • EGL5 Tier 3 includes: • MBAGC Project The spatial extent of the impact on cables or pipelines or access to these resources with Scenario 4 will be relatively small. Any restriction of access with any safety zones and/or advisory clearance distances placed around structures or vessels carrying out

	Cumulative effects assessment
	Scenario 4: Morven North and Tier 1, Tier 2 and Tier 3 Projects
	major maintenance activities is expected to be temporary in nature, and it is unlikely that the activities of all the projects in Scenario 4 would temporarily coincide to restrict the access to cables or pipelines. The cumulative effect is predicted to be of regional spatial extent, short to medium term duration, intermittent and medium reversibility. It is predicted that the impact will affect the receptor directly. The magnitude is therefore, considered to be low.
Sensitivity of receptor	Restriction of access to an active cable for inspection and maintenance activities could be critical to the operator of that cable. However, any potential impacts to cables will be mitigated through crossing and proximity agreements, which are common across the UKCS, to ensure communications between both parties and that loss of access is minimised. NtMs will be published regularly during the O&M phase of each project in line with industry standard, advising of the location and nature of construction works, ensuring that maintenance works on cables in the area can be planned accordingly. It is anticipated that any third-party vessels operating on cables in the vicinity will be aware of the project O&M activities and be able to plan and re-route with minimal interference to access. The receptor is deemed to be of moderate vulnerability, moderate recoverability and high value. The sensitivity of the receptor is therefore, considered to be medium.
Significance of effect	Overall, the magnitude of the cumulative impact is deemed to be low and the sensitivity of the receptor is considered to be medium. The cumulative effect will, therefore, be of **minor adverse** significance, which is not significant in EIA terms.
Further mitigation and residual significance	No secondary mitigation measures for other sea users and communications are considered necessary because the likely effect in the absence of further mitigation (beyond the designed-in measures outlined in Table 16.14), is not significant in EIA terms.
Decommissioning phase	
Magnitude of impact	Tier 1 includes: • Morven South • Ossian OWF • Seagreen 1 OWF • Seagreen Phase 1 – OWF export cable • Seagreen 1A OWF • Seagreen 1A – OWF export cable • Berwick Bank OWF • Cambois Connection

	Cumulative effects assessment
	Scenario 4: Morven North and Tier 1, Tier 2 and Tier 3 Projects
	• Kincardine OWF • Kincardine – OWF export cable • EGL2 • Navy Department X5641: Forth Outer • D613A - AIAA (EGD613A Central Complex) • D613B - AIAA (EGD613B Central Complex) • D613C - AIAA (EGD613C Central Complex) • D613D - AIAA (EGD613D Central Complex) Tier 2 includes: • MHPGC Project • Ossian – OWF export cable • Bellrock OWF • Bowdun OWF • EGL3 • EGL5 Tier 3 includes: • MBAGC Project The spatial extent of the impact on cables or pipelines or access to these resources with Scenario 4 will be relatively small. Any restriction of access with any safety zones and/or advisory clearance distances placed around structures or vessels carrying out decommissioning activities is expected to be temporary in nature, and it is unlikely that the activities of all the projects in Scenario 4 would temporarily coincide to restrict the access to cables or pipelines. The cumulative effect is predicted to be of regional spatial extent, short to medium term duration, intermittent and medium reversibility. It is predicted that the impact will affect the receptor directly. The magnitude is therefore, considered to be low.
Sensitivity of receptor	Restriction of access to an active cable for inspection and maintenance activities could be critical to the operator of that cable. However, any potential impacts to cables will be mitigated through crossing and proximity agreements, which are common across the UKCS, to ensure communications between both parties and that loss of access is minimised. NtMs will be published regularly during the decommissioning phase of each project in line with industry standard, advising of the location and nature of

	Cumulative effects assessment
	Scenario 4: Morven North and Tier 1, Tier 2 and Tier 3 Projects
	decommissioning works, ensuring that maintenance works on cables in the area can be planned accordingly. It is anticipated that any third-party vessels operating on cables in the vicinity will be aware of the project decommissioning activities and be able to plan and re-route with minimal interference to access. The receptor is deemed to be of moderate vulnerability, moderate recoverability and high value. The sensitivity of the receptor is therefore, considered to be medium.
Significance of effect	Overall, the magnitude of the cumulative impact is deemed to be low and the sensitivity of the receptor is considered to be medium. The cumulative effect will, therefore, be of **minor adverse** significance, which is not significant in EIA terms.
Further mitigation and residual significance	No secondary mitigation measures for other sea users and communications are considered necessary because the likely effect in the absence of further mitigation (beyond the designed-in measures outlined in Table 16.14), is not significant in EIA terms.

