Preliminary Environmental Information Report Volume 1

Chapter 24 Commercial Fisheries

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Contents

Glossary of Project Terminology

This Glossary has been provided to define terms used across a number of the LionLink Proposed Scheme documents.

Term	Definition
Applicant, the	National Grid Lion Link Limited (NGLLL)
Co-ordination	The process of people or entities working together.
Co-location	Where different elements of a project, or various projects, are located in one place.
Development Consent Order (DCO)	An order made by the Secretary of State pursuant to the Planning Act 2008 (as amended) granting development consent for a Nationally Significant Infrastructure Project. It grants consent to develop the approved project and may include (among other things) powers to compulsorily acquire land and rights where required and deemed marine licences for any offshore works.
Draft Order Limits	The area of land identified as being subject to the DCO application. The Draft Order Limits are made up of the land required both temporarily and permanently to allow for the construction, operation and maintenance, and decommissioning of the Proposed Scheme. All onshore parts of the Proposed Onshore Scheme are located within England and offshore parts of the Proposed Offshore Scheme are located within English territorial waters to 12 Nautical Miles and then up to the United Kingdom (UK) Exclusive Economic Zone (EEZ) boundary at sea.
Dutch Offshore Components	Is the term used when referring to the offshore elements of the Project within Dutch waters.
Environmental Impact Assessment (EIA)	The EIA is a systematic regulatory process that assesses the potential likely significant effects of a proposed project or development on the environment.
EIA Scoping Report	An EIA scoping report defines the proposed scope and methodology of the EIA process for a particular project or development. The EIA Scoping Report for the Proposed Scheme was submitted to the Planning Inspectorate with a request for the Secretary of State to adopt a scoping opinion in relation to the Proposed Scheme on 6 March 2024.

Term	Definition
Environmental Statement (ES)	The ES is a document that sets out the likely significant effects of the project on the environment. The ES is the main output from the EIA process. The ES is published as part of the DCO application.
Exclusive Economic Zone (EEZ)	The zone in which the coastal state exercises the rights under Part V of the United Nations Convention on the Law of the Sea. These rights relate principally to the water column and may extend to 200 nautical miles from baselines. This is distinct from territorial waters, which for the UK extend 12 nautical miles from the coast.
Landfall	The proposed Landfall is where the proposed offshore HVDC Submarine Cables are brought ashore and meets with the onshore proposed Underground HVDC Cables. This includes the Transition Joint Bay (TJB). The proposed Landfall will be located at Walberswick, and there will be no permanent above ground infrastructure at the proposed Landfall.
Landfall Site	The area where the Landfall may be located.
Multi-purpose interconnector (MPI)	A project where GB interconnection is combined with transmission of offshore generation within GB (and optionally within a connecting state).
National Grid Lion Link Limited (NGLLL)	The Applicant, a joint venture between National Grid Ventures and TenneT. NGLLL is a business within the wider National Grid Ventures portfolio.
National Grid Ventures (NGV)	Operates and invests in energy projects, technologies and partnerships to accelerate the development of a clean energy future. This includes interconnectors (such as the LionLink Project), allowing trade between energy markets and the efficient use of renewable energy resources.
Nationally Significant Infrastructure Projects (NSIP)	Major infrastructure developments in England and Wales for which development consent is required, as defined within Section 14 of the Planning Act 2008 (as amended). This includes any development which is subject to a direction by the relevant Secretary of State pursuant to Section 35 of the Planning Act 2008.
Offshore Hybrid Asset (OHA)	A project that combines cross-border interconnection with the transmission of offshore generation, this is an overarching term which covers both multi-purpose interconnectors (MPI) and non-standard interconnectors (NSI).
Order Limits	The maximum extent of land within which the Proposed Scheme may take place, as consented.

Term	Definition
Outline Offshore Construction Environmental Management Plan (Outline Offshore CEMP)	Describes the control measures and standards proposed to be implemented to provide a consistent approach to the environmental management of the construction activities of the Proposed Offshore Scheme.
Outline Onshore Code of Construction Practice (Outline Onshore CoCP)	Describes the control measures and standards proposed to be implemented to provide a consistent approach to the environmental management of the construction activities of the Proposed Onshore Scheme.
Planning Act 2008	The Planning Act 2008 being the relevant primary legislation for national infrastructure planning.
Planning Inspectorate (PINS)	The Planning inspectorate review DCO applications and make a recommendation to the Secretary of State, who will then decide whether to approve the DCO.
Preliminary Environmental Information Report (PEIR)	The PEIR is a document, compiled by the Applicant, which presents preliminary environmental information, as part of the statutory consultation process. This is defined by the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 as containing information which "is reasonably required for the consultation bodies to develop an informed view of the likely significant environmental effects of the development (and of any associated development)" (Section 12 2. (b)). This PEIR describes the Proposed Scheme, sets out preliminary findings of the EIA undertaken to date, and the mitigation measures proposed to reduce effects. The PEIR is published at Statutory Consultation stage for information and feedback.
Project (the)	The LionLink Project (hereafter referred to as the 'Project') is a proposal by National Grid Lion Link Limited (NGLLL) and TenneT. The Project is a proposed electricity link between Great Britain (GB) and the Netherlands with a capacity of up to 2.0 gigawatts (GW) of electricity and will connect to Dutch offshore wind via an offshore platform in Dutch waters. The Project is the collective term used to refer to the proposal for all aspects (onshore and offshore) of the proposed interconnector between GB and the Netherlands.
Proposed Offshore Scheme	The term used when referring to the offshore elements of the Proposed Scheme, seaward of the

Term	Definition
	mean high-water springs to the EEZ boundary at sea.
Proposed Scheme	Used when referring to the GB scheme components of the Project, not including Dutch components. This includes both the onshore and offshore scheme components which are within UK territorial waters and up to the UK EEZ boundary at sea.
Scoping Opinion	A scoping opinion is requested from the Planning Inspectorate on behalf of the Secretary of State, to inform the requirements of EIA process and ultimately the ES which will be submitted as part of the application for development consent. Through the scoping process, the views of the statutory consultees and other relevant organisations on the proposed scope of the EIA are sought. A Scoping Opinion for the Proposed Scheme was issued by the Planning Inspectorate (on behalf of the Secretary of State) on 16 April 2024. The Applicant received a separate EIA Scoping Opinion from the Marine Management Organisation (MMO) (Reference DCO/2024/00005, dated 04 September 2024) as the MMO were unable to provide opinion to the Planning Inspectorate in time for the April 2024 deadline.
Scottish Power Renewables (SPR) East Anglia One North (EA1N) and East Anglia 2 (EA2) Consents (SPR EA1N and EA2 Consents)	The Orders made following the Scottish Power Renewables applications for development consent for the following projects: The East Anglia ONE North Offshore Wind Farm Order 2022; and East Anglia TWO Offshore Wind Farm Order 2022
Statutory Consultation	Consultation undertaken with the community and stakeholders in advance of the application for development consent being submitted to the Planning Inspectorate, on behalf of the Secretary of state, in accordance with the PA 2008.
TenneT	Operator of the electricity transmission network across the Netherlands.
Transition Joint Bay (TJB)	An underground structure at the Landfall Site that house the joints between the offshore cables and the onshore cables.

Terms and abbreviations specific to this technical chapter contained herein are provided at the end of the document in the **Topic Glossary and Abbreviations.**

24 COMMERCIAL FISHERIES

24.1 Introduction

24.1.1 This chapter provides a preliminary assessment of the potential likely significant effects in relation to the commercial fisheries from the construction, operation and maintenance, and decommissioning of the LionLink (here after referred to as 'the Proposed Scheme').

24.1.2 This chapter outlines legislation, policy and guidance that is relevant to commercial fisheries, summarises the engagement undertaken to date, sets out the scope and methodology of assessment, and describes the baseline environment. Following this, the likely significant effects of the Proposed Scheme on commercial fisheries are assessed taking account of mitigation measures within the design. The need for any additional mitigation is then considered along with any proposals for monitoring and/or enhancement. The chapter concludes with a summary of residual effects.

24.1.3 Commercial fisheries aspects considered within this chapter for the Proposed Offshore Scheme are:

a. local fishing fleet;
b. gear types;
c. fishing effort;
d. restricted fishing areas; and
e. historic fishing rights.

24.1.4 This chapter should be read in conjunction with **Chapter 2 Description of the Proposed Scheme** of this Preliminary Environmental Information Report (PEIR), which describes the development parameters against which the effects considered in this chapter have been assessed, and **Chapter 5 EIA Approach and Methodology** of this PEIR where the project-wide approach to the assessment methodology is set out.

24.1.5 In addition, there may be interrelationships related to the potential effects on commercial fisheries and other disciplines. Therefore, this chapter should be read alongside relevant parts of other chapters; namely:

a. **Chapter 18 Marine Physical Environment** of this PEIR - identifies the spatial extent of potential impacts from temporary sediment suspension and subsequent re-deposition;
b. **Chapter 20 Fish and Shellfish** of this PEIR - identifies the potential impacts on key commercial fisheries target species; and
c. **Chapter 23 Shipping and Navigation** of this PEIR - identifies the potential navigational impacts on fishing vessels such as risk of collision and disruption.

24.1.6 This chapter is supported by the following appendices and figures, contained within Volume 2 and Volume 3 of this PEIR, respectively:

a. **Appendix 2.2 Outline Offshore Construction Environmental Management Plan** of this PEIR;
b. **Appendix 29.1 Outline Schedule of Environmental Commitments and Measures** of this PEIR;
c. **Appendix 4.1 Legislation and Policy Register** of this PEIR;
d. **Appendix 4.2 Marine Plan Assessment** of this PEIR;
e. **Appendix 5.1 Transboundary Screening** of this PEIR;
f. **Appendix 20.1 Sandeel and Atlantic Herring Habitat Assessment** of this PEIR;
g. **Appendix 24.1 Supporting Commercial Fisheries Information** of this PEIR;
h. **Appendix 24.2 Draft Fisheries Liaison and Coexistence Plan** of this PEIR; and
i. **Figure 24.1** to **Figure 24.7** of this PEIR.

24.1.7 As set out in **Chapter 4 Policy and Legislation** of this PEIR, cable installation and some associated activities beyond 12 nautical miles (NM) are exempt under the Marine and Coastal Access Act (MCAA) as well as repair of the installed cable. This chapter presents a preliminary assessment of the Proposed Offshore Scheme from mean high water springs (MHWS) at the proposed Landfall Site to the boundary between the UK and Netherlands Exclusive Economic Zones (EEZ). This is to provide a holistic view of the Proposed Offshore Scheme and any associated impacts, however consent is not being sought for the exempt cable (either installation or repair) and only cable protection and dredging for sandwave levelling would be included in the Deemed Marine Licence (DML) beyond 12NM.

24.2 Legislation and policy framework

24.2.1 This section identifies the legislation, policy and guidance that has informed the assessment of the likely significant effects on commercial fisheries.

24.2.2 The legislation and planning policy which has informed the assessment of effects with respect to commercial fisheries is provided within **Appendix 4.1 Legislation and Policy Register** of this PEIR. A preliminary marine plan assessment is provided as **Appendix 4.2 Marine Plan Assessment** of this PEIR.

24.2.3 **Table 24.1** lists the legislation relevant to the assessment of the likely significant effects on commercial fisheries.

Table 24.1: List of relevant legislation for commercial fisheries

Legislation	Relevance to assessment
The Planning Act 2008 (Ref 1)	An Act to establish the Infrastructure Planning Commission and make provision about its functions; to make provision about, and about matters ancillary to, the authorisation of projects for the development of nationally significant infrastructure.
The Infrastructure Planning (Environmental	This Act transposes EU Directive 2011/92/EU (the EIA Directive) into UK law for nationally significant infrastructure projects, ensuring

Legislation	Relevance to assessment
Impact Assessment) Regulations 2017 (Ref 2)	environmental safeguards while potentially streamlining the process.
Marine Works (Environmental Impact Assessment) Regulations 2007 (as amended) (Ref 3)	The Marine Works (EIA) Regulations 2007 require certain types of projects that have the potential to significantly affect the environment to submit an Environmental Impact Assessment before a marine licence decision is made.
Marine and Coastal Access Act 2009 (Ref 5)	This Act provides a framework for managing and protecting marine and coastal areas, promoting sustainable development, enhancing public access to the coast, and conserving marine biodiversity and habitats, including establishing marine protected areas and coastal access routes.

National Policy

Overarching National Policy Statement for Energy (NPS EN-1)

24.2.4 The primary basis for deciding whether to grant a Development Consent Order (DCO) for the Proposed Scheme are the National Policy Statements (NPS), and of primary relevance the Overarching NPS for Energy (NPS EN-1) (Ref 6), the NPS for Renewable Energy Infrastructure (NPS EN-3) (Ref 7) and the UK Marine Policy Statement (Ref 8). These set out policies to guide how applications for development consent for energy infrastructure should be decided and how the effects of such infrastructure are considered.

24.2.5 **Table 24.2** lists the paragraphs from the NPS EN-1 and other national policy that are relevant to the commercial fisheries assessment. It also sets out where these policy requirements are addressed within the chapter.

Table 24.2: List of relevant national policy for commercial fisheries

Relevant paragraph reference	Summary of policy requirement	Where addressed in PEIR
NPS EN-1		
Section 5.13	Provides guidance on the Applicant's assessment with respect to socio-economic considerations, which for this assessment includes commercial fisheries.	Preliminary assessment to the effects of socio economics considerations is provided in **paragraphs 24.6.7** to **24.6.62** and with **Appendix 24.1 Supporting commercial fisheries information** of this PEIR.
NPS EN-3		
Section 2.8.11	**Section 2.8.11** of this policy looks at the physical environment and the knock-on	Preliminary assessment of the effects on fish stocks and commercial fisheries

Relevant paragraph reference	Summary of policy requirement	Where addressed in PEIR
	effects on offshore habitats and biodiversity and in turn fish stocks affecting the commercial fishing industry.	is provided in **Chapter 20 Fish and Shellfish** of this PEIR and **paragraphs 24.8.35** to **24.8.36**
Sections 2.8.142 to 2.8.314	Considers the impacts on commercial fisheries and fishing. Whilst much of the content relates to offshore wind (particularly the array areas), many of the principles can be applied to cable projects such as early engagement with the fishing industry, implementation of industry best practice for fisheries liaison, consideration of transboundary issues, and consultation with the fishing industry on mitigation proposals.	The Applicant has employed a Fisheries Liaison Officer (FLO) for the Project, and the project is using guidance for best practices as shown in **paragraph 24.4.28.**
UK Marine Policy Statement		
Section 3.8.1	**Section 3.8.1** of the policy notes the importance of fish being an important source of protein and being part of a balanced diet. It also plays an important role in achieving food security which is an objective of the UK administration. It also states that "The UK has a long history of fishing both inshore and offshore waters, which the UK Administrations wish to see continue".	Preliminary assessment of the effects on fish stocks and commercial fisheries is provided in **Chapter 20 Fish and Shellfish** of this PEIR and **paragraphs 24.8.35** to **24.8.36** of this chapter.
Section 3.8.2	Policy refers to the Common Fisheries Policy (CFP) which provides a framework for decision-making concerning the management of fisheries. Notes a Member State may take non-discriminatory measures that are more restrictive than the CFP measures to those fisheries operating within their 0-12 nautical mile zones in respect of national fleets and, with the approval of the Commission and affected Member States, to other EU vessels subject to where historic fisheries rights exist in the 6-12 nautical mile zone.	The Applicant is aware of the CFP and any potential historic fisheries rights which are noted in **paragraph 24.4.8**
Section 3.8.3 to 3.8.6	These sections refer to policies which reference the CFP and guidance which decision makers should be aware of with respect to ensuring fisheries are sustainable.	The Applicant acknowledges these policies and the information provided.

