FLOWW
Fishing Liaison with Offshore Wind and Wet Renewables

Best Practice Guidance for Fisheries Liaison with Offshore Renewables Developments

November 2025

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Endorsed by:


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Preface

This Best Practice Guidance document for Fisheries Liaison has been developed by the Fishing Liaison with Offshore Wind and Wet Renewables (FLOWW) group. It updates the previous FLOWW guidance that was published in 2014 and supersedes the FLOWW Best Practice Guidance for Offshore Renewables Developments: Recommendations for Fisheries Disruption Settlements and Community Funds from August 2015. It aims to support effective and constructive dialogue between the offshore renewable energy and fisheries sectors.

The Fishing Liaison with Offshore Wind and Wet Renewables Group (FLOWW) was set up in 2002 to foster good relations between the fishing and offshore renewable energy sectors and encourage co-existence of the industries across the UK. FLOWW's objectives are to discuss effectively on issues arising from the interaction of the fishing industry and offshore renewables activity, share and develop best practice, and liaise with other sectors with interests in the marine environment. It is supported by The Crown Estate who provide funding for the Chair and Secretariat roles.

We would like to thank all developers, fisheries stakeholders and regulators that have contributed to the process of updating the guidance. The guidance has been prepared by the FLOWW working group with support from ABPmer.

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1 Purpose and Scope

1.1 Purpose

The purpose of this document is to provide best practice guidance on effective liaison, communication, and exchange of information, between offshore renewable energy (ORE) sectors and the fishing industry, during all phases of an ORE project. This document recommends when, how and why liaison should take place. Effective liaison is pivotal in helping to avoid, minimise, and/or address as part of embedded mitigation, any potential impacts of ORE projects on fishing activities.

The guidance is intended to foster mutual understanding and cooperation while minimising disruption to all parties, and to promote safe and sustainable working practices.

1.2 Scope

This document covers current and future ORE sectors across the United Kingdom (UK), including:

- offshore wind (with a focus on fixed offshore wind farms)[1];
- wave and tidal stream (i.e. excluding tidal barrage projects);
- test and demonstration projects; and
- ORE-related infrastructure (i.e., subsea cables and protection methods, moorings, substations, and grid connections).

In addition to adherence to the guidance, individuals should satisfy themselves of the legal position regarding any associated regulatory requirements. Adherence to the guidance does not alter or limit the application of any regulatory requirements or individual obligations (including but not limited to SOLAS and COLREGS), of which such regulatory requirements should take priority.

The guidance described in this document should be followed by all parties involved in offshore renewable developments and fisheries engagement and liaison, including but not limited to ORE developers and representatives, consultants contracted to or working on behalf of ORE developers, fisheries liaison officers, fishing industry representatives, individual fishers, fisheries associations and organisations, and any consultant or person working for or on behalf of a fisher or group of fishers.

As recognised best practice guidance, and in the absence of legislation, it is advised and expected that all ORE developers and fisheries stakeholders respect and work in line with this guidance.

Deviation from the guidance should only be in exceptional circumstances. Where parties do not follow the best practice guidance, they should provide a clear justification for the deviation, its rationale and any alternative approach taken, and demonstrate how they continue to work consistently with the overarching aim of promoting cooperation and minimising disruption, whilst ensuring safety and maximising opportunities for co-existence.

Whilst this guidance has been developed in collaboration with UK-based fishers, the principles apply to all relevant fishing vessels in UK waters, regardless of nationality.

[1] The guidance is relevant to all types of offshore wind projects. Specific considerations for floating offshore wind are not included, however the general principles will apply unless otherwise stated.

1.3 Structure of this guidance

This guidance is structured as follows:

- Chapter 2: Overview of the ORE Lifecycle;
- Chapter 3: Roles and Responsibilities;
- Chapter 4: Liaison during the Lifecycle of ORE Projects;
- Chapter 5: Methods of Engagement;
- Chapter 6: Subsea Cables; and
- Chapter 7: Disruption Settlements, Protocols for Lost/Damaged Gear, and Fisheries Community Funds.

Chapter 2 provides an overview of the ORE lifecycle and key opportunities for fisheries liaison. This includes many partners such as The Crown Estate and Crown Estate Scotland at the seabed leasing stage, as well as ORE developers. However, the predominant focus of the guidance is on liaison between fishers and ORE developers.

Chapter 3 discusses the key roles and responsibilities of both ORE developers and fishers in relation to liaison.

Chapters 4–7 are each structured around key recommendations, which are then expanded upon with relevant details and signposted information. The considerations and timescales of different needs and types of liaison opportunities are identified. There is joint responsibility for both fishers and developers to take on board the necessary liaison requirements and to stay up to date with these.

In this guidance, the principals of the 'avoid, minimise, and/or mitigate' hierarchy apply equally to all parts of the ORE project lifecycle (and associated activities), and all parties should be held accountable to the hierarchy. 'Avoid' can apply to individual aspects of an ORE project, for example, ORE-related surveys avoiding key fishing seasons.

This guidance is supported by Supplementary Information (SI) in Appendices. The Supplementary Information should be used for reference, and in conjunction with the guidance, as required.

2 Overview of the ORE Lifecycle

There are opportunities for fisheries liaison throughout the ORE lifecycle. Figure 1 demonstrates the different stages of the ORE lifecycle highlighting when and how liaison can best take place, and further details are provided in the Supplementary Information for Chapter 2 (Annex A).

Fisheries liaison should be initiated as early as possible (i.e. at the site selection stage by seabed owners, and during the bid application by ORE developers) and continue throughout the ORE lifecycle. This should be at a point when input from the fishing industry has the potential to inform project design to help minimise impacts. It should be prior to planning and consent applications being submitted, and prior to the commissioning of surveys.

Please refer to the relevant seabed owner and Government websites for up-to-date information on leasing processes – more information about offshore wind leasing can be found at:

- England, Wales and Northern Ireland: The Crown Estate; and
- Scotland: Crown Estate Scotland.

Throughout the ORE lifecycle there are a number of formal consultation opportunities for fisheries stakeholders to provide views. These formal consultations are often carried out by regulators at specific stages of a regulatory process, e.g. consultation on applications for regulatory consent. Fisheries stakeholders are encouraged to submit responses to all relevant formal public consultations as an interested party. In addition, it is good practice for ORE developers to liaise and engage with fisheries stakeholders in addition to and in advance of any formal consultation opportunities throughout the ORE lifecycle.

Formal regulatory consultation opportunities will vary depending on the government administration and regulatory regime. The relevant regulatory authority websites should be consulted. Public registers are available which list all regulatory applications and activities (and their associated consultation opportunities).

Public registers of marine licence applications can be accessed at:

- England: Marine Management Organisation www.gov.uk/check-marine-licence-register or National Infrastructure Planning Inspectorate national-infrastructure-consenting.planninginspectorate.gov.uk/;
- Scotland (The Scottish Government): marine.gov.scot/marine-licence-applications;
- Wales (Natural Resources Wales): naturalresourceswales.gov.uk/permits-and-permissions/permit-applications-consultations-and-decisions/applications-received-and-determined/?lang=en; and
- Northern Ireland (Department of Agriculture, Environment and Rural Affairs):www.daera-ni.gov.uk/articles/marine-licensing-public-register.

Further information on the tasks and regulatory approvals required at each stage of the ORE lifecycle, with opportunities for liaison at each stage, and details of the leasing process for each Devolved Administration (DA) can be found in the Supplementary Information for Chapter 2 (Annex A).

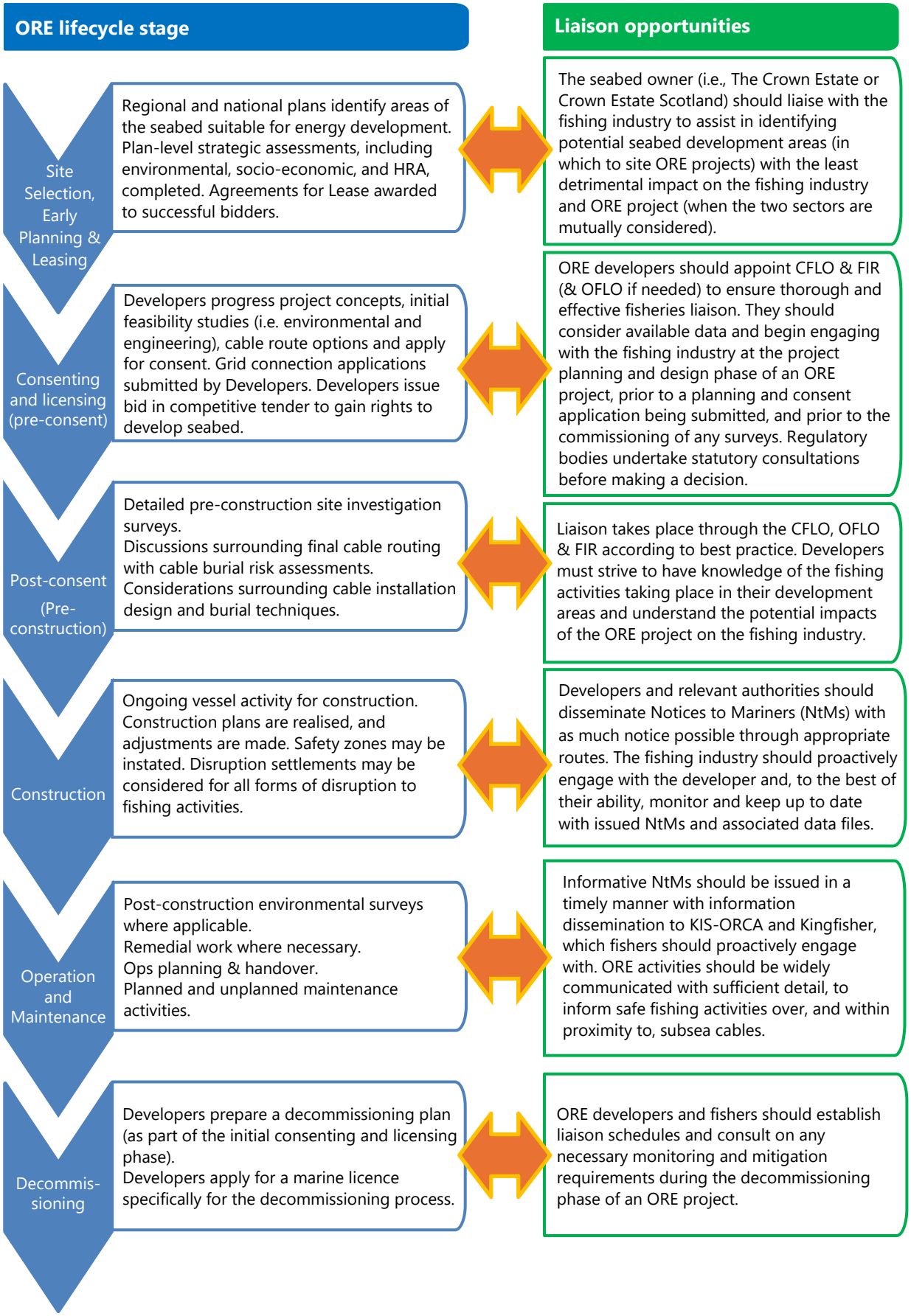

Figure 1. Liaison opportunities throughout the ORE lifecycle

3 Roles and Responsibilities

This chapter provides best practice guidance on the roles and responsibilities of the principal components of liaison and communication between the fishing industry and a developer during an ORE project.

3.1 Liaison roles

There are a number of liaison roles that are good practice for effective engagement between ORE developers and the fishing industry:

- Company Fisheries Liaison Officers (CFLOs);
- Fishing Industry Representatives (FIRs);
- Offshore Fisheries Liaison Officers (OFLOs);
- Marine Coordination Centre (MCC); and
- National fisheries federations and associations.

These roles and relationships should be formed at the start of ORE project development. Contact details should be made available on the ORE developer's website.

CFLOs and FIRs are very important components of the relationship between ORE developers and the fishing industry. They should be appointed by ORE developers as the primary points of contact for direct communication between the two sectors. In addition to these roles, the ORE developer may appoint a commercial fisheries manager to oversee and manage the relationship between the company and the fishing industry. Alternatively, this responsibility may lie with the ORE project manager or other project member.

Each role and group mentioned above fulfils a different and important function. These are set out below. CFLOs, FIRs and OFLOs need to be proactive, adaptable and dynamic. The principal tasks associated with these roles are listed in Table 1. Tasks should be stated in fisheries liaison and communication plans (see Chapter 5 for further information).

3.1.1 Company Fisheries Liaison Officers (CFLOs)

Every developer should have an individual nominated as the developer's fisheries contact, known as the CFLO (also known as the 'onshore Fisheries Liaison Officer' or 'onshore FLO'). This person should be employed directly by the developer or, if employed as a consultant to the developer, should have delegated authority to fully represent the developer on fishing issues with the support of the FIR, as required. Whilst the CFLO may delegate much of the day-to-day liaison between the fishing industry and the developer to the FIR, the CFLO is likely to be the primary point of contact for the fishing industry when direct communication with the developer is required and their identity should be made available to the fishing community. The CFLO is usually shore-based.

Appointment of a CFLO is commonly a condition of planning consent, however, they should be employed at the earliest opportunity during the planning and development (i.e. pre-consent) phase of an ORE project. CFLOs may either be direct employees or sub-contractors of ORE developers.

3.1.2 Fishing Industry Representatives (FIRs)

Acting as a counterpart to the CFLO, FIRs act as a single onshore contact point within the fishing community who can represent an un-biased fishing industry view of the region within which the ORE development is located. Depending on the diversity and geographical range of the fishing industry, more than one FIR may be required.

FIRs are usually appointed after onshore CFLOs are in place and are a result of the ORE developer engaging with fishing industries who are active in the ORE development area. Such engagement will help identify suitable FIRs and their associated tasks. It is beneficial for the FIR to have local knowledge of the ORE development area (both onshore and offshore) and possess a fisheries background. FIRs may be employed to engage with fisheries within a particular geographical area and/or have specialist knowledge of certain types of fishing activity. ORE developers should be aware that FIRs play an important role in all ORE projects and all geographical regions.

3.1.3 Offshore Fisheries Liaison Officers (OFLOs)

OFLOs may be required onboard ORE-associated vessels on an ad hoc basis to facilitate liaison with the fishing industry during certain at-sea activities. The primary responsibility of the OFLO is to act as an effective communication point between the ORE installation and the fishing industry during offshore activities. OFLOs must be fully certified to work onboard vessels at sea. It is recommended that OFLO have local expertise wherever possible. The OFLO will be the first point of contact for fishermen at sea whilst construction activities are taking place. The OFLO will be in communication with the ORE developer and the CFLO regarding construction progress, to communicate any construction activities to the local fishing industry including safety zones (SZs) where applicable. OFLOs may either be direct employees or sub-contractors of ORE developers.

3.1.4 Marine Coordination Centre

The Marine Coordination Centre (MCC) is established by the ORE developer. It can assist with general liaison (and emergency responses) between the ORE developer, contractors, fishers and other third parties. MCCs are usually established during the construction phase of the ORE development. The MCC has responsibility for communications between parties, with a focus on logistical operations. Information on communication methods should be disseminated between the MCC and the fishing industry. Further details on the role of MCCs can be found in the G+ Global offshore wind Good Practice Guideline for the safe management of small service vessels used in the offshore wind industry.

