

Addendum to the
Environmental Impact
Assessment Report

NISA
North Irish Sea Array

Volume 9 - Offshore Appendices

Appendix A16.2

Fisheries Management and Mitigation Strategy



North Irish Sea Array Offshore Wind Farm Fisheries Management and Mitigation Strategy

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Appendix B – Overview of the Sustainable Fisheries Community (SFC) Initiative

Appendix C – Outline construction disturbance compensation protocol

Appendix D – Summary of consultation

Appendix E - Technical Co-existence Assessment

Acronyms

Term	Meaning
ABP	An Bord Pleanála
ACP	An Coimisiún Pleanála
AIS	Automatic Identification System
BIM	Bord Iascaigh Mhara
CBRA	Cable Burial Risk Assessment
CFLO	Company Fisheries Liaison Officer
CMS	Construction Method Statement
CoP	Construction Programme
DETP	Digital Effort Traceability Project
DP	Decommissioning Programme
DRM	Dispute Resolution Mechanism
DS	Design Statement
ECC	Offshore Export Cable Corridor
EIAR	Environmental Impact Assessment Report
EMP	Environmental Management Plan
FLO	Fisheries Liaison Officer
FMMS	Fisheries Management and Mitigation Strategy
FIR	Fishing Industry Representative
FLOWW	Fishing Liaison with Offshore Wind and Wet Renewables Group
GPS	Global Positioning System
ICES	International Council for the Exploration of the Sea

IFI	Inland Fisheries Ireland
IFPO	Irish Fish Producers Organisation
IFPEA	Irish Fish Processors and Exporters Association
IIMRO	Irish Islands Marine Resource Organisation
ISEFPO	Irish South and East Fish Producer's Organisation
ISWFPO	Irish South and West Fish Producers Organisation
LMP	Lighting and Marking Plan
MAC	Maritime Area Consent
MARA	Maritime Area Regulatory Authority
MCZ	Marine Conservation Zone
MI	Marine Institute
MMO	Marine Management Organisation
MoU	Memorandum of Understanding
NERIFF	North East Regional Inshore Fisheries Forum
NIFA	National Inshore Fishermen's Association
NIFO	National Inshore Fishermen's Organisation
NIFF	National Inshore Fisheries Forum
NISA	North Irish Sea Array
NMPF	National Marine Planning Framework
NSP	Navigational Safety Plan
NtM	Notices to Mariners
OFLO	Offshore Fisheries Liaison Officer
OMP	Operation and Maintenance Programme

ORE	Offshore Renewable Energy
OREI	Offshore Renewable Energy Installations
OSP	Offshore Substation Platforms
RAM	Restricted in Ability to Manoeuvre
RFI	Request for Further Information
RNW	Radio Navigation Warning
SECAD	South East Cork Area Development
SERIFF	South East Regional Inshore Fisheries Forum
SFC	Sustainable Fisheries Community
SFPA	Sea-Fisheries Protection Authority
SF-ORE WG	Seafood / Offshore Renewable Energy Working Group
SOLAS	Safety of Life at Sea
ToR	Terms of Reference
UN FAO	United Nations Food and Agriculture Organization
VHF	Very High Frequency
VMP	Vessel Management Plan
VMS	Vessel Monitoring System
WTG	Wind Turbine Generators

North Irish Sea Array Windfarm Ltd (NISA, hereafter referred to as ‘the Developer’) has been considering the Request for Further Information (RFI) issued by An Bord Pleanála (now An Coimisiún Pleanála) as well as the third-party submissions received following public consultation. At An Coimisiún Pleanála’s behest, the Developer has also continued to consult with stakeholders in respect of the 2024 planning application throughout 2024-2026. The Developer has refined elements of the design to respond to the third-party submissions, the continued public and stakeholder consultation and the RFI. Amendments are therefore required to the Fisheries Management and Mitigation Strategy (FMMS). Full details of consultation undertaken can be found in Appendix A.1.2 Consultation Report.

Any cross reference to a chapter, section, table, image, figure or appendix within this document is to another location within the Addendum to the EIAR unless explicitly stated otherwise. Any cross reference to anything included in the 2024 EIAR will be clearly labelled as such.

The specific sections of the RFI that have been addressed in this FMMS are provided in the table below.

RFI Section	RFI	Relevance to Appendix
1 (b)	The scientific information provided as part of the planning application documentation should be based on up-to-date survey reports and data. Accordingly, the applicant is requested to confirm/provide justification/verification that the information submitted in support of the planning application remains relevant and appropriate at the point of submitting further information or to update same as required.	The timeframes associated with the RFI have necessitated a review of the datasets previously used in the 2024 EIAR to ensure any necessary updates to the baseline environment are captured. These are detailed in Section 16.2.4 and Appendix A16.1: Commercial Fisheries Technical Report.
12	The NMPF provides that the proposed development should be considered in the context of co-existences with existing marine activities in the area, including fisheries and aquaculture. Having regard to the provisions of the NMPF, the submitted EIAR (including the Fisheries Management and Mitigation Strategy, Appendix 16.2), and all observations made:	The NMPF and co-existence is addressed in the Addendum to Chapter 16 Commercial Fisheries and this Appendix 16.2 Fisheries Management and Mitigation Strategy (FMMS), which together set out the project’s approach to fisheries coexistence, mitigation, monitoring and ongoing engagement. In particular, this includes further development of the Sustainable Fisheries Community (SFC) (see Appendix B of Appendix 16.2) and the updated mitigation measures in Table A16.11. The FMMS further sets out the detailed Fisheries Liaison Strategy, Co-existence Strategy, disturbance payment approach and governance framework that would support implementation of these measures.
12 (a)	The applicant is requested to address observations by prescribed bodies and observers who raise concerns in relation to the potential impacts on commercial fishing arising from the proposed development within both the array and the cable route corridor areas, specifically relating to the practicality and uncertainties of	Addressed through this Appendix A16.2, which details co-existence measures and the further development of the SFC (see Appendix B of this Appendix). Chapter 16 now cross-refers to Appendix 16.2 for the detailed Co-existence Strategy, Fisheries Liaison Strategy and updated mitigation in Table A16.11, including liaison roles, notice procedures, advisory safety zones, cable burial and protection principles, and code of good practice measures intended to support

RFI Section	RFI	Relevance to Appendix
	co-existence with reference to Co-existence Policy 1 in the NMPP.	practical coexistence within the array area and Export Cable Corridor (ECC). This Appendix 16.2 FMMS also includes a Technical Co-existence Assessment (Appendix D), which concludes that coexistence is technically achievable subject to defined trawling corridors between WTGs, cable burial standards, fisheries-informed operational protocols and monitoring.
12 (b)	The applicant is requested to address observations by prescribed bodies and observers who raise concerns in relation to the displacement of fishing effort during operational activities. In particular, the Marine Institute submit that the displacement of fishing effort would potentially increase fishing pressure and competition in neighbouring areas and have an impact on smaller vessels which cannot travel beyond their main area of activity. The applicant is requested to consider, in a holistic and integrated manner, cumulative impacts (see also point 5 above) associated with the potential effects of such displacement of fishing effort associated with other Irish Sea Phase 1 ORE projects in this area.	Observations have been addressed through the cumulative effects assessment in the Addendum to Chapter 16 and the FMMS Cumulative Mitigation Strategy. The Addendum to Chapter 16 assesses cumulative effects in Section 16.9, including reduction in access, displacement and increased fishing pressure in combination with other Irish Sea projects, while Appendix 16.2 sets out the corresponding cumulative mitigation approach. This includes use of the SFC as the primary governance mechanism, monitoring to improve the evidence base on fishing activity and displacement, continued engagement with fisheries stakeholders, public bodies and other Phase One developers, and an adaptive, evidence-led approach to responding to cumulative displacement should it arise. Further relevant detail is also provided in relation to the SFC governance arrangements, funded initiatives and consultation in Appendices B and C of this Appendix.

1. Introduction

This Fisheries Management and Mitigation Strategy (FMMS) has been prepared by NiMa Consultants Ltd to support the Environmental Impact Assessment Report (EIAR) for the North Irish Sea Array (NISA) Offshore Wind Farm (hereafter referred to as the ‘proposed development’) being developed by North Irish Sea Array Windfarm Ltd (hereafter referred to as ‘the Developer’).

Personnel, contractors and sub-contractors involved in the proposed development are required to comply with this FMMS.

This FMMS should be read in conjunction with Volume 2, Chapter 16: Commercial Fisheries of the 2024 EIAR and the Addendum to Chapter 16 of the proposed development EIAR.

This FMMS includes the following supporting appendices:

- Appendix A – National Marine Planning Framework Fisheries and Co-existence Policies
- Appendix B – Overview of the Sustainable Fisheries Community (SFC) Initiative
- Appendix C – Outline disturbance compensation protocol
- Appendix D – Summary of consultation
- Appendix E – Technical Co-existence Assessment

This FMMS remains a live document and will be updated to reflect the current fishing and construction schedule ahead of construction of the proposed development commencing.

1.1 Scope and Objectives of this FMMS

The development of offshore renewable energy infrastructure within Ireland’s maritime area has intensified the need for credible coexistence mechanisms between offshore wind projects and long-established commercial fishing activity. Fishing communities represent both economic stakeholders and custodians of marine space.

Marine Area Consent (MAC) provides the statutory gateway for offshore renewable developments under the Maritime Area Planning Act. Following MAC, projects must obtain planning permission through ACP. At this stage of development, ACP through the Request for Further Information (RFI) has sought clarification on commercial fisheries impacts, including displacement risk, mitigation credibility, consultation adequacy, and enforceable monitoring structures. In addition, the fisheries section of the RFI questions whether coexistence is merely aspirational or supported by credible governance, evidence, and financial mechanisms.

The National Marine Planning Framework (NMPF) (Department of Housing, Local Government and Heritage, 2021) provides specific policies for fisheries in the context of marine developments. Where significant adverse impact on access for existing fishing activities occurs, it must be demonstrated that proposals will (in order of preference) avoid, minimise or mitigate such impacts (Fisheries Policy 1). In addition, where significant impacts are identified, a Fisheries Management and Mitigation Strategy (FMMS) should be prepared (Fisheries Policy 2) (see Appendix A Fisheries Policies 1 and 2 in full). The 2024 EIAR and the Addendum concluded significant impacts requiring additional mitigation for Irish demersal otter trawlers targeting Nephrops (*Nephrops norvegicus*) within the array area during all phases of the proposed development and Irish potters during the construction of the Export Cable Corridor (ECC), as presented in Section 16.5 of Volume 2, Chapter 16.

In addition, of relevance to commercial fisheries, is the NMPF (Department of Housing, Local Government and Heritage, 2021) Co-existence policy 1, which requires the proposals to demonstrate they have considered how to optimise the use of space, including through consideration of opportunities for co-existence and co-operation with other activities (see Appendix A for full Policy).

As detailed within the Addendum to Volume 2, Chapter A16: Commercial Fisheries, significant impacts were identified for commercial fisheries as a result of the proposed development. This FMMS has been prepared to address the specific requirements of the NMPF.

The overall aim and objective of the FMMS is to provide details on the Developer's approach to fisheries liaison and mitigation for the proposed development, including proposed measures to facilitate co-existence between the proposed development and commercial fishing and to minimise potential impacts as far as reasonably practicable.

In line with the requirements of the NMPF, industry standards and good practice, this FMMS has the following key primary functions:

- To ensure that appropriate liaison channels with the fishing industry are established and that effective liaison is maintained throughout the construction, operation and maintenance and decommissioning phases of the proposed development; and
- To define appropriate management and mitigation measures to minimise potential impacts on fishing activities as far as reasonably practicable and facilitate co-existence throughout the construction, operation and maintenance and decommissioning of the proposed development.

1.2 Relevant Guidance

This FMMS has been prepared having regard to the following Irish guidance and good-practice documents relevant to offshore renewable energy and commercial fisheries interaction:

- Seafood / Offshore Renewable Energy (ORE) Engagement in Ireland – A Summary Guide (Seafood/ORE Working Group, 2023).
- Seafood/ORE Working Group – Dispute Resolution Mechanism (DRM) (Seafood/ORE Working Group).
- Use of Fishing Vessels for Commercial Work on ORE Projects – A Guide to Registration (Seafood/ORE Working Group).

In addition, the following regulatory and sector-specific guidance documents have also been considered, where relevant to fisheries liaison, navigation safety, consenting, and wider project delivery:

- Guidance Note for Applicants applying for a Maritime Area Consent (MAC) (MARA, current version).
- The Maritime Navigation Safety & Emergency Response Guidance Documents for Offshore Renewable Energy Installations (OREI) (Department of Transport / Irish Coast Guard, 2025).
- Best Practice Guidance for Fisheries Liaison with Offshore Renewables Developments (FLOWW, 2025).

Other internationally relevant guidance and good practice considered in the preparation of this FMMS includes:

- Fisheries Mitigation, Monitoring and Communication Plan guidance within Marine Licensing and Consenting: Offshore Renewable Energy Projects (Scottish Government), noting that this was previously referred to as Fisheries Management and Mitigation Strategy guidance; and
- Guidelines for Mitigating Impacts to Commercial and Recreational Fisheries (Draft) prepared by the United States Bureau of Ocean Energy Management (2022).

1.3 FMMS Audience

It is the Developer's responsibility to ensure the implementation of this FMMS. Compliance with this FMMS will be monitored by the Developer's Company Fisheries Liaison Officer (CFLO), the Developer's appointed Fisheries Liaison Officer (FLO) and the Developer's Environmental Manager for the proposed development.

Copies of the FMMS are to be held in the following locations:

- The Developer's head office;
- The construction office for the proposed development;
- At the premises of any Contractor (as appropriate), including the Environmental Manager for the proposed development, acting on behalf of the Developer; and
- Aboard any vessel engaged in activities associated with the proposed development.

1.4 Consultation on the FMMS

Details on engagement with the fishing industry are provided in Appendix D of the FMMS, and full details on consultation for the proposed development are provided in Appendix A1.2: Consultation Report.

Consultation in support of the FMMS has been ongoing and has expanded significantly through the development of the Sustainable Fisheries Community (SFC). The SFC has been established as a fisheries-led governance mechanism in the development phase to support long-term coexistence between the proposed development and commercial fishing activity (see Appendix B for further details of the SFC).

Since April 2025, engagement has included bi-weekly pier visits, direct engagement with fisheries representative organisations, seafood producers, government departments, prescribed bodies and wider offshore renewable and fisheries stakeholders, alongside targeted meetings on FMMS development, coexistence and cumulative effects. Key milestones have included:

- Finalisation of the SFC governance arrangements during the development phase;
- SFC committee formation in June 2025 with majority seafood-sector representation;
- Opening of the SFC Fund and presentations to the SF-ORE Working Group;
- Ministerial and agency engagement; and
- Circulation of the FMMS to fisheries stakeholders for comment in February 2026 followed by a dedicated discussion meeting in March 2026.

The consultation programme has involved a substantial level of outreach, including pier-based engagement, workshops and clinics, video conferences, Teams meetings, phone calls, emails, stakeholder mailshots and digital communications, demonstrating a structured and ongoing approach to fisheries engagement intended to inform the FMMS and support fisheries-led coexistence measures (see Appendix D).

1.5 Consents and Other Plans

1.5.1 Consents

The proposed development will be subject to the consents shown in Table 1-1. The table will be updated once further consents are granted.

Table 1-1 Offshore Infrastructure Consents

Licence	Legislation	Provider	Date Issued
Maritime Area Consent	Maritime Area Planning Act 2021	Minister for the Environment, Climate and Communications	23 December 2022
Planning Permission	Maritime Area Planning Act 2021	An Bord Pleanála (now known as “An Coimisiún Pleanála”)	Currently in determination phase

1.5.2 Linkages with Other Consents Plans

This FMMS sets out specific procedures relating to mitigation of effects on commercial fisheries. It will form part of a suite of approved documents that will provide the framework for the management of the construction, operation and decommissioning of the proposed development. These other plans and documents are referred to in Table 1-2 indicating the relevant linkages with this FMMS.

Table 1-2: FMMS linkages with other plans and documents

Plan/Document	Linkage with the FMMS
Offshore Construction Strategy as set out in Volume 2, Chapter 8: Construction Strategy - Offshore	Outlines the proposed construction programme for the proposed development. Provides details on the timing and sequencing of construction works, which is of relevance to the FMMS. The construction methodology provides information on the construction procedures and good working practices proposed for the construction phase of the proposed development.
Offshore Environmental Management Plan (EMP) (Volume 8, Appendix 6.1: Environmental Management Plan)	Outlines the Developer’s approach to environmental management during all phases of the proposed development and includes a complete register of the mitigation, management and monitoring commitments made in the EIAR. Of relevance to the FMMS, it confirms the role of the FLO within the wider proposed development team and sets out procedures for reporting of dropped objects and pollution response procedures.

Plan/Document	Linkage with the FMMS
Vessel Management Plan (VMP), Volume 9, Appendix 17.2.	Provides information on indicative transit routes to and from construction/ operational ports and the proposed development.
Operation and maintenance activities as set out in Volume 2, Chapter 6: Description of the Proposed Development – Offshore	Provides information on the maintenance procedure, including timing of maintenance activities.
Advisory Safety Zones and, Appendix 17.3: Lighting and Marking as set out in Volume 2, Chapter 6: Description of the Proposed Development – Offshore	Provides information on the approach to ensuring the safety of vessels (including fishing vessels) during construction and operation including details of temporary construction and decommissioning lighting and marking.
Cable Installation (within the Offshore EMP)	The Offshore EMP provides information on the specification of the cables, routing, the burial risk assessment and the cable installation process. Of relevance to the FMMS, it confirms the finalised location of the cable route, cable burial and protection details.