Relevant paragraph reference	Summary of policy requirement	Where addressed in PEIR
Section 3.8.7	The policy acknowledges how sensitive fisheries are to changes by other sea users, and how Marine developments have the potential to prevent, displace or encourage fishing activities. There are also potential social, economic and environmental impacts of displacement of fishing activity caused by other sea uses, particularly if from well-established fishing grounds. In addition to marine fish stocks associated with commercial sea fishing, the coastal environment is important as a corridor for migrating Atlantic salmon and European eel, and in providing the marine feeding ground for sea trout. These important species that support coastal and inland commercial fishing and recreational angling could be vulnerable to a wide range of coastal activities.	The Applicant acknowledges this information. Relevant assessment have been provided in **Chapter 28 Cumulative effects** of this PEIR**, Chapter 20 Fish and Shellfish** of this PEIR and in **Section 24.8** of this chapter of the PEIR.
Section 3.8.8	The policy notes how some fishing can have negative effects on the environment such as over exploitation of vulnerable or rare species. However, is also notes that some fishing activities are compatible with other marine users.	The Applicant acknowledges this information the intention is that the proposed Offshore Submarine HVDC Cables will be buried. Typically, the presence of buried cables is compatible with fishing activities.
Section 3.8.10	The policy notes Marine Plan authorities should consider the potential social and economic impacts of other developments on fishing activity, as well as potential environmental impacts. It specifically references impacts of displacement of vessels, displacement of fish stocks, and cumulative impacts of multiple marine developments in the same marine plan area	The Applicant acknowledges this comment. The Applicants Fisheries Liaison Officer have been in regular consultation with the IFCA and other fisheries stakeholders. A preliminary assessment of effects is presented in **Section 24.8** of this chapter.

24.2.6 The local policies listed in **Table 24.3** are considered relevant to the commercial fisheries assessment of the Project.

Table 24.3: List of relevant local policy for commercial fisheries

Local planning authority	Relevant local policy	Relevance to assessment
Marine Management Organisation	East Inshore and East Offshore Marine Plans (Ref 9)	Marine plans set out the priorities and direction for future planning within the plan area and provide guidance on activities to avoid or promote. **Appendix 4.2 Marine Plan Assessment** of this PEIR outlines how the Proposed Offshore Scheme complies with the policies and objectives for the East Inshore and East Offshore Marine Plan area. Of relevance to this commercial fisheries assessment are Policy FISH1 and FISH2 which require Applicants to demonstrate that they will not prevent fishing activities, will not have an adverse impact upon fishing activities of fish stocks, or can implement measures to mitigate adverse impacts. The preliminary assessment of effects is presented in **Section 24.8** and embedded design mitigation and control measures are presented in **Section 24.7** of this chapter.

24.3 Consultation and engagement

24.3.1 This section describes the outcome of, and response to, the EIA Scoping report (Ref 10) and the EIA Scoping Opinion (Ref 11) in relation to the commercial fisheries assessment.

24.3.2 It also provides details of the ongoing technical engagement that has been undertaken with key stakeholders and provides a brief overview of the non-statutory public consultation undertaken to date.

24.3.3 Feedback from engagement and consultation are used to define the assessment approach and to ensure that appropriate baseline information is used.

24.3.4 It should be noted that feedback is also used to drive the design of the Proposed Scheme to avoid, prevent and reduce any likely environmental effects. **Chapter 3 Alternatives and Design Evolution** of this PEIR reports how the Proposed Scheme design has evolved in response to feedback, and details of proposed embedded design (Primary) mitigation and standard good practice (Tertiary) mitigation measures relevant to the commercial fisheries assessment are provided in **Section 24.7** of this chapter.

Consultation

Non-Statutory Consultation

24.3.5 Feedback received from stakeholders following the close of our 2022 and 2023 consultation is outlined within the **Interim Non-Statutory Consultation**

Feedback Summary Report 2023 (Ref 12) and **Supplementary Non-Statutory Consultation Summary Report 2024** (Ref 13).

24.3.6 **Table 24.4** below includes a summary of key non statutory consultation feedback received to date and how this has been addressed within the PEIR or will be within the Environmental Statement (ES).

Table 24.4: Key non statutory consultation feedback for commercial fisheries

Stakeholder	Comment	Applicant response
Eastern Inshore Fisheries and Conservation Authority (EIFCA)	In summary, while there are potential impacts to fishing activities and the environment due to the proposed works, all key concerns have been scoped in for further assessment. EIFCA recommends early engagement and direct dialogue with the fishing industry.	**Table 24.6** lists the engagement with the key fisheries stakeholders during the scoping and preparation of the PEIR including the EIFCA and Fisheries association. Engagement will continue prior to the ES. The Applicant will be seeking a 'Statement of Common Ground' with the fishers. The Applicant will also work with fishers to agree appropriate and proportionate mitigation measures where necessary.

EIA Scoping Opinion

24.3.7 An EIA Scoping Opinion was adopted by the Planning Inspectorate on behalf of the Secretary of State on 16 April 2024 (Ref 11)

24.3.8 The Applicant received a separate EIA Scoping Opinion from the Marine Management Organisation (MMO) (Ref 14) as the MMO were unable to provide opinion to the Planning Inspectorate in time for the April 2024 deadline.

24.3.9 Comments received from the Planning Inspectorate and MMO in relation to commercial fisheries are provided in **Table 24.5**.

Table 24.5: Preliminary response to Planning Inspectorate and MMO Scoping Opinion comments for commercial fisheries

Scoping Opinion ID	Scoping Opinion Comment	How this is addressed
ID 3.19.2	The EIA Scoping Report states that the potential impacts on commercial fish species will be addressed in the Fish and Shellfish ES Chapter and any impacts to the navigation abilities of fishing vessels will be assessed in the Shipping and Navigation ES Chapter. The ES should	The Applicant notes the comments and cross references have been included in the PEIR to **Chapter 20 Fish and Shellfish** and **Chapter 23 Shipping and Navigation**.

Scoping Opinion ID	Scoping Opinion Comment	How this is addressed
	provide clear cross-referencing to where relevant impacts on commercial fisheries has been assessed.	
ID 3.19.3	The EIA Scoping Report identifies the data sources that would be used to inform the baseline and describes the criteria that would be used to determine the sensitivity of receptors and magnitude of impacts. However, it is not clear from the EIA Scoping Report what methods would be used to carry out the assessment and whether the assessments would be qualitative or quantitative. The methodologies used must be described and their use justified with reference to appropriate guidance and/or agreement with relevant consultation bodies. The Applicant is encouraged to ensure that they seek advice from all relevant stakeholders with expertise on this aspect, including the appropriate Inshore Fisheries and Conservation Authorities (IFCAs).	The methodology and approach for the assessment is presented in **Section 24.4** quantitative data has been used to analyse however there are limitations of the data, so a qualitative approach has also been used. The Project FLO has engaged with fisheries stakeholders including the Eastern IFCA. In due course a statement of common grounds would be developed.
ID 3.19.4	The EIA Scoping Report states that the ES will assess the potential for the Proposed Development to temporarily disrupt fishing activities (including restriction of access) during both the construction and operational phases. The Inspectorate advises that the Applicant should consider the timing of any proposed construction and/or operational maintenance activities as to avoid key periods relating to commercial fishing activities.	The preliminary assessment is based on a precautionary approach and assumes that activities could take place at any time of the year. As the baseline has identified that fishing activity within the study area is year long this is considered to be appropriate. A Draft Fisheries Liaison and Coexistence Plan has been prepared and is provided as **Appendix 24.2** of this PEIR. The Applicant will, via the FLO, continue consultation with fishers on the timing of the works to minimise disruption where feasible.
MMO 3.3.6	Design and control measures which aim to reduce the impacts to fish and commercial fisheries receptors are provided. The mitigation measures for fish receptors presented at this stage are minor and are unlikely to significantly reduce the potential impacts of construction activities. The need for additional mitigation to reduce likelihood	The Applicant notes the comments and has included the mitigation measures within this chapter in **Section 24.7.**

Scoping Opinion ID	Scoping Opinion Comment	How this is addressed
	of significant impacts occurring should be determined and included in any resulting ES. There is potential for impacts to herring spawning habitation and sandeel habitat to occur as a result of construction and installation of the cables, however the magnitude and significance of any impacts will depend on the exact location of the cable route, the timing and duration of works and whether UXO clearance forms part of the assessment. The mitigation measures relating to commercial fisheries receptors seem appropriate at this stage.	
MMO 3.5.11	As indicated in **Table 29-2,** the EIA Scoping Report should note the potential for intra project effect of Fish and Shellfish, Commercial Fisheries and on Other Marine Users (namely the recreational fisheries/tourism element in inshore and coastal boundaries). To note the touristic attraction of 'crabbing' for small crab and prawn species at the Southwold/Walberswick harbour area	A preliminary assessment of effects on recreational fisheries/tourism element has been assessed in **Chapter 25 Other Marine Users** of this PEIR.

Engagement

24.3.10 This section provides details of the ongoing technical engagement that has been undertaken with stakeholders in relation to commercial fisheries and is outlined below.

Key stakeholders

24.3.11 Key stakeholders with views and concerns regarding commercial fisheries have been identified as including:

a. Felixstowe Ferry Fisherman's Association;
b. Harwich Fishermen's Association;
c. Sizewell (Individual representatives);
d. Southwold (Individual representatives);
e. Lowestoft (Individual representatives);
f. Aldeburgh (Individual representatives);
g. Orford (1 individual);
h. National Federation of Fishermen's Organisation (NFFO); and
i. Eastern IFCA.

24.3.12 Consultation meetings have taken place between the key stakeholders, the FLO (Brown and May Marine Ltd) and The Applicant. Meetings were held on 13 March 2024, 17 April 2024 and 11 March 2025. The key themes raised by fishers are provided in **Table 24.6.**

Table 24.6: Key feedback from commercial fisheries stakeholders

Comment	Applicant response
Concern has been expressed around the number of marine developments in the region and the continued displacement that construction activities cause the fishing community. Fishers are being squeezed and/or having to travel further to find suitable grounds.	**Section 24.8** presents the preliminary assessment of effects including displacement of fishing activity. **Chapter 28 Cumulative Effects** of this PEIR outlines the approach to be taken for the ES to assess the effects of displacement from the multiple marine developments in the region.
Concerns how works will affect the ecology of the seabed and how long it would take to recover.	**Chapter 19 Intertidal and Subtidal Benthic Ecology** of this PEIR presents the preliminary environmental assessment of effects on seabed ecology.
Requested to know how the Applicant will ensure that the cables remain buried	The intention is to bury the proposed Offshore HVDC Submarine Cables in the seabed, except in areas where trenching is not possible e.g. where ground conditions do not allow burial or at infrastructure crossings. The depth of burial will be determined through the development of a Cable Burial Risk Assessment and Burial Assessment Study. Preliminary assessments have been undertaken but these will be updated for the ES to consider the project specific seabed data acquired in 2024. **Chapter 2 Description of the Proposed Scheme** of this PEIR describes how regular surveys following installation will monitor the burial depth of the proposed Offshore Submarine HVDC Cables.
Commented that the MMO data is not representative of the inshore fishing fleet and if the Applicant was aware of a paper written by MMO on the sensitivity of the under 12m fleet.	The Applicant acknowledges that the MMO data is not representative of the inshore fleet, this has been noted as a limitation in **Section 24.5.** The Applicant requested and was provided with anecdotal evidence by the fisheries stakeholder which has been included within the baseline description in **paragraphs 24.6.11** to **24.6.22.** The Applicant has reviewed the report (Ref 15) along with other relevant reports and guidance.

24.4 Assessment methodology

24.4.1 This section outlines the methodology followed to assess the potential likely significant effects of the Proposed Offshore Scheme in relation to commercial fisheries including:

a. scope of the assessment;
b. study area;
c. assessment scenarios;
d. methodology;
e. assessment criteria; and
f. assessment of cumulative effects.

24.4.2 This section provides a description of how receptor sensitivity, magnitude of impact and significance of effects are all described and assigned to the assessment.

24.4.3 The project-wide approach to the assessment methodology is set out in **Chapter 5 EIA Approach and Methodology** of this PEIR.

Scope of the assessment

24.4.4 Potential likely significant effects requiring assessment may be temporary or permanent and may occur during construction, operation (and maintenance) and decommissioning. Potential likely significant effects on commercial fisheries receptors within the scope of the assessment are summarised in **Table 24.7**. The scope of the assessment has responded to feedback received as detailed in **Section 24.3**.

Table 24.7: Summary of the scope for commercial fisheries assessment

Receptor	Construction	Operation and Maintenance	Decommissioning
All gear types (static gear, dredging, demersal seine, beam trawl, demersal trawl and pelagic trawl)	Temporary restricted access to fishing ground (including required static gear clearance).	Temporary restricted access to fishing ground (including required static gear clearance).	Temporary restricted access to fishing ground (including required static gear clearance).
All gear types	Temporary displacement of fishing activity into other areas.	Temporary displacement of fishing activity into other areas.	Temporary displacement of fishing activity into other areas.
All gear types	Changes in distribution of target species.	n/a	Changes in distribution of target species.
All gear types	Temporary increase and deposition of suspended sediments.	Temporary increase and deposition of suspended sediments	Temporary increase and deposition of suspended sediments

Study area

24.4.5 The spatial scope of the impact assessment for commercial fisheries covers the area of the Proposed Offshore Scheme contained within the Draft Order Limits, together with the study area, described as follows.

24.4.6 The Proposed Offshore Scheme routes from Walberswick across the Southern North Sea to the boundary between the English and Dutch EEZ. The Draft Order Limits for the Proposed Offshore Scheme is illustrated in **Figure 24.1** of this PEIR**.**

24.4.7 Fisheries statistics are reported by International Council for the Exploration of the Sea (ICES) rectangles. Each rectangle is approximately 30NM square and is 30min latitude and 1º longitude in size (Ref 23).