16.13.2 Proposed monitoring

16.13.2.1 Site-specific monitoring is not proposed because the assessment concluded that Morven North would not give rise to significant effects for other sea users, either alone or when considered cumulatively with other plans, projects, or activities. The Applicant will, however, continue to liaise with MD-LOT, and other key stakeholders to help identify opportunities for proportionate, evidence-led regional or strategic monitoring that can improve the understanding of the environmental implications of offshore wind, particularly where recognised evidence gaps exist. This may include contributing to, or participating in, relevant ongoing initiatives under the ScotMER programme (Scottish Government, 2026b).

16.14 Transboundary effects

16.14.1.1 A screening of transboundary impacts has been carried out (see Volume 3, Annex 6.2: Transboundary Effects Screening). This has identified that no likely significant transboundary effects with regard to other sea users and communications would result from Morven North upon the interests of other European Economic Area (EEA) States.

16.15 Inter-related effects

16.15.1.1 Inter-relationships are considered to be the impacts and associated effects of different aspects of Morven North on the same receptor. Inter-related effects are considered to be either:

- Lifetime effects: Assessment of the scope for effects that occur throughout more than one phase of Morven North (construction, O&M and decommissioning), to interact to potentially create a more significant effect on a receptor than if just assessed in isolation in these three project stages (e.g. underwater sound effects from piling, operational wind turbines, vessels and decommissioning);
- Receptor-led effects: Assessment of the scope for all effects to interact, spatially and temporally, to create inter-related effects on a receptor. As an example, all effects on other sea users and communications, such as displacement of recreational activities and impacts to cables or pipelines or restrictions on access to these assets, may interact to produce a different, or greater effect on this receptor than when the effects are considered in isolation. Receptor-led effects may be short term, temporary or transient effects, or incorporate longer-term effects.

16.15.1.2 A description of the likely inter-related effects arising from Morven North on other sea users and communications is provided in Volume 2, Chapter 21: Inter-related and Ecosystem Effects.

16.15.1.3 For other sea users and communications, the following potential impacts have been considered within the inter-related assessment:

- physical restriction on space for recreational fishing vessels;
- physical restriction on space for recreational craft/recreational activities;
- physical impact or restriction of access to cables and pipelines.

16.15.1.4 Table 16.22 lists the inter-related effects (project lifetime effects) that are predicted to arise during the construction, O&M and decommissioning of Morven North and the inter-related effects (receptor-led effects) that are predicted to arise for other sea users and communications receptors.

16.15.1.5 As noted above, effects on other sea users and communications also have the potential to have secondary effects on other receptors and these effects are fully considered in the topic-specific chapters. These receptors and effects are:

- physical restriction on space for recreational activities and recreational fishing;
- displacement of recreational sailing, motor cruising and recreational fishing (boat angling);
- physical impact or restriction of access to cables and pipelines.

Table 16.22: Summary of likely significant inter-related effects on the environment from individual effects occurring across the construction, operations & maintenance and decommissioning phases of Morven North and from multiple effects interacting across all phases (receptor-led effects)

C= Construction, O= O&M, D= Decommissioning phases

"✓" is used to denote the phase the potential impact can occur, "X" outlines there is no impact within this project phase

Description of impact	Phase			Likely significant inter-related effect	Significance
	C	O	D		
Morven North lifetime effects					
Physical restriction on space for recreational fishing vessels;	✓	✓	✓	The presence of infrastructure, safety zones and advisory clearance distances during the construction phase may result in the displacement of recreational fishing vessels from the Morven North Boundary. This likely significant inter-related effect is repeated in the O&M and decommissioning phases of Morven North.	The effects on recreational fishing vessels are anticipated to interact in such a way as to result in combined effects of **negligible** significance in the construction, O&M and decommissioning phases (i.e. not of greater significance than the assessments presented for each individual phase). As a result, the inter-related effects are of negligible significance which is not significant in EIA terms.
Physical restriction on space for recreational craft/recreational activities	✓	✓	✓	The presence of infrastructure, safety zones and advisory clearance distances during the construction phase may result in the displacement of recreational craft/recreational activities from the Morven North Boundary. This likely significant inter-related effect is repeated in the O&M and decommissioning phases of Morven North.	The effects on recreational craft/recreational activities are anticipated to interact in such a way as to result in combined effects of **negligible** significance in the construction, O&M and decommissioning phases (i.e. not of greater significance than the assessments presented for each individual phase). As a result, the inter-related effects are of negligible significance which is not significant in EIA terms.