3.1.5 National fisheries federations and associations

These bodies disseminate information to their members and build relationships and communities. They can act as a single point of contact for many vessels in an area, but do not represent all vessels. Examples include the National Federation of Fishermen's Organisations (NFFO) and Scottish Fishermen's Federation (SFF). They may be contacted by CFLOs, but are not expected to distribute information such as Notices to Mariners (NtMs) to their members. The fishing industry is responsible for meaningful engagement with developers to ensure both industries observe minimal disruption during activities. In the absence of associations, individual vessel skippers/owners should represent their interests with the developer, and developers should reach out to individual vessel skippers/owners.

Table 1. Principal tasks of CFLOs, OFLOs and FIRs

Stage and Task	CFLO	FIR	OFLO
All stages of ORE development			
Facilitate co-operation between sectors, establish positive working relationships, and seek ways to avoid, minimise and mitigate the impacts of ORE projects on fishing activities	✓	✓	✓
Log all communications with fishers and ORE developers	✓	✓	✓
Share relevant and accurate information between sectors, and with other relevant stakeholders and consultees (according to agreed data confidentiality) (see Supplementary Information for Chapter 5, Annex C, for types of information to be shared)	✓	✓	
Assist in timely dissemination of notifications (particularly urgent notifications on marine hazards) to the fishing industry (see Chapter 5)	✓	✓	✓
Work with stakeholders to resolve any issues, or conflicts arising, where practicable	✓	✓	
Accurately determine the fishing industry's views on the ORE project, and objectively and impartially relay their views to ORE developers		✓	
On invitation, attend public stakeholder engagement events and relevant engagement forums (e.g. Commercial Fisheries Working Group meetings)		✓	
Be the primary point of contact for the fishing industry when direct communication with the developer is required	✓		
Pre-consent stages			
Understand the fishing activities taking place within proposed development areas	✓	✓	✓
Understand the potential impacts of ORE project(s) on fishing activities	✓	✓	
Prepare and maintain an up-to-date project-specific register of key local contacts and fisheries stakeholders to ensure all stakeholders are adequately informed of relevant ORE project activities	✓	✓	
Instruct ORE project contractors on fishing activities in areas of work, and provide details on how to communicate with fishing vessels at sea	✓		✓
Consult with fishers and fishing communities to understand their concerns with the proposed ORE project, and arrange and/or attend fisheries stakeholder meetings, as required	✓	✓	
Ensure ORE developers are aware of fishing sensitivities within the development area, and promote methods of work which would minimise disturbance to both the fishing industry and ORE project	✓	✓	
Pre-construction, construction and operation stages			
Inform fishers of ongoing survey and/or work programmes associated with the ORE project	✓	✓	✓
Liaise with fishing vessel skippers and inform the CFLO of any concerns and issues raised		✓	✓
Provide advice to the ORE developer on fisheries liaison throughout the pre-construction and construction of the ORE project	✓		
Publish a regular stakeholder report on construction activities	✓		
Monitor the delivery of the liaison and communication plans	✓		
Maintain a watch for marine traffic and be in regular contact with masters of fishing vessels and ORE-associated vessels (including guard and support vessels)			✓
Maintain regular contact with the onshore CFLO and project contractors regarding fishing vessel activity in the project area			✓
Liaise with fishers who may have static gear deployed in the ORE project area and vessel transit routes			✓
Log details of fishing activity and any infringement, movement, or damage to fishing gear in the ORE project area			✓

Note: The above list of principal tasks is not exhaustive.

3.2 Role of the ORE developer in liaison

ORE developers must strive to have knowledge of the fishing activities taking place in their development areas, and understand the potential impacts of the ORE project on the fishing industry. The Seafish Industry Authority (Seafish) provides information and resources about the fishing industry and fishing gears used in UK waters.

Throughout the ORE lifecycle, early dialogue between the fishing industry and ORE developers is key to building a relationship between the two sectors. This will help ORE developers gain an insight into the fishing activity taking place within the proposed development area(s) and the impacts the ORE project may have on fisheries, from the Agreement for Lease stage and onwards. This will also identify the fisheries stakeholders with whom ORE developers should engage throughout the ORE project.

ORE developers are responsible for establishing some of the liaison roles set out in section 3.1. In some cases, the developer may identify a commercial fisheries manager as part of their ORE development team. In others, this role may be undertaken by the ORE development manager. The ORE developer team, together with the CFLO and OFLO, should promote effective liaison, so that fishers are made aware of all consultation and liaison opportunities during the ORE project development process.

3.3 Role of fishers in liaison

The fishing industry should engage with ORE developers in a timely and constructive manner. For example, the industry should: communicate why and how they may be affected by the ORE development; attend meetings organised by ORE developers (when invited to do so); provide accurate data (once data confidentiality has been agreed upon), knowledge and experience of the geographic area of interest; provide details of fishing gear locations within ORE development areas and ensure gear is clearly marked; communicate proactively with ORE developers' offshore personnel (e.g. OFLOs) about fishing gear locations; and respond to formal regulatory and informal consultation opportunities. This will allow fishing activity to be appropriately incorporated and assessed in the ORE project process. Fishers should understand how they can best work with developers to inform them of potential impacts and actively engage.

Fishers should be aware of the roles of CFLOs, FIRs and OFLOs and how they can pass on their concerns and also be observant of any messages passed on through these individuals.

The fishing industry should keep up to date with ownership boundaries between ORE developers and OFTOs after the hand-over of transmission assets, and their contact details, so that the relevant people or organisations can be contacted if needed. For example, this can be through Kingfisher/KIS-ORCA or other available sources.

4 Liaison during the Lifecycle of ORE Projects

This chapter provides best practice guidance on liaison during key phases of an ORE project's lifecycle (as set out in Figure 1). Liaison with the fishing industry should be initiated as early as possible and continue throughout the ORE lifecycle.

Key Recommendations

- The seabed owner (i.e., The Crown Estate or Crown Estate Scotland) should liaise with the fishing industry to assist in identifying potential seabed development areas (in which to site ORE projects) with the least detrimental impact on the fishing industry and ORE project (when the two sectors are mutually considered).
- Liaison between ORE developers and the fishing industry should start as early as possible in the project planning and design phase, continue throughout the ORE project's lifespan, and take place in an open, transparent and meaningful manner.
- Fisheries liaison and communication plans should be created at the beginning of the liaison process, between the ORE developer and the affected fishers.
- When carrying out Environmental Impact Assessments, ORE developers should refer to guidance provided by the relevant consenting organisations for their region, and provide fishers with opportunities for consultation as part of this process.
- ORE developers should share survey, construction, and operation and maintenance programmes with fisheries stakeholders where possible, and allow for discussion of such programmes if appropriate.
- ORE developers should inform the fishing industry of the handover of transmission assets to the Offshore Transmission Owner (OFTO), after the construction and commissioning of the ORE project, and OFTOs should ensure compliance with agreed fisheries-related consent conditions and liaison and communication plans.
- ORE developers and fishers should establish liaison schedules and consult on any necessary monitoring and mitigation requirements during the decommissioning phase of an ORE project.

The seabed owner (i.e., The Crown Estate or Crown Estate Scotland) should liaise with the fishing industry to assist in identifying potential seabed development areas (in which to site ORE projects) with the least detrimental impact on the fishing industry and ORE project (when the two sectors are mutually considered)

Development of positive working relationships between seabed owners and the fishing industry during site selection will provide the foundation for equivalent constructive relationships between ORE developers and the fishing industry during leasing (the development of an ORE developer's bid for an Agreement for Lease, from the seabed owner). There are multiple considerations to be taken into account for site selection (multiple sectors, technical and economic constraints), with fisheries being one part of this. Engagement with the fishing industry at this very early stage means that key industry concerns can be considered before any project details are developed.

Bids for seabed Agreements for Lease involve ORE developers progressing project concepts, designs, and initial feasibility and scoping studies. Further details on the liaison between ORE developers and the fishing industry associated with the design phase of an ORE project can be found below.

Liaison between ORE developers and the fishing industry should start as early as possible in the project planning and design phase, continue throughout the ORE project's lifespan, and take place in an open, transparent and meaningful manner

It is important that positive working relationships are established between ORE developers and the fishing industry. Early dialogue between the fishing industry and ORE developers is key to building a relationship between the two sectors. Therefore, ORE developers should contact relevant fisheries stakeholders at a very early stage (ideally during leasing and no later than the early stages of consenting and licensing (pre-consent)). This should be at a point where input from the fishing industry has the potential to inform project design to help minimise impacts. It should be prior to planning and consent applications being submitted, and prior to the commissioning of any surveys.

ORE developers should ensure fisheries stakeholders are informed of:

- what aspects of an ORE project require liaison with fisheries stakeholders;
- how liaison will take place, what type of information will be shared and key contacts; and
- when liaison will take place.

ORE developers should ask fisheries stakeholders how they would like to be engaged. Methods of engagement may vary for different fisheries stakeholders or for different aspects of an ORE project. Where in-person meetings are used, for engagement to be effective they should be conducted at a time and location that works for the fishing industry to accurately capture any needs or concerns. This information can be captured in the liaison and communication plan (see next recommendation).

ORE developers should liaise with relevant fisheries stakeholders in relation to:

- providing information on the ORE project, including its location and size, and options for subsea cable routes and landing points, cable burial and protection;
- providing an indication of the design process and state how and when stakeholders may input to the process;
- providing information on, and discussing, the design envelope approach (the 'Rochdale Envelope'[2]) and scenario planning in the consenting process; and
- gathering information and views from fisheries stakeholders on:
    - types, locations and timings of fishing activities in the area of interest;
    - seabed conditions in the area of interest; and
    - regulatory process e.g. on the Environmental Impact Assessment (EIA) (see recommendation below on EIAs).

Fisheries stakeholders should liaise with the ORE developer in relation to:

- providing relevant information and data to the ORE developer (with agreed confidentiality);
- attending meetings organised by ORE developers;
- engaging in pre-consent application consultation opportunities (e.g. at the EIA scoping stage, the marine licensing Pre-Application Consultation event (in Scotland, for projects 0–12 nautical miles (NM) from the coast), and the Preliminary Environmental Information Report (in England and Wales); and
- agreeing on vessel transit routes and anchoring areas for vessels associated with the ORE development, to help minimise interference with fishing activities.

[2] Planning Inspectorate (2025). Nationally Significant Infrastructure Projects - Advice Note Nine: Rochdale Envelope. Available at: https://www.gov.uk/government/publications/nationally-significant-infrastructure-projects-advice-note-nine-rochdale-envelope/nationally-significant-infrastructure-projects-advice-note-nine-rochdale-envelope [Accessed April 2025]. Note that this is applicable within England and Wales.

Fisheries liaison and communication plans should be created at the beginning of the liaison process, between the ORE developer and the affected fishers

The regulatory process requires the ORE developer to produce a plan or strategy describing their liaison and communication with commercial fisheries throughout the regulated phases of the ORE project. The terminology differs between devolved administrations. For example, they are referred to as Fisheries Liaison and Co-Existence Plans (FLCPs) in England, as Fisheries Mitigation, Monitoring and Communication Plans (previously Fisheries Management and Mitigation Strategies, FMMSs) in Scotland, and in Northern Ireland such conditions may be attached to a marine licence (e.g. requirement for mitigation plans/environmental plans etc., which must be approved by DAERA before works commence). Within this guidance they are collectively referred to as ***liaison and communication plans***.

It is good practice for ORE developers to consult with fisheries stakeholders on liaison and communication plans early in the project planning and design phase, before regulatory approval is given, to support effective liaison and communication. Liaison and communication plans should clearly set out what fishers will be engaged on, when engagement will happen and how engagement will be carried out, and should be referred to and updated where necessary.

If consent is granted for the ORE project, the liaison and communication plan must be implemented. Where necessary the plan should be considered as a 'living' document.

Liaison and communication plans should:

- be developed, agreed upon, and adopted in consultation with the fishing industry at the pre-consent stage of the ORE project, and be regularly reviewed (pre-consent), and updated as appropriate post-consent (particularly during the construction phase);
- describe what aspects of an ORE project require liaison with fisheries stakeholders, how and when liaison will take pace and what type of information will be shared;
- be updated by the ORE developer with support and advice from the CFLO;
- align with the information and recommendations contained within this FLOWW Best Practice Guidance document;
- encompass the planning and design, pre-construction, construction, operation and where applicable decommissioning phases of the ORE project, and the approach should be appropriate to the final project design;
- state what aspects of the ORE project that fisheries stakeholders will be communicated on (e.g. providing information on what, where and when marine activities will be taking place, safety zones);
- state which methods of communication and liaison will be used;
- demonstrate, communicate, and guide commitments to avoid, minimise and/or mitigate impacts on the fishing industry throughout the ORE project's lifespan;
- provide assurance to fishing communities of supporting positive working relationships and limitations of conflict;
- outline anticipated licensed safety zones or safe working distances required during works;
- be disseminated to fisheries stakeholders; and
- be adhered to for any associated works outside of the primary consent of the ORE project.

These plans enable knowledge, information and data to be shared consistently and in a timely manner between ORE developers and the fishing industry. Due to the nature of data being shared, data confidentiality agreements may be required. Data confidentiality measures should be agreed upon between the two sectors during early engagement. Examples of the types of information to be shared between the two sectors can be found in the Supplementary Information for Chapter 4 (Annex B.1).

When carrying out Environmental Impact Assessments, ORE developers should refer to guidance provided by the relevant consenting organisations for their region, and provide fishers with opportunities for consultation as part of this process

As part of the planning and consenting process, ORE project proposals are likely to require an Environmental Impact Assessment (EIA). The results of which (e.g. the Environmental Statement or Environmental Impact Assessment Report) are submitted with ORE project consent applications. The regulatory planning or consenting process will vary according to geographic region and administrative body. Stakeholders should refer to information provided directly by the relevant licensing and consenting organisation (e.g. Planning Inspectorate for Nationally Significant Infrastructure Projects in English and Welsh waters; Marine Management Organisation for other projects in English waters; Natural Resources Wales on behalf of Welsh Government for other projects in Welsh waters; the Scottish Government Marine Directorate – Licensing Operations Team for Scottish waters; Department of Agriculture, Environment and Rural Affairs for Northern Irish waters and Department for Infrastructure for Nationally Significant Infrastructure Projects and local councils for major infrastructure projects for Northern Ireland).

As part of the EIA process, ORE developers (alongside appointed EIA consultants) are involved with gathering information and carrying out assessments. ORE developers should therefore liaise with the fishing industry and provide non-statutory opportunities (e.g. consultation events) for fisheries stakeholders to provide input. These opportunities should be in addition to formal public consultations that are carried out by regulators.

Fisheries liaison at an early stage of the EIA process is very important, as it will ensure views of fisheries stakeholders are incorporated into, and assessed effectively, throughout the process. The fishing industry should therefore respond to all consultation opportunities.