24.4.8 The EIA Scoping Report covered a large study area using ICES rectangles to give a regional perspective. However, analysis of catch statistics for these rectangles found that rectangles overlapping the Proposed Offshore Scheme had similar fishing effort and target species as those in the wider region. Therefore, for the PEIR, it was decided to focus only on the ICES rectangles that overlap the Proposed Offshore Scheme, namely 33F1, 33F2, 34F2, 35F2 and 35F3 which encompass the study area, as illustrated in **Figure 24.1** of this PEIR

Assessment scenarios

24.4.9 **Chapter 5 EIA Approach and Methodology** of this PEIR, provides an overview of the project's approach to the temporal scope (the time scales over which impacts may occur) of the EIA. This section describes the temporal scope for the assessment as it applies to the commercial fisheries assessment.

24.4.10 The temporal scope has been informed by **Chapter 2 The Description of the Proposed Scheme** of this PEIR. The temporal scope of the assessment of commercial fisheries is consistent with the period over which the Proposed Offshore Scheme would be carried out. It covers the period from award of consent to the anticipated end of the Proposed Scheme lifespan.

24.4.11 It assumes construction of the Proposed Offshore Scheme will commence at the earliest 2028 and complete by 2032. Operation would commence in 2032 with periodical maintenance required during the operational phase of the Proposed Offshore Scheme. It is assumed that maintenance and repair activities could take place at any time during the operational lifespan of the Proposed Offshore Scheme.

24.4.12 It is during the construction phase of the Proposed Offshore Scheme that direct impacts to commercial fisheries receptors are most likely to occur. Indirect impacts may also occur during construction-related activities.

24.4.13 The Proposed Offshore Scheme would be licensed for 40 years. At this point, either an extension to the licence would be requested, supported by the necessary environmental assessment, or decommissioning would take place. If

decommissioning is required, then activities and effects associated with the decommissioning phase are expected to be of a similar level to those during the construction phase works, albeit with a lesser duration of two years and, with the removal of visible infrastructure, effects would reduce over the course of that period.

24.4.14 Acknowledging the complexities of completing a detailed assessment for decommissioning works up to 40 years in the future, based on the information available, the Applicant has concluded that impacts from decommissioning would be no greater than those during the construction phase. Furthermore, should decommissioning take place, it is expected that a full assessment in accordance with the legislation and guidance at the time of decommissioning would be undertaken. In addition, it expected that the DCO will include a requirement for a written scheme of decommissioning for approval by the MMO and in line with The Crown Estate requirements.

Baseline methodology

Data collection

24.4.15 Baseline data collection has been undertaken to obtain information over the study area. This section provides the approach to collecting baseline data.

24.4.16 The following sources of data have been utilised to inform the baseline with respect to commercial fisheries (**Table 24.8**) In addition to these data sources, the commercial fisheries assessment draws on environmental baseline data collated for other topics, specifically, baseline data presented in **Chapter 20 Fish and Shellfish** of this PEIR

Table 24.8: Data sources used to inform the commercial fisheries assessment

Source of data	Baseline data
Marine Management Organisation (MMO) UK Fisheries Annual Statistic reports 2019 – 2023 (Ref 24)	Fisheries statistics are updated annually in September for the previous five years, the current data is between 2019 and 2023. The ES would be updated with the latest data available.
International Bottom Trawl Survey (IBTS) Data 2023 – 2024 (Ref 25)	Trawl survey data from ICES rectangles.
Inshore Fisheries and Conservation Authority (IFCA) Byelaw information (Ref 26)	Regional fisheries byelaw information.
EMODnet Average Mega Watt (MW) Fishing hours between 2018 – 2023 based on Vessel monitoring system (VMS) data (Ref 27)	GIS data of fishing effort for different gear types based.
MMO Surveillance Sightings Data 2018 – 2023 (Data supplied on request)	Surveillance sightings of vessels by gear type (all nationalities) recorded in UK waters by surveillance patrols supplied as GIS data.

Source of data	Baseline data
MMO Report 1382, Sensitivity of the under 12m fishing fleet to offshore wind development in the east marine plan areas. (Ref 15)	Reference material with background information about under 12m fishing fleet.

24.4.17 It should also be noted that the level of surveillance has been reduced in recent years, and this specifically affects the data for the same period for the European fleet where their data is no longer captured by ICES rectangle.

24.4.18 Baseline data collection for the commercial fisheries assessment has been desk based but also includes feedback from commercial fisheries stakeholders gathered during consultation.

Site surveys

24.4.19 No surveys specific to the commercial fisheries assessment have informed this PEIR. As noted above it is considered that the desk-based sources are sufficient to make assessments.

Assessment methodology

24.4.20 The approach to assessment is set out in **Chapter 5 EIA Approach and Methodology** of this PEIR. This has informed the approach used in this commercial fisheries assessment.

24.4.21 **Chapter 5 EIA Approach and Methodology** of this PEIR sets out the standard EIA methodology and matrixes to be used for the assessment. The criteria for characterising the value and sensitivity and magnitude for commercial fisheries are outlined in **Table 24.9** and **Table 24.10** respectively.

24.4.22 The assessment of sensitivity will be made with consideration of operational range of the fleet, the ability of vessels to adapt e.g. to deploy different fishing methods or target different species, the ability of the fleet to accommodate change, and the importance of the fishery in the region.

24.4.23 The assessment of magnitude will be made with consideration of the extent of the area affected in relation to the available grounds, the duration and frequency of the effect and the range of liaison and management measures that would be implemented as part of the Proposed Offshore Scheme.

24.4.24 Assessment of cumulative and combined effects are discussed in **Chapter 28 Cumulative Effects** of this PEIR.

Table 24.9: Definitions of value and sensitivity for commercial fisheries

Receptor Value and Sensitivity	Description
High	Receptor has low/no capacity to return to pre-impact conditions, e.g., low tolerance to change and low recoverability such as loss of access with no alternatives.
Medium	Receptor is generally vulnerable to the impacts and recoverability is slow or costly e.g., low levels of alternative fishing grounds are available, and/or the fishing fleet has a low operational range.
Low	Receptor has moderate levels of recoverability. May affect behaviour but is not a nuisance to user, with acceptable financial consequences e.g., short-term, reversible changes.
Negligible	The receptor is tolerant to change with no effect on its character. High levels of alternative fishing grounds are available and/or fishing fleet is adaptive.

Table 24.10: Definitions of impact magnitude criteria for commercial fisheries

Impact Magnitude	Definition
High	Impact is of long-term duration (15+ years) and/or results in total loss of or major alteration to key elements (e.g., target fish or shellfish biological resource), or features (e.g., location of fishery) of the pre-project conditions, such that the post-project character or composition of the feature would be fundamentally changed. Substantial loss of economic value of commercial landings, that is nationally or regionally significant.
Medium	Impact is of medium duration (7-15 years) and/or results in loss of or alteration to key elements (e.g., target fish or shellfish biological resource), or features (e.g., location of fishery) of the pre-project conditions, such that the post-project character of the feature would be partially changed. Partial loss of economic value of commercial landings that is locally significant.
Low	Impact is of short duration (1-7 years) and/or is a minor alteration to key elements (e.g., target fish or shellfish biological resource), or features (e.g., location of fishery) of the pre-project conditions. Minor loss of economic value of commercial landings that is not locally significant.
Negligible	Impact is temporary (<1 year) and/or is a slight loss of ability to carry out fishing activities or slight loss of target fish or shellfish biological resources. No or unquantifiable change to pre-project conditions. Minimal loss of economic value of commercial landings.

24.4.25 The significance of an effect, either adverse or beneficial, will be determined using a combination of the magnitude of the impact and the sensitivity of the receptor. A matrix approach is used throughout all topic areas to ensure a

consistent approach within the assessment. This is described further in **Chapter 5 EIA Approach and Methodology** of this PEIR and is replicated for ease in **Table 24.11**

Table 24.11: Significance matrix

Magnitude of Impact	Receptor value and sensitivity			
	High	**Medium**	**Low**	**Negligible**
High	Major	Moderate	Moderate	Minor
Medium	Moderate	Moderate	Minor	Negligible
Low	Moderate	Minor	Negligible	Negligible
Negligible	Minor	Negligible	Negligible	Negligible

Cumulative assessment

24.4.26 **Chapter 28 Cumulative Effects** of this PEIR defines the methodology for the assessment of cumulative effects. The commercial fisheries assessment of intra- and inter-project cumulative effects would be carried out and reported within the ES to be submitted with the application for development consent.

24.4.27 The zone of influence for the inter-project cumulative effects assessment of commercial fisheries comprises the area of the Southern North Sea from Lowestoft in the north to Harwich in the south and out to the boundary between the UK and Netherlands EEZs.

Guidance

24.4.28 In addition, the commercial fisheries assessment has been undertaken in accordance with relevant guidance and has been compiled in accordance with professional standards. The guidance and standards which relate to this assessment are:

a. Best Practice Guidance for Offshore Renewables Developments: Recommendations for Fisheries Liaison (Ref 16);
b. Best Practice Guidance for Offshore Renewables Developments: Recommendations for Fisheries Disruption Settlements and Community Funds (Ref 17);
c. Changes to fishing practices around the UK as a result of the development of offshore windfarms (Ref 18);
d. Guidelines for data acquisition to support marine environmental assessments of offshore renewable energy projects (Ref 19);
e. International Cable Protection Committee - Fishing and Submarine Cables Working together (Ref 20);

f. European Subsea Cable Association Guideline 20 on vessels operating in the vicinity of subsea cables (Ref 21); and
g. Best Practice Guidance for Fishing Industry Financial and Economic Impact Assessments (Ref 22).

24.5 Assessment assumptions and limitations

24.5.1 This section provides a description of the assumptions and limitations to the commercial fisheries assessment.

24.5.2 The information provided in this PEIR is preliminary and the final assessment of significant effects will be reported in the ES. The PEIR has been produced to fulfil the Applicants consultation duties pursuant to Section 42 of the Planning Act 2008 and is in accordance with Regulation 12 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017. This PEIR enables consultees to develop an informed view of the likely significant effects of the Proposed Offshore Scheme.

24.5.3 The assessment has been undertaken based on the description of the Proposed Scheme in **Chapter 2 Description of the Proposed Scheme** of this PEIR. It is assumed the Proposed Offshore Scheme will be installed in one trench within the Draft Order Limits.

24.5.4 It is possible that external cable protection may be required in areas within the Draft Order Limits. This would include areas where there are infrastructure crossings and where the target depth of burial cannot be achieved.

24.5.5 It is assumed that any areas where static gear needs to be temporarily removed from would be communicated to fishers by the FLO and via Notices to Mariners and the Kingfisher bulletin service.

24.5.6 Any safety zone would be a 500m radius area around vessels and installation spread at the section of the cable route being laid, maintained or decommissioned. The safety zone would be maintained 24 hours, 7 days a week as detailed in **Chapter 2 Description of the Proposed Scheme** of this PEIR, which would move forward on a rolling basis as the works progress in a linear manner.

24.5.7 This PEIR has been collated based on a range of publicly available data and information. It is assumed that the data collated is accurate. The data has been supplemented with additional information acquired as part of the stakeholder engagement process.

24.5.8 Statistics have been used from the Marine Management Organisations (MMO) UK Sea fisheries annual statistics which are issued annually. These statistics show the catch data from the previous year and four further years previous to that, 2019 to 2023. This data is annually released by the MMO September for the previous year. It would therefore be updated for the ES with the 2024 data after its release in September 2025.

24.5.9 It should be noted that fishing is not equally distributed across the whole area of the ICES rectangles. Therefore, overall fishing activities identified for any given rectangle may not be a true representation of the activity where the Proposed Offshore Scheme is located.

24.5.10 Additionally fishing methods are grouped into gear categories within the MMO data. In some cases, these groups may include different fisheries which does not necessarily allow for any differentiation between activities.

24.5.11 Catches of under 30kg are not required to be reported and therefore are not captured with the MMO statistics. It is acknowledged that publicly available statistics will underrepresent the inshore fleet; fishing vessels <12m are not required to carry Automatic Identification System (AIS) and do not directly report landings data. Landings data derived from the MMO catch statistics can therefore only provide a general overview of fishing effort. Data has been supplemented by data from consultation with the local fisheries stakeholders.

24.5.12 Variations and trends in commercial fisheries activity are an important aspect of the baseline assessment. Although statistics and consultation can identify past long-term trends, it is harder to predict future trends which may result from changes in market conditions, changes following the withdrawal of the UK from the EU or global events such as conflict. Given the time period assessed, data may also reflect potential short-term changes in activity due to the 2020-2021 COVID pandemic, which temporarily affected market demand and supply chains.

24.5.13 It should also be noted that the level of surveillance has been reduced in recent years, and this specifically affects the data for the same period for the European fleet where their data is no longer captured by ICES rectangle.

24.5.14 Given the above limitations, a precautionary approach to the assessment will be adopted, with consultation with local fisheries stakeholders forming a key part in establishing the current and future baseline. In the absence of data, professional judgement, based on experience of similar linear schemes, has been used where required to inform the assessment.

24.5.15 Stakeholders in other Member States would be consulted regarding transboundary issues, and the most up to date information of fisheries data and European projects will be used as part of the assessment produced for the Environmental Statement.

24.6 Baseline conditions

24.6.1 To provide an assessment of the likely significance of the Proposed Scheme (in terms of commercial fisheries), it is necessary to identify and understand the baseline conditions in the study area. This provides a reference point against which potential changes in commercial fisheries can be assessed.

24.6.2 The baseline section should be read in conjunction with the following supporting Appendices and Figures as found within Volume 2 and Volume 3 of this PEIR respectively:

a. **Appendix 20.1 Sandeel and Atlantic Herring Habitat Assessment** of this PEIR**;**
b. **Appendix 24.1 Supporting Commercial Fisheries Information** of this PEIR**;**
c. **Appendix 24.2 Draft Fisheries Liaison and Coexistence Plan** of this PEIR**;**
d. **Figure 24.1 Commercial fisheries study area;**
e. **Figure 24.2 Surveillance sightings by vessel nationality within the study area between 2018-2023;**
f. **Figure 24.3 Surveillance sightings by fishing method within the study area between 2018-2023;**
g. **Figure 24.4 Areas of historic fishing rights;**
h. **Figure 24.5 Beam trawling and bottom otter trawl effort within the study area between 2018-2023;**
i. **Figure 24.6 Bottom seines and dredging effort within the study area between 2018-2023;** and
j. **Figure 24.7 Pelagic trawl and Seine and Static gear within the study area between 2018-2023.**

Current baseline

Overview of principal fishing activity

24.6.3 The area is primarily fished by vessels from the UK and Netherlands with evidence of vessels from Belgium, Denmark, Germany and France also being present. This is illustrated in **Figure 24.2** of this PEIR which is based on surveillance sightings data from the MMO for the period of 2018 to 2023. These vessels use a variety of gear types as illustrated in **Figure 24.3** of this PEIR. A detailed breakdown of the sightings within the study area is provided in **Table 24.12.**

24.6.4 ICES rectangle 33F1, which is the rectangle closest to the proposed Landfall Site, is where the highest catch for the under 10m fishing fleet is found; primarily within the 6NM limit. The types of fishing methods used within this rectangle are primarily gear types such as pots and drift nets, though there is also evidence of scallop dredging, trawling and the use of lines. This is also backed up by the catch value shown in **Table 24.13** which shows this is the most valued rectangle for the under 10m vessels.