2. Proposed Development Description

2.1 The proposed development

The proposed development is an offshore wind farm development location off the coast of counties Dublin, Meath and Louth, situated in the West Irish Sea. It will comprise 35 or 49 wind turbine generators (WTGs) and associated foundations, one offshore substation platform (OSP), inter-array cables and two export cables located within an Export Cable Corridor (ECC). The full description of the proposed development, including Project Options 1 and 2, is provided in the Addendum to Volume 2, Chapter 6: Offshore Project Description. The array area (the area in which the WTGs, inter-array cables, and the OSP will be located) covers approximately 89km² however since the 2024 EIAR planning submission, the spatial extent of the WTG layouts within the array area for both Project Options 1 and 2 has reduced. This design refinement is depicted in Figure A2.1 for Project Option 1 and Figure A2.2 for Project Option 2.

The offshore elements of the proposed development consist of the array area and the ECC, referred to collectively as the 'offshore development area' hereafter. The offshore development area is fully located inside of 12 nautical mile (NM) territorial seas limit and within Ireland's Exclusive Economic Zone (EEZ) waters.

Fishing stocks are managed by stock at the scale of International Council for the Exploration of the Sea (ICES) divisions, and quotas for specific species are allocated per stock and ICES division, i.e., at a scale of ICES division 7a: Irish Sea. The offshore development area is located within the central portion of the ICES Division 7a (Irish Sea) statistical area.

ICES statistical rectangles are the smallest spatial unit used to collate commercial fisheries data; and it is considered appropriate to define the study areas using these. ICES statistical rectangles are consistent across all Member States operating in the Irish Sea.

The array area is located within ICES statistical rectangle 36E4 and the ECC is located within ICES statistical rectangles 36E4 and 36E3, which together represent the commercial fisheries local study area, as shown in Figure A2.3. Note that the array area and the ECC occupy only a portion of these ICES statistical rectangles.

In order to understand fishing activity in waters adjacent to the offshore development area, a regional commercial fisheries study area has been defined to include 36E4 and 36E3, together with ICES statistical rectangles 37E4, 37E3, 35E4 and 35E3. Baseline data has been gathered and analysed for the regional study area. In summary, the study areas for commercial fisheries are:

- Local commercial fisheries study area: 36E4 and 36E3; and
- Regional commercial fisheries study area: 37E4, 37E3, 36E4, 36E3, 35E4 and 35E3.

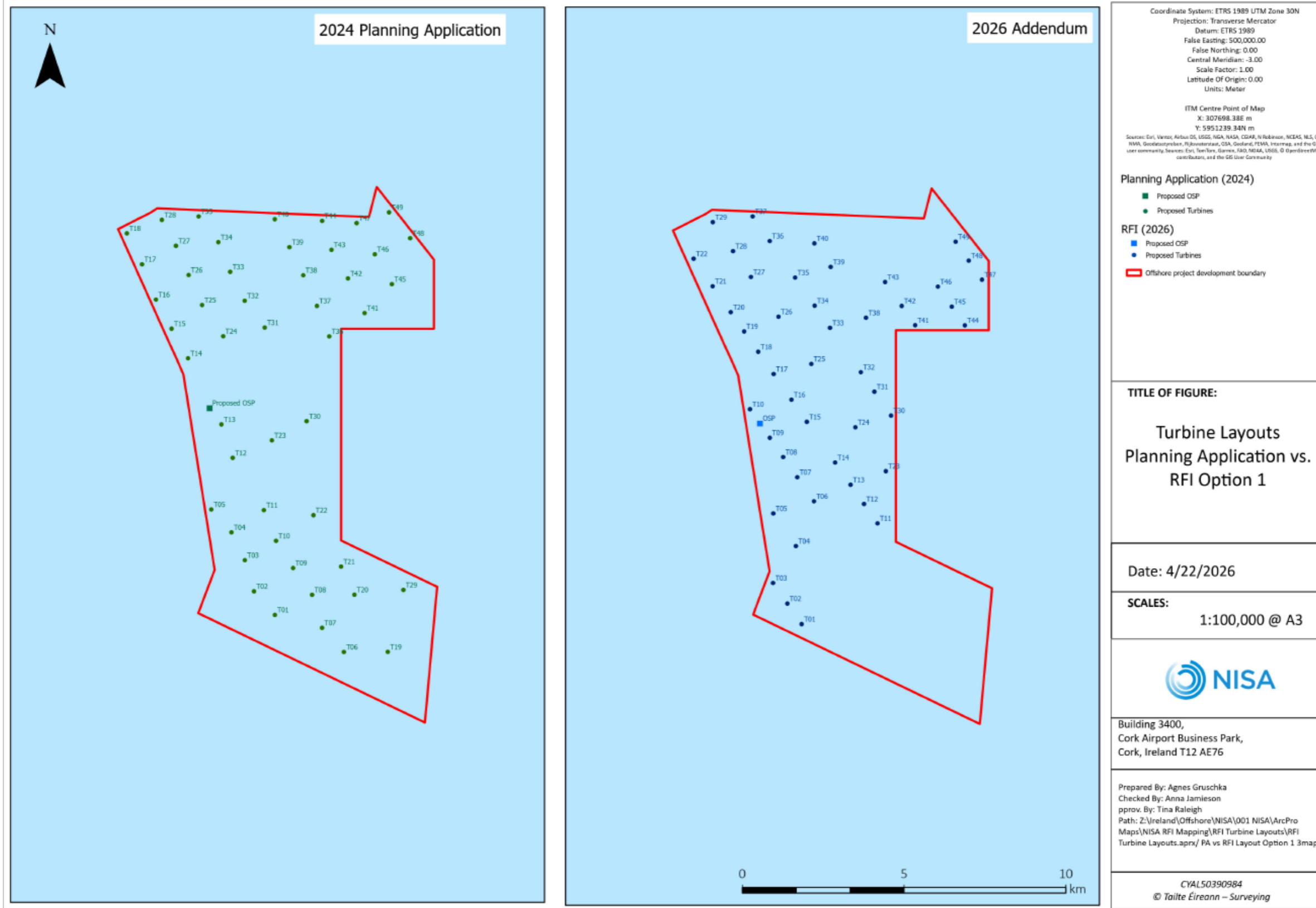


Figure A2-1 NISA Design Refinements- Project Option 1 within the array area outlined in red.

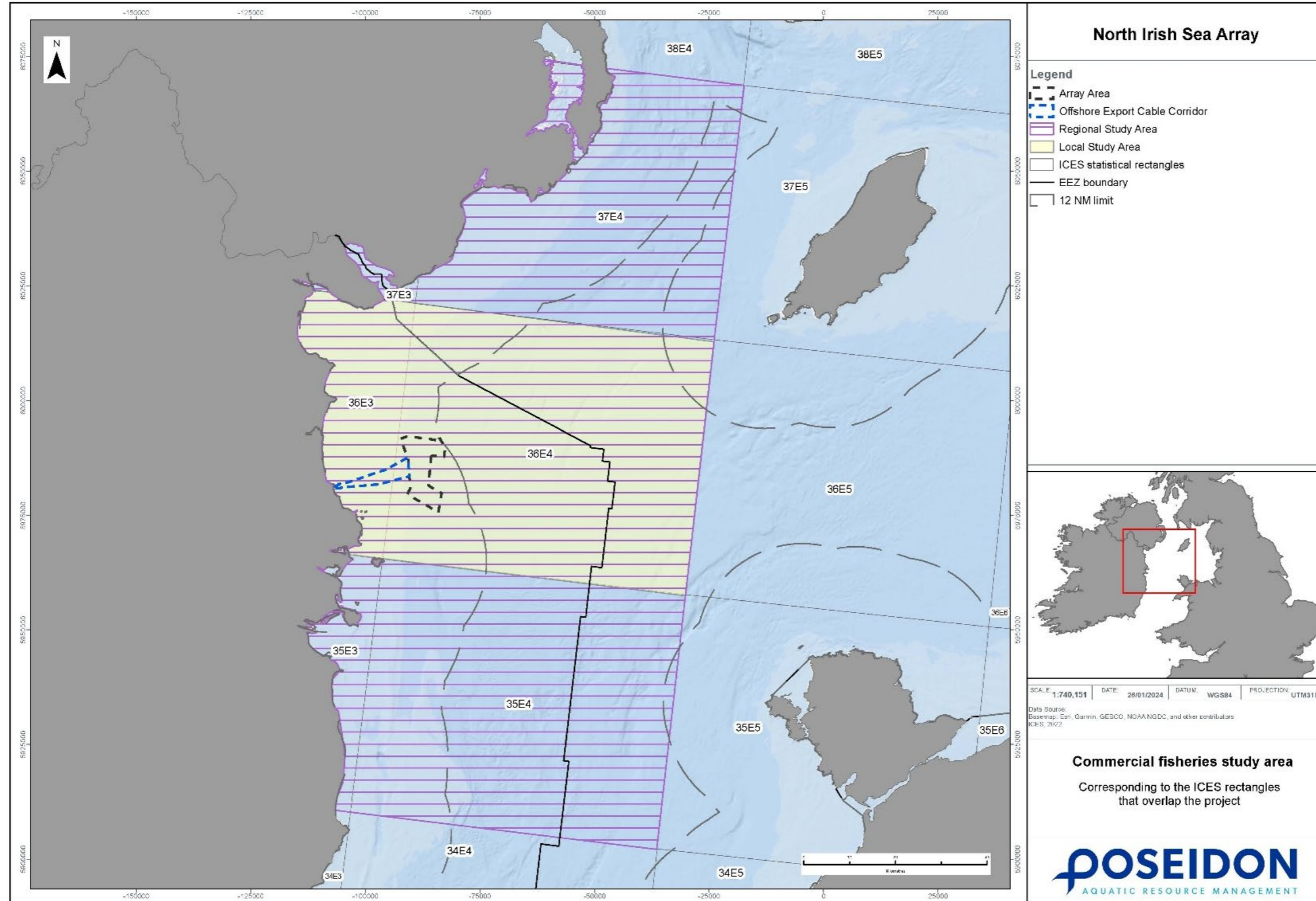


Figure A2-3 – Commercial Fisheries Study Area

2.2 Construction and Maintenance Works

2.2.1 Construction Works

Construction works with the potential to impact on commercial fisheries include the following:

- Pre-construction surveys within the ECC and array area;
- Construction of the export cable, including cable pre-lay grapnel run and the installation of cable and cable protection across a maximum of 20% of cables;
- Construction of the WTG and Offshore Substation Platform (OSP) foundations, including deployment of jack up vessels, anchor placement, pre-lay grapnel run and the installation of inter-array cables; and
- Restricted access to offshore areas within the offshore development area including areas undergoing construction works and vessels undertaking construction activities.

2.2.2 Operation and Maintenance Works

Operations and maintenance activities with the potential to impact on commercial fisheries include the following:

- Physical presence of WTGs, OSP, inter-array cables and cable protection;
- Physical presence of export cable and cable protection;
- Presence of maintenance vessel use during maintenance activities in the array area and ECC including safe passing distances;
- Cable repair, reburial and maintenance activities; and
- Restricted access to the offshore development area.

2.2.3 Timing of Construction and Maintenance works

It is currently anticipated that the offshore construction works will be carried out year-round and around the clock (i.e. 24 hours working per day, seven days a week, unless noted otherwise). Information and updates on construction activities will be promulgated through local Notice to Mariners (NtMs) and continuing liaison through the Fisheries Liaison Officer (FLO) and Offshore FLO (OFLO).

2.2.4 Construction and Maintenance Management

Full details of the construction management procedures and maintenance schedule and procedures, including environmental compliance, monitoring and reporting and roles and responsibilities are provided in Volume 8, Addendum to Appendix A6.1: Offshore EMP.

2.3 Key commercial fisheries

A Commercial Fisheries Technical Report (Volume 9, Appendix A16.1) has been prepared and covers the commercial fisheries study area illustrated in Figure A2.3, in order to characterise the active fisheries and understand trends in activity from 2016 to 2024. The appraisal has been based on both publicly available

data sets and specific data requests including inshore mapping, vessel monitoring system data and landing statistics.

The commercial fisheries characterisation has identified the following key fleet métiers operating across the local and regional study areas (in no particular order):

- Irish demersal otter trawlers targeting nephrops and mixed demersal species;
- Irish demersal otter trawlers targeting haddock and mixed demersal species;
- Northern Irish demersal otter trawlers targeting nephrops and mixed demersal species;
- Northern Irish demersal otter trawlers targeting haddock and mixed demersal species;
- Irish potting vessels targeting whelk;
- Irish potting vessels targeting brown crab and lobster;
- Irish scallop dredgers targeting king scallop;
- UK scallop dredgers targeting king scallop;
- Irish hydraulic dredgers targeting razor shell;
- Irish dredgers harvesting mussel seed;
- Irish and Belgian beam trawlers targeting plaice, sole and mixed demersal species; and
- Irish pelagic trawlers targeting sprat and herring.

Unless otherwise specified, the measures proposed in this FMMS apply to all the fisheries identified above during the construction phase. Where specific measures have been proposed in relation to specific fisheries, this is clearly noted within this FMMS.

3. Fisheries Liaison Strategy

3.1 Principles of Liaison

The implementation of appropriate communication and information transfer strategies is of key importance to assist in minimising interference and facilitating effective co-existence with the fishing industry.

The principles of liaison are that:

- The Developer will undertake regular and routine communications via NtMs to provide reasonable time to enable operational fishing business decisions to be made;
- Continued engagement, constructive communication and proactive dialogue between the fishers, their representatives and other fisheries stakeholders and the Developer is desired and is advantageous to all parties; and
- All maritime operations that may have an effect on the commercial fishing sector will be made on a factual and accurate basis, in order to prevent unnecessary escalation of issues.

3.1.1 Seafood / ORE Working Group Guidance

The Developer commits to following the Seafood / Offshore Renewable Energy (ORE) Working Group Summary guidance (Seafood/ORE Working Group, 2023), including the principles for engagement presented in Figure A3-1.

The Developer commits to effective engagement built upon mutual respect, a clear intention to reach agreement and recognition of the importance of the seafood/fisheries sector.

Engagement: Early and ongoing engagement including physical (i.e., face-to-face) meetings with national and regional seafood representatives

Communication: Commit to open sharing of information by both ORE and seafood industries, that is relevant to the intended recipient and, subject to commercial / GDPR or other restrictions, communicate with each other honestly, openly and transparently. All data / information will be evidence-based and provided in a way that is easily understood and accessible.

Cooperation: Work together, recognising each other's expertise and the importance of each other's industry to Ireland, to our economy, our society, and our coastal communities, to achieve sustainable outcomes that benefit us all.

Co-existence: Encourage the principle that the seafood and offshore renewable energy industries can work side-by-side and co-exist in a manner that respectfully shares the marine space.

Avoid, minimise, mitigate: Cooperate to determine the impact, effect and opportunities that ORE proposals may have on seafood activity and work together to avoid, minimise or mitigate any negative impacts.

Figure A3-1 Principles of engagement (Seafood / ORE Working Group, 2023)

3.2 Liaison Roles and Responsibilities

The following section outlines the relevant roles and responsibilities of the Company FLO, FLO, OFLO and Fisheries Industry Representatives (FIR) and the linkage between specific roles and fisheries consultees. An organogram of key liaison roles is provided in Figure A3-2.