Non-statutory liaison by ORE developers during the EIA process should allow fisheries stakeholders to:

- provide information and data (with agreed confidentiality) on historical and current commercial fishing activities in the area of interest to help determine baselines;
- comment on the subsequent assessment and presentation of the fisheries information and data;
- comment on the potential impacts (and displacement[3]) the ORE project may impose on fishing activities (including the extent to which fishing activities may be able continue in the area throughout the lifespan of the ORE project, and whether such impacts are likely to be temporary or permanent);
- suggest and discuss mitigation measures to avoid or reduce the adverse effects of the ORE project on commercial fishing activity, e.g. discuss the transiting of ORE-associated vessels (to and from the ORE project area), including the transit routes to be used, the type and number of vessels involved, and location of anchoring areas; and
- comment on proposed monitoring schemes and surveys.

ORE developers should consider the following to facilitate engagement of fisheries stakeholders in the EIA process:

- share the EIA Scoping Report directly with relevant fisheries stakeholders;
- include visual representations (e.g. charts) in the EIA outputs and reports, which illustrate the relationship between the proposed ORE project (including cable routes) and the affected fishing grounds;

[3] The relocation of fishing activity (i.e. pressure or effort) into another area as a result of restricted access to or closure of an area.

- be aware that the assessment of the sensitivity of fisheries to the proposed ORE development and the magnitude of the impact, should be objective and transparent, and supported by expert judgement from qualified individuals;
- consider using the local fishing fleet in survey strategies to utilise their local knowledge and endeavour to establish a shared understanding of the likely impacts highlighted in the EIA;
- understand that cumulative impacts of the proposed development on the fishing industry are important and should be considered in the assessment; and
- describe how fisheries stakeholders' feedback has been taken into account. If feedback did not lead to any changes, or there are differences of opinion, justifications for this should be included in applications to improve transparency.

The risk to navigation is also assessed as part of the EIA process. When conducting a navigational risk assessment as part of the EIA, the fishing industry should be consulted to assist in the assessment outputs.

A navigational risk assessment should be based on the Maritime and Coastguard Agency (MCA) MGN654 Annex 1 Methodology for Assessing the Marine Navigational Safety & Emergency Response Risks of Offshore Renewable Energy Installations (OREI). The fishing industry should be consulted to assist in informing and verifying the assessment outputs. This is usually undertaken through a dedicated Hazard Identification Workshop (or similar forum). It is recommended that CFLOs and other fishing industry representatives are invited and attend such workshops. This enables them to provide feedback to fisheries stakeholders.

Key issues to be discussed in the Hazard Identification workshop in relation to fisheries should include:

- risk of collision, contact, and grounding;
- increase in safety risk due to deviation such as "end-on" or "crossing" encounters; and
- the creation of choke points.

Further information on navigational safety can be found in the Supplementary Information for Chapter 4 (Annex B.2)

The ORE developer should ensure that the fishing industry is made aware of, and encouraged to respond to, all formal consultation exercises associated with EIAs as part of the consenting and licensing stage (details are within Table 3 in Annex A.1). Fisheries stakeholders should check whether there is a requirement for them to register as an 'Interested Party' in order to submit a response ('Representation') during the examination stage of the consenting process. Fisheries stakeholders should constructively engage with ORE developers and their associates, when opportunities arise. This should include attending meetings to which they are invited. More information on opportunities for liaison to support mitigation and monitoring that can feed into EIAs is available in the Supplementary Information for Chapter 4 (Annex B.3).

After regulatory consent has been granted, but prior to construction commencing, there may be conditions that require the ORE developer to submit additional information, if such information was not available at the time of application. This may include, for example, details of some fisheries mitigation measures. If this is required, it is likely that the regulator will need to consult with fisheries stakeholders.

ORE developers should share any relevant survey, construction, and operation and maintenance programmes with fisheries stakeholders where possible, and allow for discussion of such programmes if appropriate

Liaison should be undertaken as described within the published fisheries liaison and communication plan for the ORE project, established at project inception (see also Chapter 5, Methods of Engagement).

Prior to commencing surveys or other activities, CFLOs and FIRs should ensure they are aware of fishing activities currently taking place in the affected area, to notify affected fishers of upcoming works. Fishers will require adequate time to move their fishing gear and/or adapt their future fishing plans, if that is required. Fishermen should clearly mark static gear. It is recommended that gear scouting is undertaken by vessels prior to survey to ensure the route/area has been cleared of fishing gear. If gear is still present, the fishing gear operator/owner should be notified as soon as possible. It should be noted that gear scouting procedures are specific to individual ORE projects.

Navigational safety is paramount during all phases of an ORE project. Maritime law must be adhered to. Further information on navigational safety can be found in the Supplementary Information for Chapter 4 (Annex B.2).

Hazards to navigation (e.g., accidentally dropped objects, failure of wind turbines / blades, exposure of cables etc.) should also be communicated to fishers as soon as reasonably practicable, recognising the need for urgency in the interests of fishers where such hazards pose a material increase in risk. Further information on how to best to disseminate information can found in Chapter 5 on Methods of Engagement.

The Marine Coordination Centre (MCC) – or the Marine Coordinator – usually in place during the construction phase of ORE project, will also assist with general liaison (and emergency responses) between the ORE developer, contractors, fishers and other third parties. During the operation phase of the ORE project, the MCC will be responsible for supporting effective communication. More information on MCCs can be found in section 3.1.4 and Chapter 5 on Methods of Engagement.

ORE developers should inform the fishing industry of the handover of transmission assets to the Offshore Transmission Owner (OFTO), after the construction and commissioning of the ORE project, and OFTOs should ensure compliance with agreed fisheries-related consent conditions and liaison and communication plans

The fishing industry should be notified of all ownership boundaries and contact details. Such contact details should be updated, as required, and disseminated to fisheries stakeholders as well as Kingfisher/KIS-ORCA. It should be noted that the liaison and communication plans, CFLOs, and FIRs which are in place during the design, planning, and construction phases of an ORE project, are not automatically transferred to, nor valid with, OFTOs.

Upon assuming ownership of the assets and associated transmission consents, OFTOs should ensure full compliance with all fisheries-related consent conditions. As a condition of licence or consent, OFTOs will be required to generate their own liaison and communication plan. This should take into consideration the liaison and communication plan that was in place during the design, planning, and construction phases, and ensure alignment with its commitments.

OFTOs should disseminate their liaison and communication plan with fisheries stakeholders and consider employing dedicated liaison personnel and/or commercial fisheries managers to act as conduits between the asset owner and fishing industry.

ORE developers and fishers should establish liaison schedules and consult on any necessary monitoring and mitigation requirements during the decommissioning phase of an ORE project

During the decommissioning phase, the ORE developer and fishers should follow any agreed liaison as detailed within the liaison and communication plans as required as part of a licence agreement. Any final mitigation and monitoring requirements for the ORE project should be consulted on with impacted fishers and their views taken into account.

5 Methods of Engagement

This chapter includes guidance on both general methods of engagement (e.g. CFLOs, FIRs, meetings, reports and emails), as well as methods for specific scenarios, audiences and activities (e.g. Notice to Mariners (NtMs) concerning navigational safety at sea).

There are many ways for ORE developers, the fishing industry and other stakeholders, to engage, communicate and disseminate information throughout the ORE lifecycle. The methods employed will depend on the purpose of the engagement, and therefore ORE developers should ensure that the most appropriate means of communication are used.

Parties involved must ensure they comply with applicable legal requirements on handling personal data and the sharing of information and data. These guidelines are not a substitute for considering relevant legal obligations (and seeking independent legal advice if necessary), and adherence to these guidelines should not be understood as satisfying the relevant legal obligations and requirements.

Key Recommendations

- At least one CFLO and/or FIR should be appointed for each ORE project.
- ORE developers should choose methods of engagement which are the most effective and efficient for informing stakeholders on the activity of interest on a regular basis or at an appropriate frequency for the project stage; multiple channels of communication are often required.
- Marine Co-ordination Centres or Marine Coordinators should be appointed by the ORE developer to assist with liaison with the fishing industry.
- ORE developers and relevant authorities should issue NtMs or Local Notifications containing relevant information and disseminate them through appropriate routes such as KIS-ORCA and Kingfisher.
- When issuing NtMs, as much notice should be given as possible, and this should be in line with the recommended minimum notice periods.
- If Safety Zones are implemented, these must be well communicated by ORE developers and must be adhered to by the fishing industry; in addition, advised safe working distances should be adhered to.
- Fishers (and/or fishing industry representatives) should proactively engage with the ORE developer and, to the best of their ability, monitor and keep up to date with issued NtMs and associated data files and observe safety requests within NtMs.

At least one CFLO and/or FIR should be appointed for each ORE project

CFLOs and FIRs are important components of the relationship between ORE developers and the fishing industry. They should be appointed by ORE developers as the primary points of contact for direct communication between the two sectors.

The identities and contact details of CFLOs and FIRs should be made available to all stakeholders. In addition, 24-hour company contact numbers should be established and maintained.

Further details on the roles of CFLOs, FIRs and Marine Coordination Centres are provided in Chapter 3.

ORE developers should choose methods of engagement which are the most effective and efficient for informing stakeholders on the activity of interest on a regular basis or at an appropriate frequency for the project stage; multiple channels of communication are often required

There are many useful methods of engagement that ORE developers should consider using. The principal ones of which are listed below. Note that many of these methods should be incorporated into fisheries liaison and communication plans.

Different methods of engagement and liaison can be used as and when required, but some type of communication channel should be open and available between the ORE developer/asset owner and the fishing industry throughout the lifespan of the ORE project. Early and proactive engagement is key to establishing positive working relationships between ORE developers, the fishing industry and other stakeholders.

Key methods of engagement are:

- use of existing local communication channels, such as regional fisheries officers, fisheries associations, Coastguards, Marine Management Organisation (MMO) offices, IFCAs, newspapers, village/harbour notice boards;
- briefing sessions and meetings with fisheries stakeholders during the development phase of a project:
    - Fishers and/or fishing industry representatives should be invited to such sessions/meetings;
    - ORE developers should seek to plan such sessions/meetings that facilitate fishers' attendance (e.g. at times which are least unlikely to coincide with fishing activities, and in locations that are accessible to fishers);
- publication of a regular stakeholder report by the ORE developer on the status of ORE project activities:
    - the frequency of updates may vary depending on the phase of the ORE project, but should be weekly during busy periods (e.g. during the construction phase) and include any relevant NtMs;
- publication of 'Awareness Charts and Flyers' to highlight ORE activities (e.g., for the construction of an offshore wind farm)[4];
- implementation of a fisheries liaison working group, specific to an ORE project or a geographic region;
- development of specific fisheries/sea user facing webpages to communicate information on ORE project activities;
- use of national maritime channels of communication, such as the Kingfisher Bulletin, UK Hydrographic Office (UKHO) and radio navigational warnings;
- use of very high frequency (VHF) Channel 16 for brief safety announcements, and a working channel used by local fishers for more detailed information;
- appointment of a commercial fishery advisor to support any complex issues which arise during the ORE project;
- port visits by the CFLO/FIR to establish relationships with local fishers;
- direct engagement by the ORE developer with relevant fishers and stakeholders, such as via regular emails or informal fisheries notice, to provide updates on the ORE project (through the CFLO); and
- update reports from the ORE developer, which should be disseminated to fisheries stakeholders via CFLOs and FIRs.

[4] There are six charts surrounding the UK and localised charts for each constructed wind farm. These are available to download from Downloads | KIS-ORCA. ESCA, via KIS-ORCA, only produce awareness flyers once per annum for active windfarms. Ad-hoc flyers are more often now produced by the ORE developer.

ORE developers may use local fishing vessels (and personnel) in surveys, operations and maintenance activities, and in offshore liaison and guard duties associated with the ORE project. This can be a means of encouraging engagement with fishers and local communities. Fishing vessels must meet the relevant safety and operational standards required by the MCA and the ORE industry in order to undertake any of the above activities. Further information on using local fishing vessels (and personnel) can be found in the Supplementary Information for Chapter 5 (Annex C.1).

If multiple ORE projects are located within the same marine area, share onshore landing points, and/or have similar cable routes, ORE developers are encouraged to establish forums with the fishing industry which include representation from all relevant ORE developers and fisheries stakeholders. This will allow ORE developers to work collaboratively with fishers to seek ways to reduce impacts on fishing activities, and to work together to consider potential ways to minimise or mitigate their cumulative impacts on the affected fishing industry. It will also help to reduce the number of meetings required and reduce stakeholder fatigue.

If ORE projects are located on grounds fished by vessels from other nations, the ORE developer should contact the relevant Advisory Councils, and/or fishing associations of those nations, and include them in the liaison and communication plan.

Marine Coordination Centres or Marine Coordinators should be appointed by the ORE developer to assist with liaison with the fishing industry

The Marine Coordination Centre (MCC), or Marine Coordinator, is employed by the ORE developer to assist with general liaison (and emergency responses) between the ORE developer, contractors, fishers and other third parties. MCCs are usually established during the construction and operational phases of the ORE development.

The MCC will undertake responsibility for communication between parties during the operational phase of an ORE project, however, MCCs will begin liaising with affected fishers during the construction phase.

To support liaison between the fishing industry and ORE project, the MCC (or ORE developer) should:

- provide contact details for MCCs in relevant fisheries liaison plans/strategies and indicate the circumstances under which commercial fishers should get in contact with them;
    - FIRs/CFLOs may assist by ensuring that fishers receive MCC contact details in their preferred format;
- provide fishers with an overview of any works taking place in the ORE project area; and
- notify any ORE-affiliated vessels of fishers' presence in the works area.

If fishers intend to fish within, or in the vicinity of, an ORE project, they should:

- contact the MCC prior to entering the ORE project site (via VHF, mobile phone, email, or other means such as WhatsApp);
- share coordinates of areas/boxes that they will be actively fishing in (and specific coordinates of gear locations, if possible) with the MCC, in order for the MCC to relay this information to ORE-affiliated vessels in, or within the vicinity of, the ORE project site;
- maintain an active watch and use all appropriate navigational tools when available; and
- notify the MCC when their fishing gear locations change within ORE project site.

Tasks for the MCC include the following:

- detect and monitor other marine users within and in proximity to the ORE installation;
- promulgate information on safety zones, safe working distances, localised exclusion areas, and where hazards have been notified;
- communicate with fishing vessels if the construction vessels (or MCC) feel that fishing vessel(s) may be at risk from (or to) the activities;
- obtain and provide localised weather information for vessels associated with the ORE installation to assist in the planning of works;
- maintain a copy of the project and contractor emergency response plans and other key safety documents; and
- issue Local Notifications to local marine users, and notify the UK Hydrographic Office (UKHO) to support issuing of NtMs to keep stakeholders informed of ORE marine operations.

Further details on the roles of Marine Coordination Centres are provided in Chapter 3.

ORE developers and relevant authorities should issue NtMs or Local Notifications containing relevant information and disseminate them through appropriate routes such as KIS-ORCA and Kingfisher

ORE developers can issue Local Notifications to local marine users to inform of an upcoming activity (planned or unplanned) or an unexpected hazard that has been identified. ORE developers can also provide a notification to the UKHO that can decide to issue a Notice to Mariners (NtM) or Radio Navigational Warning to inform sea users of an upcoming activity (planned or unplanned) or an unexpected hazard that has been identified, which may interfere with navigational safety and/or legitimate uses (including fishing) of the sea. Notifications are an integral part of fisheries liaison throughout the lifecycle of an ORE project, with the aim of allowing fishing activity to continue in some capacity, in a safe manner.