24.6.5 ICES rectangle 33F2 is fished by vessels from the UK, Belgium, France, Germany, and the Netherlands. It is the third highest valued area within the study area, with most of the value attributed to the over 10m fleet. This rectangle has a wide range of gear types used but the primary method is beam trawling (66% of the total).

24.6.6 Rectangles 34F2 and 35F3 are exclusively fished by the over 10m fleet and primarily by the Dutch but there is some evidence of French and German vessels

using these grounds. Most of these vessels are beam trawlers (85%), and of this 92% are Dutch. 35F2 is similar to 34F2 and 35F3 but there was evidence of some under 10m vessels in 2023 using this rectangle at a very low level.

24.6.7 The surveillance sightings show that beam trawlers are the most sighted vessel type within the study area, equating to over 71% of all sightings. Static gear only equates to 8% of the sightings.

Table 24.12: Surveillance sightings by nationality and gear type (2018 - 2023)

Vessel Nationality	Primary Gear type	No of sightings	% of sightings
UK	Beam Trawler	16	2.930
	Other Trawlers	22	4.029
	Nets (Gill and Drift)	24	4.395
	Bottom Seiner (Anchor/Danish/Fly/Scots)	10	1.831
	Lines (Longlining, Rod and Line)	19	3.479
	Potters and Whelkers	16	2.930
	Dredgers (Scallop)	4	0.732
	Other	4	0.732
	UK Total	**115**	**21.062**
Belgium	Beam Trawler	12	2.197
	Belgium Total	**12**	**2.197**
Germany	Beam Trawler	7	1.282
	Bottom Seiner (Anchor/Danish/Fly/Scots)	2	0.366
	Germany Total	**9**	**1.648**
Denmark	Trawler	1	0.183
	Denmark Total	**1**	**0.183**
France	Trawlers	6	1.098
	Other	4	0.732
	France Total	**10**	**1.831**
Netherlands	Trawlers	7	1.282
	Beam Trawler	354	64.835
	Bottom Seiner (Anchor/Danish/Fly/Scots)	18	3.296
	Potter/Whelker	4	0.732
	Other	16	2.930
	Netherlands Total	**399**	**73.076**

24.6.8 It is clear from **Figure 24.2** of this PEIR that the majority of the UK fleet fish within the 12NM limit in ICES rectangle 33F1, whereas the majority of the European fleet fish beyond the UK 12NM limit in ICES rectangles 33F2, 34F2 and 35F2. As part of the UK-EU Trade and Cooperation Agreement French and Belgium fishing vessels are allowed to fish between the 6NM and 12NM mile limit. In May 2025 a new agreement was made between the UK and EU which allows EU vessels continued access to fish in UK waters until 2038 (Ref 41). **Figure 24.4** of this PEIR illustrates the extent of the historic fishing rights in relation to the study area.

24.6.9 The trend can also be seen in **Table 24.13**. The catch value for <10m vessels is greatest in ICES rectangle 33F1 which is the closest to the English coastline. The >10m vessels tend to target grounds further offshore.

Table 24.13: Annual UK catch value from 2019 to 2023 within the study area by vessel size

ICES Rectangle	Under 10m Vessels Weight in tonnes	Under 10m Vessels Value in £	Over 10m Vessels Weight in tonne	Over 10m Vessels Value in £
33F1	947.87	£2,323,663	154.10	£221,936
33F2	6.63	£17,095	1066.29	£1,993,872
34F2	0	£0	668.72	£1,893,204
35F2	0.755	£2,126	163.63	£455,894
35F3	0	£0	418.93	£1,993,953

Source: MMO (2024) (Ref 24)

Local Fishing Fleet

24.6.10 UK vessels of less than 17m in length and with less than 300 horsepower (hp) (221kW) are permitted to fish inside the 6NM fishery limit, with some fishing restrictions. Fishing effort within the EIFCA district is, therefore, limited to inshore fishing activity by vessels of under 17m in length and under 300hp (221kW). Most of the current local based fishing fleet is made up of vessels under 10m in length with an average of around 88hp.

24.6.11 The UK fleet represents just over 21% of vessels that fish within the study area, but their catch value in 2023 equated to approximately 39% of the total catch value in the study area. Of this 39%, 70% of the catch value was caught by the under 10m vessels, the nearshore fleet.

24.6.12 The UK fleet use a wider range of gear types including pots, trawls, dredging, nets and rods and lines, in comparison to the foreign vessels which are primarily

trawlers. Local vessels tend to use more than one fishing method to target different species throughout the year.

24.6.13 UK fisheries are also a focus of the government's joint fisheries statement (JFS) (Ref 33) and as such, they are considered the primary indicator of commercial fishing activities undertaken within the study area.

24.6.14 The UK vessels which primarily work within the study area are based out of the ports of Lowestoft, Southwold, Aldeburgh, Orford, Felixstowe and Harwich. They concentrate their effort within the 12NM limit and are mainly under 10m in length. **Table 24.14** lists the number of vessels currently registered to these ports and their size.

Table 24.14: Vessels registered at ports local to the study area in September 2024

Home Port	**Registered vessels under 10m (Shellfish Licence)** (Ref 34)	**Registered vessels over 10m (Shellfish Licence)** (Ref 35)
Aldeburgh and Orford	6 (4)	-
Felixstowe	20 (20)	-
Harwich	18 (10)	-
Lowestoft	21 (9)	4 (1)
Sizewell Beach	1 (1)	-
Southwold	11 (8)	-
Total	**77 (52)**	**4 (1)**

Values in brackets refer to vessels with shellfish licenses.

Felixstowe Ferry Fisherman's Association.

24.6.15 The Felixstowe fleet is based south of the Proposed Offshore Scheme and comprises of multi-purpose under 10m vessels which are able to deploy various gear types such as: trawls, longlines, nets (both static and drift) pots and hook and line. The association has had to adapt its methods over the years to be more dynamic and reactive to keep in business.

24.6.16 Primarily they fish within the 6NM but are able to go offshore up to the EEZ if the weather conditions are favourable.

Harwich Fishermans Association.

24.6.17 Similar to Felixstowe Fleet the Harwich fleet is based south of the Proposed Offshore Scheme it also comprises of multi-purpose under 10m vessels able to deploy a number different gear type to suit the time of year and the weather

conditions. Primarily they fish within the 6NM but are able to go offshore up to the EEZ if the weather conditions are favourable

Sizewell

24.6.18 The Sizewell fleet is beach rather than harbour based, but similar to the other associations it uses a number of different gear types. It is also based south of the Proposed Offshore Scheme. The Sizewell fleet primarily fish within the 6NM but can go out to 12NM.

Southwold Fishermen's association

24.6.19 The Southwold fleet is the closest to the proposed Landfall Site at Walberswick. Their fleet of under 10m vessels use multiple gear types with most vessels operating at least two or three different methods during the year. Their primary catch is sole which are caught inside the 12NM.

Lowestoft Fishing Fleet Association

24.6.20 The Lowestoft fleet is based north of the Proposed Offshore Scheme. As with the other associations the under 10m vessels are using multiple gear types to suit the conditions and the time of year. Vessels can no longer rely on just one gear type to keep operational.

24.6.21 The Lowestoft vessels operate both within the 6NM and beyond the 12NM depending on the conditions.

Lowestoft Independents

24.6.22 As well as the Lowestoft Fishing Fleet Association, Lowestoft also have a number of independent vessels which are over 10m. These larger vessels, as with the under 10m vessels, use several gear types including long lines, pots, nets and trawls. However, they tend to be able to fish further offshore and of longer durations due to the increased size of their vessels.

Restricted Fishing Areas

24.6.23 There are no nationally or internationally designated marine protected areas within the study area which restrict commercial fishing activity.

24.6.24 There are three EIFCA Byelaw areas within the 6NM limit within the study area, which restrict the use of certain fisheries methods.

a. BYELAW 3: Molluscan shellfish methods of fishing (Ref 36) - prohibits fishing for molluscs (i.e., oysters, mussels, cockles, clams, scallops or queens) using fishing gear (e.g., a mussel dredge) unless authorised by the EIFCA.
b. BYELAW 15: Towed gear restriction for bivalve mollusc (Ref 37) - prohibits fishing vessels greater than 14m from fishing for molluscs using any towed gear type within the entirety of the EIFCA district. It also prohibits all vessels from using towed gear between Mundesley Church and Blackeney Church on the North Norfolk coastline out to 3NM miles; an area which lies outside of the study area.

c. BYELAW 12: Inshore Trawling Restriction (Ref 38) - prohibits fishing vessels greater than 15.24m from fishing using towed nets (e.g., shrimp beams, otter trawls) within 3NM of the coastline throughout the EIFCA district. It also mirrors the prohibition in Byelaw 15 prohibiting all vessels from using towed nets between Mundesley Church and Blackeney Church on the North Norfolk coastline out to 3NM miles; an area which lies outside of the study area.

Local Gear Types

24.6.25 There are many different fishing methods or gear types used within the study area, including:

a. beam trawling;
b. longlining;
c. demersal trawling;
d. handlines;
e. demersal seine;
f. pots and traps;
g. pelagic trawl;
h. scallop dredging; and
i. drift of fixed nets.

24.6.26 Further information on these fishing methods can be found in **Appendix 24.1 Supplementary Commercial Fisheries Data** of this PEIR.

24.6.27 A summary of the gear types used by the different fleets, their location and the targeted species are shown in **Table 24.15** is based on the MMO surveillance sightings data.

Table 24.15: Summary of gear types used within the study area

Gear type	Nationalities	Location	Target species
Beam trawling	UK, BE, DE, NL	Beyond 12 NM	Demersal species such as sole, plaice and bass
Demersal trawling	UK, FR, NL	UK within 6NM FR and NL beyond 12NM	Demersal species such as cod, whiting but also squid.
Demersal seine	UK, NL, DE	Within 12NM	Demersal species such as cod, bass and gurnards
Pelagic trawl	UK, FR, NL	Within and beyond 12NM	Pelagic species such as herring, mackerel and horse mackerel
Drift or fixed nets	UK	Within 6NM	Demersal species such as bass, sole and thornback ray
Longlining	UK	Within 6NM	Demersal species such as bass, smoothhound and thornback ray

Gear type	Nationalities	Location	Target species
Handlining	UK	Within 6NM	Demersal species such as bass and cod
Pots and traps	UK	Within and beyond 12NM	Shellfish species such as whelk, crab and lobster
Scallop dredging	UK	Within 12NM	Scallop

Fishing Effort

24.6.28 Heat maps, using data from EMODnet, have been presented in **Figures 24.5** to **24.7** of this PEIR, to provide a visual representation of fishing intensity across the Proposed Offshore Scheme for the period 2018 and 2021 (the most recently published data set). Fishing effort is measured in average Mega Watt (MW) hours over the four-year period, with the darker areas representing locations which have seen the most activity.

24.6.29 **Figure 24.5** of this PEIR shows beam trawl and bottom otter trawl gear effort. The areas of highest intensity of effort for beam trawl is within ICES rectangles 34F2 and 35F2, where the range of MW hours is between 42 and 500. The Proposed Offshore Scheme is within an area of effort of up to 500MW. Beam trawlers are targeting demersal species such as sole, plaice and thornback ray.

24.6.30 The effort of bottom otter trawl is much lower and there are gaps where there is no activity along the Proposed Offshore Scheme, with the higher level of activity for this gear type in ICES rectangle 35F2 between 1MW and 4MW hours on average. Bottom otter trawl also known as demersal trawl target demersal species such as sole and gurnard but also shellfish species such as squid and cuttlefish.

24.6.31 **Figure 24.6** of this PEIR shows demersal seine and dredging gear effort. The area of highest intensity demersal seine gear use is in ICES rectangle 34F2 where the average fishing effort is between 1MW and 13MW hours however there is no effort for approximately the first 40km of the Proposed Offshore Scheme. Demersal seine target demersal species such as gurnard and sur mullet but also shellfish species such as squid and pelagic species such as horse mackerel and pilchards.

24.6.32 The use of dredging gear is limited within the study area to ICES rectangle 33F1 and is all within the 12NM limit. The average effort is less than 1MW hour and does not appear to occur within the Draft Order Limits. Dredging gear target shellfish species such as scallops

24.6.33 **Figure 24.7** of this PEIR shows pelagic trawl and seine and static gear effort. Pelagic trawl and seine gear use is focused in ICES rectangle 34F2 where the average fishing hours are between 1MW and 4MW hours. There are large areas

of the Draft Order Limits where there is no evidence of use of this gear type. Pelagic trawl and seine gear target pelagic species such as herring and horse mackerel.