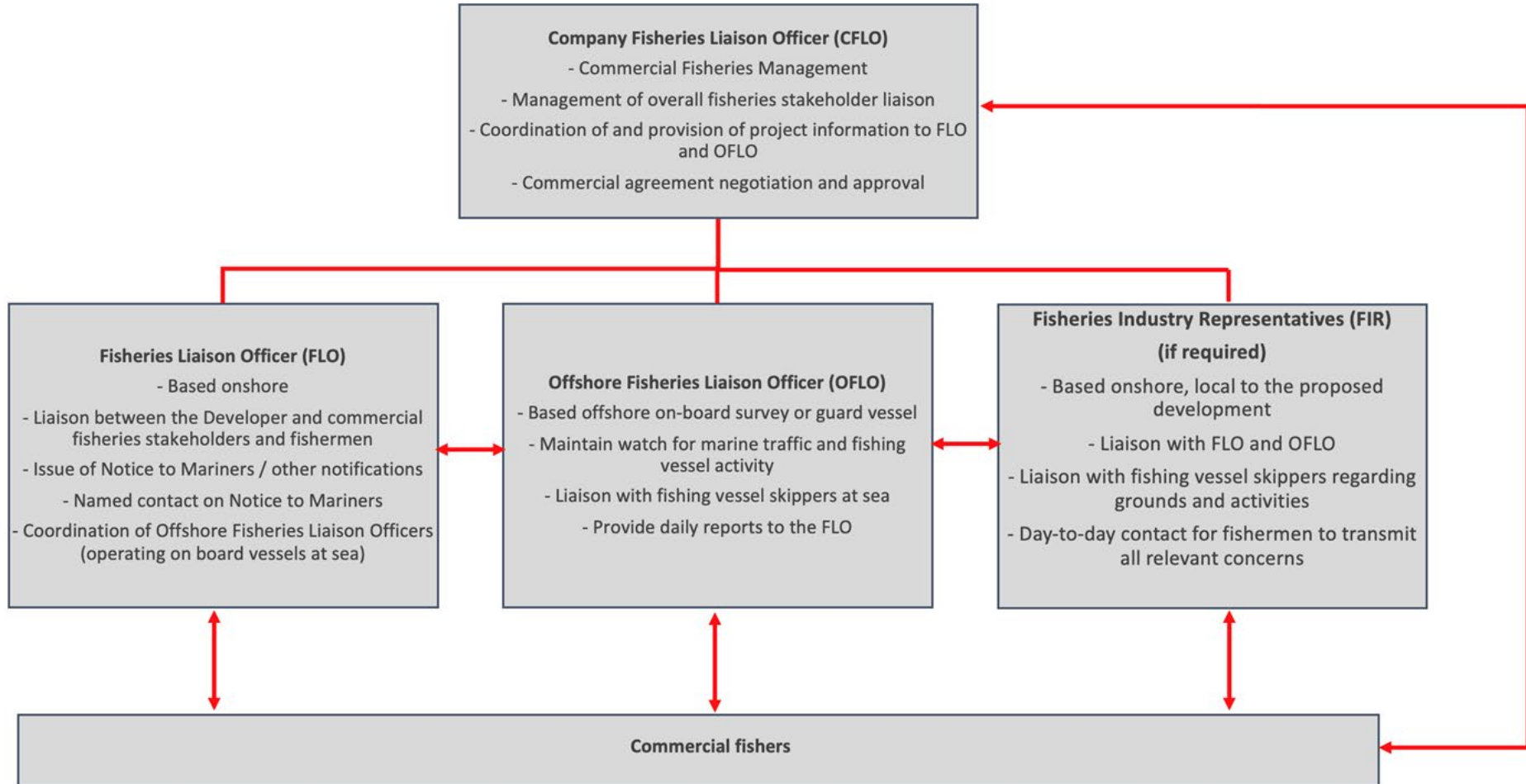


Figure A3-2 Team organogram and consultation links to fisheries stakeholder

3.2.1 The Developer

The responsibilities of the Developer in relation to this FMMS are:

- Provide the role of Company Fisheries Liaison Officer (CFLO);
- Progress the construction of the proposed development with the least disturbance practicable to the local fishing activities;
- Maintain the on-going employment of a FLO and OFLO (as required when there is offshore works that could interact with existing fishing activities) throughout the lifetime of the proposed development; and
- Aid in the prevention of conflict through the timely provision of information to the FLO, Fishing Industry Representative (FIR) and the fishing industry, including in relation to cable laying, the type and location of cable protection measures where this may be required, and the timing of construction works.

3.2.2 Fisheries Liaison Officer (FLO)

The Developer has employed an FLO since 2019 for the proposed development.

Details on engagement with the fishing industry are provided in Appendix D of the FMMS, and full details on consultation for the proposed development are provided in the Addendum to Appendix A1.2: Consultation Report.

The FLO continues to have active engagement with the fishing industry and the key responsibilities of the FLO are outlined below:

- Provide advice to the Developer on fisheries liaison throughout the construction, operation and decommissioning of the proposed development;
- Communicate with the fishing industry, any contractors or sub-contractors, other developers and other users of the sea through appropriate channels;
- Provide information relating to the safe operation of fishing activity throughout the construction and operation of the proposed development;
- Develop and maintain a strong positive working relationship with the local fishing industry;
- Have and maintain a strong knowledge of the fishing industry local to the proposed development;
- Understand the interactions likely to occur between the local fishing industry and the proposed development, and any potential impacts on the fishing industry during construction and operation of the proposed development;
- Ensure that information is made available and circulated in a timely manner to minimise interference with fishing operations and other users of the sea; and
- Maintain availability to receive and respond to fisheries stakeholders and client enquiries, including resolution of fisheries related issues as they arise.

In line with the above responsibilities, the main duties of the FLO are to:

- Maintain the fisheries stakeholder database that contains information on fishing vessel operations (e.g. vessel name, registration and port base, and skipper) within and around the proposed development;
- Organise, prepare updates and attend fisheries meetings, local fisheries stakeholder events and meetings with regulators, as required;
- Prepare and distribute the required information and notices of all activities associated with the proposed development which could affect fishing stakeholders;
- Instruct contractors on the fishing activities in the areas of work and provide details on the fishing activities and gear types that may be present, any relevant sensitivities and contact details for communicating with the fishing vessels at sea;
- Manage and coordinate OFLOs that are supporting surveys and works at sea, including liaising on any fisheries issues at sea, such as facilitating the relocation or removal of static fishing gear where this may be required;
- Communicate details of any dropped objects to the fishing industry. Dropped objects should be reported to stakeholders within 24 hours of the event occurring (or as soon as possible);
- Communicate details of exposed cables and any other safety hazards to the fishing industry;
- Coordinate the activities and responsibilities of the Onshore FIRs (if required); and
- Provide monthly reporting to the Developer's Environmental Manager during the construction phase of the proposed development.

3.2.3 Offshore Fisheries Liaison Officer (OFLO)

An OFLO will be employed by the Developer or Developer's Contractors and will be stationed on a survey/works/guard vessel to act as the point of communication with fishers at sea, directly and through consultation with FLO and/or FIRs. The OFLO will request fishers at sea to keep works locations and transit routes free from gear / not trawl across the area and risk themselves or the works during construction, major maintenance and decommissioning.

The primary responsibilities of the OFLOs are to:

- Maintain regular contact with the FLO and the Developer's personnel, contractors and sub-contractors, as required, concerning marine traffic and fishing vessel activity in the vicinity of the proposed development;
- Maintain watch for marine traffic and fishing vessel activity during marine operations and maintain regular contact with guard vessels and support vessels;
- Communicate with the vessel master in respect of providing any relevant information on fishing vessels, and, when the proposed development-related vessel is not engaged in marine operations, work with the vessel master to avoid, where reasonably practicable, any fishing vessels actively engaged in fishing operations;
- Liaise with any fishers who may have static gear deployed in the vicinity of the proposed development or along vessel transit routes;
- Provide the required support to the FLO in the handling of any claims by fishers who may have static gear deployed in the vicinity of the proposed development;

- Work with the vessel master to ensure adherence with relevant aspects of the FMMS;
- Develop and provide training for all vessel personnel to include induction and training for staff with specific fisheries liaison responsibilities;
- Record details of any fishing activity in and around the proposed development (including fishing vessels, gear and communications with fishers) and of any events of infringement or movement or damage to static gear;
- When engaged in OFLO duties, provide daily update reports via email to the FLO; and
- Attend meetings, when required, with the Developer's personnel and the FLO.

3.2.4 Fisheries Industry Representative

To further aid the establishment of effective communication channels and to benefit from extensive local knowledge, one or more FIR(s) may be employed. FIRs can be helpful when communicating information across a wide geographic area to assist the FLO in delivering face-to-face information dissemination. An FIR will support activities that would otherwise be undertaken by the FLO (if a FIR is not in position).

FIRs will make skippers of fishing vessels aware of any forthcoming operations and other on-going activities related to the proposed development. The roles and responsibilities of FIR and FLO can be very similar and often delivered by one individual, dependant on knowledge and resource requirements.

The primary responsibilities of the FIRs are:

- Liaise with fishing skippers with the objective to provide details of fishing activities in the area and particular sensitivities;
- Maintain mutually productive relationships between the Developer and fisheries stakeholders;
- Be the local conduit for liaison, providing the day-to-day point of contact for fishers to transmit all their relevant concerns in relation to activities associated with the proposed development;
- Log all concerns raised by the fishers, including date, individual and details related to the type, nature and location of the concern and regularly provide this log to the FLO;
- Assist the FLO at a local level in undertaking the tasks listed above, including:
 - Assist the Developer's representatives to identify areas of concern or conflict at an early stage so that as far as is practicable appropriate measures can be implemented to address these;
 - Assist with the liaison between OFLOs and FLO where necessary, including liaising on any fisheries issues at sea;
 - Assist in the distribution of notices and relevant project information to local fisheries stakeholders;
 - Regularly update the contacts database; and
 - Maintain availability as required for addressing local fisheries issues if they arise.

The FIR(s) will be contracted by the Developer subject to a Terms of Reference and contract Terms and Conditions. While a FIR may be associated with a specific organisation or association, they will not be acting to the sole benefit of that association. Should an instance arise whereby an industry association or

individual fishers does not wish to communicate via the FIR for that area, the FLO will undertake such direct responsibilities to ensure that the association/fishers still has a line of communication to the Developer and vice versa.

3.2.5 Marine Coordinator

The Marine Coordinator coordinates all marine operations during construction, including monitoring and managing all construction vessel activity. During operations the Marine Coordinator will only operate when vessels from the proposed development are operating.

The Marine Coordinator will operate 24/7. Further details on the Marine Coordinator are provided in Volume 8, Appendix 6.1: Offshore EMP.

3.2.6 Liaison Scenarios

Example liaison scenarios are presented in Figure A3-3. It is understood that alternative or more specific scenarios may occur, but the principles remain that a fisheries stakeholder or fishers currently onshore and wishing to communicate with the Developer should contact the relevant FIR and/or FLO; where they are offshore and working in the vicinity of the proposed development with a more immediate issue or concern, they should contact the FLO and/or the OFLO.

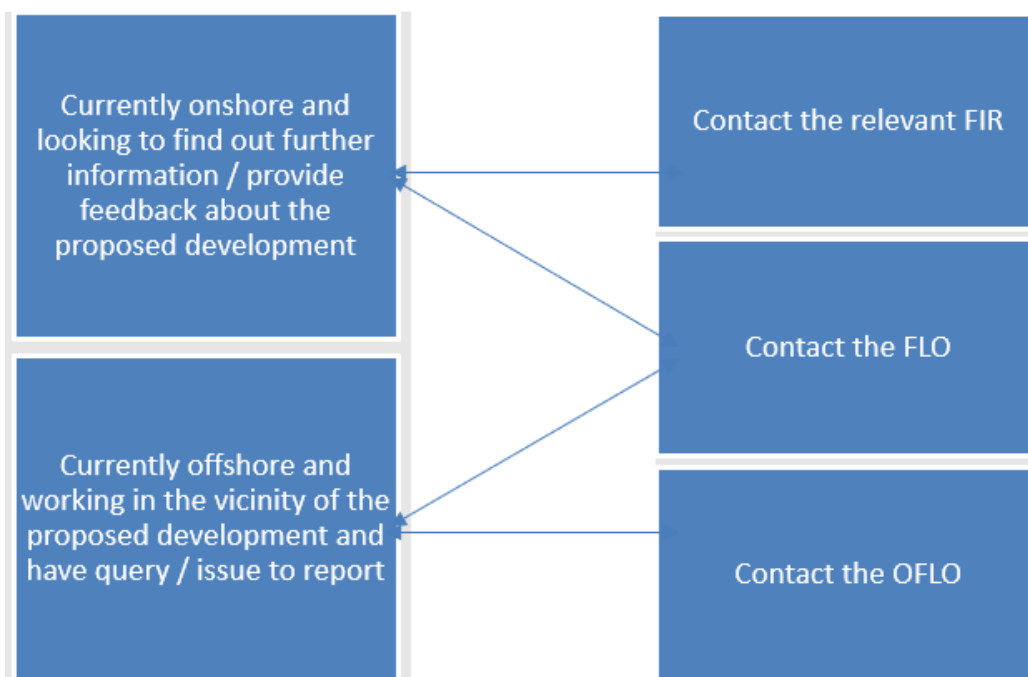


Figure A3-3 Fisheries contacts in example scenarios

3.3 Information Dissemination

Information regarding pre-construction and construction works will be circulated to fisheries stakeholders with a view to minimising interference and facilitating effective co-existence.

The proposed schedule for dissemination of information to the fishing industry in is outlined in Table A3-1.

Table A3-1 Scheduling of Liaison and Information Dissemination

Activity	Means of dissemination	Timing and frequency	Responsible
Pre-construction surveys (e.g. geophysical survey)	NtM; Offshore Fisheries Liaison Officer (OFLO); Fisheries Liaison Officer (FLO); and Fishing Industry Representative (FIR).	Issued prior to survey mobilisation, as required during survey, and upon completion of survey. Radio Navigation Warning (RNW) for dropped objects. Provision of information to fishing vessels at sea as required.	FLO, supported by OFLO, FIR
Pre-construction activities (e.g. RNW in the event that a dropped object poses a hazard to fishing activity and notification of recovery)	MN; FLO; OFLO; FIR	Issued prior to activity mobilisation, as required during activity, and upon completion of activity. RNW for dropped objects. Provision of information to fishing vessels at sea as required.	Marine Coordinator or FLO, supported by OFLO, FIR
Construction activities (e.g. cable placement and burial)	Notices of Operations / Vessel Reports MN; FLO; OFLO; FIR	Issued prior to activity mobilisation, as required during activity, and upon completion of activity. Notice and information will aim to be provided not less than 14 days prior for individual construction vessels mobilisations (where feasible) Weekly construction status updates. RNW for dropped objects. Provision of information to fishing vessels at sea as required.	Marine Coordinator or FLO, supported by OFLO, FIR
Post-construction surveys (e.g. geophysical survey)	Survey report issued as relevant; MN; FLO; OFLO; FIR	Issued prior to survey mobilisation, as required during survey, and upon completion of survey. RNW for dropped objects. Survey report issued as relevant. Provision of information to fishing vessels at sea as required.	FLO, supported by OFLO, FIR
Operation and Maintenance activities (e.g. scheduled or unscheduled maintenance)	MN; FLO; OFLO; FIR	Issued prior to activity mobilisation, as required during activity, and upon completion of activity. RNW for dropped objects. Provision of information to fishing vessels at sea as required.	FLO, supported by OFLO, FIR
Decommissioning activities (e.g. removal of infrastructure)	Notices of Operations / Vessel Reports NtM; FLO; OFLO; FIR	Issued prior to activity mobilisation, as required during	Marine Coordinator or FLO,

Activity	Means of dissemination	Timing and frequency	Responsible
		activity, and upon completion of activity. Notice and information will aim to be provided not less than 14 days prior for individual decommissioning vessels mobilisations (where feasible) Weekly construction status updates. RNW for dropped objects. Provision of information to fishing vessels at sea as required.	supported by OFLO, FIR
Unscheduled liaison	Email, phone, in person.	Ad hoc / continual basis.	FLO, supported by OFLO, FIR

4. Fisheries Mitigation Strategy

4.1 Principles of Mitigation

In line with best practice guidance (Seafood/ORE, 2023; FLOWW, 2025), the Developer commits to the following principles of mitigation:

- The Developer will minimise the size and duration of advisory safety zones during surveys and other works where safe and practicable to do so;
- The Developer will provide local fisheries stakeholders with procedures for registering disturbance payment claims for loss of/damage to fishing gear in association with surveys and construction related activities of the proposed development (see Appendix C);
- Safe working practices underpinned by appropriate safety management systems are expected from all vessels undertaking operations related to the proposed development. Vessels employed by the Developer will only undertake activities prescribed in their line of work; and
- Vessels involved in the construction, operation and maintenance and decommissioning of the proposed development, including guard vessels and survey vessels, will be provided with the relevant lines of communication (as outlined within this document) to minimise interaction with fishing vessels undertaking their normal activities.

4.1.1 Embedded Mitigation

Factored in measures as documented in Volume 2, Chapter 16: Commercial Fisheries are provided in Table A4-1.

Table A4-1 Embedded mitigation relevant to commercial fisheries

Embedded mitigation	Justification
Fisheries liaison	<p>The Developer is committed to ongoing liaison with fishermen throughout all stages of the project, including:</p> <p>Continuation of the appointment of a FLO to continue to maintain effective communications between the project and fishermen, in compliance with the Seafood/ORE Engagement in Ireland guidance (Seafood/ORE Working Group, 2023);</p> <p>Appropriate liaison with relevant fishing interests to ensure that they are fully informed of development planning and any offshore activities and works;</p> <p>Timely issue of notifications including NtM Kingfisher Bulletin notifications and other navigational warnings to the fishing community to provide advance warning of project activities and associated advisory safe passing distances; and</p> <p>Development of a FMMS (this document), setting out in detail the approach to fisheries liaison and co-existence and mitigation strategies.</p>
Agreement of lighting and marking with Irish Lights.	<p>The Developer is committed to marking and lighting the project in accordance with relevant industry guidance and as advised by relevant stakeholders including in accordance with IALA Recommendation O-139 (IALA, 2013) and Commission of Irish Lights, “Irish Lights” requirements. In particular, the use of marine lighting to mark selected peripheral structures.</p> <p>The Developer will also ensure all structures associated with the proposed development are adequately marked on nautical and electronic charts and documented within the Lighting and Marking Plan (LMP).</p> <p>Implementation of a buoyed construction / decommissioning area around the site during the appropriate phases, in consultation with Irish Lights and documented within the LMP.</p>
Cable burial	<p>Preferred means of cable protection is cable burial with typical trench depth of between 1-3 m, noting cable protection with mattresses or similar could be required for up to 20% of cables.</p>
Cable Burial Risk Assessment (CBRA)	<p>CBRA undertaken pre-construction including consideration of under keel clearance and appropriate cable protection applied based upon the outcomes. To include consideration of requirements for monitoring of the protection.</p>

Embedded mitigation	Justification
Guard vessels	Use of a temporary guard vessel will be employed if deemed necessary at detailed design stage e.g., to protect unlit structures and/or unprotected cable prior to burial.
Advisory safe passing distances	Use of advisory safe passing distances including surrounding vessels that are undertaking sensitive construction, installation, or maintenance works. These vessels are likely to display Restricted in Ability to Manoeuvre (RAM) status.
Snagging	In the instance that snagging was to occur, and in the absence of Irish specific guidance in relation to snagging, the Developer will work to the protocols laid out within the guidance produced by the UK FLOWW group and 'Recommendations for Fisheries Liaison: Best Practice' guidance for offshore renewable developers, in particular Section 11: Dealing with claims for loss or damage of gear.