ORE developers should initially undertake discussions directly with affected fishers, and when appropriate, issue Local Notifications to officially alert fishers and stakeholders of activities and hazards. ORE developers should also adhere to conditions relating to notifications in their marine licence.

There are different types of notifications, depending on the situation and requirements, but they can be generally categorised as UKHO NtMs, Notices from other authorities, and Local Notifications to local marine users. The principal types of notification are summarised below. More information can be found in the Supplementary Information for Chapter 5 (Annex C.2).

UKHO NtMs

- Radio Navigational Warnings – national radio broadcasts, issued by the UKHO and broadcast via His Majesty's (HM) Coastguard (i.e., MCA), to alert vessels quickly to the presence of navigational hazards.
- Admiralty Notice to Mariners – national NtMs issued by the UKHO on a daily/weekly basis via the internet (or paper copy) to alert vessels to the presence of long-term navigational hazards, works being conducted, or navigationally significant changes to Admiralty Charts and Electronic Navigational Charts (ENCs).

Notices from other authorities

- General Lighthouse Authority (GLA) Notice to Mariners – local NtMs issued by the GLA to alert vessels to the presence of navigational hazards within the GLA's jurisdiction.
- Port Notices – issued by Harbour Authorities to alert vessels of activities and hazards taking place within the Harbour Authority's jurisdiction.

Local Notifications

- Local Notifications – issued by a developer or subcontractor as specified in the marine licence conditions and/or fisheries liaison plan/strategy. Distribution of the notification will depend on whether the activity/hazard is located inside or outside the local Harbour Authority's jurisdiction.

The ORE developer is responsible for submitting an appropriate notification to relevant authorities/organisations (e.g. UKHO, Kingfisher Services of Seafish, Harbour Authorities) who will then issue the required information. It should be noted that national fishers' federations may not disseminate notifications to local fisheries associations or individual fishers; therefore, ORE developers should always use additional dissemination routes. Kingfisher Bulletin and KIS-ORCA[5] provide national notices and information issued by Kingfisher Services of Seafish and The European Subsea Cables Association (ESCA) on offshore marine activities and hazards, including ORE and subsea cables-related activities and infrastructure. These are often used to disseminate information on notifications. For more information on the Kingfisher Bulletin and KIS-ORCA, please refer to the Supplementary Information for Chapter 5 (Annex C.4). Details of suggested organisations, authorities, associations and groups to which local notifications should be sent is provided in the Supplementary Information for Chapter 5 (Annex C.2).

Notification Content

Although authorities and organisations issuing national NtMs commonly have their own template and information requirements, which ORE developers should utilise, FLOWW recommends that, whenever possible, ORE developers (and other relevant parties) adhere to the below information on Local Notification content and notice periods. This will help to standardise Local Notifications, and ensure accurate, informative, and timely dissemination of critical information to sea users.

An example of a suitable Local Notification template is included in the Supplementary Information for Chapter 5 (Annex C.3).

Local Notifications should be concise and contain information on what the upcoming activity (or hazard) is, and when and where it will be taking place. Recommendations on formulating informative notifications are to:

- use a short title which describes the location and main activity (or hazard);
- put the most valuable information at the beginning (e.g., any information pertaining to navigational or fishing safety);
- state positional information in degrees and decimal minutes (DD° MM.MMM) to three decimal places (e.g., 53°45.786'N 000° 07.292'E), using World Geodetic System (WGS) 84 datum;
- use a chart to define the area where the activity will be taking place, or where the hazard is located;
- describe briefly the type of works to be undertaken, including whether equipment is to be left on the seabed and where buoys are moored;
- include appropriate dates, or a timescale of activities;
- state whether the proposed works will be 24 hours a day, and if not, the proposed working patterns;
- state the name and general details of vessel(s) engaged with the works (including the call sign, a VHF working channel, telephone number, and photograph of the vessels(s));
- include information on light sequences on anchor buoys, if works will be taking place during darkness;
- state contact details for the ORE development company representative, FIR, or CFLO; and
- provide 24/7 emergency contact details.

[5] Kingfisher Information Services Offshore Renewable & Cables Awareness provides positional data and information for fishers (and mariners) on 'assets' of subsea cables and renewable energy industries in UK and European waters.

Notifications about hazards and navigational safety, including recommendations for temporary exclusion from specified locations, should include the following wording:

> *"mariners are requested to remain [a specified distance away] from [reference location/activity/vessel, give safety reason and end date etc.]".*

Updates of Existing Notifications

Notifications should be updated when there is notable change to the proposed activity (e.g., change of vessel, alteration to start or end date of the activity). The updated notification should either use the same title as the previous notification or reference it within the contained information. However, it is recommended that if a campaign or activity is delayed by more than 30 days, an entirely new notification is issued.

With regards to the Kingfisher Bulletin, it is specifically advised that updates are made to the existing notification. ORE developers can easily make changes and update their Kingfisher Bulletin notice which allows the ORE developer and Kingfisher Services of Seafish to keep a full record of changes to the notification, and to revert to a previous version (if required). Furthermore, fisheries stakeholders will have the same web address for the lifetime of a notification.

A notification should also be issued to inform sea users of the close-out report on removed/resolved navigational hazards and other safety issues.

When issuing notifications, as much notice should be given as possible, and this should be in line with the recommended minimum notice periods

For ORE project-related activities (both planed and unplanned), FLOWW recommends the minimum notice periods for issuing notifications prior to an activity taking place as shown in Table 2.

Table 2. Recommended minimum notice periods for notifications

Activity	Recommended minimum notice period
Pre-installation surveys	14 days
Construction campaigns	14 days
Fishing gear clearance	14 days
Major maintenance[6]	14 days
Emergency (unplanned) works	0–24 hours

Longer notice periods may be required in ORE development areas which interact with static gear[7] fisheries, and in seasons of inclement weather, in order to provide fishers with sufficient time to remove their fishing gear. Direct liaison with affected fishers, prior to issuing a notification, is also recommended.

It is noted in some instances the notice periods in Table 2 are not possible for aspects such as navigational hazards, as well as unplanned and emergency activities. All reasonable effort should be made to ensure the notification is widely distributed with as much notice as possible. Additional dissemination methods should also be employed, if deemed necessary.

[6] Major maintenance works are defined as 'works relating to any renewable energy installation which has become operational, requiring the attachment to, or anchoring next to, such an installation of a self-elevating platform, jack-up barge, crane barge or other maintenance vessel' (The Electricity (Offshore Generating Stations) (Safety Zones) (Application Procedures and Control of Access) Regulations 2007, available at www.legislation.gov.uk/uksi/2007/1948/made, accessed May 2025).

[7] Fishing gear that is set in the water to wait for fish to swim into it or attract fish to it using bait.

In the case of alerting of hazards, ORE developers should inform fishers directly as soon as possible; and submit notifications to the MCA, UKHO and Kingfisher Information Services of Seafish (for publication in the Kingfisher Bulletin).

If Safety Zones are implemented, these must be well communicated by ORE developers and must be adhered to by the fishing industry; in addition, advised safe working distances should be adhered to

Safety zones are implemented to safeguard all users of the marine environment, and when granted, legally prohibit activities within waters around or adjacent to a renewable energy installation. Safety zones can be established around surface-piercing wind farm structures (including wind turbines and offshore substation platforms) at any phase of an ORE project; the type and size of which will depend on the activity taking place. With regards to offshore wind farms (OWFs), there are two principal types of safety zone[8]:

- Safety zones with a radius of 500 m measured from the outer edge at sea level of the proposed or existing renewable energy installation during its ongoing construction, extension or decommissioning, and major maintenance works in respect of such an installation. These are typically applied whilst work is underway at the structure, as indicated by the presence of construction, maintenance or decommissioning vessels.
- Safety zones with a radius of 50 m measured from the outer edge at sea level of the proposed or existing renewable energy installation during proposed or ongoing operation. 50 m safety zones are also typically applied during the construction phase around any partially completed or constructed wind turbine or offshore substation prior to final commissioning. This is separate to the advised safe working distances during the operational phase.

Further information on safety zones can be found in the Supplementary Information for Chapter 5 (Annex C.4).

Safety zones during operation and maintenance (routine operations) are not typically applied for or granted, however, advised safe working distances will be in place during operation. The fishing industry should use best endeavours to ensure their gear markers and vessels do not impede access to ORE installations and that safe working distance requests are adhered to.

ORE developers should, where practicable, communicate and discuss plans for safety zones with fisheries stakeholders during the pre-consent and pre-construction stages of an ORE project as shown in Figure 1. Such liaison should involve voluntary consultations led by the CFLO.

During the development, construction, operation and decommissioning of an ORE project, ORE developers should:

- discuss their proposed application of safety zones with fisheries stakeholders;
- detail the navigational safety case for any anticipated safety zone applications as part of the post-consent phase;
- apply to the relevant authority for safety zones with as much advance notice of planned activities, as possible;
- make fishers aware of the consultation stage of the safety zone application;
- make fishers aware of approved safety zones, with as much advance warning as possible, via frequent notifications and other dissemination methods (e.g., the Kingfisher Bulletin and VHF radio broadcasts);

[8] The Electricity (Offshore Generating Stations) (Safety Zones) (Application Procedures and Control of Access) Regulations 2007.

- ensure notifications clearly state whether it is a statutory safety zone or an advised safe working distance, and the distance/area it covers and how long it is in place for;
- provide details on the work being carried out during construction, major maintenance or other activity, via notifications and weekly reports/notices. Details should include information on the vessels engaged in the work and the corresponding statutory safety zones in place;
- provide vessel masters undertaking guard duties with clear guidance on their roles and responsibilities (particularly with regards to monitoring of statutory safety zones); and
- ensure the role of OFLOs is clearly defined and their carriage on guard vessels noted.

To support the safety of fishing vessels and appropriate application of safety zones, fisheries stakeholders should:

- engage with ORE developers on the application of statutory safety zones, should the opportunity arise;
- respond to statutory consultations on safety zones, if deemed necessary;
- abide with safety zones and advised safe working distances; and
- keep up to date on the publication of notifications, which will detail approved safety zones and advised safe working distances.

Fishers have an obligation to report any collision with ORE infrastructure to the Marine Accident and Investigation Branch (MAIB) as soon as practicable (MGN 564 (M+ F) Marine Casualty and Marine Incident Reporting). The ORE developer should also be notified at the earliest opportunity via the CFLO, FIR or MCC.

Fishers (and/or fishing industry representatives) should proactively engage with the ORE developer and, to the best of their ability, monitor and keep up to date with issued notifications and associated data files

The fishing industry has a responsibility to liaise with ORE developers and to monitor notifications for their own safety and to prevent damage to ORE assets.

Fishers and fishing industry representatives should also facilitate engagement with the ORE developer by:

- engaging with the CFLO and communicating why they may be affected by the ORE project, and providing data to support this; and
- attending meetings and events organised by the ORE developers, when invited to do so as notified by CFLOs.

6 Subsea Cables

This chapter provides information on fisheries liaison specific to subsea cable design, routing, installation, redundancy, surveys, monitoring, and resumption of fishing. This chapter addresses intricacies particular to subsea cables, although recommendations from other chapters may also apply to subsea cables.

In the construction and operational phases, ORE developers, asset owners and the fishing industry all have a responsibility to minimise and practically manage:

- interactions that could arise between subsea cables and fisheries; and
- safety of life and vessels and asset integrity risks.

ESCA, International Cable Protection Committee (ICPC) and KIS-ORCA produce useful information, guidance and recommendations on all aspects of subsea cables, including specific guidance for fisheries liaison. Please refer to their individual websites for further information.

Key Recommendations

- Early and continuous engagement between ORE developers and the fishing industry is important, including prior to the detailed cable route design stage.
- Cables should be buried to depths that manage risks to cable integrity and to other sea users. Where cables are not buried, options for physical external cable protection measures in line with industry guidelines, should be discussed with the fishing industry.
- Information on any subsea cable activities (pre-installation), or positional information (post-installation) should be widely communicated, with sufficient detail, to inform safe fishing activities in the vicinity of subsea cables.
- ORE developers and fishers should liaise on the management of redundant or out-of-service cables.
- After cable installation, fishers should monitor notifications issued for the areas they fish in, and keep on-board navigation aids up-to-date with the latest files and information; ORE developers should ensure that timely and satisfactory notifications are issued.
- Post-installation and monitoring surveys of subsea cables should be discussed with the fishing industry and their views should be taken into account. In the event of identification of a subsea cable hazard, ORE developers and asset owners should respond in a timely manner and seek resolution.
- In the event of a cable snagging event, fishers must follow emergency protocols.

Early and continuous engagement between ORE developers and the fishing industry is important, including prior to the detailed cable route design stage

Fisheries liaison, in combination with physical investigation and assessment, is key during the planning and licensing of subsea cable routes. Effective fishing liaison will help ORE developers to identify constraints and risks associated with various subsea cable route options, and ultimately support cable route studies, surveys and licence applications. The use of non-disclosure agreements (NDAs) may support confidence in sharing and discussing sensitive information.

Opportunities for consultation may vary throughout a project lifecycle and differ between projects. Early engagement with the fishing industry at a local level and via national bodies is mutually beneficial in ensuring fishing stakeholders are informed, and also in ensuring knowledgeable fishers can provide input on the local area and seabed conditions. Options for very early engagement should be discussed with the local fishing community as they may prefer route options to be developed prior to engagement to guide discussion and input.

To ensure effective fisheries liaison, the following recommendations should be adhered to.

ORE developers and asset owners should:

- engage with fishers throughout the process and state what their expectations are on fishing activities resuming following cable installation (e.g. as stated in EIA reports):
- use a variety of engagement methods as appropriate (see Chapter 5 for more information);
- consider fisheries data when identifying subsea cable route options and in the subsequent route selection process;
- undertake liaison before the final route selection, but once some cable route options have been developed;
- share charts of potential cable route options with fisheries stakeholders at the appropriate early stage in project planning;
- liaise with the fishing industry to identify constraints and risks to fishing activities associated with different cable route options;
- maintain regular liaison after factoring in the other hard constraints to cable route options, and keep the fishing industry up to date on the ORE developer's decision-making as there could be reasons that fishing activity is or is not considered the major routing factor in a particular area;
- inform fisheries stakeholders of planned cable route surveys (e.g. share survey methodologies and schedules, and issue Local Notifications); and
- inform fisheries stakeholders of any consultation opportunities as part of the marine licensing process.

The fishing industry should:

- actively engage with ORE developers;
- provide best available fishing data (and/or data summaries) for ORE developers to assess risks to the fishing industry, to facilitate constraints mapping, inform cable route studies, and identify potential subsea cable routes. If fisheries data need to be requested from government, sufficient time should be allowed for this. Data provision may be delayed if a marine licence application associated with the development is being reviewed by the competent authority during which time data cannot be shared. In this case, data summaries should be shared as soon as possible;
- provide information on their specific fishing activities (e.g. seasonality, gear types);
- impart local knowledge on the nature of the seabed (including influencing factors such as migrating sand-waves). This can help to inform cable route studies and support cable route selection;
- avoid any obstruction of survey and cable lay operations;
- clearly mark static fishing gear, using easily visible buoys and with Port Letter Number (PLN), or other identifier;
- communicate proactively with offshore personnel, informing them of fishing gear locations within cable asset areas so that they can make best endeavours to work around fishing gear; and
- engage with any consultation opportunities.