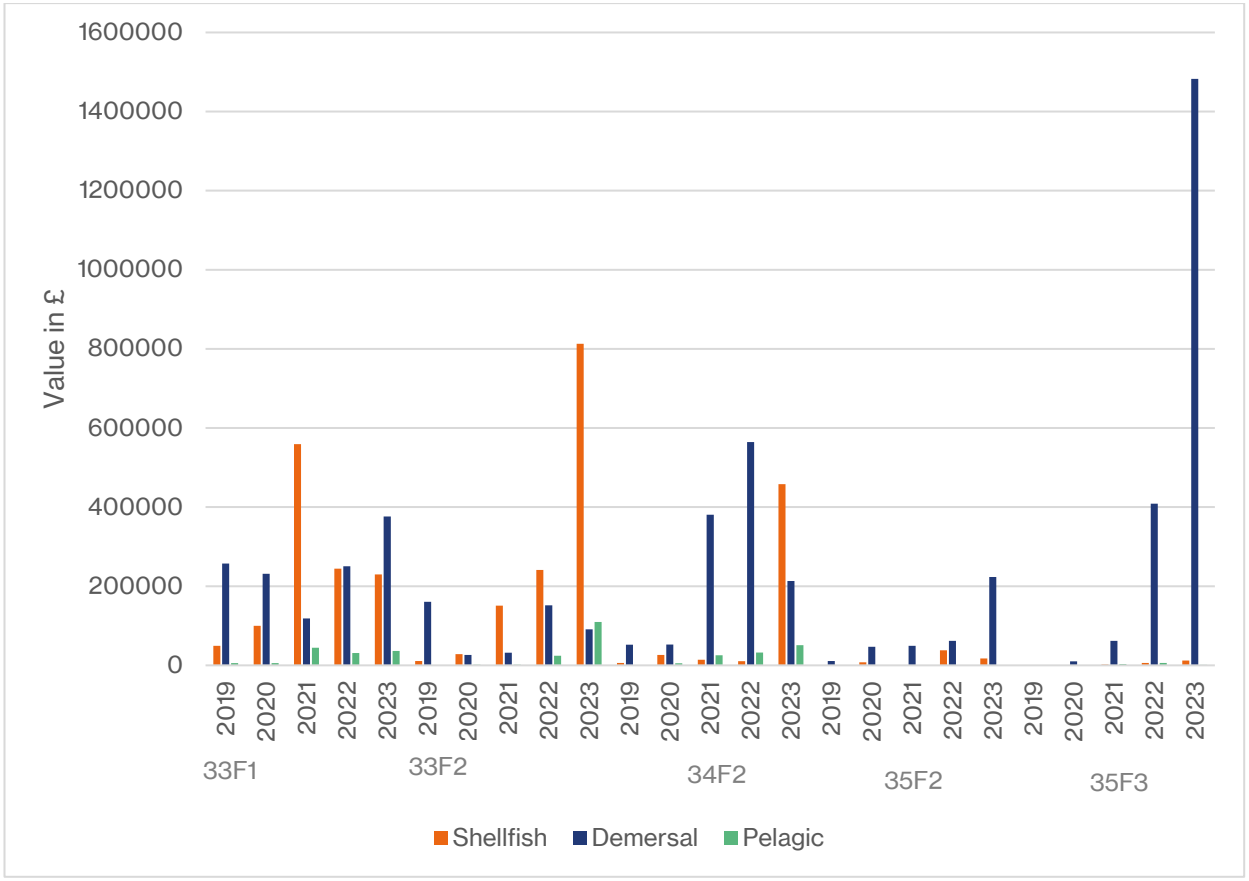
24.6.34 The use of static gear is highest in ICES rectangles 33F1 and 33F2 with average effort between 1MW and 58MW hours. However, there are some areas of the Draft Order Limits further offshore where there is no evidence of effort for this gear type. Static gear target shellfish depending what type of pots are used this can be for crabs and lobsters or whelks.

Landings Data

24.6.35 The annual value of landings for the period of 2019 to 2023 by species group from the five ICES rectangles within the study area is illustrated in **Inset 24.1.**

24.6.36 The landings of shellfish species are highest in the nearshore areas and rectangle 33F1 whereas demersal landings are highest in offshore rectangles 34F2 and 35F3. The data illustrates the variability of the landing values over a five-year period within the five different rectangles but also within each rectangle.

Inset 24.1: Value of landings 2019 to 2023 from the study area by ICES rectangle and species group



Source: MMO (2024) (Ref 24)

24.6.37 To further analyse the landing catch data each ICES rectangle has been looked at to identify the top 10 species caught over a five-year period between 2019 and

2023 by weight and by value. Additionally, the gear type used for these catches has been assessed for trends in the types of fishing. Further information has been included in **Appendix 24.1 Supporting Commercial Fisheries Information** of this PEIR and has been summarised in **paragraphs 24.6.38** to **24.6.57**.

ICES Rectangle 33F1

24.6.38 ICES rectangle 33F1 is the rectangle closest to the proposed Landfall and has the highest overall catch weight and catch value for the under 10m vessels compared to the rest of the Proposed Offshore Scheme. It is primarily fished by the UK inshore fleet. The most caught species by weight and by value are whelk as illustrated in **Appendix 24.1 Supporting Commercial Fisheries Information**, **Inset 3.1** and **Inset 3.2** of this PEIR. The peak months for whelk fishing are between February and June, but they are caught all year using whelk pots.

24.6.39 Bass and sole are targeted demersal species caught in this rectangle; peak seasons are between July and December for sole and between April and May for bass. Bass and sole are caught using various different fishing gear including demersal seine, demersal trawl, longlines, handlines and drift and fixed nets. In 2023 the demersal catch value equated to approximately 59% of the total catch value within this rectangle.

24.6.40 Lobster and crabs are also targeted within rectangle 33F1; primarily using pots but also using beam trawl or drift and fixed nets. In 2023 the shellfish catch value equated to approximately 36% of the total catch value within this rectangle.

24.6.41 Multiple methods of fishing are used within this rectangle, but typically demersal trawl, pots and traps and drift and fixed nets have the highest value and are used all year round, as shown in **Appendix 24.1 Supporting Commercial Fisheries Information, Table 3.1** of this PEIR.

ICES Rectangle 33F2

24.6.42 ICES rectangle 33F2 has the highest catch weight for the over 10m vessels with over 1,000 tonnes being caught in the last five years. Similarly to rectangle 33F1, the most caught species between 2019 and 2023 were whelk as illustrated in **Appendix 24.1 Supporting Commercial Fisheries Information**, **Inset 3.3** and **Inset 3.4** of this PEIR. There was a significant catch of squid in 2023 which had a value of over £650,000. This was unusual as the average squid catch value over previous four years was £14,000. This can be partially explained by the UK fisheries now beginning to target squid which would normally be targeted by the European fleet.

24.6.43 Lobster and crabs are also targeted within this rectangle which are primarily caught using pots but can also be caught using beam trawl or drift and fixed nets. In 2023, shellfish equated to approximately 80% of the total catch value within this rectangle.

24.6.44 Plaice and sole are targeted demersal species caught in this rectangle; peak seasons are between July and December for sole and between October and

December for plaice. Whiting is another highly targeted species with a peak season in February and March.

24.6.45 Pelagic trawl gear is used to target horse mackerel and mackerel. In 2023 the catch for these two species equated to approximately 10% of the overall catch value for the rectangle.

24.6.46 Multiple methods of fishing are used within this rectangle, but typically demersal trawl, demersal seine, pots and traps have the highest value and are used all year round as shown in **Appendix 24.1 Supporting Commercial Fisheries Information**, **Table 3.2** of this PEIR.

ICES Rectangle 34F2

24.6.47 ICES rectangle 34F2 is not fished by the under 10m vessels due to its distance offshore, requiring larger vessels to access these fishing grounds. It is also an area that is highly fished by European vessels, in particular the Dutch fleet. As with rectangle 33F2 there was a significant catch of squid in 2023 which had a value of over £390,000 as illustrated in **Appendix 24.1 Supporting Commercial Fisheries Information**, **Inset 3.5** of this PEIR. This was unusual as the average squid catch value over the previous four years was £5,400. This can be partially explained by the UK fisheries now beginning to target squid, which would normally be targeted by the European fleet.

24.6.48 Sole are the most targeted demersal species, although there are other large catch values for surmullet and plaice. There is some evidence of shellfish being targeted such as whelk, crab and lobsters but not to the same extent as the rectangles closer to shore as illustrated in **Appendix 24.1 Supporting Commercial Fisheries Information, Inset 3.6** of this PEIR. However, due to abnormal squid catch the overall shellfish value for 2023 equates to over 63% of the rectangle's overall annual total.

24.6.49 Multiple methods of fishing are used within this rectangle, but typically demersal trawl and demersal seine have the highest value and are used all year round, as shown in **Appendix 24.1 Supporting Commercial Fisheries Information**, **Table 3.3** of this PEIR.

ICES Rectangle 35F2

24.6.50 Similarly to ICES rectangle 34F2, ICES rectangle 35F2 is not fished by the under 10m vessels due to its distance offshore. It is also an area that is highly fished by European vessels in particular the Dutch fleet.

24.6.51 Sole are the most targeted demersal species, although there are other large catch values for plaice and turbot as illustrated in **Appendix 24.1 Supporting Commercial Fisheries Information, Inset 3.7** of this PEIR. The demersal catch equates to over 92% of the overall catch value for rectangle 35F2.

24.6.52 There is some evidence of shellfish being targeted such as whelk, crab and lobsters but not to the same extent as the rectangles closer to shore as

illustrated in **Appendix 24.1 Supporting Commercial Fisheries Information, Inset 3.8** of this PEIR. The overall shellfish value for 2023 equates to approximately 7% of the rectangles overall annual total.

24.6.53 Multiple methods of fishing are used within this rectangle, but typically beam trawling, demersal trawl and demersal seine have the highest value and are used all year round. In 2023 the beam trawl catch value was over £180,000 which was considerably higher than the previous four years as shown in **Appendix 24.1 Supporting Commercial Fisheries Information, Table 3.4** of this PEIR.

ICES Rectangle 35F3

24.6.54 There is no MMO data for 2019 for this rectangle. ICES rectangle 35F3, similarly to rectangle 34F2, is not fished by the under 10m vessels due to its distance offshore. It is also an area that is fished by European vessels, in particular the Dutch fleet. There is limited statistical evidence of the UK fleet in this area.

24.6.55 Sole are the most targeted demersal species, however there are other large catch values for plaice and turbot as illustrated in **Appendix 24.1 Supporting Commercial Fisheries Information**, **Inset 3.9** and **Inset 3.10** of this PEIR. The demersal catch equates to over 99% of the overall catch value for rectangle 35F3.

24.6.56 Only a small amount of shellfish (crab and lobster) are caught in this rectangle by either beam trawl or demersal trawl, but shellfish are not specifically targeted.

24.6.57 There is evidence of three different methods of fishing within this rectangle; the primary method being beam trawling with some catch by demersal seine and demersal trawl as shown in **Appendix 24.1 Supporting Commercial Fisheries Information, Table 3.5** of this PEIR.

Seasonality

24.6.58 Fishing activities operate all year round but there are some seasons where effort is more focused. This variation is a result of factors such as weather, species abundance and availability. The following insets show the variation in the landings value over the course of 2023, broken down by gear types and then by species groups.

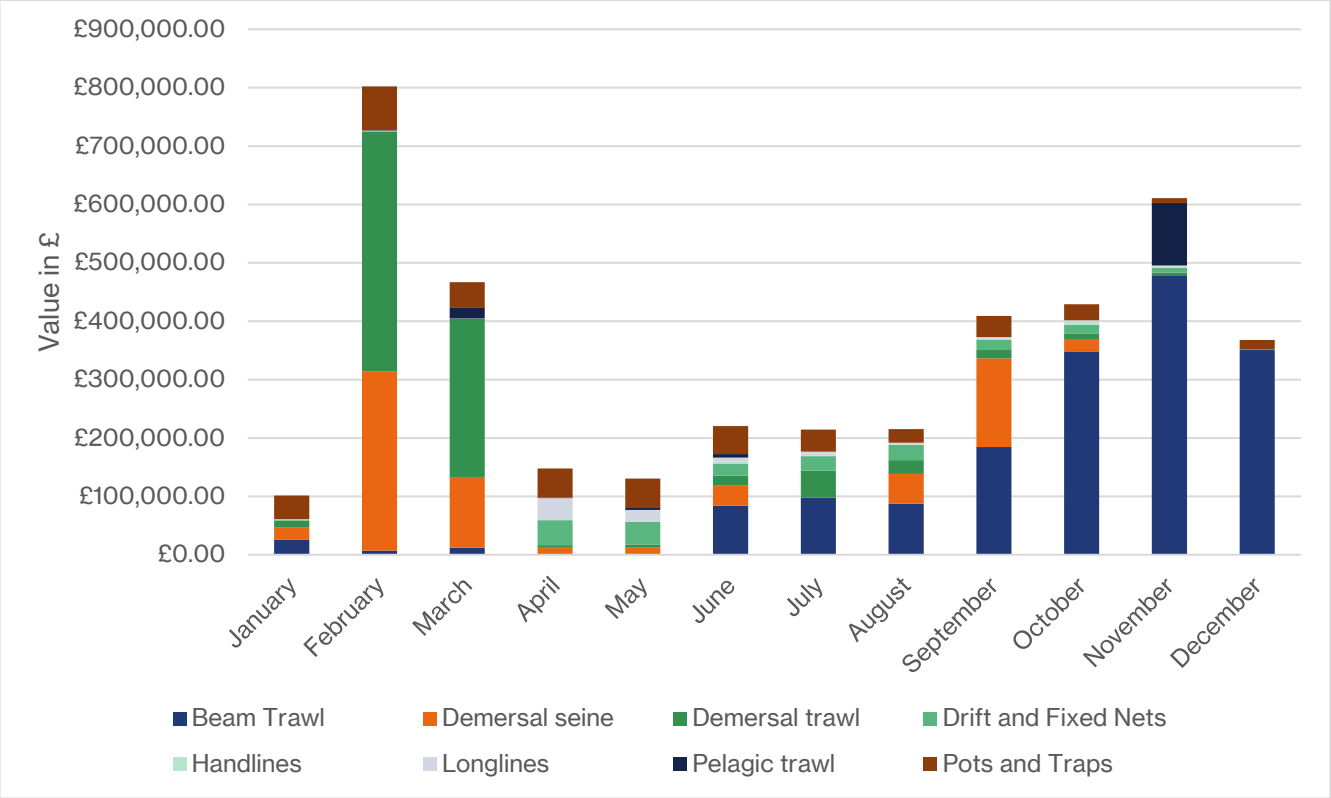
24.6.59 **Inset 24.2** shows fishing effort by catch value in GBP is low during January, April and May. There is a peak in February and March which is due to the high value of the demersal trawl during those months. The value of the beam trawl catch is highest between September and December; the gear type is used 11 months of the year.

24.6.60 Demersal seine is used nine months of the year with peaks in February and September. The use of handlines is between June and December but has the overall lowest catch value of all the gear types within the Draft Order Limits. Longline method appears to be used all year peaking in April and May.

24.6.61 Drift and fixed nets are used 11 months of the year with higher catch values between April and August but lower values January to March. Pelagic trawling occurs between February and June and again in November and December. The data shows a large peak in November where catch value is 78% of the year's pelagic catch value. This is caused by a significant horse mackerel catch illustrated in **Inset 24.4.**

24.6.62 Pots and traps are used all year round with peak catch values in February, April and May and the lowest catch value in November.