Additional mitigation listed in the Volume 2, Addendum to Chapter 16: Commercial Fisheries specific to commercial fisheries includes the following:

- The Offshore EMP will set out environmental management measures to be adopted during the construction phase (Volume 8, Addendum to Appendix A6.1); and
- The approach for dealing with dropped objects including reporting and recovery of dropped objects where they pose a potential hazard to other marine users will be included in the Offshore EMP.

An evidence-based disturbance payment strategy has been developed, with further details provided in Appendix C.

4.2 Co-existence Strategy

4.2.1 Principles of Co-existence

The Developer regards coexistence as the continuation of both the proposed development and fishing industry activities at the same time within and around the array area and along the ECC.

Commitments relevant to coexistence are summarised below as key elements of the FMMS. Specifically, these commitments relate to:

- Project design, i.e. the location and coordinates of all including wind farm layout infrastructure and cable burial and protection;
- The offshore development area represents only 36% of the full MAC boundary area and was reduced as a commitment by the Developer to ensure optimal seabed usage where possible, whilst ensuring the key other marine users are impacted as minimally as possible;

- Further project design refinements to Project Options 1 and 2 have reduced the spatial extent of WTGs within the array area, as shown in Figures A2.1 and A2.2.
- Design of the array area to maximise corridors between turbines for navigation and orientated the turbines in a NNW – SSE direction to facilitate the direction of trawling in this area;
- Defined trawling corridors as shown in Figure A4-1. These corridors are aligned with the search and rescue (SAR) corridors, which constrains WTG Limit of Deviation (LoD) and micro-siting such that turbines cannot be positioned within a trawling corridor.
- Appropriate notification of survey and construction activities to other marine users and the continued appointment of a FLO and OFLO;
- Appropriate lighting and marking of the proposed development and construction vessels;
- Appropriate charting of the proposed development and notification of any hazards; and
- The adoption of advisory safety zones and a process for marine coordination of all vessel activity.

Fishing will not be prohibited within the array area and the above commitments are made by the Developer to maximise coexistence with the fishing industry. A technical coexistence study has been undertaken with further details in Section 4.4 and Appendix E. The Developer will monitor the efficacy of the fisheries inclusive design measures.

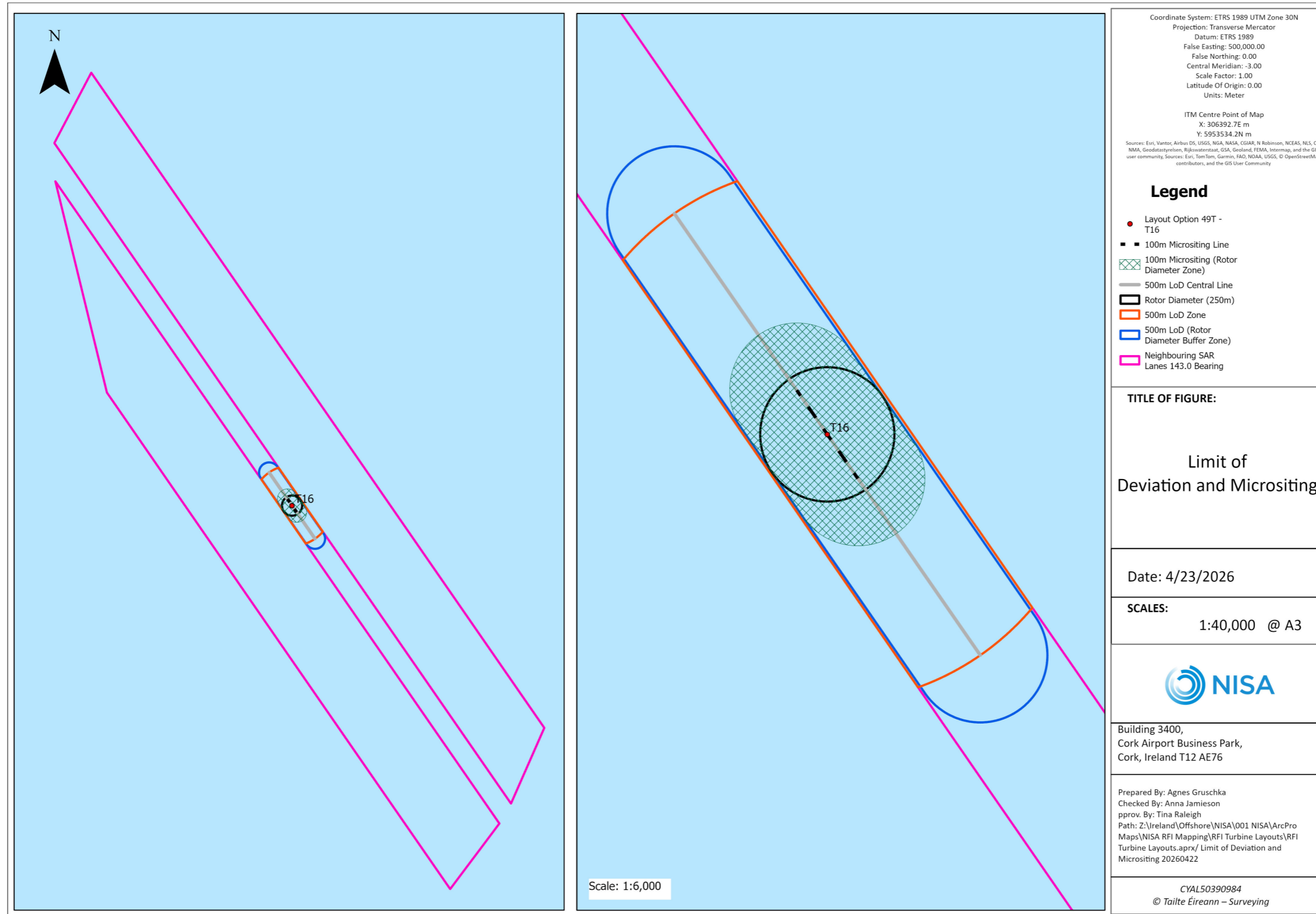


Figure A4-1 NISA Defined Commercial Fisheries Trawling Corridors

4.2.2 Cable Burial

The Construction Methodology as set out in Volume 2, Addendum to Chapter 6: Description of Development - Offshore and Chapter 8: Construction Strategy – Offshore provides additional detail on cable installation, and confirms target cable burial, and protection measures where target burial cannot be achieved. The Operation and Maintenance Activities Methodology as set out in Volume 2, Addendum to Chapter 6: Description of Development – Offshore sets out an approach to surveys of cables and any protection during the operational life of the proposed development.

The Construction Methodology and Operation and Maintenance Activities Methodology includes the following:

- a) The vessel types used in the proposed development activity;
- b) The location of the export cable route;
- c) The duration and timings of the proposed development activity;
- d) The cable laying techniques, including measures to maximise the likelihood of achieving target burial and measures to bury cables where target burial has not initially been achieved;
- e) Measures to ensure the remediation, where practicable, of any seabed obstacles created during construction;
- f) Technical specification of cables, including a desk-based assessment of attenuation of electromagnetic field strengths and shielding;
- g) A CBRA undertaken post consent (following the analysis of the site investigations) will inform burial depths and where necessary alternative protection measures, and a mechanism for risk-based approach to protection measures where target burial has not been achieved;
- h) Survey methods and timescales for monitoring of cables through their operational life, including inspection, over trawl and post-lay; and
- i) Measures to address and report any exposure of cables or risk to users of the sea from cables.

4.2.3 Safe Passing Distances and Guard Vessels

There are no legal provisions for advisory safety zones within the Irish EEZ. Based on best practice and best available techniques from other European construction experiences in offshore wind farm development, the Developer will implement advisory safety zones of 500m, established through Marine Notices for construction and maintenance works, and for pre commissioning works (50 m); and advise the use of 'rolling'/temporary 500m advisory safety zones around installation/maintenance vessels.

Provision of guard vessels will be the responsibility of relevant Contractors during construction activities, as appropriate. The guard vessels will support the OFLO in monitoring fishing activity and communicating with fishing vessels.

4.2.4 Safety of Navigation

The procedures relating to safety of navigation is set out in a LMP and VMP.

The LMP and VMP are intended to ensure that the vessel operations are managed in such a way as to mitigate the navigational risk to other legitimate users of the sea.

The LMP and VMP set out requirements related to:

- Navigational safety measures;
- Information on indicative transit routes to and from construction/operational ports;
- Vessel movements, anchorage areas, potential sheltering arrangements and marine coordination measures;
- Construction advisory safety zones and use of guard vessels;
- Notices to other marine users, including Notice(s) to Mariners and Radio Navigation Warnings as appropriate;
- Emergency response and coordination arrangements; and
- All Contractors will be required to comply with the approved LMP and VMP.

The Developer will consult via the FLO with commercial fisheries stakeholders on indicative transit routes and any potential shelter areas and will advise contractor vessels of any concerns raised and the importance of adhering to the code of good practice defined for contractor vessels, below. The Marine Coordinator will monitor construction vessel locations and will advise vessels on use of transit routes and shelter areas.

In line with consent requirements and as confirmed in the LMP and VMP, all installed infrastructure will be marked on Admiralty Charts.

4.2.5 Dropped Objects

The requirements relating to dropped objects is set out in Volume 8, Addendum to Appendix A6.1: Offshore EMP, including the use of a Dropped Objects Procedure Form. All Contractors will be required to comply with the approved Offshore EMP.

4.2.6 Code of Good Practice for all Vessels

When the Developer appoints Contractors, they will be contractually required to follow a code of good practice in order to ensure external communication is accurate and to aid co-existence with the fishing industry. This will include the following considerations:

- Ensure that any debris related to the proposed development accidentally dropped during construction and maintenance activities is removed as practicably and safely, as is feasible, and reported as stated within the Offshore EMP;
- Ensure all vessels under contract for the proposed development adhere to the Convention on the International Regulations for Preventing Collisions at Sea, 1972 (COLREGs) and the International Convention for the Safety of Life at Sea (SOLAS) requirements;

- Ensure all vessels under contract for the proposed development do not engage in any commercial or recreational fishing activities whatsoever;
- All vessels under contract for the proposed development will maintain regular communications as required with fishing vessels during offshore operations;
- All vessels under contract for the proposed development will monitor at all times the required Very High Frequency (VHF) channels so as to receive communications directly from fishing vessels;
- All vessels contracted to undertake work associated with the proposed development will have undertaken appropriate risk assessments in respect of potential interactions with commercial fishing vessels and their gears;
- Where appropriate, for vessels using anchored positioning, Contractors will be obliged wherever possible to adopt anchor release procedures to minimise the size of anchor mounds and where necessary undertake remedial actions to level any significant anchor mounds;
- All vessels contracted by the Developer to have on board fishing liaison/interaction manuals;
- Where appropriate, where appropriate and where subsea or surface works are undertaken where a possible interaction with the fishing industry is deemed likely then an OFLO will be in place and communication with the fishing industry active within the proposed work area will be daily in relation to work scope; and
- Vessels transiting to the proposed development shall follow transit routes as defined in the VMP where and when safe and practical to do so. In addition, if and when a corridor is established to the work area, this corridor will be communicated to the fishing industry.

4.2.7 Procedures in Relation to Gear Fastening or Loss

As per the Seafish et al. 2016 guidance on reducing the risks while fishing:

"In the interests of fishing safety and to prevent damage to subsea structures, fishers are advised to exercise caution when fishing in the vicinity of subsea cables and renewable energy structures. If it is suspected that gear has snagged a subsea cable, DO NOT endanger vessel and crew by attempting to recover gear. If gear is snagged and it is thought prudent to slip or cut the fishing gear in an attempt to clear a subsea structure, the gear should always be lowered to the seabed first. To slip or cut anything bearing excessive weight should never be attempted."

The following procedure replicates that which has been in place in respect of the UK offshore oil & gas industry and describes the steps that should be undertaken in the event of fishing gear becoming fastened within the proposed offshore development area due to project related infrastructure:

If the fastened gear is not easily retrieved, fishers should not apply excessive winch, line or net hauler loads or engine powers in attempts to retrieve fastened gear.

Fishing vessel should advise the coastguard or the Marine Coordinator, giving an accurate position of the vessel and/or lost gear.

If the coastguard or the Marine Coordinator, confirms that the vessel is in the immediate vicinity of a cable, serious consideration will be given to the slipping of the gear and buoying and recording its position.

After buoying off the gear, the position should be confirmed with the coastguard or the FLO.

On no account should skippers grapple in an attempt to recover fishing gear lost or cut away in the vicinity of any project related infrastructure.

Claims for loss of gear should be made within 24 hours of arrival in port. Full particulars of the incident should be given and full details recorded in the vessel's official log, date and exact time, the vessel's position (plotter data or Vessel Monitoring System (VMS) if suitable), depth of water and a description of the cable or infrastructure if sighted.

A claim procedure should be followed for compensation for damage or loss of fishing gear, loss of fishing time, or damage to vessel by offshore renewable activity.

4.3 Sustainable Fisheries Community

The Developer's Sustainable Fisheries Community (SFC) has been established as a fisheries-led initiative in the development phase to support long-term coexistence between the proposed wind farm and commercial fishing activity. The progress and developments in the SFC are provided in Appendix B and summarised in this section. The SFC will be adapted to facilitate the construction and operational phases of the proposed development to address the implementation of this FMMS and construction related disturbance compensation (see Appendix C for further detail on disturbance compensation).

The SFC's objective is to ensure that the proposed development can be delivered sustainably alongside established fishing interests. The SFC is and will be the principal delivery mechanism between the Developer and the commercial fisheries sector in relation to consultation, mitigation, monitoring and compensation.

The SFC differs from traditional fisheries liaison arrangements in that it is intended to operate as a formal, pre-consent consortium rather than a consultation forum. It currently comprises executive membership including NISA, SECAD (which is the independent fund administrator and Secretariat to the SFC) and seafood-producing community representatives, together with non-executive oversight members to promote transparency, inclusivity and governance assurance. The SFC is intended to be adapted post consent to function as the governance framework for the FMMS, ensuring that fisheries stakeholders are directly involved in mitigation design and monitoring commitments over time.

A key function of the SFC is to support the development of a stronger evidence base for fisheries assessment and coexistence planning. Through the SFC, the Developer has supported fisheries-led data initiatives, such as the GPS-based effort traceability, to improve mapping of fishing activity within and adjacent to the offshore development area (see Section 4.3.1). The intention is that these data will strengthen the understanding of fleet activity and support displacement assessment, mitigation planning and adaptive management using evidence that is transparent, fisheries-informed and industry-endorsed.

The SFC also allows for mitigation measures to be co-designed and governed. This approach ensures mitigation is developed in partnership with affected fleets to be incorporated into the FMMS in a credible and deliverable manner. In addition, an adapted form of the SFC is intended to govern post-consent monitoring, including for example trawlability surveys, reporting of gear interactions, coexistence reviews and iterative mitigation adjustments throughout construction and operation.

The Developer has committed €1M to the SFC during this development phase to establish a Fisheries Coexistence Fund, administered independently by SECAD, to provide a transparent and conflict-free mechanism for fisheries-related initiatives. These include displacement support measures, fisheries research, education programmes, low-impact gear transition projects and coastal engagement.

SFC projects approved in funding Round 1 include:

- Digital Effort Traceability Pilot (DETP) (see Section 4.4.1)
- Coastal education vehicles engaging with coastal communities
- Low impact fishery pilot - exploring artisanal value-adding opportunities and short supply chains
- Mobile app for marine biodiversity mapping to support collaborative data gathering

SFC projects approved in funding round 2 include:

- Balbriggan Sustainable Fisheries Harbour feasibility study – A sustainable fisheries, marine science, and regenerative tourism hub.
- Further investment in Digital Effort Traceability Pilot (DETP) to facilitate more users and data, improved reliability and uptime and easier future expansion.

As part of the SFC proactive fisheries evidence-gathering and engagement programme, a Digital Effort Traceability Project (DETP) has been supported to improve understanding of commercial fishing activity across the offshore development area during the development phase and to strengthen the evidence base for continuous monitoring and fisheries engagement. This is relevant in the Irish offshore wind context, where recent policy and stakeholder work has identified inadequate access to robust marine data, limited stakeholder inclusion in planning and decision-making, and a need for fishing activity and socio-economic information to be available at an early stage and ongoing through the project implementation.

The DETP is an integrated system that provides accurate real-time data on inshore fisheries spatial footprint, landings, discards and traceability. It is delivered by Smart Ocean AS in collaboration with the NISA Sustainable Fisheries Community (SFC), targeted at Ireland's under-12 m inshore fleet and focused on vessels that operate across the NISA Project.