Cables should be buried to depths that manage risks to cable integrity and to other sea users. Where cables are not buried, options for physical external cable protection measures should be discussed with the fishing industry

When considering cable protection methods, an understanding of the fishing methods and activities operating in the vicinity of cable routes is necessary to assess risk as part of determining sufficient burial (and the choice of burial techniques) or cable protection methods.

Cable protection may be needed in scenarios such as when target burial depth has not been achieved according to the design intent, reburial options are not possible, and when remedial work is required to protect or stabilise cables and associated equipment which may be at risk of natural exposure or stress. When remedial work is required to address hazards, fishers prefer cable re-burial, rather than deployment of external protection measures, but recognise that it is not always possible or practical.

Fisheries liaison involves the following recommendations.

ORE developers and asset owners should:

- follow the mitigation hierarchy of avoid, minimise, mitigate – including considerations relating to cable burial;
- liaise with the fishing industry to gain insight into the fishing activities taking place in the area of interest;
- liaise with the fishing industry in the development of cable burial plans and associated cable burial risk assessments (CBRAs); discussing results of cable burial feasibility studies can support such liaison; and
- discuss cable protection options with the fishing industry in order to inform the CBRA and potential impacts on fishing activities (during the planning and licensing process):
    - ORE developers would like fishers to state their preferred type of cable protection. The type of cable protection and design will have different implications depending on site conditions, the type of fishing activity and size of vessels operating in the area.

The choice of protection measures should be informed by a range of factors including engineering feasibilities, site environmental conditions, fishing types and patterns, and other navigation considerations accounted for in risk and impact assessments. The potential impacts of protection measures on fishing activities should be considered, and minimised as far as reasonably possible, while ensuring effective cable protection. Liaison with the fishing industry should inform this. The type and design of protection will have different implications depending on the type of fishing activity and size of vessels operating in the area.

Potential protection measures include concrete mattresses, anti-scour frond mattresses and rock berms. Bevelled elements on the periphery of concrete mattresses create a lower profile and help minimise snagging risks. Fronds on the edge of mattresses may help to reduce scouring and subsequent exposure of mattresses. Rock size and placement method for rock berms should be discussed with fisheries stakeholders to minimise snagging risks; large rocks risk capture in trawl nets, which will remove the rock protection and damage the trawl net and catch, and rock protection methods are incompatible with scallop dredge gear operation.

Operational protocols for cable remediation works should be in place as part of any fisheries liaison and communication plan. This should include arrangements for fishing gear relocation and works notification periods. Protocols should be activated once it has been determined remedial works are required. Appropriate separation distances should be maintained when navigating or deploying/operating fishing gear in the vicinity of vessels when engaged in remedial works in line with the COLREGs (Convention on the International Regulations for Preventing Collisions at Sea, 1972).

Where remedial measures are implemented, ORE developers and asset owners should:

- activate communication protocols for remedial works, as stated in fisheries liaison and communication plans; and
- upon completion of remedial works, submit any changes to 'as-laid' subsea cables (including repair, reroute, known movement, new survey data, additional cable protection) to:
    - UKHO;
    - Kingfisher Services of Seafish (verbal note of change);
    - KIS-ORCA (information on additionally installed subsea cable protection measures) (spatial data).

The fishing industry should ensure it is informed of the latest information, as detailed in the next recommendation.

Information on any subsea cable-related activities (pre-installation), or positional information (post-installation) should be widely communicated, with sufficient detail, to inform safe fishing activities in the vicinity of subsea cables

Appropriate liaison, engagement and communication of the best available information between sectors will keep risks associated with subsea cables to a practical minimum. This includes both risks to cable integrity, and risks to the fishing industry.

In the UK, it is not illegal to fish over subsea cables, however, it is an offence to damage a subsea cable either wilfully or through culpable negligence (see Supplementary Information for Chapter 6, Annex D.1). A collaborative approach between sectors is more likely to limit fishing gear snagging incidents and cable damage, compared with precluding access to established fishing grounds and the threat of harsh civil or criminal proceedings.

When provided with sufficient data and information, fishers are able to make their own informed decisions on the risks (to their vessel, personnel and the integrity of any seabed assets) associated with fishing in the vicinity of subsea cables. Fishers can decide on a case-by-case scenario if fishing in the vicinity of subsea cables is an 'as low as reasonably practicable risk' (ALARP) and should take decisions in line with their responsibilities under SOLAS 1974.

ORE developers and asset owners should:

- inform fishers (with as much information and notice as possible) of planned works – this will allow fishers to remove fishing gear from affected areas and make alternative fishing arrangements;
- submit Local Notifications to the relevant authorities and organisations (e.g. UKHO, MCA) and disseminate directly to local marine users and Kingfisher Services of Seafish prior to any cable works commencing;
- liaise with fishers at sea during cable works (if required);
- consider deploying guard vessels (if deemed appropriate);
- cancel active notifications (or issue updated notifications) once works are complete;
- submit 'as-laid' positions of all subsea cables to UKHO (to update Admiralty charts);
- ensure subsea cable awareness by submitting all cable data to KIS-ORCA[9] and Kingfisher Services of Seafish (further information on KIS-ORCA and Kingfisher Bulletin can be found in the Supplementary Information for Chapter 5, Annex C.4), including information on subsea cable locations and hazards (e.g., cable exposures/spans);

[9] KIS-ORCA (no date). Homepage. Available at kis-orca.org [Accessed March 2025].

- disseminate cable awareness information to fisheries stakeholders (e.g. via a cable awareness chart showing as-laid position of cables);
- share information with fishers on exposed sections of cable that remain unburied or unprotected during installation that could present a hazard;
- share cable protection locations with the fishing industry directly in a user-friendly (i.e. plotter) format, if possible; and
- ensure prompt notification of subsea cable hazards and snagging risks.

The fishing industry (and individual fishers) should:

- make themselves aware of cable locations, safe and responsible practices, as set out in Marine Guidance Note (MGN) 661 (M+F) - Navigation - safe and responsible anchoring and fishing practices;
- ensure awareness of notified subsea cable-related activities, risks and hazards (e.g. via Local Notifications);
- maintain appropriate separation distances when navigating, operating or deploying fishing gear in the vicinity of vessels engaged in cable installation works (which have restricted ability to manoeuvre (RAM) status as defined under COLREGs Rule 3);
- ensure electronic plotters or navigation systems, which are compatible with Kingfisher Services of Seafish and KIS-ORCA data files, are up to date with the latest files and information; and
- conduct fishing activities in a responsible manner in the vicinity of subsea cables to avoid identified hazards and limit the potential for snagging incidents, as far as reasonably practical – activities should be based on data and information provided by ORE developers and asset owners.

A template for Local Notifications is provided in Supplementary Information Supplementary Information for Chapter 5 (Annex C.3).

ORE developers and fishers should liaise on the management of redundant or out-of-service cables

As part of the installation of new cables, it may be necessary to remove sections of redundant or out of service cables that cross the route of new cables. These redundant or out-of-service cables include non-ORE cables such as telecoms and power cables. Fisheries liaison is important to determine the potential impacts of cable cutting (and clump weights) on fishing activities. The following recommendations should be adhered to.

ORE developers and asset owners should:

- liaise with the fishing industry to understand the risks imposed by cable cut ends and clump weights to select an appropriate method of weighting or making safe cable ends;
- seek to use low-profile weights on cut cable ends:
    - the impact of clumps weights on fishing activities will depend on the type of clump weight, and the type of fishing method; and
- submit a Local Notification stating the locations of cable cut ends, and/or the location and type of clump weights to the Kingfisher Services of Seafish and to UKHO.

Clump weight information can also be submitted to KIS-ORCA as an ‘object classification’ of ‘subsurface’ and ‘object subclassification’ is ‘clump weight’.

The fishing industry should:

- discuss their preferred type of clump weight with ORE developers at the earliest opportunity;
- monitor notifications issued for the areas they fish in; and
- ensure electronic plotters or navigation systems, which are compatible with Kingfisher Services of Seafish and KIS-ORCA data files, are up to date with the latest files and information.

Further information on the management of out-of-service cables is provided by the International Cable Protection Committee (ICPC). Please refer to ICPC Recommendation #1 on the Recovery and Management of Out of Service Cables.

After cable installation, fishers should monitor notifications issued for the areas they fish in, and keep on-board navigation aids up to date with the latest files and information; ORE developers should ensure that timely and satisfactory notifications are issued

ORE developers and asset owners have a responsibility to minimise impacts on other marine users, however, it cannot be guaranteed or assumed that any length of cable will always remain sufficiently buried or protected and therefore be safe to fish over. Extreme caution should therefore be exercised when fishing in the vicinity of subsea cables. There is never a guarantee that a cable is 'safe' to fish over. Fishers should ensure they are informed of the most up to date information and decide on a case-by-case scenario if fishing in the vicinity of subsea cables is an 'as low as reasonably practicable risk' (ALARP).

Representative bodies of the subsea cables and fishing industries take different views on fishing in the vicinity of subsea cables. Industry position statements are provided in the Supplementary Information for Chapter 6 (Annex D.2). These statements are without prejudice to the individual views of other members of FLOWW.

ORE developers and asset owners should:

- share accessible and informative survey data summaries and/or latest data suites with fishers who are active in the vicinity of a given subsea cable, in a timely manner, so they can make informed decisions on the resumption of fishing, in accordance with the ALARP principle;
- communicate survey data summaries (in an easy-to-understand format) with fishers via CFLOs;
- issue notifications for any cable-related hazards identified; and
- promote cable awareness, e.g., via cable awareness charts showing as-laid positions of cables and hazards, and via KIS-ORCA to provide cable data in a plotter format to the fishing industry.

Agreements may be made between individual ORE developers and relevant fishers regarding the type and amount of information which will be shared by the ORE developer.

The fishing industry should:

- ensure understanding and awareness of the legislation and safety advice relevant to fishing over subsea cables (see Supplementary Information for Chapter 6 in Annex D.1), and make themselves aware of cable locations, safe and responsible practices, as set out in MGN 661 (M+F) - Navigation - safe and responsible anchoring and fishing practices;
- monitor notifications issued for the areas they fish in;
- ensure electronic plotters or navigation systems, which are compatible with Kingfisher Services of Seafish and KIS-ORCA data files, are up to date with the latest files and information;

- conduct fishing activities in a responsible manner in the vicinity of subsea cables to avoid identified hazards and limit the potential for snagging incidents, as far as reasonably practical – activities should be based on data and information provided by ORE developers and asset owners; and
- maintain an active watch and use all appropriate navigation tools when available.

In the event of a subsea cable snagging incident, there are emergency protocols to be followed to avoid jeopardising the safety of the crew and vessel. They include a protocol on the active liaison steps required to communicate with the coastguard and cable owner. These are published on the ESCA website and KIS-ORCA website.

Post-installation and monitoring surveys of subsea cables should be discussed with the fishing industry and their views should be taken into account. In the event of identification of a subsea cable hazard, ORE developers should respond in a timely manner and seek resolution

Post-installation survey and ongoing monitoring of subsea cables and associated seabed hazards should be determined via robust, site-specific risk assessments and the approach should be discussed with the fishing industry and their views taken into account. These surveys serve to confirm successful cable burial, installation of protection measures, and the absence of unaccounted for seabed hazards. They are also vital for identifying potential risks posed by environmental changes over time, such as seabed mobility, scour, or migrating sand waves.

Surveys may include bathymetric, video, multi-beam sonar surveys, and/or fishing gear trials (e.g. over-trawl surveys)[10], and should be tailored to local conditions and informed by liaison with fisheries stakeholders and cable burial risk assessments.

ORE developers and asset owners should:

- engage with the fishing industry in advance of planned surveys (e.g. via CFLOs);
- issue notifications for planned surveys; and
- share relevant information, for example accessible summaries of survey information within three months.

It should be made clear in the survey data summaries that the survey results are from a specified point in time. They do not provide a guarantee or verification that a cable is safe to fish over, and do not guarantee that the status of the cable will not change in the future. Therefore, for the purpose of not increasing risks to fishing activities or subsequent liability, the results should not be used as a proxy to declare that fishing over a section of subsea cable is 'safe'. Fishers should still undertake their own risk assessment to determine whether the risks of fishing in the vicinity of cables are ALARP.

Monitoring frequency should be responsive to observed environmental conditions and revised accordingly. In the event of a hazard (e.g. exposed or shallow cables, spans), a timely response must be initiated.

[10] Note: European Subsea Cables Association does not support the use of post-installation over-trawl surveys as verifications of safety. Their position statement can be accessed at www.escaeu.org/download/?Id=490# [Accessed March 2025].

ORE developers and asset owners should:

- submit a Local Notification to Kingfisher Services of Seafish of any hazards identified during surveys;
- notify fisheries stakeholders directly of any identified hazards (e.g., cable exposures or seabed hazards, i.e., locations of large boulders that were moved during cable installation);
- submit any changes to cable positions to KIS-ORCA (spatial data) and alert Kingfisher for verbal notice;
- follow communication protocols stated in fisheries liaison and communication plans and marine licences;
- submit a Local Notification on the subsea cable hazard as soon as reasonably practicable after identification (but where possible, within 72 hours of identification), recognising the need for urgency in the interests of fishers where such hazards pose a material increase in risk. The notification should:
    - distinguish between nominally buried subsea cables, cable exposures, and cable spans;
    - identify the coordinates of the subsea cable hazard;
    - be submitted to Kingfisher Services of Seafish; and
    - be issued according to any other related marine licence conditions;
- issue radio warnings to fishers, if the notification has not yet been issued and there is immediate risk of danger;
- consult with the MCA and the relevant General Lighthouse Authority to determine how best to protect the subsea cable and, where appropriate, provide additional safety protection until the remediation works are complete:
    - deployment of a guard vessel(s) and/or marker buoys may be considered necessary;
    - the need for a guard vessel(s) may depend on the timeframe taken to distribute an effective notification;
- continue communicating with the fishing industry until the risk posed has been addressed:
    - ORE developers/CFLOs should distribute the information accordingly, and should not assume that national fishing federations will do this;
    - CFLOs and FIRs should support, and advise on, communication with affected fishers; and
- submit a Local Notification to relevant authorities to confirm when the increased subsea cable risk has been addressed.

The fishing industry should:

- inform relevant parties (including ORE developers and asset owners) of potential subsea cable hazards encountered (including changes to the seabed);
- monitor notifications issued for the areas they fish in; and
- ensure electronic plotters or navigation systems, which are compatible with Kingfisher Services of Seafish and KIS-ORCA data files, are up to date with the latest files and information.

Effective and timely cooperation between ORE developers and the fishing industry is essential to minimise risks, manage liabilities, and enable safe co-existence at sea.

Further information on the recommended content of a Local Notification for cable exposures can be found the Supplementary Information for Chapter 6 (Annex D.3).

In the event of a cable snagging event, fishers must follow emergency protocols

In the event of a suspected interaction/snagging between fishing gear and subsea cables, there are emergency protocols to be followed to avoid jeopardising the safety of the crew and vessel. ESCA and KIS-ORCA offer guidance and emergency protocols, which can be found on their websites[11,12]. They include a protocol on the active liaison steps required to communicate with the coastguard and cable owner. The KIS-ORCA website also contains a list of emergency contact telephone numbers (manned 24 hours a day, 7 days a week) for offshore wind farms and subsea cable owners.