Inset 24.2: Catch by gear type during 2023 within the Draft Order Limits

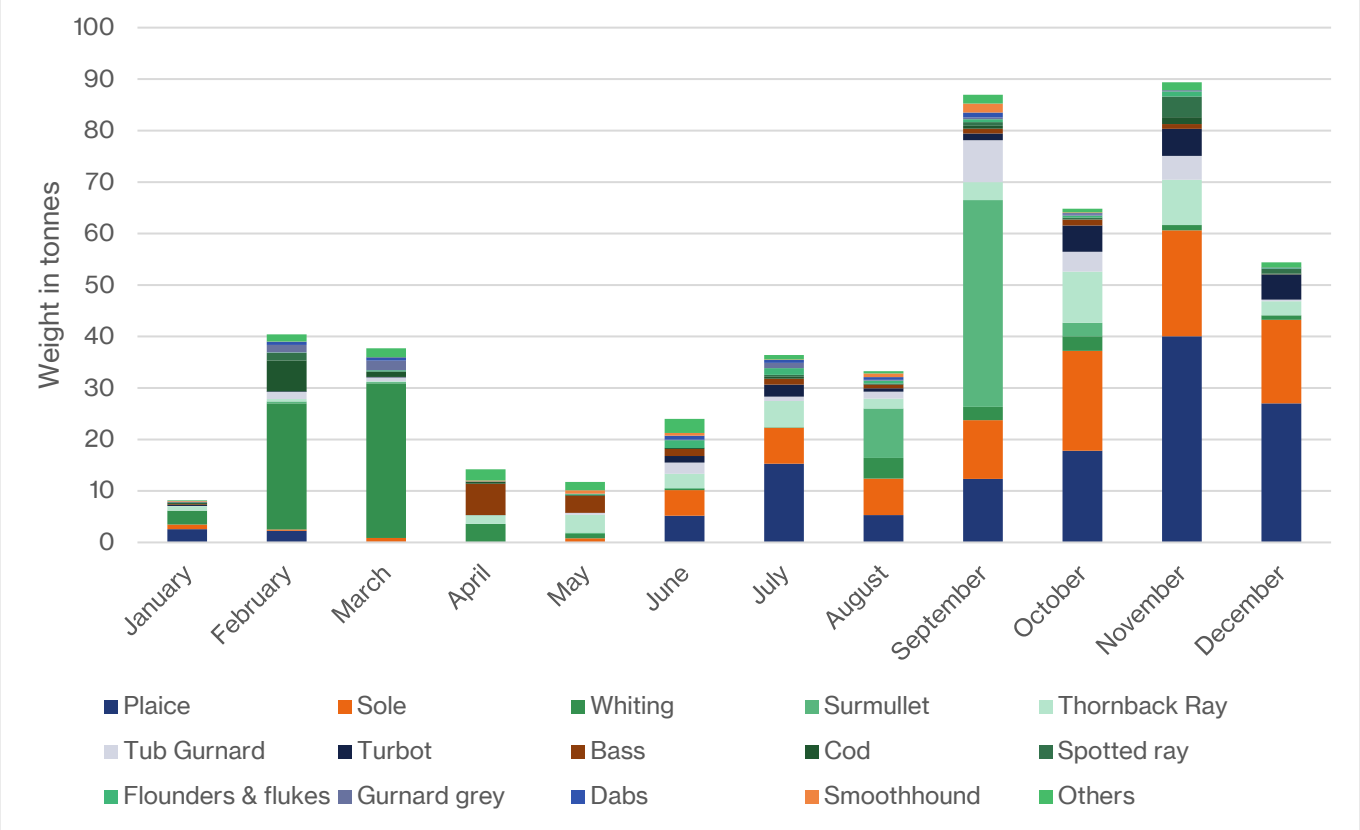


Source MMO (2024) (Ref 24)

24.6.63 **Inset 24.3** illustrates that the peak catch season is between September and December with a smaller peak in February and March. There were 46 different species of demersal fish caught in 2023 across the five rectangles.

24.6.64 Most demersal species are caught all year round at different quantities, whereas some species are much more seasonal such as bass which only becomes available during late spring, or hake which are primarily available between June and December.

Inset 24.3: Demersal monthly catch by weight during 2023 within the Draft Order Limits

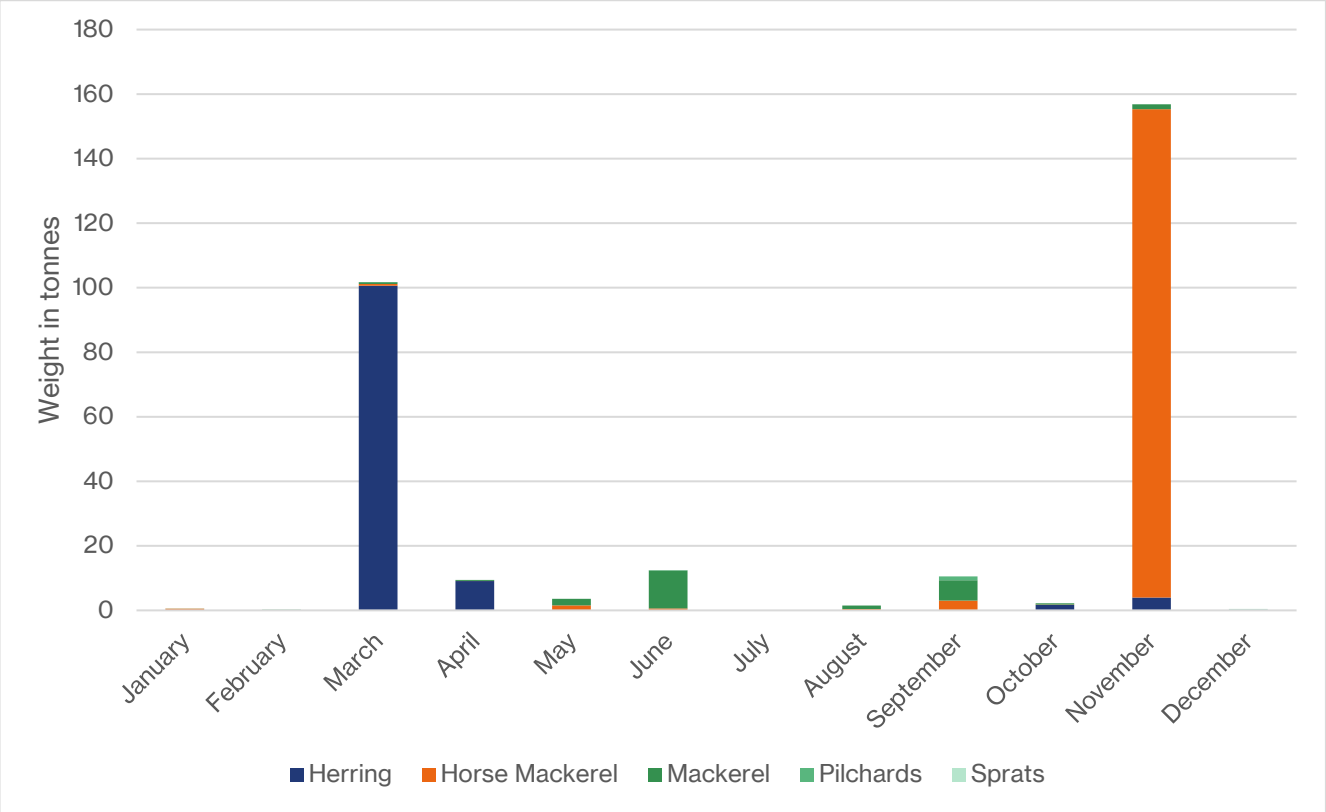


*Others include Brill, Dogfish, Unidentified Dogfish, Blonde Ray, Spurdog, Haddock, Pouting, Starry Smooth hound, Lemon sole, Gurnard red, Sea Breams, Monks and Anglers, Greater weever, Lesser spotted dog, John Dory, Conger eels, Tope, Mullet other, Gurnard and Latchet, White skate, Pollack, Ling, Red Scorpion fish, Hake, Red Mullet, Halibut, Skate and rays, Eels, Saithe, Black Seabream, Thresher Shark and Witch

Source MMO (2024) (Ref 24)

24.6.65 **Inset 24.4** illustrates the peak season for the pelagic catch in 2023 was March for herring and November for horse mackerel. There were only five different pelagic species caught in 2023. In comparison to the demersal catch, the pelagic catch appears to quite irregular with some months barely catching a kilo of fish.

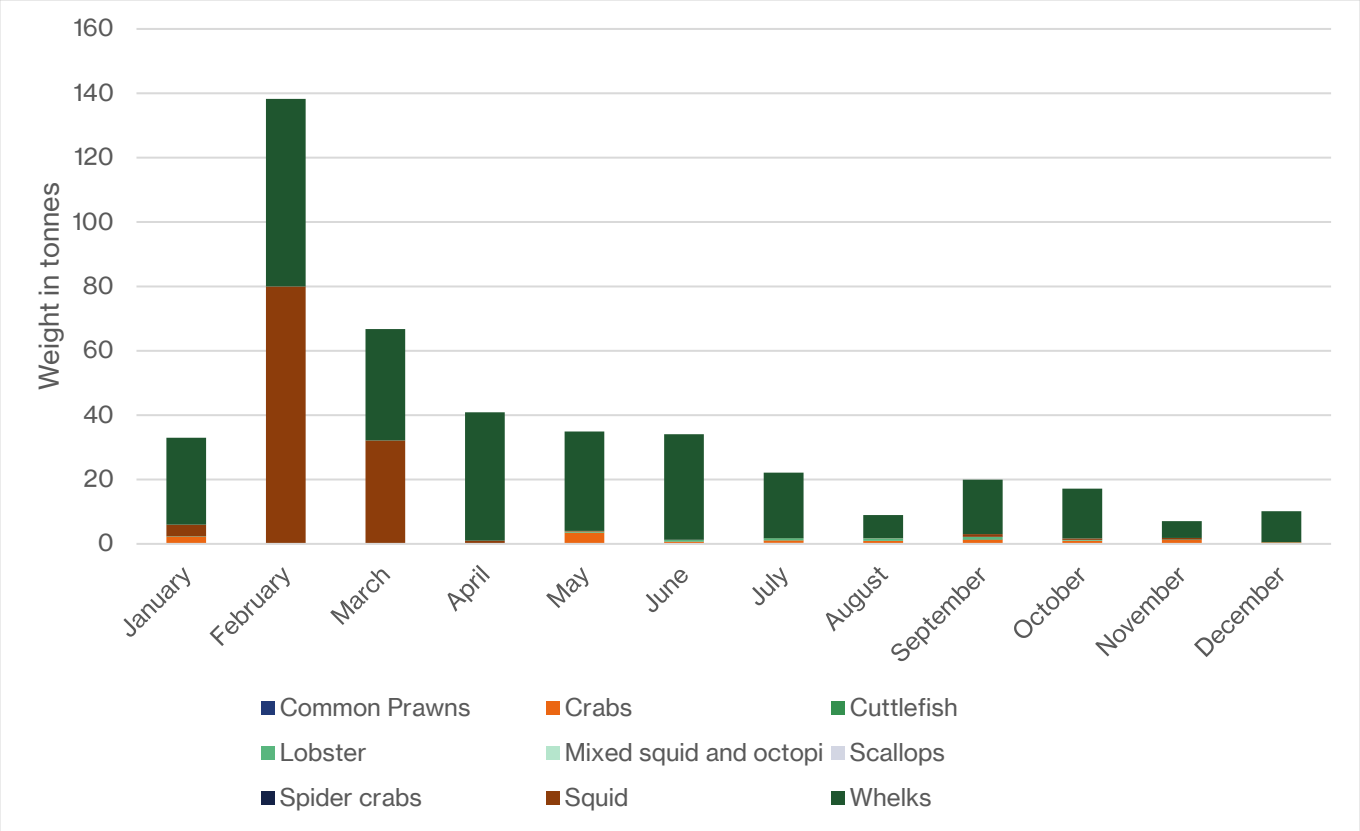
Inset 24.4: Pelagic monthly catch by weight during 2023 within the Draft Order Limits



Source MMO (2024) (Ref 24)

24.6.66 **Inset 24.5** illustrates the peak season for shellfish is February. Whelk and lobsters are the only species that are consistently caught year round. In February and March 2023 there was an unusually large catch of squid. There were nine different species of shellfish caught in 2023, though some of these were very small, in particular scallops 5kg and spider crabs 7kg in September and October respectively.

Inset 24.5: Shellfish monthly catch by weight during 2023 within the Draft Order Limits



Source MMO (2024) (Ref 24)

Future baseline

24.6.67 From the above baseline data, the potential impacts to commercial fisheries would be assessed for the following receptor groups which have been identified as being of particular importance within the study area:

a. static gear fisheries which include pots and traps and netting gear; and
b. mobile gear fisheries which include beam, demersal and pelagic trawlers, dredges and seines.

24.6.68 Commercial fisheries baseline varies on a season-by-season basis based on a range of natural and socio-economic causes. The previous section illustrates the amount of variability in the target species, landing value and gear type used over a five-year period. Therefore, predicting the future baseline is difficult, but the following factors should be considered:

a. Environmental management: including restrictions of the use of certain types of fishing gear or restrictions on species caught within certain areas.
b. Additionally, recent Fish Management Plans introduced in December 2024 which introduced new minimum landing sizes for specific species in specific areas. This has been introduced to protect juveniles being caught before they have matured (Ref 40).
c. Fish stock abundance: Fluctuations in the number of individual species stocks due to recruitment, natural disturbances (such as weather conditions and sea temperature variations).
d. Market prices: commercial fishing fleets respond to the market prices and therefore may change focus to targeting the higher value species when the prices are high.
e. Fishing gear: as with many industries the commercial fishing industry is trying to be more efficient and sustainable and therefore are using improved gear technology to reduce their operational costs. An example of this is the move away from using beam trawling to using demersal seine gear.
f. Fisheries management: each year quotas are set by the government for specific fish species to avoid overfishing of specific species, which may result in a change in fishing effort in a particular area. Following the withdrawal from the EU, the UK and EU have agreed the Trade and Cooperation Agreement) (Ref 43), which establishes a transitional period from 1 May 2021 until 30 June 2026. During the transitional period 25% of the EU's fisheries quota in UK waters will be transferred to the UK. Based on these changes it is likely that up to 2026 a similar level of fishing activity would take place within UK territorial waters, but this effort would be undertaken by a greater proportion of UK than EU vessels. As of May 2025, this agreement was extended until 2038 (Ref 41). EU vessels are able to access UK waters by applying for a foreign vessel licence. This licence allows EU vessels to fish within the UK EEZ (12 to 200NM limit), UK 6 to 12NM limit (ICES 4c, 7d-g) and Northern Ireland 0-6NM (Ref 42). If further data becomes available on this topic it would be included in the ES.
g. Climate change: it is anticipated that over time global climate change would result in changes to the marine environment, which could include impacts on fish and shellfish populations of commercial importance (Ref 44, Ref 45). This may in turn result in changes to commercial fisheries practices in order to respond to any potential changes in species distribution abundance and/or seasonal trends.
h. Other offshore developments: the Suffolk coast has a number of existing and planned offshore projects including other cables projects, offshore windfarms and Sizewell C nuclear generation station, all of which will place demands on an ever-decreasing area where local vessels can fish. This effect is known as spatial squeeze.

24.7 Embedded design mitigation and control measures

Design and embedded mitigation measures

24.7.1 As described in **Chapter 2 Description of the Proposed Scheme** of this PEIR, a range of measures have been embedded into the Proposed Offshore Scheme

design to avoid or reduce environmental effects. These mitigation measures form part of the design that has been assessed, which for commercial fisheries are listed in **Table 24.16**.