The DETP system combines high-resolution GPS vessel tracking, 3-axis accelerometer monitoring, secure device transmission, gear-type identification, fisher app reporting, catch and discard recording, landing sales note upload, and barcode/QR traceability. The purpose of this integrated approach is to generate a continuous spatial activity record, distinguish fishing effort from transit, reduce reliance on manual reporting, and provide a low-burden, fisher-centred monitoring framework that is governed in a way that supports trust, confidentiality and sector ownership of outcomes.

Of particular relevance to the proposed development, DETP is designed to identify the true fishing footprint of participating vessels rather than simply vessel presence. Using GPS and accelerometer-derived activity states such as steaming, gear setting, hauling, catch handling and port inactivity, the system can map core fishing grounds, seasonal fishing intensity and gear-specific effort distribution. It is also designed to support displacement analysis through before/after comparisons, alongside catch and discard layers and socio-

economic outputs such as revenue-per-area, port dependency and vulnerability under different spatial planning scenarios. In practice, this gives the Developer a stronger basis for understanding how, where and when fishing activity occurs within and around the Project area, and for assessing possible interactions, displacement risks and coexistence issues using objective spatial and economic evidence.

The DETP has been implemented, and is currently active and recording data. It currently involves up to 100 vessels across 6–8 representative ports, with the intention of recording data across a 24-month monitoring period to provide full seasonal coverage. The system is designed to work offline where needed and to upload verified landings documentation to improve the socio-economic evidence base. Each landed batch can also be linked to barcode/QR traceability showing trip, species, grade, weight, landing details and a generalised fishing area, with confidentiality protections built in.

Overall, DETP demonstrates that the Developer has gone beyond conventional consultation alone and has taken proactive steps to help establish a more robust fisheries evidence base for the Project. By supporting a system capable of linking vessel activity, gear use, catch, discards, landings and socio-economic information, the Developer is better positioned to understand commercial fishing activity across the NISA Project area, inform ongoing monitoring, and engage with the fleet using transparent, spatially explicit and project-relevant evidence.

4.4 Technical Coexistence Assessment

A Technical Coexistence Assessment has been undertaken by the Developer for the proposed development to examine, in practical fisheries terms, whether the proposed WTG layouts can support continued access for mobile demersal fishing activity, particularly trawling, within and around the array area. The assessment is framed against relevant National Marine Planning Framework (NMPF) and DMAP policy requirements on coexistence, minimisation of interference with established fishing activity, and evidence-based fisheries monitoring. The Technical Coexistence Assessment is provided in Appendix E, with a summary provided below.

Project Option 1 and Project Option 2 for the proposed development have been evaluated based on their implications for navigable trawl space, turbine spacing, cable protection, tidal conditions and operational requirements.

For Layout Option 1, the assessment identifies 49 wind turbine generators with a minimum trawl lane width of 850 m once operational buffers are applied. Layout Option 2, with fewer turbines in a similar footprint, provides wider corridors and is therefore expected to offer greater spatial flexibility for trawling. In both cases, designated trawling corridors are aligned with known conventional trawling directions in a NNW – SSE direction in order to support practical fishing access rather than relying only on nominal turbine spacing.

Technical coexistence is considered as a combination of layout design, cable engineering, navigational safety and adaptive operational management, requiring the following measures to be secured through design and operation:

- The explicit designation of obstruction-free trawl corridors as maintained navigable space;

- Cable burial and protection measures that are compatible with trawl gear interaction and avoid snagging hazards such as exposed protection;
- Operational protocols that account for tidal constraints; and
- Ongoing monitoring of fishing access and catch rates.

The coexistence assessment finds that a 28 m demersal trawler can be technically accommodated within the proposed corridor arrangement. The effective trawlable width is approximately 850 m, which is considered sufficient for towing at typical operating speeds. However, coexistence viability is materially influenced by local tidal dynamics. Peak spring tidal flows may introduce a substantial cross-tidal component, increasing handling difficulty and risk during gear shooting and hauling. For this reason, the assessment recommends that operational and emergency protocols should be developed collaboratively with vessel operators, taking account of tidal windows and seasonal traffic levels.

Evidence of coexistence will be supported through monitoring including the Digital Effort Traceability Project (DETP) developed with Smart Ocean AS and the SFC, to provide evidence on actual fishing activity in and around the proposed development. This system is intended to generate spatial footprint mapping, displacement analysis, catch and discard layers, socio-economic indicators and traceability outputs, thereby helping to monitor whether access and fishing activity are maintained in practice over time (see Appendix E for further details).

Overall, the Technical Coexistence Assessment indicates that coexistence between the proposed development and commercial fishing activity is technically achievable, provided that appropriate corridor design, cable burial standards, fisheries-informed operational protocols and monitoring measures are incorporated into the WTG layout design and operational management approach. A third-party has been appointed to further develop this coexistence study.

5. Cumulative Mitigation Strategy

The Developer recognises the need to consider cumulative effects on commercial fisheries arising from the array area together with other offshore renewable energy developments in the Irish Sea.

The Developer's approach builds on the fisheries evidence base already developed for the proposed development, including fisheries engagement, baseline analysis, effort and earnings work, and vessel activity analysis. It also builds on the Technical Coexistence Assessment, which indicates that coexistence between the proposed development and commercial fishing activity is technically achievable, provided that appropriate corridor design, cable burial standards, fisheries-informed operational protocols and monitoring measures are incorporated into project design and management. Recognising the concerns raised by fisheries stakeholders in relation to cumulative displacement and access, the Developer commits to the following collaborative actions.

5.1 Collaborative monitoring through the Digital Effort Traceability Project (DETP)

The Developer has already supported the implementation of the Digital Effort Traceability Project (DETP) through the SFC and will use this as a principal mechanism for monitoring fishing activity for participating

inshore vessels operating in and around the offshore development area. Accordingly, the Developer does not rely solely on the future introduction of a separate iVMS initiative for cumulative monitoring. The DETP is designed to provide a more detailed evidence base by identifying the true fishing footprint of participating vessels rather than vessel presence alone.

The DETP combines high-resolution GPS vessel tracking, accelerometer-based activity monitoring, gear-type identification, fisher app reporting, catch and discard recording, landings upload and traceability functions. It is intended to support baseline establishment, before-and-after comparison, displacement analysis, monitoring of fishing intensity, and assessment of socio-economic dependency and vulnerability. The DETP is already implemented and recording data and is intended to provide 24-month seasonal coverage across a representative spread of ports and participating vessels. Information arising from the DETP will be used, alongside engagement with fishers and other available fisheries data, to help identify any redistribution of fishing effort that may arise cumulatively with other Irish Sea projects.

5.2 Independent scientific oversight and evidence development

The Developer will continue to work through the SFC with suitably qualified scientific, technical and sectoral partners, including engagement with the Marine Institute and specialist delivery partners where appropriate, to support robust interpretation of fisheries monitoring and displacement evidence. The purpose of this approach is to ensure that cumulative effects are considered on the basis of transparent, credible and fisheries-relevant evidence, including spatial effort, fishing behaviour, catch, landings and socio-economic information where available.

The Developer will also continue to support evidence development, fisheries resilience and coexistence initiatives through the €1 million SFC fund, administered independently by SECAD in the development phase. This fund provides a transparent and conflict-free mechanism through which fisheries-related initiatives can be supported, including displacement support measures, fisheries research, education, low-impact gear transition, coastal engagement and other measures relevant to coexistence and cumulative effects. To date, support has included DETP, coastal education initiatives, the Low Impact Fishery Pilot and collaborative biodiversity data initiatives, with further projects approved in principle for later rounds.

5.3 Cumulative and holistic consideration

The Developer acknowledges the need to consider cumulative impacts arising from multiple offshore renewable energy developments in the Irish Sea (as assessed in the Addendum to Chapter 16: Commercial Fisheries) and is committed to a holistic and collaborative approach. This includes continued engagement through the Seafood / ORE Working Group, continued dialogue with fisheries representative organisations and public bodies, and continued liaison with other relevant Phase One developers.

5.3.1 Short-term: Construction phase impacts

Construction activities may give rise to temporary disruption to fishing activity, including temporary access restrictions, altered steaming patterns, constraints on gear deployment and localised redistribution of effort. Where monitoring, consultation and the available evidence indicate that short-term cumulative

displacement or disruption has occurred during construction, the Developer will address its own project-related construction effects through the following mechanisms , including project-level liaison, construction scheduling and coordination through the FLO / OFLO function, and evidence-based construction related disturbance payment arrangements (see Appendix C).

If construction related impacts occur, and where there are claims to be considered, the developer will require a significant level of supporting evidence for any such claims. It is for this reason that the Developer has gathered extensive fishing activity information, so as to ensure that this lengthy process can be expedited, for known fishers in the area. The Developer will develop a fair, transparent and evidence based disruption payment scheme for those fishers that can evidence disruption as detailed in Appendix C.

If a wider cumulative issue is identified that cannot reasonably be attributed to the proposed development alone, the Developer will use relevant coordination forums to engage with fisheries representatives, public bodies and other relevant developers in order to review the evidence, understand the contributing factors and consider whether a coordinated response is required.

5.3.2 Medium- to long-term: Operation and maintenance phase impacts

For the operational phase, the Developer will continue to focus on enabling practical coexistence between the proposed development and commercial fishing activity. This will be supported through the Technical Coexistence Assessment, DETP monitoring, fisheries liaison and ongoing review . In this regard, the Developer's approach is that, should unforeseen cumulative operational effects occur, they should be assessed on the basis of observed evidence of access, activity and interaction over time, rather than assumed in advance as evidence suggests coexistence is possible. Monitoring will comprise evidence from the DETP, fisher engagement, SFC review, gear interaction reporting or other relevant research. Where such evidence indicates that further measures may be required, the Developer will work through an adapted form of the SFC, and with other relevant projects and stakeholders as appropriate, to identify and develop proportionate measures. However, the Developer does not consider disruption payments to be a feasible or appropriate form of mitigation for cumulative operational effects. This is because such cumulative effects, if they arise, are influenced by multiple developments, rather than being attributable to a single developer in a way that could be addressed through bilateral business-to-business compensation arrangements.

This approach is intended to ensure that cumulative mitigation is evidence-led, fisheries-informed and proportionate, while making practical use of the governance, monitoring and support mechanisms already established by the Developer.

6. References

Blyth-Skyrme R.E. (2010). Developing guidance on fisheries Cumulative Impact Assessment for wind farm developers

Blyth-Skyrme, R.E. (2010). Options and opportunities for marine fisheries mitigation associated with wind farms. Final report for Collaborative Offshore Wind Research into the Environment contract FISHMITIG09. COWRIE Ltd, London

Bureau of Ocean Energy Management (2025). Guidelines for Providing Information for Mitigating Impacts to Commercial and For-Hire Recreational Fisheries on the Outer Continental Shelf

Department of Communications, Climate Action and Environment (2018). Guidance on Marine Baseline Ecological Assessments & Monitoring Activities for Offshore Renewable Energy Projects Part 1 April 2018

Department of Communications, Climate Action and Environment (2018). Guidance on Marine Baseline Ecological Assessments & Monitoring Activities for Offshore Renewable Energy Projects Part 2 April 2018

Department of Housing, Local Government and Heritage (2021). National Marine Planning (NMP) Framework- Project Ireland 2040

Department of Housing, Planning and Local Government (2018). Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment

Department of Transport / Irish Coast Guard (2025). The Maritime Navigation Safety & Emergency Response Guidance Documents for Offshore Renewable Energy Installations (OREI)

Department of Transport (2022). Code of Practice, Design, Construction, Equipment and Operation of Small Fishing Vessels of less than 15 metres in length overall

EC (2011). European Communities (Marine Strategy Framework) Regulations 2011 (S.I. No. 249 of 2011)

Environmental Protection Agency (2022). Guidelines on the Information to be contained in Environmental Impact Assessment reports

Environmental Working Group of the Offshore Renewable Energy Steering Group and the Department of Communications, Climate Action and Environment (2017) Guidance on Environmental Impact Statement (EIS) and Natura Impact Statement (NIS) Preparation for Offshore Renewable Energy Projects

European Union Data Collection Framework (EU DCF) database. (Accessed 2022). Data by quarter-rectangle: Tables and maps of effort and landings by ICES statistical rectangles for 2012 to 2016

Fishing Liaison with Offshore Wind and Wet Renewables (FLOWW) (2025). Best Practice Guidance for Fisheries Liaison with Offshore Renewables Developments

Maritime Area Regulatory Authority (MARA) (2025). Guidance Note for Applicants applying for a Maritime Area Consent (MAC)

Scottish Government (2024, updated 2025). Marine licensing and consenting: offshore renewable energy projects – Fisheries Mitigation, Monitoring and Communication Plan

Seafish (2012) Best Practice Guidance for Fishing Industry Financial and Economic Impact Assessments. Available online: <http://www.seafish.org/media/634910/ukfen%20ia%20best%20practice%20guidance.pdf>

Seafish, The Kingfisher Information Service and DONG Energy (2016). Reducing the risks while fishing. Available online: http://kis-orca.eu/media/9284/Barrow_LRes.pdf

Seafood/ORE Working Group (2023). Seafood/ORE Engagement in Ireland: A summary guide. <https://www.gov.ie/pdf/?file=https://assets.gov.ie/263199/aa87ef6b-7419-4620-9146-41c8d0d31283.pdf#page=null>

Appendix A

National Marine Planning Framework (NMPF) (Department of Housing, Local Government and Heritage, 2021) Fisheries Policy 1 and 2 and Co-existence Policy 1 in full.

Fisheries Policy 1

Proposals that may have significant adverse impacts on access for existing fishing activities, must demonstrate that they will, in order of preference:

- a) avoid,
- b) minimise, or
- c) mitigate such impacts.
- d) If it is not possible to mitigate significant adverse impacts on fishing activity, the public benefits for proceeding with the proposal that outweigh the significant adverse impacts on existing fishing activity must be demonstrated.

Fisheries Policy 2

Where significant impact upon fishing activity arising from any proposal is identified, a Fisheries Management and Mitigation Strategy (FMMS) should be prepared by the proposer of development or other maritime area use, in consultation with local fishing interests and other interests as appropriate. All efforts should be made to agree the FMMS with those interests. Those interests should also undertake to engage with the proposer and provide best available, transparent and accurate information and data in a timely manner to help complete the FMMS. The FMMS should be **drawn up as part of readying a proposal prior to submission, with measures identified to be considered in finalising conditions of any authorisations granted. Development of the strategy should be coordinated with other relevant assessments such as EIA where possible.**

The content of the Fisheries Management and Mitigation Strategy (FMMS) should be relevant to the particular circumstances and could include:

- An assessment of the potential impact of all stages of the development or other suggested use on the affected fishery or fisheries, both in socio-economic terms and in relation to environmental sustainability. This assessment should include consideration of any impact upon cultural identity within fishing communities, as well as identifying indirect / in-combination matters.
- A recognition that the disruption to existing fishing opportunities / activity should be minimised as far as possible.
- Demonstration of the public benefit(s) that outweigh the significant impacts identified.
- Reasonable measures to mitigate any constraints which the proposed development or use may place on existing or proposed fishing activity.

- Reasonable measures to mitigate any potential impacts on sustainability of fish stocks (e.g. impacts on spawning grounds or areas of fish or shellfish abundance) and any socio-economic impacts.

Where it does not prove possible to agree the FMMS with all interests:

- Divergent views and the reasons for any divergence of views between the parties should be fully explained in the FMMS, and dissenting views should be given a platform within the said FMMS to make their case.
- Where divergent views are identified, relevant public authorities should be engaged to identify informal and formal steps designed to enable proposal(s) to progress.

Appendix B

Overview of the Sustainable Fisheries Community (SFC) Initiative

1. About the NISA Sustainable Fisheries Community (SFC) Initiative

The SFC, which is currently in place, is a mechanism to deliver proactive fisheries impact mitigation delivering mutual, long-term benefit for energy, food and the marine environment through collaboration and mutual cooperation between the local fishing community and the North Irish Sea Array (NISA) offshore wind farm (hereafter referred to as ‘the proposed development’). The SFC will be adapted to facilitate future construction and operational phases and address related disturbance compensation (see Appendix C for detail on disturbance compensation).

2. Key Aims

One of the key aims during development was to establish a SFC focused on the protection and enhancement of a locally sustainable fisheries and marine environment in the waters around the proposed offshore development area. This ambition included the following:

- Collaboration between the Developer and local fishing community.
- Provide a definition of what is considered the local fishing community.
- Deliver a proactive fisheries impact mitigation process.
- Create a mechanism to deliver benefits, both to and from, the local fishing ports.
- Work collaboratively to deliver enhancements to the local marine environment.
- To, in a broad context, enhance the sustainability of the local fishing community.
- Establish ways of collaboratively adding value to local seafood produce.

3. The Sustainable Fisheries Community (SFC) Model

The SFC is currently a formally constituted committee structure comprising executive membership (NISA, SECAD, seafood producing community representatives) and non-executive oversight members providing transparency and inclusivity. Officer roles include Chairperson, Vice-Chairperson, and Secretary, with SECAD holding the Secretariat function.