In summary, in the event of snagging incident, fishers should:

- NOT endanger the vessel and crew by attempting to recover the fishing gear;
- plot the fishing vessel's position as accurately as possible;
- advise HM Coastguard of the situation or call the 24-hour emergency number associated with the cable/structure and state that there is an incident concerning a subsea cable/OREI structure; and
- upon return to port, inform:
    - the relevant CFLO and FIR;
    - local fishery officers; and
    - other fishers.

The ESCA Fishing Liaison Best Practices – Linear Subsea Cables (Telecommunications and Power) document further details emergency protocols for reference.

Further information on fishing gear damage/loss is provided in section 7.2.

[11] ESCA (no date). Emergency Procedures. Available at: www.escaeu.org/emergency-procedures [Accessed March 2025].

[12] KIS-ORCA (no date). Emergency Procedures. Available at: kis-orca.org/safety/emergency-procedures [Accessed March 2025].

7 Disruption Settlements, Protocols for Lost/Damaged Gear, and Fisheries Community Funds

This chapter focuses on the direct impact of ORE projects on active commercial fishers, specific to fixed foundation turbines. Secondary or tertiary impacts (i.e., on markets, processing and supply chain businesses) are beyond the scope of this guidance. Since it is currently assumed that fishing can resume within fixed ORE sites after the construction of ORE installations, this guidance relates only to temporary disruption scenarios which may affect the fishing industry.

For the purposes of this guidance, a disruption settlement is defined as an agreement for monetary payment for demonstrable temporary loss of fishery access, or economic disadvantage, caused directly to active commercial fishing vessels by disturbance or displacement by activities associated with ORE projects.

It is not within FLOWW's remit to provide prescriptive advice on how disruption settlements are calculated, however, an example has been provided on how to calculate monetary losses incurred by fishers as a result of ORE activities. FLOWW has no role or responsibility in arbitrating or settling claims.

Effective fisheries liaison is an integral part of managing disruption settlements. In some instances, proactive engagement between the fishing industry and ORE developer can remove the need for disruption settlements. However, when settlements are deemed necessary, CFLOs and FIRs play a pivotal role in facilitating communication, and hence reaching an agreement, between the two sectors.

Key Recommendations

- Where there are residual impacts on fisheries from activities associated with ORE projects that cannot be avoided, minimised or addressed as part of embedded mitigation, disruption settlements may be agreed between the ORE developer and affected fishers to compensate for losses incurred.
- Disruption settlements may be considered for disruption to fishing activities where losses are incurred.
- Disruption settlements should reflect an individual's economic dependency on the area and be based upon evidence, to ensure accurate claims and fair settlements. Evidence requirements should be proportionate and take into account practicalities associated with providing such evidence.
- Fishers should quickly report loss of, or damage to, fishing gear (due to encounters with ORE installations) through appropriate channels, and the ORE developer should establish a clear process for claims for reimbursement.
- ORE developers should consider and discuss the need for and potential benefit of establishing a Fisheries Community Fund.

7.1 Disruption Settlements

Where there are residual impacts on fisheries from activities associated with ORE projects that cannot be avoided, minimised or addressed as part of embedded mitigation, disruption settlements may be agreed between the ORE developer and affected fishers to compensate for losses incurred

As part of the planning and development phases of an ORE project, disruption to fishing activities should be considered in accordance with the mitigation hierarchy, and therefore avoided, minimised or addressed as part of embedded mitigation, as far as possible. However, some disruption to fishing activities may still occur. Settlements to compensate for losses incurred should be agreed between the ORE developer and affected fishers prior to the relevant ORE project work commencing. Settlements are commonly monetary payments that reflect loss of earnings and should be based on evidence of economic dependency to ensure fairness.

ORE projects may disrupt fishing activities (via the temporary loss of fishing grounds) during surveys and construction of ORE installations, or via a longer-term loss of fishing grounds. During the operation and maintenance phase of an ORE project, interactions between fishing and ORE infrastructure (and associated activities) are managed via fisheries liaison and communication plans, which typically remove the requirement for disruption settlements.

In the UK, there is no legal basis, or current marine licensing or consenting process, for financial settlement associated with the loss of access to fishing grounds, disruption or displacement[13] of fishing activities resulting from ORE projects. However, financial settlements are recognised as a potential area of concern by both industries, and one which may require discussion and an agreed resolution between the parties. Financial compensation for loss of, or damage to, fishing gear in order to avoid injuring a submarine cable is covered by the Submarine Telegraph Act 1885[14].

Disruption settlements may be considered for disruption to fishing activities where losses are incurred

Fishers should not be economically advantaged or disadvantaged by activities associated with ORE projects. Therefore, the aim of any disruption settlement is to ensure fair payment to those fishers which have incurred losses through the principle of no betterment. Settlements should reflect the losses incurred by fishers due to disruptions to their 'business as usual' fishing practices. Where ORE projects are working simultaneously within an overlapping geographic boundary, ORE projects should work together in order to ensure any payments meet the principle of no betterment.

Disruption settlements are commonly used where a requirement to remove static fishing gear from an ORE site has the potential to cause a significant impact. Mobile fishing gear[15] may be considered for disruption settlements where a significant residual impact is identified and evidenced – when an EIA identifies a significant impact (outwith statutory safety zones) which cannot be sufficiently mitigated via other measures.

Disruption settlements should ideally be agreed with individual fishers; however, under some circumstances, it may be with groups of fishers (or vessel owners) or local fisheries associations. Where there is a group or association arrangement, it should be transparent and ensure appropriate payments reach the individual fishers affected.

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13 The relocation of fishing activity (i.e. pressure or effort) into another area as a result of restricted access to or closure of an area (Scottish Government, 2022. Good practice guidance for assessing fisheries displacement by other licensed marine activities). Available at www.gov.scot/publications/good-practice-guidance-assessing-fisheries-displacement-licensed-marine-activities/ [Accessed May 2025]).

14 Submarine Telegraph Act 1885. Available at: www.legislation.gov.uk/ukpga/Vict/48-49/49 [Accessed March 2025].

15 Fishing gear that is moved through the water to catch fish and shellfish.

Principles and considerations to support fair disruption settlements are as follows:

- **Negotiating mandate**: The parties involved in the process should have the mandate to speak on behalf of the affected stakeholders they represent. Care should be taken to ensure that all relevant stakeholders are involved in the process.
- **Transparency**: Whilst accepting the need for commercial confidentiality, an agreed and transparent approach is important. The following may support this:
    - development of terms of reference;
    - providing meeting minutes;
    - defining terms of any final settlement.
- **Evidence-based**: Monetary settlements should be based upon evidence to demonstrate losses incurred. Evidence requirements should be proportionate and consider practicalities associated with providing evidence.
- **Honour settlements**: Settlements should be enduring and transferable (i.e., if an ORE developer sells or transfers a project to a third party), and be implemented in a timely manner. They should also apply, where relevant, to bodies responsible for different ORE project assets e.g. in the case where there is a separate owner of the ORE installation and the transmission cable infrastructure.

A tailored monetary value for individual fishing vessels should be sought. If it is not possible to calculate monetary values for individual vessels, the value of an affected area can be based on International Council for the Exploration of the Sea (ICES) rectangle landing data, apportioned according to area, time period and vessels involved.

An example disruption payment calculation is provided in the Supplementary Information for Chapter 7 (Annex E).

If evidence has been provided by fishers and an offer has been made by the ORE developer, but a mutually agreed settlement cannot be reached, alternative dispute resolution (ADR) should be sought prior to any legal action. The ADR can be instigated by either party but should be undertaken by a qualified neutral third party that both parties agree to.

Disruption settlements should be based upon evidence, to ensure accurate claims and fair settlements. Evidence requirements should be proportionate, and take into account practicalities associated with providing such evidence.

Appropriate levels of evidence for disruption settlements should be agreed. Affected fishers must provide evidence to support their claim and specifically demonstrate recent historic economic dependency on the area, relating to the past three years. A minimum of three years of evidence of historic economic dependency should be considered. Disruption settlements should be made against income generated from direct fishing effort only.

GDPR requirements must be complied with. In particular, fishing data that has been provided for a specific ORE project cannot be used for the purposes of another ORE project, or transferred to another ORE developer, unless there is a data sharing agreement in place that explicitly gives consent for this.

Examples of evidence types are provided below. Other evidence sources may also be appropriate, and different sources can be used to cross-validate information. Evidence requirements may be adjusted on a case-by-case basis, where agreed by both parties.

Types of evidence to support disruption settlements include:

- certificate of registry for the vessel;
- valid MCA Fishing Vessel Certificate, or equivalent;
- fishing licences and entitlements;
- permits associated with byelaws, e.g., Inshore Fisheries Conservation Authority (IFCA) shellfish permits;
- spatial information showing the vessel's historic fishing activity – Vessel Monitoring System (VMS), inshore VMS (iVMS) and Automatic Information System (AIS) are preferred sources as they are considered the most robust data sources. Where these are not available, Global Positioning System (GPS) plotter records may support the case for historic activity, and may include physical examination of a vessel's plotter;
- financial accounts for the past three years, specific to the fishing aspects of their business(es);
- evidence, or examples of, sales notes where available for an agreed time period, and linked to the area under consideration; and
- fishing vessel activity and/or fisheries landings data held by fisheries authorities (Note: due to General Data Protection Regulation (GDPR), a declaration is needed for individual vessel records to be released).

The following could also be taken into account, where appropriate, for considering the monetary value of any disruption settlement:

- period of impact, taking into account seasonality, intensity, and historic patterns, of fishing activity in the area under consideration (i.e. is the impact taking place within peak fishing season, whereby an average monthly landings value would not be appropriate);
- proportion of the ORE area which is unable to be fished;
- importance of the ORE area to affected fishers;
- accessibility and availability of other similar fishing grounds; and
- additional costs, e.g. for gear relocation or removal.

7.2 Fishing Gear Damage/Loss

Fishers should quickly report loss of, or damage to, fishing gear (due to encounters with ORE installations) through appropriate channels, and the ORE developer should establish a clear process for claims for reimbursement

Effective liaison between the ORE developer and fishers, throughout the ORE project lifecycle, will help to minimise the potential for detrimental interactions with ORE installations. However, in the event of fishing gear being lost or damaged due to encounters with ORE installations or associated activities, fishers should:

- follow the emergency protocols available from KIS-ORCA, report the incident to the local Coastguard and ensure the vessel and crew are safe;
- report gear loss/damage to the asset owner:
    - this should be through the Marine Coordination Centre or an alternative contact (e.g. emergency contacts from the Local Notification, or contacts detailed in the fisheries liaison strategy);
- report the incident to the CFLO, giving an accurate position of the vessel and/or lost gear; and
- report the incident to UK fisheries authorities using the lost gear declaration (GLS) (if using electronic logbook reporting), or to the UK Fisheries Monitoring Centre.

If fishing gear has been snagged on a cable and sacrificed for safety reasons or to avoid damage to the cable, a claim for reimbursement for the gear can be submitted to the company believed to be the owner or operator of the cable involved (see ESCA Guideline 01 – Appendix 03 – Fishing Claims forms & Guidance Notes[16]). See also Chapter 6 Subsea Cables.

The ORE developer should establish a clear process and communication protocol for fishers to submit claims for loss of, or damage to, fishing gear. If there are specific requirements agreed for the area, these should be adhered to.[17] The process should involve the following:

- the ORE developer to provide fishers with appropriate claim forms and evidence requirements;
- the CFLO to facilitate claims and provide a contact point for the fishers;
- the FIR to facilitate the submission of claims by fishers;
- the claimant (i.e. fisher/vessel owner) to provide a suitable level of evidence, both relating to the incident and to the associated costs, for example:
    - plotter data showing tracks of their fishing activity in the incident area;
    - evidence of damage to fishing gear (i.e. photographs, if the fishing gear was retrieved);
    - evidence of the cost of replacement gear or repair of damaged gear;
    - information on the last known location of each string, and when it was last lifted, may be also required for static gear, which may involve several strings of gear;
- the fisher/vessel owner to send the completed claim form and supporting evidence to the CFLO within 14 days of the incident;
- the ORE developer to confirm receipt of the claim within 14 days; and
- the ORE developer to review the claim, and the CFLO to update the fisher/vessel owner with the outcome and next steps.

If a claim is rejected by the ORE developer, the developer or CFLO should provide evidence to the fisher/vessel owner as to why the claim was rejected. Any further dispute should be handled between the fisher, developer and a neutral third party.

Templates and associated guidance for static and mobile gear claims are available from ESCA and can be requested from secretary@escaeu.org.

7.3 Fisheries Community Funds

Developers may consider the need for and potential benefit of establishing a Fisheries Community Fund

Fisheries Community Funds are established by ORE developers for the general betterment of a fishing community. They can be part of a broader strategy to address impacts, or be a goodwill gesture, to fishing communities in recognition of a new marine activity being accommodated within an area of existing fishing activity.

16 www.escaeu.org/guidelines [Accessed March 2025].

17 For example, a damage form has been agreed between the Scottish Commercial Fisheries Working Group and Marine Directorate.

Fisheries Community Funds:

- are a voluntary measure agreed to by both the ORE developer(s) and fisheries stakeholders;
- are in addition to, not a replacement for, disruption settlements for individual fishers, unless otherwise agreed;
- are separate from wider community benefit funds that may be established by the ORE developer;
- may be used as a source of match funding for larger-scale projects or to return greater value to fishing communities; and
- are aimed at promoting longer-term community relations through fishing community orientated projects, initiatives or research activities.

8 Abbreviations

ADR	Alternative Dispute Resolution
AIS	Automatic Identification System
ALARP	As Low As Reasonably Practicable risk
BPG	Best Practice Guidance
CBRA	Cable Burial Risk Assessment
CES	Crown Estate Scotland
CFLO	Company Fisheries Liaison Officer
COLREGs	Convention on the International Regulations for Preventing Collisions at Sea, 1972
COWRIE	Collaborative Offshore Wind Research into the Environment
DA	Devolved Administration
DAERA	Department of Agriculture, Environment and Rural Affairs
DCO	Development Consent Order
DD	Decimal Degrees
EIA	Environmental Impact Assessment
ENCs	Electronic Navigational Charts
EPS	European Protected Species
ESCA	European Subsea Cable Association
FIR	Fishing Industry Representatives
FLO	Fisheries Liaison Officer
FLOWW	Fisheries Liaison with Offshore Wind and Wet Renewables
GDPR	General Data Protection Regulation
GLA	General Lighthouse Authority
GLS	Lost Gear Declaration
GPS	Global Positioning System
HM	His Majesty's
HMCG	His Majesty's Coastguard
HRA	Habitats Regulations Assessment
ICES	International Council for the Exploration of the Sea
ICPC	International Cable Protection Committee
IFCA	Inshore Fisheries and Conservation Authority
IMO	International Maritime Organisation
iVMS	Inshore Vessel Monitoring System
KIS-ORCA	Kingfisher Information Service – Offshore Renewable & Cable Awareness
LPA	Local Planning Authority
MAIB	Marine Accident Investigation Branch
MCA	Maritime and Coastguard Agency
MCC	Marine Coordination Centre
MGN	Marine Guidance Note
MLWS	Mean Low Water Springs
MM.MMM	Decimal Minutes
MMO	Marine Management Organisation
MMSI	Maritime Mobile Service Identities
MW	Megawatt
NDA	Non-Disclosure Agreement
NFFO	National Federation of Fishermen's Organisations
NM	Nautical Miles
NRA	Navigational Risk Assessment
NRW	Natural Resources Wales

NtM	Notice to Mariners
OFLO	Offshore Fisheries Liaison Officer
OFTO	Offshore Transmission Owner
ORE	Offshore Renewable Energy
OREI	Offshore Renewable Energy Installation
OWF	Offshore Wind Farm
PEIR	Preliminary Environmental Information Report
PINS	Planning Inspectorate
RAM	Restricted Ability to Manoeuvre
RNW	Radio Navigational Warning
RYA	Royal Yachting Association
SCV	Small Commercial Vessel and Pilot Boat
SFF	Scottish Fishermen's Federation
SI	Supplementary Information
SOLAS	International Convention for the Safety of Life at Sea
STA	Submarine Telegraph Act
SZ	Safety Zone
TCE	The Crown Estate
UK	United Kingdom
UKHO	UK Hydrographic Office
UNCLOS	United Nations Convention of the Law of the Sea 1982
UXO	Unexploded Ordnance
VHF	Very High Frequency (for radios)
VMS	Vessel Monitoring System
VTS	Vessel Traffic Service
WGS	World Geodetic System

Cardinal points/directions are used unless otherwise stated.