Table 24.16: Design and embedded mitigation measures for commercial fisheries

Commitment Reference Code	Measure	Compliance Mechanism
OD01	All cables will be installed in one trench.	CEMP secured by DML
OD02	HVDC cables will be bundled together to minimise the EMF profile.	CEMP secured by DML
OD04	The intention is to bury the cables in the seabed, except in areas where trenching is not possible e.g. where ground conditions do not allow burial or at infrastructure crossings.	CEMP secured by DML
OD05	External cable protection shall only be used where it can be demonstrated that adequate burial depth cannot be achieved (e.g., where ground conditions do not allow burial or at infrastructure crossings); the footprint of any external protection shall be the minimum required to ensure adequate cable protection and stability.	CEMP secured by DML
OD06	In sites designated for benthic features, cable protection materials will be selected to match the environment (e.g. rock of similar grade as the receiving environment) where feasible.	CEMP secured by DML
OD07	Design and construction will be carried out in accordance with International Cable Protection Committee (ICPC) Recommendations.	CEMP secured by DML
OD08	Micro-routeing within the Order Limits to avoid sensitive environmental constraints and minimise the risk of exposure by seabed mobility.	CEMP secured by DML
OD11	Cable protection (including infrastructure crossings) would be designed to prevent the risk of fishing gear snagging.	CEMP secured by DML
OD12	Routine surveys and inspections of the cables and associated protection measures would be conducted through the lifetime of the project, to ensure they remain in good condition, and adequately protected.	CEMP secured by DML

Control measures

24.7.2 Control measures are set out in **Appendix 2.2 Outline Offshore Construction Environmental Management Plan** of this PEIR which will manage the effects of construction. The measures of particular relevance to commercial fisheries are listed in **Table 24.17**.

24.7.3 Several management plans will be provided as Outline Management Plans with the application for development consent to support the Deemed Marine Licence.

These will include an Outline Construction Environmental Management Plan (CEMP), Outline Marine Pollution Contingency Plan, Biosecurity plan, and Outline Fisheries Liaison and Coexistence Plan (FLCP).

24.7.4 These documents will outline control measures to be implemented to comply with legislation and best industry practice (e.g., implementation of FLOWW guidance for Offshore Renewable Developments and recommendations for fisheries liaison) during all phases of the Proposed Offshore Scheme. Final management plans will be submitted in accordance with the DML to discharge the licence conditions.

24.7.5 The Applicant would ensure that all work that is undertaken during construction, operation and maintenance and decommissioning complies with the requirements of relevant national and international legislation.

Table 24.17: Control measures relevant to commercial fisheries assessment

Commitment Reference Code	Measure	Compliance Mechanism
OC06	As-built locations of cables and external cable protection will be supplied to The Crown Estate, UKHO (Admiralty) and Kingfisher Information Services for inclusion in Admiralty and KIS-ORCA charts.	DML secured through DCO
OC07	External cable protection (excluding crossing locations) shall not reduce chart datum by more than 5%, unless agreed in advance with the Maritime and Coastguard Agency (MCA) and appropriate navigation authorities. If external cable protection at any location including crossings does impact on navigable depth, such locations shall be marked in accordance with Trinity House requirements and suitably marked on navigation charts.	DML secured through DCO
OC15	A Fisheries Liaison Officer (FLO) and fisheries working group(s) will be maintained throughout installation to ensure project information is effectively disseminated, dialogue is maintained with the commercial fishing industry and access to home ports is maintained during the main fishing season. Details of the FLO will the included in the Construction Fisheries Liaison and Coexistence Plan.	FLCP and DML secured through DCO
OC16	Timings of any temporary areas of exclusion from fishing grounds will be clearly communicated via a Notice to Mariners (NtM).	FLCP and DML secured through DCO
OC17	A procedure for the claim of loss of/or damage to fishing gear will be developed and details included in the Construction Fisheries Liaison and Coexistence Plan	FLCP secured by DML
OC18	During the course of cable route clearance, specific activities would be completed to remove items from the seabed. Out of Service cables would be removed as per industry	CEMP secured by DML

Commitment Reference Code	Measure	Compliance Mechanism
	guidelines (International Cable Protection Committee (ICPC) Recommendation 1), larger debris including lost fishing gear would be removed prior to cable installation and a pre-lay grapnel run would be completed to ensure smaller debris is removed. In the event that abandoned, lost or discarded fishing gear ('ALDFG') is encountered, it may be necessary in certain circumstances to bring ALDFG onto the vessel deck. In these instances, marked ALDFG will be returned to the MMO/local IFCA for onward retrieval by the owner of the marked gear, in line with existing best practice. Not all gear (particularly 'active' gear) is marked; if necessary to bring onto the vessel deck, unmarked gear will be disposed of via conventional onshore waste channels.	
OC19	Cut cable end locations and associated weights shall be accurately noted and charted and positions given to the FLO at the earliest opportunity for onward communication to the fishing industry.	CEMP secured by DML
OC20	In the event that cable exposures are identified during routine maintenance surveys, the location of these will be shared with fisheries stakeholders and where necessary, additional temporary measures put in place (e.g., marker buoys, use of guard vessels, etc), until a repair or remediation can be implemented.	FLCP secured by DML
OC21	Guard vessel(s), using RADAR with Automatic RADAR Plotting Aid (ARPA) to monitor vessel activity and predict possible interactions, will be employed to work alongside the installation vessel(s) during cable installation works and to protect any temporary cable exposures during installation.	CEMP secured by DML
OC26	Timely and efficient communication will be given to sea users in the area via Notices to Mariners (NtM), Kingfisher Bulletins, Radio Navigation Warnings Navigational Telex (NAVTEX and Navigational Areas (NAVAREA) warnings and/or broadcast warnings.	DML secured through DCO

24.8 Assessment of effects

24.8.1 This section presents the preliminary assessment of likely significant effects on commercial fisheries resulting from the construction, operation (including maintenance) and decommissioning of the Proposed Offshore Scheme. The likely significant effects of the Proposed Offshore Scheme are identified taking into account the embedded design mitigation and control measures.

24.8.2 Following assessment further mitigation is proposed as required which is presented in **Section 24.9**.

Construction

24.8.3 It is anticipated that the construction programme for the Proposed Offshore Scheme would be split into multiple campaigns, comprising of route preparation and cable lay and burial campaigns. Pre-construction phase activities, such as surveys, route preparation, boulder clearance, pre-sweeping and infrastructure crossing preparation, are expected to take up to one year to complete. As set out in **Chapter 2 Description of the Proposed Scheme** of this PEIR, installation vessels would install the cables at an indicative speed of between 100m and 500m per hour, depending on seabed conditions and the vessels used.

24.8.4 The Offshore HVDC Submarine cables would be installed in one trench, with installation methodologies including simultaneous cable lay and trenching, and surface cable lay followed by post lay trenching. Cable burial tools which may be used include jet trenching machines, mechanical trenchers, control flow excavators and ploughs. Overall, displacement ploughs/boulder clearance ploughs would result in the greatest seabed disturbance, however this method may only be required within discrete sections **(Chapter 2 Description of the Proposed Scheme** of this PEIR).

24.8.5 Additional information on the construction techniques is provided in **Chapter 2 Description of the Proposed Scheme** of this PEIR.

Temporary restricted access to fishing ground (including required static gear clearance)

24.8.6 The Proposed Offshore Scheme has the potential to affect commercial fishing activity (both static and mobile gear) during the construction via temporary restricted access to fishing grounds. During construction, fishing activity would be temporarily excluded from discrete areas of the Draft Order Limits due to the implementation of 500m safety zones around project vessels and installation spread.

24.8.7 There would also be a requirement for static gear such as pots to be cleared from within the Draft Order Limits in advance of any construction activities. The Draft Order Limits would be split into blocks and fishers would be requested to clear a block at a time. Once the construction activity has been undertaken fishing activity would be able to resume within that block.

24.8.8 During pre-construction surveys, blocks of approximately 15km would be typically cleared approximately five days in advance of works commencing. For construction the worst-case scenario would be a 100km area of the Draft Order Limits at one time, which is the maximum length of cable that the cable laying ship can carry.

24.8.9 The rate at which cable can be laid is indicatively between 100m and 500m per hour, however this is dependent on the offshore conditions. Each campaign would be for the purpose of worst-case scenario would be restrictions to an area for up to one year. Though safety zones would be restricted to certain areas of

the Draft Order Limits and not the entire Proposed Offshore Scheme. Further information about the cable laying can be found in **Chapter 2 Description of the Proposed Scheme** of this PEIR.

24.8.10 During the construction phase fishing vessels may be asked to temporarily avoid areas of the Draft Order Limits where the installed cables are temporarily vulnerable, for example where cables are surface laid or exposed and are awaiting trenching or protection. If this is required, it will be requested via NtMs and engagement with fisheries stakeholders via the FLO. Guard vessels would be in place where deemed necessary.

24.8.11 The impact is the temporary loss of access to fishing grounds and the resources within them. This would therefore result in the loss of fishing activities taking place within these locations which would affect all fishing types/vessels during the periods of construction; the assessments below provide more detail about the effects on each gear type.

Static gear

24.8.12 This impact will have the most significant impact on vessels using static gear such as pots and traps and drift and fixed nets, especially within ICES rectangles 33F1 and 33F2 where the shellfish catch is of the highest value. Though static gear is used along much of the Proposed Offshore Scheme up to KP 144 as illustrated in **Figure 24.7** of this PEIR. Typically, these vessels are from the UK inshore fleet and are less than 10m in length.

24.8.13 During construction, vessels using pots or traps would be required to remove pots from areas under construction and either relocate or bring to shore depending on available grounds and fishing preferences. Potting fishers will therefore experience loss of earnings for the time taken to relocate gear, and, potentially, also a loss of earnings associated with not being able to fish the specific grounds under construction. Especially if alternative grounds are either not available, or not as productive as the original grounds.

24.8.14 Potting, as noted in **Appendix 24.1 Supporting commercial fisheries information** of this PEIR, typically involves a number of fleets of pots being deployed across a range of areas. It is very unlikely that 100% of pots deployed by a single vessel will be impacted at any one time. However, it is understood that specific potting grounds may be targeted by specific fishers and therefore impact magnitude would vary between fishers with some more affected than others. The magnitude of the impact has been assessed as low.

24.8.15 The fishers who heavily use static gear work in areas (as evidenced by the baseline description), are typically in smaller vessels and are therefore more sensitive to change. Therefore, this receptor has been identified as having a value and sensitivity of medium.

24.8.16 The overall significance of the effect on static gear fisheries has been assessed as **Minor** and **Not Significant**.

Dredging

24.8.17 There is a limited use of dredging gear, which is used to target scallops, in the Draft Order Limits as illustrated in **Figure 24.6** of this PEIR and therefore there is unlikely to be any significant effect on this type of fishing. The impact on the receptor has been assessed as having a low magnitude with the value and sensitivity of the receptor determined to be negligible. The overall significance of the effect on dredging fisheries is **Negligible** and **Not Significant**.

Demersal seine, Beam trawl and Pelagic trawl

24.8.18 There is evidence of demersal seine gear usage along the Draft Order Limits; primarily in ICES rectangles 33F2, 34F2 and 35F2 as illustrated in **Figure 24.6** of this PEIR.

24.8.19 Much of the Draft Order Limits is fished using beam trawlers. These vessels are primarily over 40m in length and come from both the UK and European fleets. ICES rectangles 34F2, 35F2 and 35F3 are the most heavily fished areas using beam trawling gear with areas where the fishing effort is over 500 average MW hours as illustrated in **Figure 24.5** of this PEIR with the Draft Order Limits.

24.8.20 There is evidence of the use of pelagic trawl gear along the Draft Order Limits, this method is primarily used in ICES rectangles 35F2 and 35F3 as illustrated in **Figure 24.7** of this PEIR. The catch value for this method in 2023 was approximately £112,000.

24.8.21 As these types of fishing gear are mobile and can operate across large areas of the North Sea it is unlikely any disruption would be caused during construction. Given adequate notification via NtMs and regular contact with the FLO, it is expected that these vessels would be in a position to avoid construction areas. Therefore, the impact on the receptors has been assessed as having a low magnitude with the value and sensitivity of the receptors determined to be negligible. The overall significance of the effect on demersal seine fisheries is **Negligible** and **Not Significant**.

Demersal trawl

24.8.22 The use of demersal gear occurs across much of the Draft Order Limits, however not at any high intensity as illustrated in **Figure 24.5** of this PEIR. Demersal trawling results in the highest value catch on an annual basis compared to the other gear types as illustrated in **Inset 24.2**. In 2023 landings worth over £770,000 were made using demersal trawl gear. Despite this, as demersal trawling is a mobile gear type it is unlikely there would be any significant effect on this type of fishing during construction. Given adequate notification via NtMs and regular contact with the FLO, it is expected that these vessels would be in a position to avoid construction areas. Therefore, the impact on the receptor has been assessed as having a low magnitude with the value and sensitivity of the receptor determined to be Negligible. The overall significance of the effect on beam trawl fisheries is **Negligible** and **Not Significant**.

Temporary displacement of fishing activity into other areas

24.8.23 The Proposed Offshore Scheme has the potential to affect commercial fishing activity (both static and mobile gear) during construction via temporary displacement. The temporary exclusion from fishing grounds within the Draft Order Limits (as described in **paragraphs 24.8.6** to **24.8.22**) may lead to temporary increases in fishing effort in other areas which may already be heavily fished. An indirect impact is that steaming distances may also be increased as vessels transit around any restricted areas, with resultant economic costs to fishers.

Static Gear

24.8.24 This impact would affect vessels using static gear such as pots and traps and drift and fixed nets especially within ICES rectangles 33F1 and 33F2 where the shellfish catch is of the highest value. Prior to and during construction fishers would be required to remove pots from active construction areas within the Draft Order Limits and either relocate them or bring them to shore depending on available grounds and fishing preferences.

24.8.25 Though fishers' using static gear would prefer to relocate to alternative fishing grounds this may not be possible as adjacent areas may already be heavily fished by other vessels using static gear which could potentially lead to gear conflict.

24.8.26 There is also potential for conflict over the reduced grounds if displaced vessels using mobile gear explore grounds primarily used by potting vessels.

24.8.27 Conflict between vessels using mobile or static gear has the potential to occur and therefore would affect fishing patterns in the area.

24.8.28 It is understood that specific potting grounds may be targeted by specific fishers and therefore impact of displacement will vary between fishers with some more affected than others.

24.8.29 Potting, as noted in **Appendix 24.1 Supporting commercial fisheries information** of this PEIR, typically involves a number of fleets of pots being deployed across a range of areas. It is very unlikely that 100% of pots deployed by a single vessel would be impacted at any one time. However, it is understood that specific potting grounds may be targeted by specific fishers and therefore impact magnitude will vary between fishers with some more affected than others. The magnitude has been assessed as low because the disruption caused by construction would be temporary and will not affect the whole Draft Order Limit at any one time.