Unlike traditional liaison models, the SFC has been established pre-consent and will be adapted to address the requirements of the FMMS post consent, during construction and operation. This structure ensures fisheries voices are embedded within project decision-making, mitigation design, and monitoring commitments.

4. Consultation and Stakeholder Representation

The SFC currently provides meaningful consultation that is continuous, representative, and capable of influencing project outcomes. It provides a structured engagement forum with recorded minutes, quorum rules, and stakeholder nomination pathways involving , IS&WFPO, IFPEA, NERIFF, and remains open for applications from other fisheries bodies.

The presence of non-executive oversight strengthens legitimacy, ensuring that fisheries engagement is transparent and ethically governed. This model directly addresses stakeholder concerns that consultation should not be limited to one-off meetings but embedded within a durable governance framework.

5. Displacement Assessment and Spatial Evidence

Displacement is one of the most significant fisheries concerns associated with offshore wind. Through the SFC, NISA can support fleet-wide GPS effort traceability initiatives, enabling 100% mapping of fishing activity within and adjacent to the project area.

Such datasets validate VMS/AIS interpretations and provide high-confidence evidence for displacement modelling. The SFC ensures these assessments are fisheries-led and industry-endorsed.

6. Mitigation Co-Design through the FMMS

Mitigation measures, where required, should be technically feasible and deliverable through planning conditions. The SFC will be adapted by the Developer post consent as the delivery framework for the FMMS.

This approach ensures mitigation is developed in partnership with affected fleets, enhancing credibility and compliance.

7. Monitoring, Adaptive Management and Long-Term Governance

The SFC can provide a structure through which for example, post-construction trawlability surveys, gear interaction reporting, ongoing coexistence reviews, and iterative mitigation adjustments can be governed. By embedding fisheries oversight within monitoring programmes, the SFC can ensure long-term coexistence commitments remain active throughout the wind farm life.

8. Current SFC SECAD Fund Model

The Developer established a €1 million SFC administered independently by SECAD during the development stage of the proposed development. This provides a conflict-free mechanism to support displacement initiatives, fisheries research, education programmes, reduced impact gear transition projects, and coastal engagement.

The fund aligns with the proposed development's sustainability pillars (Climate Action, Just Transition, Biodiversity, Circular Economy) and UN Sustainable Development Goals, ensuring legacy value beyond mitigation compliance.

9. Strategic Fisheries-Led Coexistence Initiatives

The SFC has enabled strategic projects that demonstrate coexistence as a holistic model. These include GPS effort traceability, low impact potting initiatives, mobile education vehicles engaging coastal communities, and Irish fishing industry fact sheets documenting decline under the Common Fisheries Policy.

Projects approved in funding round 1 of the SFC include:

1. Digital Effort Traceability Pilot (DETP): Provides smaller fishing operators with evidence of historic effort to back up claims of displacement should they occur.

Gamechanger here is the fact that the user controls their own data, thus facilitating uptake from Seafood. This will be of major benefit to both Seafood and ORE as the problem of how to inform primary compensation for displacement for surveys and construction has been an ongoing puzzle for the SF-ORE WG. This data will also be important for assuring tenure in the upcoming DMAPS programme when designating MPAs (marine protected areas).

2. Coastal education Vehicle: Lack of awareness by the general public around the seafood industry, heritage, culture and the optimised use seafood as an everyday foodstuff in Ireland has long been a complaint of fishing spokespeople. this resource will be utilised to promote awareness of the industry with respect to sustainability and resource management to ensure uptake by the next generation.

3. Low Impact Fishery Pilot: This project aligns with the objectives of NIFA and IIMRO and the UN FAO best practice guidelines for small scale fisheries SSF Guidelines. Its about showing how fisheries can be brought back into the centre to attract regenerative tourism and enhance the socioeconomic wellbeing of coastal communities. Explores artisanal value adding, short supply chain and ties in with the DETP project by providing smart data to support full catch traceability..

4. Mobile app for Marine biodiversity mapping: This app gives Fisheries the opportunity to collaborate with a respected scientific organisation and to become a resource for science and data gathering. It is hoped that this will help to highlight Fishermen/womens dedication to marine stewardship and provide a positive PR for the sector.

Such initiatives demonstrate long-term community benefits and resilience building.

10. Conclusion: An Offshore Renewable Energy Industry First

The SFC is currently established by the Developer and represents an Offshore Renewable Energy industry first: a fully operational, independently supported, fisheries-led governance and funding mechanism established at the development stage. It directly addresses fisheries requirements across consultation, displacement, mitigation, and monitoring and can be adapted to construction and operational phases of the proposed development.

This SFC model provides a potential benchmark for national and international best practice in true coexistence between offshore renewable energy developments and commercial fisheries.

Appendix C

Outline construction disturbance compensation protocol

A framework for a disturbance payment protocol relating to the construction phase has been developed and it is envisaged it will be delivered in conjunction with the Sustainable Fisheries Community (SFC). To facilitate this post consent, the SFC would be adapted to include all relevant stakeholders and a mutually agreed protocol for disturbance compensation. An overview of the SFC, in its current form during the development phase has been provided in Appendix B.

In general, for those fishers with a valid and evidenced claim for a disturbance payment, a legal agreement will be entered into with the fisher and the Developer. This legal agreement will ensure that obligations and commitments of both parties are delivered upon.

Evidence base

The following documentation and data are required to form an evidence base to support any claim for disturbance payment. The purpose of the evidence base is to document active fishing across the area of works and demonstrate the level of economic loss that is expected over the period of works. The documentation and data required are:

- a) Copy of certificate of registry for each vessel for which a claim is being made (Department of Transport, 2022);
- b) Copy of the relevant vessel fishing licences and entitlements and vessel insurance;
- c) Digital Effort Traceability project (DETP) data or Sight of vessels fishing charts or Global Positioning System (GPS) plotter records to provide clear evidence of presence of vessels within the area of the proposed development. Alternatively, where such data is not attainable, each vessel owner should provide annotated admiralty charts indicating areas fished, this may be undertaken with assistance from the FLO who will provide graphics and work with the claimant to understand the areas fished;
- d) Evidence of monthly sales notes for the three-year time period prior to the claim;
- e) Annual fishing accounts of the vessels concerned for a three year time period or equivalent evidence of annual earnings e.g. self-assessment tax return;
- f) Monthly fishing vessel landings data (e.g. sales notes); and
- g) Gear configuration information, including total number of strings/ pots per fleet and number of fleets in the relevant project area.

Items (a) and (b) are mandatory for all fishing vessels. For the other items there is some flexibility in the level of evidence provided, depending on what is available to the claimant. If the claimant believes they will suffer economic loss, but do not have all aspects required under the evidence base, the FLO can provide advice more tailored to the claimant's specific circumstances in order to assist the claimant in submitting a claim. For example, where a vessel does not have a GPS plotter or where fishing accounts are not available over the full three-year period.

The overall process is depicted in .

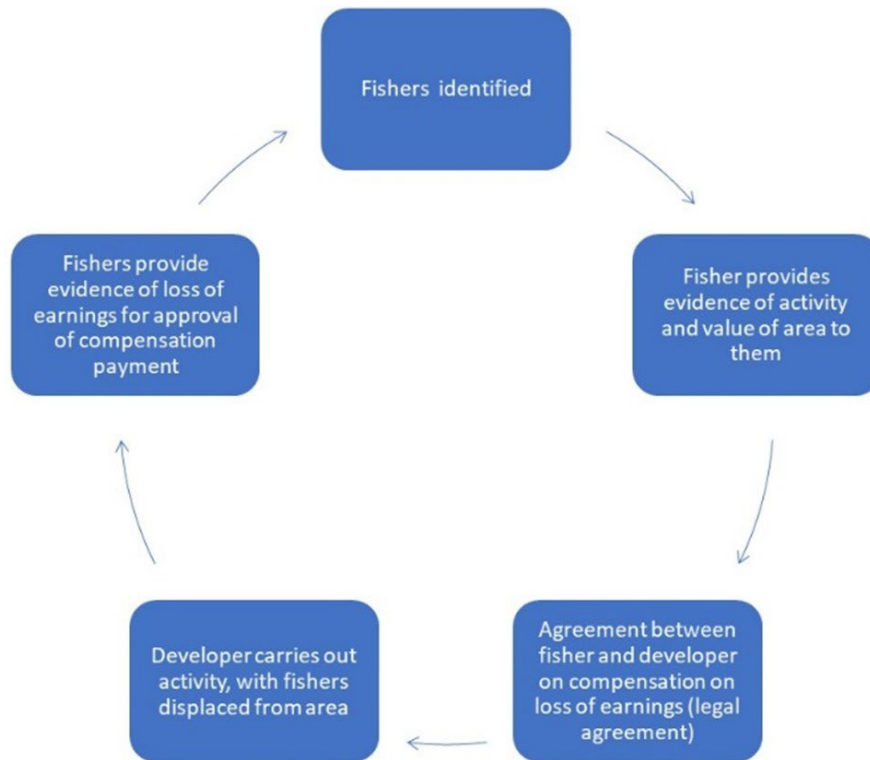


Figure 61 Approach to agreeing construction related disturbance payment

SFC & Offshore Fisheries – A Bespoke Mechanism

The Developer team has been observing fisheries practices in the local area and have worked to understand the current and historical fishing practices. Through this a clear understanding of the main fishing activity within the array area and ECC was gained. The Developer carried out a body of work to establish the catch per unit effort (CPUE). In addition to this the Developer has worked to establish the value of earnings. Using a standard formula based on the information harvested from both the SFPA and the Marine Management Organisation (MMO) in the UK, a value was established for the proposed offshore development area. The use and application of this formula can be refined in consultation with stakeholders.

Alongside specialised consultants including from independent sources navigational risk assessments, the Developer analysed VMS and AIS data which allowed the identification of vessels indigenous to the area as well as visiting vessels to the area. This process allowed the developer to refine the data and extract effort per operation annually for a period of 10 years historically up to and including 2022. Through this the Developer has a clear understanding of the main fishing activity within the array area and ECC that may be impacted during the offshore construction works.

The SFC will be adapted to continue to focus on the commercial fishing industry in the long term. For example measures such as enhancing stocks, improvements to fishing vessels, improvements that enhance the profit margins of sustainable fishing activities, and the development of new fisheries or other activities.

SFC local inshore fisheries disturbance mechanism

It is envisaged that any negative impacts on the inshore area will be limited in nature and constrained to the ECC construction period only. The objective of the SFC is to establish a mechanism post consent to deal with any disturbance caused to local operators and provide for collaboration which will deliver a long term positive impact on local inshore fisheries interests.

Based on the identification process above, post consent an invitation will be extended to the identified local operators who are known to have a track record of working in this area. The Developer will work with these operators to establish a mechanism to deliver a fair and reasonable disturbance mitigation process should this be required.

The SFC will work proactively to ensure that all genuinely affected parties will be identified and included in discussions.

Dispute resolution

The Developer will offer support and guidance to all claimants throughout the process where appropriate and will work proactively to reach a fair agreement.

Appendix D

Summary of consultation – Engagement with the Fishing Industry

The Developer engaged with the fishing industry at a very early stage in the development process and before any licence application for site investigations/surveys was submitted. This engagement has developed and evolved since 2019 and has been influenced significantly, in terms of approach and outputs by feedback and input from the fishing industry.

Approach

Fisheries were identified as one of the key stakeholders at an early stage of the development process. The approach to engagement with this key stakeholder is fundamentally based on early, genuine, meaningful, and transparent engagement. It was recognised that development of a relationship with the fisheries that would provide a constructive two-way dialogue, would ensure that all considerations could be taken into account, concerns addressed in the best possible way including the early identification of the best mitigation strategies and that any opportunities could be identified.

At the outset in 2019, the developer engaged with at a high level with An Bord Iascaigh Mhara (BIM) and the Northeast Regional Inshore Fisheries Forum (NERIFF). Based on feedback from these meetings, a fisheries liaison officer (FLO), with significant experience in the fishing industry, was appointed by the Developer to represent the proposed development.

Initial Steps

As a first step following appointment, the FLO organised meetings with some of the key stakeholders within the fishing industry, including the NERIFF and South East Regional Inshore Fisheries Forum (SERIFF), to provide information on what was being considered and to open up lines of communication with the fishing industry. Importantly, and as a first demonstration of the developer's commitment to engaging openly and proactively with the fishing industry, a commercial fisheries section was drafted and included in the foreshore licence application. This section was aimed at explaining the planned surveys, including outlining the technologies likely to be employed during the surveys, to the fishing industry in a way that was understandable and clear from a fisheries perspective.

The initial engagement focused on understanding how the fisheries wanted to be communicated with and what the most appropriate channels would be to use.

Extent of Fisheries Engagement

The extent of engagement was considered in terms of geography and industry reach. The engagement approach was to have multiple engagements and discussions with fishers interested in the proposed development. This allowed not only the provision of information but also time for consideration of the information provided which in turn allowed for considered feedback to be provided from stakeholders to the project.

Engaging with fishers multiple times, the FLO and fisheries engagement team has had in excess of 1,000 individual engagements with locally interested fishers.

Engagement commenced (and is ongoing) with fisheries organisations covering national fishing industry bodies and key local individuals and groups in the fishing industry. These groups are outlined in the table below.

Irish South & East Fish Producers Organisation Limited (ISEFPO)	Irish Fish Producers Organisation (IFPO)
Irish South and West Fish Producers Organisation (ISWFPO)	Killybegs Fishermen's Organisation (KFO)
National Inshore Fishermen's Association & National Inshore Fishermen's Organisation (NIFA/NIFO)	National Inshore Fisheries Forum (NIFF)
North East Inshore Fisheries Forum (NERIFF)	South East Inshore Fisheries Forum (SERIFF)
Clogherhead Fishermen's Co-Op	Bord Iascaigh Mhara (BIM)
Naval Service – Fisheries Monitoring Centre (FMC)	Sea Fisheries Protection Authority (SFPA)
Inland Fisheries Ireland (IFI)	Marine Institute (MI)

In addition to this, direct engagement was commenced with local fishers (both supporting organisation affiliated and unaffiliated) including port and pier visits. These visits facilitated open discussion regarding the project being considered and fishers were asked to provide feedback in terms of concerns held (both on planned surveys and the overall project) and also in terms of potential opportunities for collaboration. A key aspect of these visits was to develop an in-depth understanding of the how the fishing community operates in the local area.

Local ports with continuing direct engagement:

Clogherhead	Howth
Loughshinny	Balbriggan
Skerries	Rush

In addition to the ports listed in the table above, Kilkeel fishing port in the North of Ireland and Dun Laoghaire ports were also visited.

Understanding Local Fishing Practices

To support meaningful engagement and supplement information gathered from organisation and individual engagement, a comprehensive campaign was carried out to understand how fishing is carried out in the area. This included identification of the relevant fishing vessels via;

- Direct engagement with the local fishing fleet and key stakeholders (as outlined above);
- Afloat fisheries surveys to ID fishing gear and fishing types in the area;
- Engagement with the Sea Fisheries Protection Authority (SFPA);
- Engagement with the Naval Service;
- Engagement with the Marine Institute;
- Analysis of redacted Vessel Monitoring Systems (VMS) information; and
- Analysis of Automatic Identification Systems (AIS) information.

The above approach has continued over the course of development and is still in place. Analysis of information available has also allowed the project to develop an understanding of the historical usage patterns of the area going back to as far as 2012. This has allowed for the compilation of a comprehensive understanding of the fishers relevant to the project area. Engagement and initiatives under development are being tailored to support constructive collaboration with all those identified.

The project FLO also attended all Public Consultation Events for the project. Fishers were invited to attend these events and the FLO answered queries from both the fishing community and general public.

Feedback and the design process

A key objective of the consultation and engagement process was to gather feedback from the fishing community. This feedback was shared with the design team and wider project team, with fisheries being central consideration of the development process.

Initial feedback reflected a number of concerns being expressed including the interaction between the proposed project and the Nephrops fisheries. Exploring the concerns raised highlighted a number of issues including the way that the area is currently fished, exclusion zones, navigability and ultimately impacts on incomes.

A revised layout was brought forward which incorporated the Pod Layout concept (Outlined in Chapter 5: Alternatives) which maximised navigability, maximised corridors between turbines for navigation and orientated the turbines in a NNW – SSE direction to facilitate the direction of trawling in this area. This layout was again brought forward to the fisheries for consideration and feedback sought in terms of not only the design but also the engagement process. Fishers expressed a view that demonstrated acknowledgement and appreciation of the endeavour to address their concerns however said that the redesign would not address concerns as it increased the overall footprint of the project. Whilst this engagement did not close out concerns from a fisheries perspective, it did provide the foundation upon which to build collaborative and constructive relationship going forward.

Subsequent consultation focused on providing information on what an overview of the project and the designs which were being considered.

Throughout these consultations, feedback was gathered on concerns raised from a fisheries perspective. Concerns raised included potential exclusion zones, trawl direction and turbine orientation of NNW – SSE, trawl corridors and mechanism to deal with impact on incomes. This feedback continued to be incorporated into the design of the proposed development and has influenced the layout and orientation of the current design. The layout proposal has incorporated the general orientation in line with the fishers preferred direction of trawling and turbine spacing has remained cognisant of navigability within the wind farm.

Follow up engagement was carried out to provide clarification on some issues and information on aspects being worked into design. These communications included fisheries specific project booklets circulated in Q2 2021 and another in Q2 2022.