Description of impact	Phase			Likely significant inter-related effect	Significance
	C	O	D		
Physical impact or restriction of access to cables and pipelines.	✓	✓	✓	Cables and pipelines may be affected where they are crossed by the Morven North infrastructure. In addition, the presence of infrastructure, safety zones and advisory clearance distances may restrict access to cables and pipelines during construction, O&M and decommissioning activities. Cable and pipeline crossing and proximity agreements will be developed and implemented with the relevant cable and/or pipeline operator to minimise the potential for any impact. Crossing and proximity agreements will include the ability of a cable and/or pipeline operator to access their infrastructure as far as practical during each phase and advises close communication and planning between the affected parties to ensure disruption of activities is minimised.	The effects on cables and pipelines are anticipated to interact in such a way as to result in combined effects of **minor adverse** significance in the construction, O&M and decommissioning phases (i.e. not of greater significance than the assessments presented for each individual phase). As a result, the inter-related effects are of negligible significance which is not significant in EIA terms.
Receptor-led effects					
Potential exists for spatial and temporal interactions between direct and indirect impacts to other sea users and communications receptors. Based on current understanding and expert knowledge, there is scope for potential inter-related impacts to arise from the physical restriction on space for recreational craft and recreational fishing vessels interacting with the displacement of recreational sailing and motor cruising, recreational fishing (boat angling) and other recreational activities. Where both impacts overlap spatially and temporally, there is potential for inter-related effects as the restriction/displacement on movements of recreational activity may cover a larger area. However, as a vast extent of alternative resource for recreational activities will remain available, and the impacts initially identified were of negligible to minor adverse significance, these impacts are not likely to interact in way that results in a significant inter-related effect.					

16.16 Summary of impacts, mitigation, Likely Significant Effects and monitoring

16.16.1.1 Information on other sea users and communications within the Morven North Other Sea Users and Communications Study Areas was collected through desktop review, stakeholder consultation and site surveys.

16.16.1.2 Table 16.23 presents a summary of the potential impacts, mitigation measures and the conclusion of LSE[1] on other sea users and communications in EIA terms. The impacts assessed include: displacement of recreational activities (including recreational sailing, motor cruising and recreational fishing) and impacts to cables and pipelines or restrictions on access to cables or pipelines. Overall, it is concluded that there will be no likely significant effects arising from Morven North during the construction, O&M or decommissioning phases.

16.16.1.3 Table 16.24 presents a summary of the potential cumulative impacts, mitigation measures and the conclusion of LSE[1] on information on other sea users and communications in EIA terms. The

cumulative effects assessed include: displacement of recreational activities (including recreational sailing, motor cruising and recreational fishing) and impacts to cables and pipelines or restrictions on access to cables or pipelines. Overall, it is concluded that there will be no likely significant cumulative effects from Morven North alongside other projects/plans.

16.16.1.4 No likely significant transboundary effects have been identified in regard to effects of Morven North.

Table 16.23: Summary of Likely Significant Effects, mitigation and monitoring

C= Construction, O= Operations and Maintenance, D= Decommissioning phases

"✓" is used to denote the phase the potential impact can occur, "X" outlines there is no impact within this project phase

Description of impact	Phase			Designed-in measures	Magnitude of impact	Sensitivity of receptor	Significance of effect	Additional mitigation measures	Significance of residual effect	Proposed monitoring
	C	O	D							
Displacement of recreational activities (including recreational sailing, motor cruising and recreational fishing)	✓	✓	✓	MM-7, MM-11, MM-12, MM-37	Low	Low	Negligible	Not applicable (N/A)	N/A	None
Physical impact or restriction of access to cables and pipelines	✓	✓	✓	MM-20	Low	Medium	Minor adverse	None	N/A	None

Table 16.24: Summary of likely significant cumulative effects, mitigation and monitoring

C= Construction, O= Operations and Maintenance, D= Decommissioning phases

"✓" is used to denote the phase the potential impact can occur, "X" outlines there is no impact within this project phase

Description of impact	Phase			Designed-in measures	Magnitude of impact	Sensitivity of receptor	Significance of effect	Additional mitigation measures	Significance of residual effect	Proposed monitoring
	C	O	D							
Scenario 1 and 2										
Displacement of recreational activities (including recreational sailing, motor cruising and recreational fishing)	✓	✓	✓	MM-7, MM-11, MM-12, MM-37	Low	Low	Negligible	None	N/A	None
Physical impact or restriction of access to cables and pipelines	✓	✓	✓	MM-20	Low	Medium	Minor adverse	None	N/A	None
Scenario 4										
Displacement of recreational activities (including recreational sailing, motor cruising and recreational fishing)	✓	✓	✓	MM-7, MM-11, MM-12, MM-37	Low	Low	Negligible	None	N/A	None
Physical impact or restriction of access to cables and pipelines	✓	✓	✓	MM-20	Low	Medium	Minor adverse	None	N/A	None

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