24.8.30 The fishers who use static gear work in areas which are already heavily exploited and are in smaller vessels where it may be harder to find alternative grounds if displaced. They are therefore more sensitive to change. Therefore, this receptor has been identified as having a value and sensitivity of medium.

24.8.31 The overall significance of the effect on static gear fisheries has been assessed as **Minor** and **Not Significant**.

Dredging

24.8.32 Vessels using dredging methods are unlikely to be impacted by displacement as there is limited evidence of fishing effort using this method. Therefore, it is unlikely there would be any significant effect on this gear type during construction. The impact on the receptor has been assessed as having a low magnitude with the value and sensitivity of the receptor determined to be negligible. The overall significance of the effect on dredging fisheries is **Negligible** and **Not Significant**.

Demersal seine

24.8.33 Vessels using demersal seine gear are unlikely to be impacted by displacement as they are mobile gear and would be able to find alternate grounds to fish in as the excluded areas would be limited and temporary. It is unlikely there would be any significant effect on this gear type during construction. Given adequate notification via NtM and regular contact with the FLO, it is expected that these vessels would be in a position to avoid construction areas. The impact on the receptor has been assessed as having a Low magnitude with the value and sensitivity of the receptor determined to be Negligible. The overall significance of the effect on demersal seine fisheries is **Negligible** and **Not Significant**.

Beam trawl, Demersal trawl and Pelagic

24.8.34 Beam, demersal and pelagic trawlers may be impacted if vessels using static methods that have been displaced encroach on grounds used by the trawlers which could cause potential conflict of gear. However, trawlers are highly mobile, and vessels tend to be much larger than the vessels using static gear and are more likely to be able to access alternate grounds. It is unlikely there would be any significant effect on this gear type during construction. Given adequate notification via NtMs and regular contact with the FLO, it is expected that these vessels would be in a position to avoid construction areas. The impact on these receptors has been assessed as having a low magnitude with the value and sensitivity of the receptors assessed to be negligible. The overall significance of the effect on beam trawl fisheries is **Negligible** and **Not Significant**.

Changes in distribution of target species

24.8.35 The distribution of fish and shellfish populations have the potential to be impacted by construction activities such a pre sweeping, cable burial and deposition of external cable protection of the Proposed Offshore Scheme.

24.8.36 **Chapter 20 Fish and Shellfish** of this PEIR, provides a preliminary environmental assessment for a range of potential impacts on fish and shellfish species. The preliminary assessment considered impacts such as changes in underwater noise, temporary seabed disturbance, permanent changes in seabed habitat,

temporary increase and deposition of suspended sediments, electromagnetic changes, barrier to species movement and temperature increases. Distributions of fish and shellfish populations have the potential to be affected by the combined effects of multiple impacts on fish and shellfish. **Chapter 20 Fish and Shellfish** of this PEIR also provided a preliminary assessment of the intra-project impacts which could combine and lead to a change in distribution of fish and shellfish species. All preliminary assessments concluded that during construction effects were either negligible or minor and Not Significant for all receptor types.

24.8.37 The current baseline has established that the species present within the study area are either key commercially targeted species or support the food chain on which commercial species rely. Therefore, the conclusions reached in **Chapter 20 Fish and Shellfish** of this PEIR are directly applicable for commercial fisheries and therefore taken a precautionary approach and using the highest significance conclusion reached by **Chapter 20 Fish and Shellfish** of this PEIR the overall significance of the impact during construction has been assessed as **Minor** and **Not Significant**.

Temporary increase and deposition of suspended sediments

24.8.38 Temporary increases and depositions of suspended sediments are likely to occur from installation activities during construction such as PLGR, boulder clearance but primarily from pre-sweeping of sand waves and cable trenching. As turbidity may also increase, sediment plumes could then be carried through the water column and deposited on the seabed elsewhere. This assessment also considers the pressures changes in water clarity, disturbance of contaminated sediments and smothering and siltation rate changes which are all sub-sets of the impact pathway.

24.8.39 Depending on the technique used and the size of sand waves requiring pre-sweeping, the redeposition of sediment can cause smothering >10cm deep over relatively wide areas of seabed (in the order of tens of thousands square metres). For commercial fisheries, this may cause the clogging of static gear and any contents of pots or traps and clogging of fine nets.

24.8.40 The majority of the Draft Order Limits is over primarily sand, slightly gravelly sand or gravelly sand (i.e. course-grained sediment). **Chapter 18 Marine Physical Environment** of this PEIR concludes that site specific contaminant data indicates that sediments are suitable for seabed disposal and the risk of release of contaminants from the sediment is low. **Chapter 18 Marine Physical Environment** of this PEIR also provides an assessment of the area of seabed impacted by temporary increases and depositions of suspended sediments. In summary, it estimates that increases in suspended sediment concentration (SSC) of more than 5mg/l are constrained within the study area (defined for **Chapter 18 Marine Physical Environment** of this PEIR as 15km either side of the Draft Order Limits) and are short lived (generally occurring for less than 2.4 hours). The only exception is associated with cable burial between KP5 and KP10 where increases

in SSC of up to 15mg/l extend to 1.5km to the north of the study area i.e., approximately 16.5km from the Draft Order Limits. This is a result of the higher percentage of fines in this area and the proposed Offshore HVDC Cable Corridor aligning closer with the flow direction. Sedimentation of more than 0.1mm was only predicted to occur within the study area, while sedimentation of more than 1mm was only predicted to occur within the Draft Order Limits. It also concludes that there is a low risk from sediments

Static Gear

24.8.41 There is potential for temporary increases and depositions of suspended sediments to affect the use of static gear. Static gear sits on the seabed and therefore could get smothered by depositions of suspended sediments which could clog up the gear and any contents should the gear be within close proximity to the disturbance. However, it is highly unlikely that static gear would be that close to construction activities as they would have been asked in advance to move away from these areas.

24.8.42 The magnitude of a temporary increase and deposition of suspended sediments has been assessed as negligible. This receptor has been identified as having a value and sensitivity of low commercial fishers using static gear would have been requested to move their gear away from construction areas. The overall significance of the effect on cockles has been assessed as **Negligible** and **Not Significant.**

Mobile gear types

24.8.43 The effects mobile gear types a from temporary increases and deposition of suspended sediments has assessed the magnitude to be negligible because the gear is mobile and unlikely to be in one area long enough to have suspended sediment settle on it. These receptors have been identified as being of the low sensitivity. Therefore, the significance of the effects has been assessed to be **Negligible** and **Not Significant**.

Operation and maintenance

24.8.44 The Proposed Offshore Scheme would be designed to minimise any maintenance requirements. However, the following activities may be required during the operational phase:

a. inspection surveys;
b. cable repair; and
c. reburial, remedial protection, or maintenance and reinstatement of external cable protection features.

24.8.45 Additional information on the Proposed Offshore Scheme operation and maintenance is provided in **Chapter 2 Description of the Proposed Scheme** of this PEIR.

Temporary restricted access to fishing ground (including required static gear clearance)

24.8.46 During maintenance of the Proposed Offshore Scheme, fishing activity could be temporarily excluded from discrete areas of the Draft Order Limits if vessels are present e.g., to undertake a cable repair, install remedial cable protection or to undertake survey of the cables. Access would likely be restricted within 500m of project vessels for safety purposes.

24.8.47 It is unknown how many events would happen during the lifetime of the Proposed Scheme that would require temporary restricted access to fishing grounds. However, any repair or maintenance activities would be temporary and localised rather extending over the entire Draft Order Limits.

24.8.48 NtMs would be issued in advance of any maintenance works. Vessels using static gear such as pots may be required to temporarily relocate their gear for the duration of any maintenance works.

Static gear

24.8.49 The vessels that use static gear will be the most sensitive to this impact as they would be required to move their gear. However, any restrictions will be highly localised and therefore should only impact a small number of vessels. The impact is predicted to be localised and of a shorter duration than construction, and therefore the magnitude of this receptor has been assessed as low. This receptor has been identified as having a value and sensitivity of medium. The overall significance on static gear fisheries has been assessed as **Minor** and **Not Significant**.

Mobile gear types

24.8.50 The mobile fleet operating across large areas of the North Sea are unlikely to be impacted by maintenance or repair works. The impact is predicted to be localised and of a shorter duration than construction, and therefore the magnitude of this receptor has been assessed as low. These receptors (dredging, demersal seine, beam, demersal and pelagic trawl) have been identified as having a value and sensitivity of low. The overall effect on mobile gear fisheries has been assessed as **Negligible** and **Not Significant**.

Temporary displacement of fishing activity into other areas

24.8.51 During maintenance activities if vessels have safety zones established around them this could lead to displacement of fishing activity, temporarily increasing fishing effort in other areas which may already be heavily fished and could cause potential conflicts between fishers. It could also increase steaming distances, with economic consequences, if fishers need to manoeuvre around any restricted areas.

24.8.52 It is unknown how many events would happen during the lifetime of the Proposed Scheme that could result in displacement. However, any repair or maintenance

activities would be temporary and localised rather extending over the entire Draft Order Limits.

24.8.53 NtMs would be issued in advance of any maintenance works. Vessels using static gear such as pots may be required to temporarily relocate their gear for the duration of any maintenance works and therefore be temporarily displaced.

Static gear

24.8.54 The vessels that use static gear will be the most sensitive to this impact as they would be displaced during any works. However, any restrictions will be highly localised and therefore should only impact a small number of vessels. The impact is predicted to be localised and of a shorter duration than construction therefore the magnitude of this receptor has been assessed as low. This receptor has been identified as having a value and sensitivity as medium. The overall significance on static gear fisheries has been assessed as **Minor** and **Not Significant**.

Mobile gear types

24.8.55 The mobile fleet who and can operate across large areas of the North Sea are unlikely to be impacted by maintenance and repair activities. The impact is predicted to be localised and of a shorter duration than construction therefore the magnitude of this receptor has been assessed as low. These receptors (dredging, demersal seine, beam, demersal and pelagic trawl) have been identified as having a value and sensitivity of low. The overall effect on mobile gear fisheries has been assessed as **Negligible** and **Not Significant**.

Temporary increase and deposition of suspended sediments

All gear types

24.8.56 It is possible that temporary increases and deposition of suspended sediments may be required during operations and maintenance however this would be highly localised. Therefore, the magnitude has been defined as low. The sensitivity of all gear type receptors has been assessed as low sensitivity as Notice to Mariners will be communicated in advance to ask fishers to avoid the area during any operations or maintenance activities. The significance of the effect has been assessed as **Negligible** and **Not Significant**.

Decommissioning

24.8.57 The Proposed Scheme is expected to have a life span of 40 years. If decommissioning requires cessation of operation and removal of visible infrastructure at this point, then activities and effects associated with the decommissioning phase are expected to be no worse than during construction; and with the removal of visible infrastructure, effects would reduce over the course of that period. The Proposed Scheme could also remain operational for a period after the 40 years or be taken out of service and left within the Draft Order Limits after 40 years. Acknowledging the complexities of completing a

detailed assessment for decommissioning works up to 40 years in the future, based on the information available, the project has concluded that impacts from decommissioning would be no greater than those during the construction phase. The following conclusions reached for construction are therefore applicable:

a. Temporary restricted access to fishing ground (including required static gear clearance):
   i. Static gear – **Minor** and **Not Significant**; and
   ii. Mobile gear – **Negligible** and **Not Significant.**
b. Temporary displacement of fishing activity into other areas:
   i. Static gear - **Minor** and **Not Significant;** and
   ii. Mobile gear – **Negligible** and **Not Significant.**
c. Changes in distribution of target species - **Minor** and **Not Significant**.
d. Temporary increase and deposition of suspended sediments - **Negligible** and **Not Significant.**

24.9 Mitigation, monitoring and enhancement

24.9.1 Mitigation measures are defined in **Chapter 5 EIA Approach and Methodology** of this PEIR, with embedded control measures for commercial fisheries being presented in **Section 24.7** of this chapter.

24.9.2 There are no likely significant adverse effects related to the commercial fisheries assessment identified either during construction, operation and maintenance or decommissioning stages of the Proposed Offshore Scheme that require additional mitigation or monitoring over and above that outlined in **Section 24.7** of this chapter.

24.9.3 As described in **Chapter 2 Description of the Proposed Scheme** of this PEIR a post lay survey and regular monitoring surveys would be undertaken to confirm the burial status of the cables. Remedial works could be required in the event that cable exposures are identified. As outlined in Commitment Measure Reference OC20, fishers would be advised of any exposures and kept informed of the temporary measures implemented to repair or remediation is undertaken.

24.10 Summary of residual effects

24.10.1 The preliminary assessment has concluded that no significant effects on commercial fisheries are expected from the Proposed Offshore Scheme alone during construction, operation (including maintenance) and decommissioning, provided design and control measures are implemented. No additional mitigation has been proposed at this stage.

Topic Glossary and Abbreviations

Term	Definition
AIS	Automatic Identification System
ALDFG	Abandoned, lost or discarded fishing gear
ARPA	Automatic Radar Plotting Aid
BE	Belgium
BSP	Biosecurity Plan
CEMP	Construction Environmental Management Plan
CFP	Common Fisheries Policy
Cm	centimetre
DCO	Development Consent Order
DE	Germany
dML	Deemed Marine License
DOL	Draft Order Limits
EEZ	Exclusive Economic Zones
EIA	Environmental Impact Assessment
EIFCA	Eastern Inshore Fisheries and Conservation Authority
EPC	Engineering Procurement and Construction
ES	Environmental Statement
EU	European Union
FLCP	Fisheries Liaison and Coexistence Plan
FLO	Fisheries Liaison Officer
FLOWW	Fishing Liaison with Offshore Wind and Wet Renewables Group
FR	France
GBP	Great Britain Pound
HDD	Horizontal Directional Drilling
HP	Horsepower
HVDC	High Voltage Direct Current
IBTS	International Bottom Trawl Survey
ICES	International Council for the Exploration of the Sea
ICPC	International Cable Protection Committee
IFCA	Inshore Fisheries and Conservation Authority
JFS	Joint Fisheries Statement
Km	Kilometre

Term	Definition
KW	Kilowatt
M	Metre
MCAA	Marine and Coastal Access Act
MCA	Maritime and Coastguard Agency
Mg/l	Milligrams per Litre
MHWS	Mean High Water Springs
Mm	Millimetre
MMO	Marine Management Organisation
MW	Megawatt
NFFO	National Federation of Fishermen's Organisations
NL	Netherlands
NPS	National Policy Statement
NM	Nautical Mile
NtM	Notice to Mariners
OWF	Offshore Wind Farm
PEIR	Preliminary Environmental Information Report
PLGR	Pre Lay Grapnel Run
SOPEPs	Shipboard Oil Pollution Emergency Plans
TAC	Total Allowable Catch
TCE	Trade and Cooperation Agreement
UK	United Kingdom
UKHO	United Kingdom Hydrographic Office
UXO	Unexploded Ordnance
VMS	Vessel Monitoring System

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