SI units are used unless otherwise stated.

Supplementary Information

November 2025

A Supplementary Information for Chapter 2 (Overview of the ORE Lifecycle)

This Supplementary Information supports Chapter 2 of the Best Practice Guidance, relevant to liaison opportunities during the ORE lifecycle. It is recommended that the Supplementary Information is used for reference, and in conjunction with the FLOWW BPG document, as required.

Specifically, this provides more information on:

- Liaison and engagement opportunities throughout the ORE lifecycle; and
- The consenting process for each UK administration.

A.1 Liaison and engagement opportunities throughout the ORE lifecycle

Table 3 details the tasks for each stage of the ORE lifecycle, as well as opportunities for engagement at each stage.

Table 3. Opportunities for liaison throughout the ORE lifecycle

ORE project phase	Tasks	Opportunities for fisheries liaison and consultation
Site selection (and early planning)	▪ Site selection by seabed owner (TCE/ CES) based on constraints analysis and regional, national, and/or sectoral plans ▪ Identification of cable routes ▪ Strategic-level assessments including environmental and socio-economic assessments completed at plan level	▪ TCE/CES site identification process – liaison with fisheries stakeholders can help identify seabed areas of least importance to fishing activities ▪ Engagement groups including fishing stakeholders and ORE developers are recommended to reduce stakeholder fatigue ▪ Local Notifications from ORE developers or relevant authorities and organisations informing of activities at sea (e.g. surveys) ▪ Formal public consultation on plan-level assessments
Leasing (For up-to-date information on leasing processes, refer to relevant TCE/CES and government websites)	▪ Seabed owner announces leasing area and opens leasing round for tender ▪ Potential ORE developers progress project concepts, designs and initial feasibility and scoping studies (i.e., environmental and engineering), identifying constraints, conducting	▪ ORE developers should liaise with fisheries stakeholders at the early stages of considering which lease areas to bid for and beginning of an ORE project's design process. This will: o Enable stakeholders to express their views on potential effects of a lease area on fishing activities

	constraint mapping exercises to identify their most desirable lease area ▪ ORE developers submit bids for seabed lease (to seabed owner), via competitive leasing round ▪ ORE developers submit grid connection applications ▪ Seabed owner enters agreement for lease to successful ORE developers	○ Enable stakeholders to outline key areas to be considered (e.g. in ORE developers' assessment of cable routing and infrastructure locations) ○ Help identify options to avoid or reduce potential impacts ▪ Engagement groups involving fisheries stakeholders are recommended to reduce stakeholder fatigue
Consenting and Licensing	▪ EIA Scoping ▪ ORE developers commence consenting and licensing process, including: ○ EIA / Preliminary Environmental Information Report ○ Navigational Risk Assessment (NRA) ○ Habitats Regulations Assessment (HRA) ○ draft liaison and communication plan ○ planning application ○ surveys and site investigation works to inform design and site layout ▪ ORE developers submit planning and licence applications to relevant authorities for examination and decision ▪ ORE developer responds to comments from consultations ▪ Regulatory authorities issue planning consents and marine licences to successful ORE developers	▪ Fisheries liaison during early 'scoping' phases is pivotal in establishing positive working relationships. It may require engagement at various levels (local, regional, national, transboundary) ▪ ORE developers should offer informal consultation opportunities to fisheries stakeholders ▪ Liaison with fisheries stakeholders should be undertaken and Local Notifications issued regarding activities at sea (e.g. surveys) ▪ Formal public consultation on EIA/PEIR, HRA. Fisheries stakeholders should respond, as an interested party, to statutory public consultations – in England (>100MW) and Wales (>350MW), stakeholders are required to register as an 'Interested Party' with the Planning Inspectorate

Post-consent (pre-construction)	▪ ORE developers submit applications for Contracts for Difference (CfD) to electricity generators ▪ Decisions made on final investments and funding ▪ Approval of grid connections ▪ ORE developers apply for additional marine licences (e.g. European Protected Species (EPS) licences) ▪ Pre-construction surveys and site preparation are undertaken by ORE developers where applicable e.g. unexploded ordnance (UXO) clearance, sand wave levelling ▪ Decisions made on micro-siting, following site surveys and finalisation of cable routes ▪ ORE developers tender for and appoint construction contractors ▪ Submission of decommissioning programme ▪ ORE developers fulfil the requirements of their consent conditions ▪ Licensing authorities approve and discharge consent conditions associated with marine licences, including fisheries liaison and communication plans	▪ Liaison with fisheries stakeholders on post-consent marine licence conditions (e.g. submission of information relevant to fisheries). Information from previous stages can help to define the conditions ▪ Formal and informal consultation opportunities on additional marine licences/variations ▪ Liaison with fisheries stakeholders should be undertaken and Local Notifications issued regarding activities at sea (e.g. surveys associated with site preparation) ▪ Finalisation of fisheries liaison and communication plans in consultation with fishing industry ▪ Development of the decommissioning programme should be open and transparent and should provide opportunity for public consultation (including fishers)
Construction	▪ ORE developers employ Tier 1 contractors (including subsea cable designers and installers) ▪ Construction works commence and safety zones put in place ▪ ORE developers fulfil the requirements of their consent conditions ▪ Licensing authorities approve and discharge consent conditions associated with marine licences ▪ Evidence-based disruption settlements may be entered into for construction activities between ORE developer and affected fishers	▪ Statutory and non-statutory consultation opportunities on variations to pre-existing marine licences (similar to those in the consenting and licensing stage) ▪ Liaison with fisheries stakeholders should be undertaken and Local Notifications issued regarding activities at sea ▪ CFLOs, FIRs, any appointed OFLOs, and Guard Vessels communicate with fishers on a regular basis at sea and on shore, ensuring fishers are aware of ongoing works and their status and reminding them of any

		fisheries clearance areas and/or safety zones which they are to keep clear of ▪ If fishing gear is observed to be within any works areas, CFLOs, FIRs and/or OFLOs will be in touch to identify ownership and request removal where agreed
Operation and Maintenance (including Life Extension where applicable, for same wind farm specification)	▪ ORE developer conducts a handover from construction to operation and maintenance ▪ ORE developers undertake post-construction environmental surveys, where applicable ▪ ORE developers fulfil the requirements of their consent conditions ▪ Licensing authorities approve and discharge consent conditions associated with marine licences ▪ Maintenance (planned and unplanned) and remedial work undertaken, where necessary, with marine licence applications for maintenance activities if required ▪ ORE developers may periodically review fisheries consultation and liaison plans to ensure the document remains up-to-date and relevant ▪ Handover of ORE project transmission assets to Offshore Transmission Owners (OFTOs)	▪ Statutory and non-statutory consultation opportunities on marine licences associated with maintenance activities ▪ Ongoing liaison with fisheries stakeholders should be undertaken and Local Notifications issued regarding activities at sea throughout this phase ▪ Consultation on updates to fisheries consultation and liaison plans
Decommissioning	▪ Pre-decommissioning environmental surveys and site investigations where applicable ▪ ORE developers undertake a comprehensive review of their decommissioning programme ▪ ORE developers undertake a decommissioning EIA ▪ ORE developers apply for a marine licence specifically for the decommissioning process ▪ ORE developers decommission the site according to their programme and marine licence	▪ Statutory and non-statutory consultation opportunities with fisheries stakeholders on decommissioning programmes and licences ▪ ORE developers should liaise with fisheries stakeholders during the early phases of decommissioning planning including the production of the decommissioning EIA, marine licence application and the final review of the decommissioning programme

	▪ ORE developers may review or update fisheries liaison and communication plans to ensure relevance for decommissioning phase ▪ Safety zones put in place to support decommissioning works ▪ Post-decommissioning environmental surveys ▪ Ongoing monitoring/ notification of assets left in situ	▪ Consultation on updates to fisheries consultation and liaison plans ▪ Ongoing liaison with fisheries stakeholders should be undertaken and Local Notifications issued regarding activities at sea throughout this phase ▪ CFLOs, FIRs, any appointed OFLOs, and Guard Vessels communicate with fishers on a regular basis at sea and on shore, ensuring fishers are aware of ongoing works and their status and reminding them of any fisheries clearance areas and/or safety zones which they are to keep clear of ▪ If fishing gear is observed to be within any works areas, CFLOs, FIRs and/or OFLOs will be in touch to identify ownership and request removal where agreed

A.2 The consenting process for each UK administration

The tables below, provided by the MMO, demonstrate the key consents associated with offshore wind for each of the administrations within the United Kingdom:

- Table 4 provides information for England;
- Table 5 provides information for Wales;
- Table 6 provides information for Scotland; and
- Table 7 provides information for Northern Ireland.

There are opportunities for statutory consultation within these consenting processes, and fisheries stakeholders can typically register as an interested party. These processes may be subject to change and administrations' websites should be monitored for the latest information.

Table 4. Offshore Wind Consenting in England

Capacity	Key Consent	Jurisdiction	Licensing/Consenting Authority
<100 megawatt (MW)	Marine Licence	Offshore	MMO
	Section 36 Energy Consent >1 MW	Offshore	MMO
>100 MW	Development Consent Order (DCO)	Offshore and Onshore	Secretary of State, following a recommendation from the Planning Inspectorate (PINS)
	Marine Licence	Offshore	Secretary of State, following a recommendation from PINS, may deem a Marine Licence as part of the DCO process, or MMO if developers choose not to include a deemed Marine Licence as part of the DCO process

Table 5. Offshore Wind Consenting in Wales

Capacity	Key Consent	Jurisdiction	Licensing/Consenting Authority
1MW to 50 MW	Marine Licence	Welsh waters	Natural Resources Wales (NRW)
	Section 36 energy Consent >1 MW	Welsh waters	Welsh Ministers, following recommendation by Planning Inspector
50MW to 350MW	Marine Licence	Welsh offshore region	Natural Resources Wales (NRW)
	Section 36 energy Consent	Welsh offshore region	Welsh Ministers, following recommendation by Planning Inspector
	Infrastructure (Wales) Act Consent and deemed marine licence	Welsh inshore region	Welsh Ministers, following recommendation by Planning Inspector
>350 MW	Marine Licence	Welsh inshore region	NRW
	Marine Licence	Welsh offshore region	Secretary of State, following recommendation from PINS may deem a Marine Licence if the project infrastructure is wholly within offshore waters, **OR** NRW, if developers choose not to include a deemed Marine Licence as part of the DCO process
	Development Consent Order	Welsh waters	Secretary of State, following a recommendation from PINS

Table 6. Offshore Wind Consenting in Scotland

Location	Key Consent	Jurisdiction	Licensing/Consenting Authority
0 to 12 NM	Marine Licence	Scottish inshore waters	Scottish Ministers
	Section 36 Energy Consent	Scottish inshore waters, only for projects >1 MW	Scottish Ministers
12 to 200 NM	Marine Licence	Scottish offshore waters	Scottish Ministers
	Section 36 Energy Consent	Scottish offshore waters, only for projects >50 MW	Scottish Ministers

Table 7. Offshore Wind Consenting in Northern Ireland

Location	Key Consent	Jurisdiction	Licensing/Consenting Authority
0 to 12 NM	Marine Licence	Inshore waters	Department of Agriculture, Environment and Rural Affairs (DAERA)
	Article 39 Consent	Projects >1 MW located seaward of mean low water springs (MLWS) or projects >10 MW located landward of MLWS	Northern Ireland Department for the Economy
12 to 200 NM	Marine Licence	Offshore waters	MMO

B Supplementary Information for Chapter 4 (Liaison during the Lifecycle of ORE Projects)

This Supplementary Information supports Chapter 4 of the Best Practice Guidance, relevant to liaison during the lifecycle of ORE projects. It is recommended that the Supplementary Information document is used for reference, and in conjunction with the FLOWW BPG document, as required.

Specifically, this provides more information on:

- Types of information to be shared;
- Navigational safety; and
- Mitigation and monitoring.

B.1 Types of information to be shared

The types of information that should be shared between the two sectors through the liaison and consultation process are set out below. Not all detail listed below may be available at the same time, however, ORE developers should inform stakeholders when details may be made available and why they are not available at certain times.

Information from the developer:

- potential ORE site and infrastructure positions;
- OWF design and turbine layout;
- proposed submarine cable routes;
- cable burial/protection methods; and
- ORE installation works and proposed works (including surveys) that may impede fishing/fisheries activities, including:
    - changes to traffic routes and restrictions to vessel movements;
    - changes or additions to navigational aids;
    - prohibited/restricted areas and/or exclusion/safety zones;
    - home port(s) and routes of survey vessels to and from development installation sites;
    - installation activities, submarine cable routes and cable laying, and the anchor patterns of installation vessels, etc.;
    - the planned schedule for works;
    - details of works vessels involved (call signs, Inmarsat numbers, communications links etc.);
    - vessel movements associated with the development – their planned routes, work times and movements to and from the installation sites; and
    - when fishing gear needs to be removed from a works area.

Information from the fishing industry:

- details of fishing activities within the vicinity of the development and those fishers who actively target the area;
- accurate fisheries data, knowledge, and experience;

- locations of important fish habitats;
- information on seabed habitats, conditions, and mobility;
- areas of potential conflict;
- potential mitigation measures;
- potential long-term monitoring strategies; and
- stakeholder contact lists (GDPR-compliant).

B.2 Navigational safety

Marine Guidance Note (MGN) 654 (M+F) is principally for developers. It highlights issues that need to be taken into consideration when assessing the impact on navigational safety and emergency response (search and rescue, salvage and towing, and counter pollution) caused by offshore renewable energy installation developments. Recommendations in this guidance note should be taken into consideration by all ORE developers seeking formal consent for marine works.

MGN 372 Amendment 1 (M+F) is principally for navigators, including fishers. MGN 372 provides safety of navigation guidance to mariners operating in the vicinity of UK ORE installations, highlighting the issues to be considered when planning and undertaking voyages in the vicinity of OREIs. MGN 661 (M+F) provides guidance for safe and responsible anchoring and fishing practices within the vicinity of subsea cables.