A mechanism to deal with concerns around the impact on fishing incomes, was developed to provide a reliable, transparent and fair system of pre-emptive impact mitigation. Engagement is ongoing with the fisheries to develop this mechanism and this is outlined further below.

Engagement during offshore surveys

A proactive approach was taken to the planning and coordination of the offshore survey campaigns which included providing early information in advance of the surveys commencing, collaboration in terms of information provided relating to the surveys and ensuring that there was adequate and sufficient points of contact both in terms of numbers and experience. This resulted in the project FLO securing additional resources including an onboard FLO who joined on board the relevant vessels and an additional shore based FLO to engage with fishers on the piers.

Prior to the commencement of the surveys in 2022, an information booklet, outlining the surveys and explain the technology was distributed to the local fishers. Prior this survey campaign a marine notice was issued and consultation held with fishing industry reps. Following this engagement, the marine notice was amended to better inform the fishing industry in particular in relation to the planned surveys.

The project endeavoured to work around fisheries and minimise disruption. This included not restricting any fishing vessel movement unless entirely necessary. Survey operators were instructed to engage proactively with fishers and standard operating procedures were developed to ensure cooperation, communication and minimisation of disturbance to the fishing industry.

This process has been followed for all surveys carried out to date.

Summary of observations raised during statutory stakeholder consultations

Table 6-1 Summary of issues raised during EIA statutory stakeholder consultation pre planning submission

EIA Topic	Summary of Key Issues from Statutory Stakeholder Consultations	Where addressed in the EIA
Commercial Fisheries	<p>Marine Institute</p> <p>Key issues that were raised by the Marine Institute in response to the EIA Scoping Report in 2021 under the topic of commercial fisheries included ensuring that key references are consulted including the Shellfish Review 2020 for Razor clams among others and earlier versions for Whelk, also the Marine Atlas for any information on distribution of fisheries by vessels under 12m in length.</p> <p>Irish Fish Producers Organisation, Irish South and East Fish Producers Organisation</p> <p>An in-person meeting was held in 2023 for the proposed development to provide a project update and present the baseline data which informed the commercial fisheries impact assessment.</p> <p>Irish Fish Producers Organisation (IFPO) requested an update as soon as the export cable route is finalised. Irish South and East Fish Producers Organisation (ISEFPO) provided updates to brown crab fishing grounds and whelk grounds which IFPO confirmed. ISEFPO also confirmed that the areas around the edge of the offshore infrastructure boundary will likely become an area of high fishing pressure. IFPO confirmed that trawling will likely not take place within the array area which could impact historic trawling practices. The EIA team confirmed displacement of vessels in line with potential Marine Conservation Zones (MCZs) will be considered from a cumulative perspective.</p>	<p>Volume 3, Chapter 16: Commercial Fisheries presents a comprehensive baseline assessment of the offshore development area and is supported by Appendix A16.1: Commercial Fisheries Technical Report and Appendix A16.2 Fisheries Management and Mitigation Strategy. Volume 3, Chapter 17: Shipping and Navigation presents a comprehensive assessment of navigational safety risks including fishing vessel movements within the offshore development area.</p>

EIAR Topic	Summary of Key Issues from Statutory Stakeholder Consultations	Where addressed in the EIAR
	<p>Additional species for consideration in the baseline assessment were highlighted during consultation as having fishing grounds which extend up to the proposed development boundary which include:</p> <ul style="list-style-type: none"> • Brown crab; • Whelk; and • Nephrops (Norwegian lobster, prawn and langoustine). <p>Concern was also raised about the displacement effects of the proposed development on the fishing fleet and the corresponding impacts from a safety and navigational viewpoint. Further discussions are being help in relation to Displacement fishing effort as a part of the wider conversation currently underway with fishing industry representative bodies</p> <p>In 2024 based on the request of the IFPO and the ISEFPO the project is now engaging with the IFPO, ISEFPO, KFO, ISWFPO, NIFF, NERIFF and NIFA in relation planning, layout and coexistence.</p>	

Table A6.2. Stakeholder engagement since submission of the 2024 EIAR

Date	Stakeholder	Detail of discussion
Key milestones and timeline of notable engagements		
01/04/2025	Fisheries stakeholders	Additional resource appointed to the proposed development Fisheries team with responsibility for Sustainable Fisheries Community development and implementation. Key responsibilities include Sustainable Fisheries Community Terms of Reference finalisation, committee formation, fund opening and call for expressions of interest to the seafood sector, building awareness of the Sustainable Fisheries Community, and canvassing support on the piers and with fisheries representative organisations, government agencies and prescribed bodies.
15/04/2025	Fisheries stakeholders / local piers	Commenced bi-weekly pier visit programme – ongoing.
05/06/2025	National Maritime College of Ireland, Cork	Discussed the possibility of utilising a simulator for co-existence modelling.
18/06/2025	Sustainable Fisheries Community Committee	Sustainable Fisheries Community Committee formed, with a majority of members from the seafood sector, including representation for the North Irish Sea Array area of impact. The committee is to meet monthly.
19/06/2025	Irish Fish Processors and Exporters Association and Irish Fish Producers Organisation	Irish Fish Processors and Exporters Association and Irish Fish Producers Organisation expressed interest in joining the Sustainable Fisheries Community and were provided with the governance documents for review and comment.
16/07/2025	Irish Fish Processors and Exporters Association and Irish Fish Producers Organisation	Meeting held to finalise the Sustainable Fisheries Community Terms of Reference.
21/07/2025	South East Regional Inshore Fisheries Forum	Meeting in Wexford to present on the Sustainable Fisheries Community.

Date	Stakeholder	Detail of discussion
25/07/2025	Irish Fish Processors and Exporters Association	Irish Fish Processors and Exporters Association signed the Sustainable Fisheries Community Memorandum of Understanding and notified that it was not joining the Sustainable Fisheries Community at this time.
02/10/2025	Sustainable Fisheries Community Fund	Sustainable Fisheries Community Fund Round 1 opened.
Consultation to build support for Sustainable Fisheries Community initiative, build capacity in communities and support uptake of funding		
21/10/2025	Timmy Dooley, Minister of State, Department of Agriculture, Food and the Marine; Patrick Murphy, Irish South and West Fish Producers Organisation	Meeting to present on the Sustainable Fisheries Community. Patrick Murphy of the Irish South and West Fish Producers Organisation also attended.
22/10/2025	Seafood / Offshore Renewable Energy Working Group	Presented the Sustainable Fisheries Community, followed by questions and answers, with the full stakeholder group in attendance. Follow-up undertaken by circulating the presentation to the stakeholder group by email.
13/11/2025	Department of Agriculture, Food and the Marine Harbour Master and Ports Engineer	Meeting in Howth regarding Howth Heritage Museum and Balbriggan sustainable fisheries harbour ideas.
20/11/2025	Irish Whale and Dolphin Group	Discussed the potential for the Sustainable Fisheries Community to fund a new marine biodiversity app for use by the fishing fleet.
28/11/2025	Bord Iascaigh Mhara	Meeting in Tralee to discuss potential synergies between the Fisheries Local Action Group fund and the Sustainable Fisheries Community.
01/12/2025	Dunany Lobstermen's Association	Meeting in Clogherhead regarding the Digital Enhanced Tracking Pilot and Low Impact Fishery Pilot.
04/12/2025	SmartOcean UK	Meeting to discuss a potential partnership on the Digital Enhanced Tracking Pilot project.

Date	Stakeholder	Detail of discussion
09/12/2025	Fingal County Council	Meeting in Swords regarding the Balbriggan sustainable fisheries harbour Sustainable Fisheries Community proposal.
10/12/2025	Sustainable Fisheries Community Fund / Evaluation Committee	Sustainable Fisheries Community Fund Round 1 closed. Four project proposals were approved by the evaluation committee, with three pipeline projects approved in principle for further development.
17/12/2025	Sustainable Fisheries Community Committee	Sustainable Fisheries Community committee evaluation meeting held; four project proposals approved.
16/01/2026	Wind Energy Ireland fishing group	Presentation on Sustainable Fisheries Community progress and initiatives, including the Digital Enhanced Tracking Pilot project.
21/01/2026	Sustainable Fisheries Community Fund	Sustainable Fisheries Community Fund opened for Round 2.
27/01/2026	Dunany Lobstermen's Association	Meeting in Clogherhead to distribute Digital Enhanced Tracking Pilot devices and hold an onboarding workshop.
29/01/2026	Balbriggan Inshore Fisheries Group and Irish Islands Marine Resource Organisation	Low Impact Fishery Pilot presentation, with discussion of alignments with Low Impact Fishers of Europe and Make Fishing Fair in Europe.
07/02/2026	Skerries Sailing Club	Workshop providing an overview of Sustainable Fisheries Community progress, Low Impact Fishery Pilot and Digital Enhanced Tracking Pilot projects, inviting expressions of interest and distributing Digital Enhanced Tracking Pilot devices to local fishermen.
12/02/2026	Fingal LEADER Development	Meeting in Swords regarding the Balbriggan sustainable fisheries harbour.
Other engagements and communications with stakeholders		
24/07/2025	Phase One developers	Collaborative meeting to discuss holistic approaches to cumulative impacts.
28/08/2025	Seafood / Offshore Renewable Energy Working Group stakeholder mailing list	Benthic survey notification issued.

Date	Stakeholder	Detail of discussion
02/10/2025	Irish South and East Fish Producers Organisation, Irish Fish Producers Organisation and Seaview Consultants	Meeting held to discuss the Fisheries Management and Mitigation Strategy and plans to begin a scoping exercise on the socio-economic value of the nephrops fishery in the proposed North Irish Sea Array area.
07/11/2025	Phase One developers	Collaborative meeting to discuss holistic approaches to cumulative impacts.
07/11/2025	Other relevant projects and Marine Institute	Meeting to discuss holistic approaches to cumulative impacts.
14/12/2025	Phase One developers	Collaborative meeting to discuss holistic approaches to cumulative impacts.
28/01/2026	Marine Institute	Presented the Digital Enhanced Tracking Pilot project to the Marine Institute inshore fisheries team.
Fisheries Management and Mitigation Strategy consultations		
25/02/2026	Fisheries stakeholders	Fisheries Management and Mitigation Strategy document circulated to main fisheries stakeholders for consultation and comment.
12/03/2026	Fisheries stakeholders	Meeting to discuss Fisheries Management and Mitigation Strategy and Sustainable Fisheries Community progress.
02/04/2026	Fisheries stakeholders	Latest draft of Fisheries Management and Mitigation Strategy circulated to full stakeholder list with request for feedback and meeting request.

Table A6.3. Estimated breakdown of engagement around SFC to date

Type of engagement	Approximate count / number of interactions
Engagements on Piers	240
Phone conversations	480
SMS- Whatsapp	1200
Emails sent	250
Email recipients including stakeholder mailing lists including SF-ORE WG stakeholders	Vast majority of maritime facing stakeholders in Ireland
Clinics and Workshops	8
Video conferences	16
Teams meetings	190
Paid adverts in industry media including socials	1
Flyer distribution (units)	100
Editorials in industry media	1
Dedicated Website for SFC	1
Dedicated SFC page on NISA website	1

Appendix E

Technical Coexistence Assessment

NISA Final layout - details and analysis

Layout Option 1

WTG	49
Foundation type	Suction Bucket Jacket
Orientation of trawl lanes	323° /143°
Navigable space -Trawl lanes	Ref. Next slide
Jacket footprint	50m diameter
Safety zone	50m around Jacket
Jacket + Safety zone	150m diameter
Max corridor length	5.74 nm
Total footprint original development area	86.619 km ²
Total footprint area final	35.577 km ²
Reduction development area	58.92%
Micrositing tolerance	Max +/-100m along SAR lane

Layout Option 2

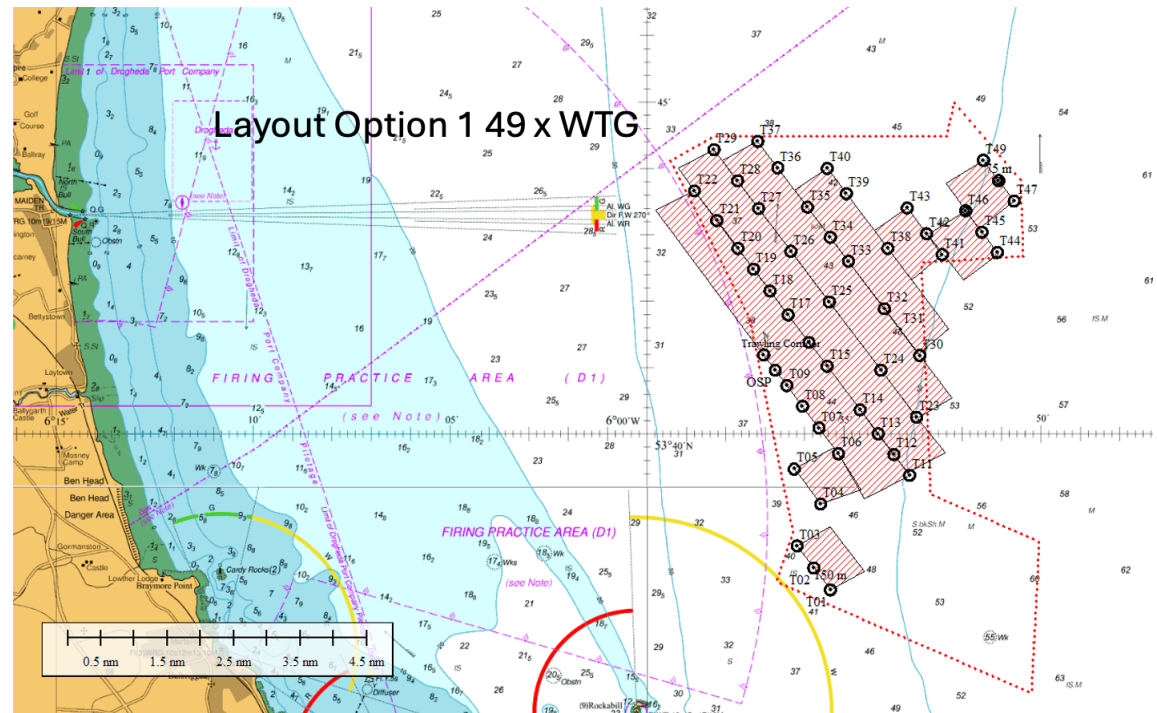
WTG	35
Foundation type	Suction Bucket Jacket
Orientation of trawl lanes	323° /143°
Navigable space – Trawl lanes	Greater than option 1
Jacket footprint	50m diameter
Safety zone	50m around Jacket
Jacket + Safety zone	150m diameter
Max corridor length	5.74 nm
Total footprint original development area	86.619 km ²
Total footprint area final	38.25 km ²
Reduction development area	55.84%
Micrositing tolerance	Max +/- 100m along SAR lane

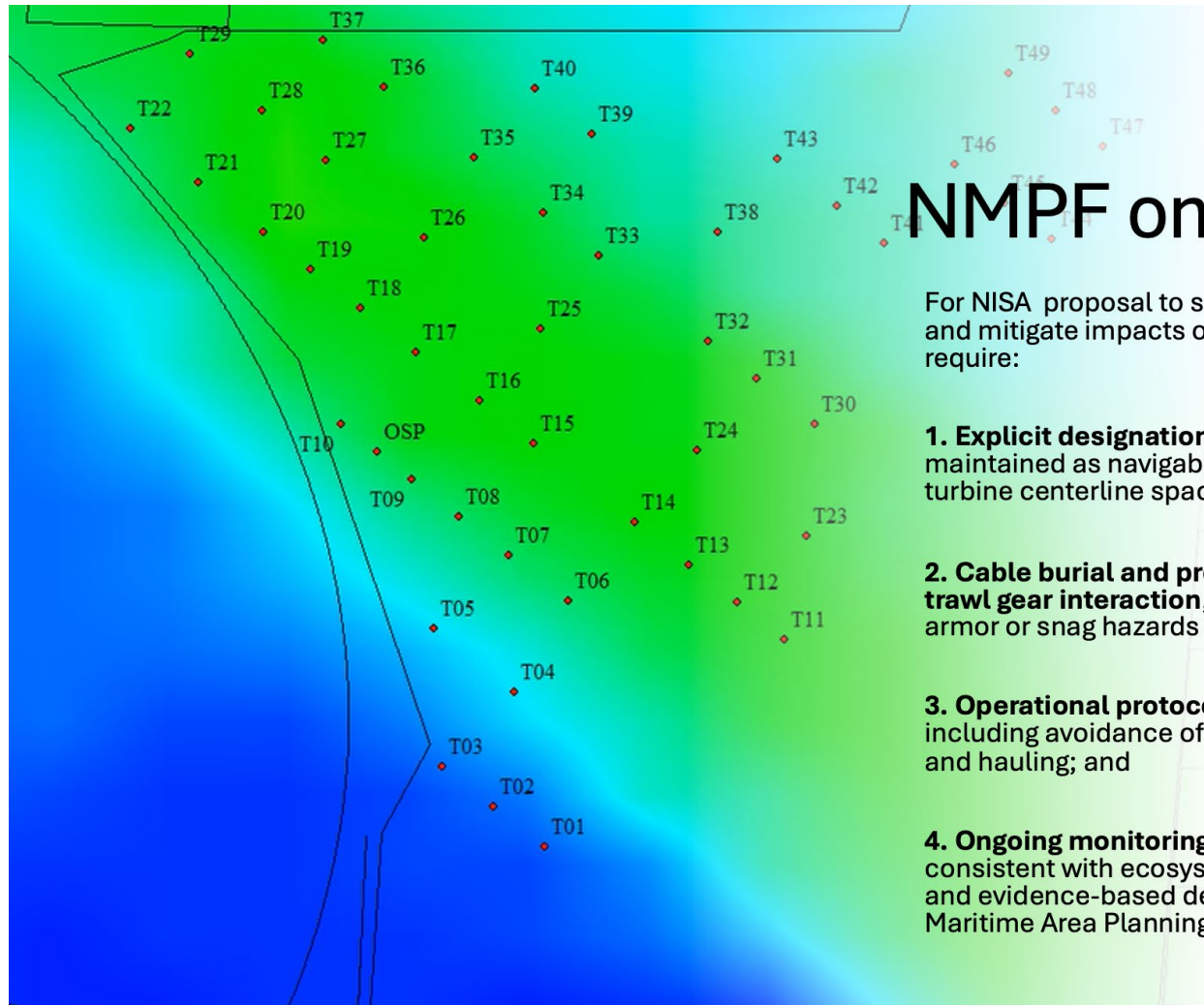
Trawl Corridors – Navigable Space

Minimum WTG spacing centre to centre 1000m

Minimum trawl lane width (navigable space) 850m

layout Option 1 49 x WTG		
WTG ID	Trawl Lane width (M)	
T03 - T04	1046	
T05 - T06	1012	
T06 - T13	943	
T13 - T23	870	
T07 - T14	960	
T09 - T15	946.5	
T24 - T30	863	
T09 - T15	953	
T10 - T16	1024	
T17 - T25	908	
T19 - T26	861	
T26 - T24	867	
T38 - T42	863	
T41 - T45	971	
T46 - T48	949	
T35 - T39	850	
T21 - T27	920	
T28 - T36	882	
T22 - T28	939	
T29 - T37	944	





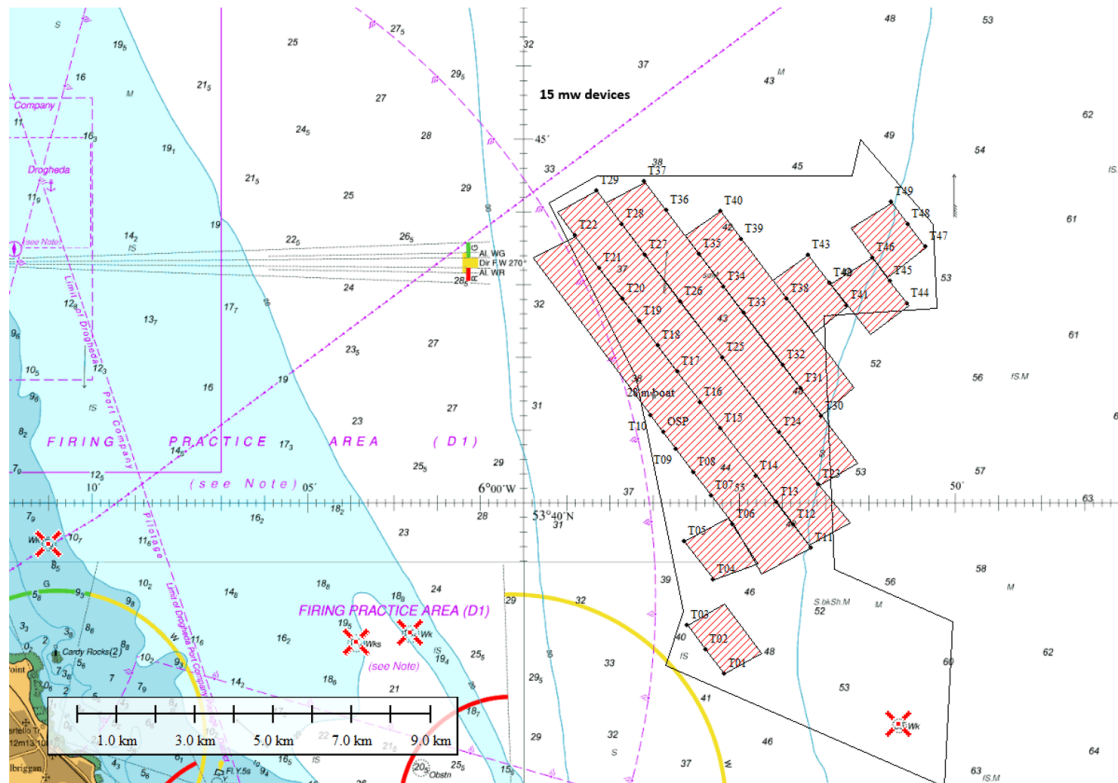
NMPF on Co-existence

For NISA proposal to satisfy NMPF requirements to minimise and mitigate impacts on fishing activity, coexistence would require:

- 1. Explicit designation of obstruction-free trawl corridors,** maintained as navigable space rather than theoretical turbine centerline spacing;
- 2. Cable burial and protection standards compatible with trawl gear interaction,** ensuring absence of exposed rock armor or snag hazards within designated corridors;
- 3. Operational protocols recognising tidal constraints,** including avoidance of peak spring tidal periods for shooting and hauling; and
- 4. Ongoing monitoring of fishing access and catch rates,** consistent with ecosystem-based management principles and evidence-based decision making as required under the Maritime Area Planning Act and EU MSP Directive.

Designated Trawling Corridors – Layout Option 1

Layout Option 1 – 49 x Turbines

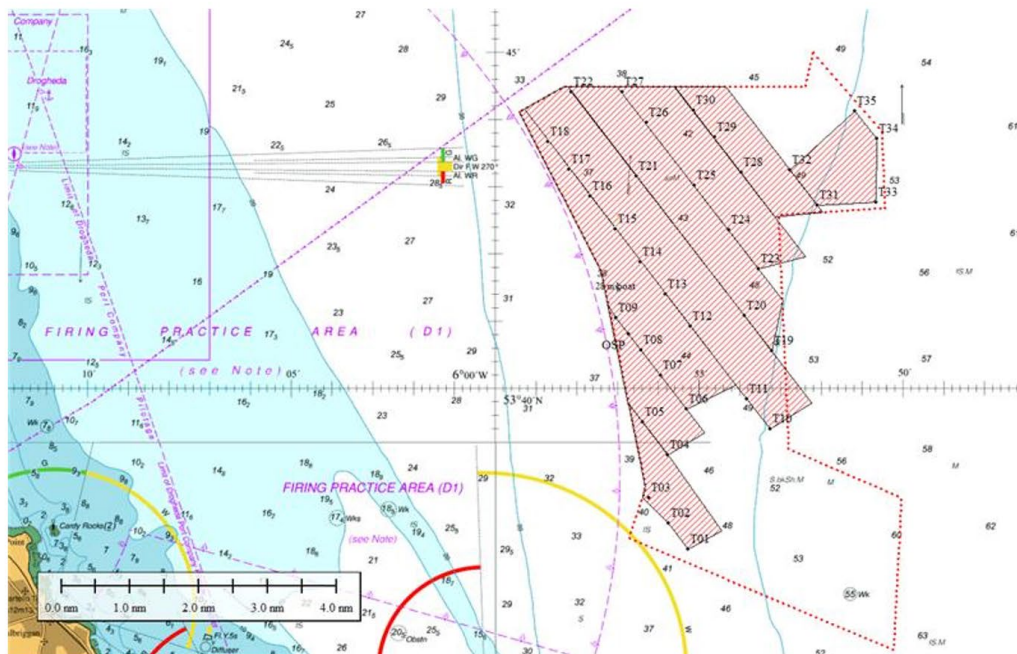


Orientation: Corridors aligned with known conventional trawling direction.

Over trawlability: NISA cable burial risk assessment will factor in over trawling and inform cable burial minimum depths and other engineering mitigations required against risk of snagging.

Designated Trawling Corridors – Layout Option 2

Layout Option 2 – 35 x Turbines

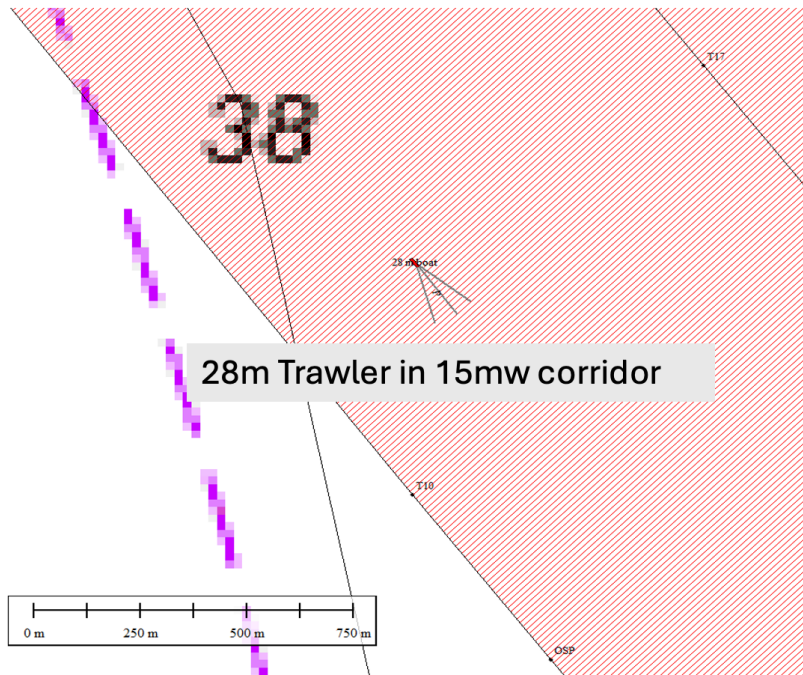


Orientation: Corridors aligned known conventional trawling direction

Over trawlability: NISA cable burial risk assessment will consider over trawling and inform cable burial minimum depths and other engineering mitigations required against risk of snagging.

WTG Spacing: Greater than option 1 due to deduced number WTGs on similar footprint resulting in wider trawling corridors

Tidal Constraints and Operational Protocols



NISA analysis – both layout options
Based on the provision of a 1,000m corridor with a 75 m operational buffer applied to each edge (resulting in an effective trawlable width of minimum 850 m), spatial accommodation for a 28 m demersal trawler operating at 3 knots is technically feasible. However, coexistence viability is materially influenced by tidal dynamics and infrastructure design. With dominant tidal streams aligned NNE–SSW and the proposed corridor bearing 323° , peak spring tidal flows of up to 2.3 knots would produce a significant cross-tidal component (approximately 2.0 knots), requiring substantial crab angles during towing. While steady towing may remain manageable, elevated risk arises during gear deployment and recovery, particularly within peak spring windows. This along with other factors like seasonal traffic density will inform operational and emergency protocols, to be developed in collaboration with vessel operators.

Monitoring of Fishing Access & Catch Rates

NISA proposal – Digital Effort Traceability Project (DEPT)

Integrated Inshore Fisheries Spatial Footprint, Discards, Landings & Traceability System

Delivered by Smart Ocean AS, in collaboration with Ireland's inshore sector through the NISA Sustainable Fisheries Community (SFC)

Target fleet: All vessels operating in and around the NISA footprint area

Core outputs: Spatial footprint mapping, displacement analysis, catch & discard layers, socio-economic indicators, and barcode-enabled seafood traceability.

- Marine spatial planning
- Offshore renewable development assessments
- MPA design and evaluation
- Socio-economic impact analysis
- Traceability and market transparency

Smart Ocean AS provides an integrated digital monitoring and traceability platform that combines:

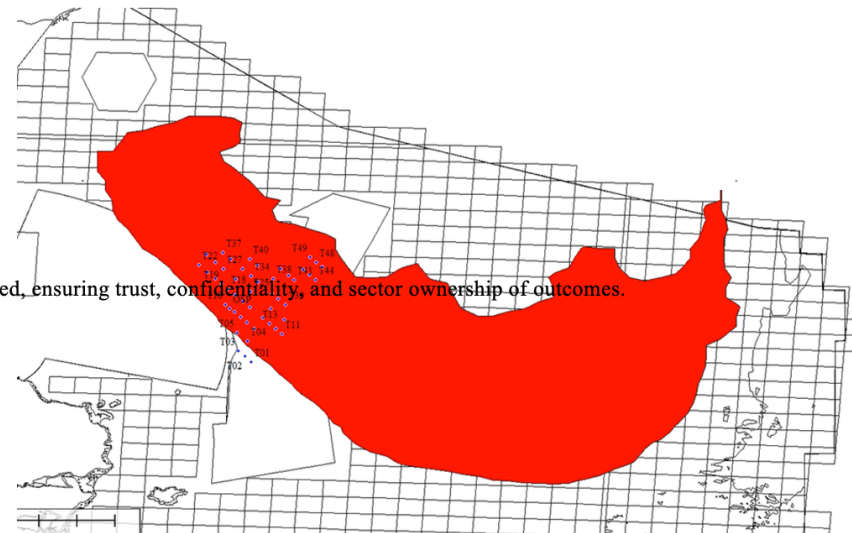
- High-resolution GPS vessel tracking
- Accelerometer-based fishing activity recognition
- Gear-type identification
- Catch composition and discard capture
- Landing sales note upload
- Barcode/QR traceability for market provenance

In collaboration with the (SFC), the system is designed to be fisherman-centred, low-burden, and governance-led, ensuring trust, confidentiality, and sector ownership of outcomes.

2. Project Objectives

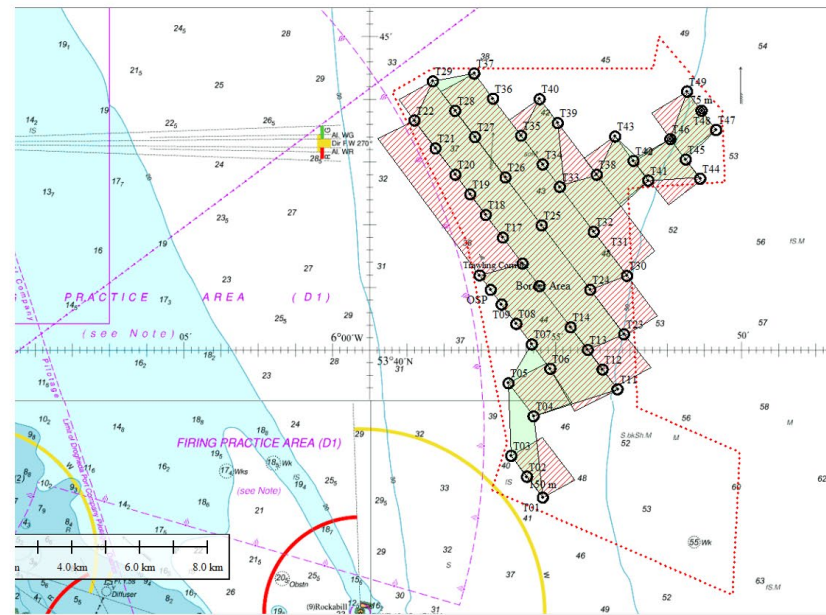
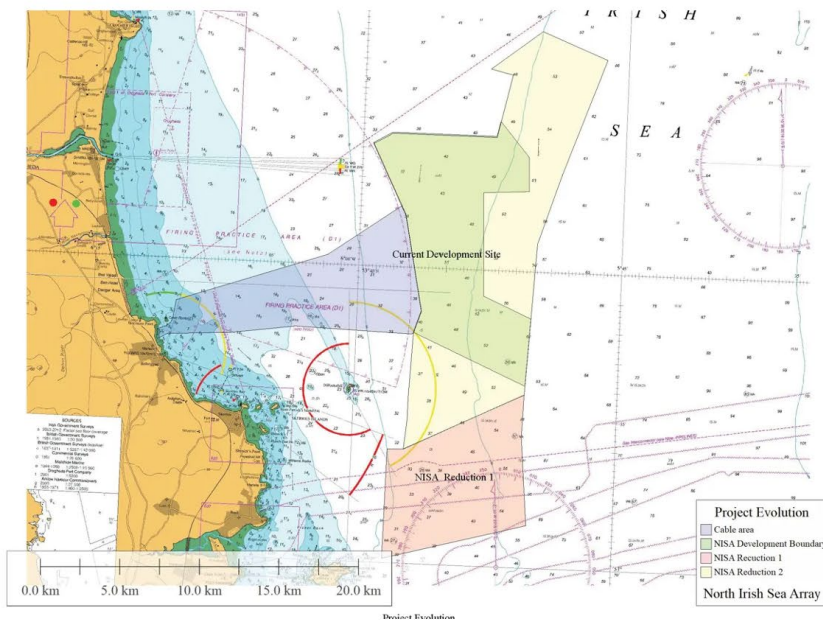
The Smart Ocean system is designed to deliver the following objectives for Ireland's inshore fleet:

- Quantify the **spatial footprint** of under-12m fishing activity
- Distinguish fishing effort from transit using **motion-based classification**
- Record fishing activity by **gear type and all available data uploaded**
- Capture landings and discards linked to fishing events
- Support socio-economic assessment through verified landing documentation
- Enable end-to-end traceability from fishing ground to market
- Provide robust outputs for MSP, MPAs, offshore renewables, and co-management



NISA Footprint Evolution

Reduction in development area 58.92%



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