General navigational safety:

- Vessels strictly observe the relevant requirements of The International Regulations for Preventing Collisions at Sea 1972 (COLREGs). Relevant lights and shapes are to be displayed at all times and appropriate sound signals used.
- In areas where fixed gear fishing is conducted, vessels associated with ORE projects remain within their designated work area.
- Fishers avoid locating gear in areas where surveys are due to take place, and not purposefully obstruct any construction related activities.

Liaison associated with navigational safety:

All personnel associated with ORE developments (including ORE developers, ORE contractors and fishers) must be aware that safety of navigation is paramount during all phases of an ORE project. Therefore, appropriate navigational aids must be used. It is also suggested that the following general recommendations on liaison are adhered to:

- disseminate information to all parties as early as possible and ensure effective lines of communication are maintained between parties and sectors;
- invite relevant fisher(s), and/or fisheries representative(s) to the Hazard Identification Workshops that are run as a component of an OREI's Navigation Risk Assessment process;
- regularly transmit radio warnings; including when vessels are operating in controlled areas, the Vessel Traffic Service (VTS) is informed of the operation; and
- a dedicated International Maritime Mobile VHF working channel is used for the exchange of information between contractors afloat and other vessels in the area.

B.3 Mitigation and monitoring

There are a number of opportunities where liaison can contribute to identifying mitigation and monitoring options, which can feed into the regulatory process, including EIA. These are set out below.

Mitigating the predicted adverse effects of the ORE development on commercial fishing:

- Developers should engage with fisheries stakeholders and consult on potential mitigation measures to avoid or reduce the adverse effects of the ORE development on commercial fishing activity. This should include:
    - early engagement with fishers on the design of the ORE project so that fishing activity can be taken into account in cable routes, locations of cable burial and cable protection, type of cable protection, turbine locations and inter-array cabling, where possible;
    - agreement of vessel transit routes and anchoring areas for vessels associated with the ORE project for all stages of the project e.g. (surveys at the early stage of project design, construction phase, operational phase and decommissioning) to help minimise interference with commercial fishing activity;
    - consideration of other mitigation measures set out in Collaborative Offshore Wind Research into the Environment (COWRIE) Options and Opportunities for Marine Fisheries Mitigation Associated with Wind farms; and
    - agreement of liaison and communication plans for all stages of the project e.g. (early design phase / pre-application, construction phase, operational phase, life extension and decommissioning).

Mitigating the predicted adverse effects of the ORE development on other relevant receptors such as commercial fish and shellfish species:

- Developers can also engage with fisheries stakeholders if mitigation measures are required to minimise the adverse effects of the ORE development on other relevant receptors such as commercial fish and shellfish species.

Monitoring required for commercial fishing:

- Developers should identify what monitoring is required of the effects of the project on commercial fishing and seek views from commercial fisheries stakeholders on this.
- Monitoring may be required for validating the results of the EIA and for assessing the effectiveness of mitigation measures.

Monitoring required for other relevant receptors such as commercial fish and shellfish species:

- Developers can seek views from commercial fisheries stakeholders on any monitoring required in relation other relevant receptors such as commercial fish and shellfish species.

C Supplementary Information for Chapter 5 (Methods of Engagement)

This Supplementary Information supports Chapter 5 of the Best Practice Guidance, relevant to methods of engagement. It is recommended that the Supplementary Information document is used for reference, and in conjunction with the FLOWW BPG document, as required.

Specifically, this provides more information on:

- Use of local fishing vessels;
- Notices to Mariners;
- Example Local Notification format;
- Safety Zones; and
- Kingfisher Bulletin and KIS-ORCA.

C.1 Use of local fishing vessels

The use of fishing vessels for guarding, pre-construction surveys etc. must comply with legislative requirements such as the International Convention for the Safety of Life at Sea (SOLAS) (international marine standard) and minimum safety requirements as defined by the ORE developer. Early engagement with fishery groups is needed to ensure their vessels meet the required developer vessel standards to facilitate them undertaking such activities.

Adequate safety standards must be in place which apply to all personnel on board the guard vessel. This includes routine fishing vessel crew and survey sub-contractors placed on the fishing vessel. Valid offshore medical and sea survival certificates are required of fishers working on guard vessels. Qualifications held in the fishing industry do not directly correlate with the Merchant Navy standards, and individual ORE developers will have their own safety requirements which fishing vessels must adhere to, should fishing vessels wish to undertake duties (or activities) on behalf of ORE developers. As such, ORE developers should be responsible for the ensuring that the guard vessel and operating crew is suitably equipped, certificated and capable of undertaking the duties required.

The guard vessel should report to the ORE developer's offshore representative (e.g. the CFLO or OFLO) or the FIR, as appropriate. In the absence of both, clear lines of communication should be established.

C.1.1 Guard vessel specification

Clear standards for fishing vessels engaged as guard vessels are required by the MCA under the Small Commercial Vessel and Pilot Boat (SCV) Code, contained in MGN 280 (M) 'Construction standards for small vessels in sport use'.

If fishing vessels are to be used as guard vessels, they should be:

- British Registered Fishing Vessels;
- meet MCA statutory safety specifications for fishing vessels;
- in possession of a valid Maritime and Coastguard Agency (MCA) Safety Certificate(s) or exemption certificate that permits use of the vessel and its personnel to act in the capacity of a guard vessel:
    - including a 'Load Line Exemption' or a 'Brown Code Work Boat Certificate' (issued by the MCA);

- equipped with GPS navigator, Radar, Echo Sounder, VHF radio and a suitable telephone as a minimum; and
- have appropriate Employers Liability and Third-Party Liability cover under the terms and conditions of their own vessel insurance.

C.1.2 Guard vessel duties

Guard vessel duties generally consist of:

- complying with the ORE developer's Health and Safety Requirements;
- complying with the Convention on the International Regulations for Preventing Collisions at Sea, 1972 (COLREGs);
- providing protection, for as long as agreed between the parties, for any exposed and vulnerable structures, cables etc. as specified by the ORE developer;
- liaising with skippers of vessels operating in the vicinity of the project, so as to ensure that those vessels are given early and adequate warning to enable them to take action to avoid any dangers that exist;
- liaising with any other marine craft as necessary; and
- making broadcasts at frequent intervals giving details of the area to be protected; these should be made on the appropriate working channels used by fishing vessels.

Skippers of the guard vessels should be required to:

- keep a detailed log of broadcasts made, vessels contacted/sighted etc.;
- prepare a detailed written report of any incident of fishing vessels or other marine traffic not responding to radio contact and warning signals, thereby threatening the integrity of any aspect of the ORE project;
- immediately advise the ORE developer, or the CFLO, of any incident; and
- effect the agreed protection for the entire time period agreed with the ORE developer.

The guard vessel must not leave the area that it has been assigned to monitor, except:

- with the express consent of the ORE developer;
- in accordance with SOLAS regarding distress calls, together with any call necessitated thereby to any port or ports for fuel or other supplies; and
- for reasons of safety of the vessel or personnel on board that vessel – for the avoidance of doubt the skipper of the guard vessel shall have absolute discretion concerning matters of safety relating to his vessel or the personnel on board.

C.2 Notices to Mariners and Local Notifications

C.2.1 Types of notices and notifications

The main types of notices and notifications are:

- Radio Navigational Warnings (issued by UKHO);
- Admiralty Notice to Mariners (issued by UKHO);
- Port Notices (issued by statutory harbour authorities); and
- Local Notification (formally known as Local Notice to Mariners) (issued by ORE developer directly to local marine users).

The UKHO Harbour Master's Guide provides information on the different types of notifications. Further details on each type of notification are set out below.

Radio Navigational Warning (RNW)

Purpose: Radio broadcasts to alert vessels quickly to the presence of navigational hazards such as works being conducted or changes affecting navigation.

Issued by: the UKHO and broadcast via HM Coast Guard (HMCG) within 30 minutes of original information arriving. Selection of information follows International Maritime Organisation (IMO) guidance. Generally designed to cover urgent information or change outside of Harbour Authority limits, near major shipping areas and be short term in lifespan.

Further details: Either self-cancelling if activity is short term or replaced by Admiralty NtM if works or change is longer-term and significant to navigation.

Admiralty Notice to Mariners

Purpose: Alert vessels to the presence of navigational hazards, works being conducted or navigationally significant changes to detail shown on Admiralty Charts and Electronic Navigational Charts. Cancel any associated RNWs.

Issued by: Issued by the UKHO Admiralty via their Maritime Safety Information.

Further details: Weekly updates that provide bridge crews with the latest safety-critical information. They can be downloaded for free from the Admiralty website, or purchased as weekly bulletins from an Admiralty Distributor.

Port Notices

Purpose: Alert local users of works and changes within harbour limits or in the general vicinity.

Issued by: the Harbour Authority if the works are wholly within their area. Port Notices will be received by UKHO and assessed for whether an Admiralty NtM is required. Note: The Licensee or sub-contractor must notify the Harbour Authority for this system to work.

Further details: When works are both inside/outside of a Harbour Authority, then a Port Notice may suffice but the Licensee or sub-contractor must liaise with the Harbour Authority to ensure all user groups are notified. Outside of harbour limits, Local Notifications will need to be issued by the Licensee or sub-contractor.

Local Notification (formally known as Local Notice to Mariners)

Purpose: To alert Regulatory Authorities, port authorities, local user groups and UKHO etc. of the activity being conducted, the period, nature of the change, precautions etc.

Issued by: the Licensee or sub-contractor as specified in the licence conditions. Distribution depends on whether area falls within or outside harbour limits:

- Within harbour limits: the Harbour Authority must always be notified before work commences. It is then the responsibility of the Harbour Authority to alert other interested parties by issuing a Port Notice. UKHO does not need to see the local notification as it will receive any subsequent Port Notice if the port thinks it is of significance to navigation.
- Outside of harbour limits: the UKHO, Regulatory Authorities, local user groups and nearby Port Authorities etc. need to receive the Local Notification from the developers. UKHO requires notification at least 5 days before work commences. Other Authorities/ user groups may require longer.

Further details: Local Notifications can take a variety of different forms. They can be placed on websites, they can be sent as emails to relevant authorities such as Harbour Authorities, Coastguards, UKHO and interested groups, as well as posted on local notice boards to ensure they reach the relevant audience.

The developers issuing the Local Notification may also consider notifying UKHO for updating charts, HMCG (nmoccontroller@hmcg.gov.uk), Trinity House, Kingfisher Fortnightly Bulletin, any local Harbour Authorities and the Royal Yachting Association (RYA).

The content should include the start date, the duration, the nature of the activity, positions, details of precautions, contact details and any other relevant information. If the activity is to take longer than 30 days, regular updates may need to be considered, giving details of incremental change.

C.2.2 Organisations and groups to which Local Notifications should be sent

Key information to be included in a Local Notification, can be found on the 'Submit a Notice' page of the Kingfisher Bulletin website (kingfisherbulletin.org/submit-notice). Local Notifications should be issued by the ORE developer, CFLO, or Tier 1 contractor, to relevant authorities, organisations, and fisheries stakeholders who may be affected by the works or hazard.

It is recommended that Local Notifications are submitted to the following stakeholders for their official dissemination:

- Kingfisher Information Service of Seafish via the Kingfisher Bulletin online portal;
- Maritime and Coastguard Agency through the relevant Maritime Rescue Coordination Centre and UK Technical Services- Navigation;
- UKHO (which issue navigational warnings and update navigation charts);
- General Lighthouse Authority;
- relevant marine licensing authorities, e.g., the Marine Management Organisation, Natural Resources Wales, Marine Directorate Licensing Operations Team;
- Harbour Authorities - for NtMs regarding upcoming works within their jurisdiction;
- Royal Yachting Association;
- local Inshore Fisheries and Conservation Authorities (IFCAs);
- Regional Inshore Fisheries Groups and Regional Fisheries Groups;
- national fishers' federations;
- local fishers' associations; and
- local fishers (where appropriate).

C.3 Example Local Notification format

An example format for Local Notifications is provided below.

LOCAL NOTIFICATION

Please promulgate the following

[SUBSEA CABLE INSTALLATION PROJECT]

Date of notice:	[Insert Date]
Notice Number:	[Insert Reference Number]
Issued by:	[Insert Company Name or Project Authority]
Area of Operations:	[Insert general location]
Coordinates for the activities are attached below.	

1. Introduction

Mariners are advised that [Company Name], on behalf of [Client Name], will be undertaking the [installation of a submarine cable] as part of the [Project Name] in the following areas: [General description of the area and location of the works, including nearby landmarks].

The vessel [insert name(s) of vessels and photos below] will be undertaking underwater activities in the area and mariners should exercise caution and communicate with the vessel.

Other sea users are requested to: [e.g. – maintain a 500 m safety zone from infrastructure where works are occurring, keep clear of xxx safe working distance of any activities, not enter any 'no fish' zones that have been agreed with fishers etc)].

This notice is to inform all fishing vessels, shipping traffic, and other stakeholders in the area about the nature of the operations and any potential risks to navigation during this period.

[Vessel Name]

Call Sign:

Maritime Mobile Service Identities (MMSI):

IMO:

2. Project Details

- Activity: [e.g. Subsea Cable Installation]
- Start Date: [Insert Start Date]

- End Date: [Insert End Date]
- Working Hours: [Insert Hours of Operation, e.g., 24/7 or specific working hours]
- Vessels Involved: The following vessels will be involved in the operations:
  - [Vessel Name] (Cable Lay Vessel)
  - [Vessel Name] (Support Vessel)
  - [Other Vessel Name] (Survey Vessel)
- Equipment: [e.g. describe any subsea equipment or underwater gear that will be deployed].
- Please visit [insert website] for more information.

3. Geographic Area of Operations

The [subsea cable installation] will take place within the following coordinates (WGS84 Datum):

Latitude (in Degrees and Decimal Minutes)	Longitude (in Degrees and Decimal Minutes)
[Insert]	[Insert]

A clearance of [Insert Distance] nautical miles is requested around the working vessels [and/or other equipment deployed] for the safety of both mariners and project personnel.

4. Navigational Safety

Mariners are advised to maintain a safe distance of at least [Insert Distance] nautical miles from the vessels involved in the cable installation.

Other relevant details: [e.g. Include details of any guard vessels or other small craft that may be active in the vicinity as part of the project]

Other requests [e.g. Fishing gear and trawling should not be deployed in the requested clearance area during the installation period to avoid entanglement with subsea equipment.]

Mariners are requested to exercise caution and remain vigilant when navigating in the vicinity of the operations.

5. Communication and Monitoring

The working vessels will maintain constant VHF radio watch on Channels [Insert VHF Channel] and [Insert Channel] and can be contacted for coordination and safety updates.

Updates on the progress of the cable installation and any changes to the schedule or working areas will be provided regularly.

6. Contact Information

For further information, please contact:
[Name]

[Company Name]
Phone: [Insert Contact Number]
Email: [Insert Contact Email]
Guard Vessel Contact (24/7):
[Vessel Name]
VHF: [Insert VHF Channel]
Phone: [Insert Contact Number]

This Notice is issued for the safety of mariners and the successful execution of the project. Compliance with the guidelines mentioned in this Notice is appreciated.

7. Distribution

[Include organisational distribution list without names or contact details]

8. Chart (Not for Navigation)

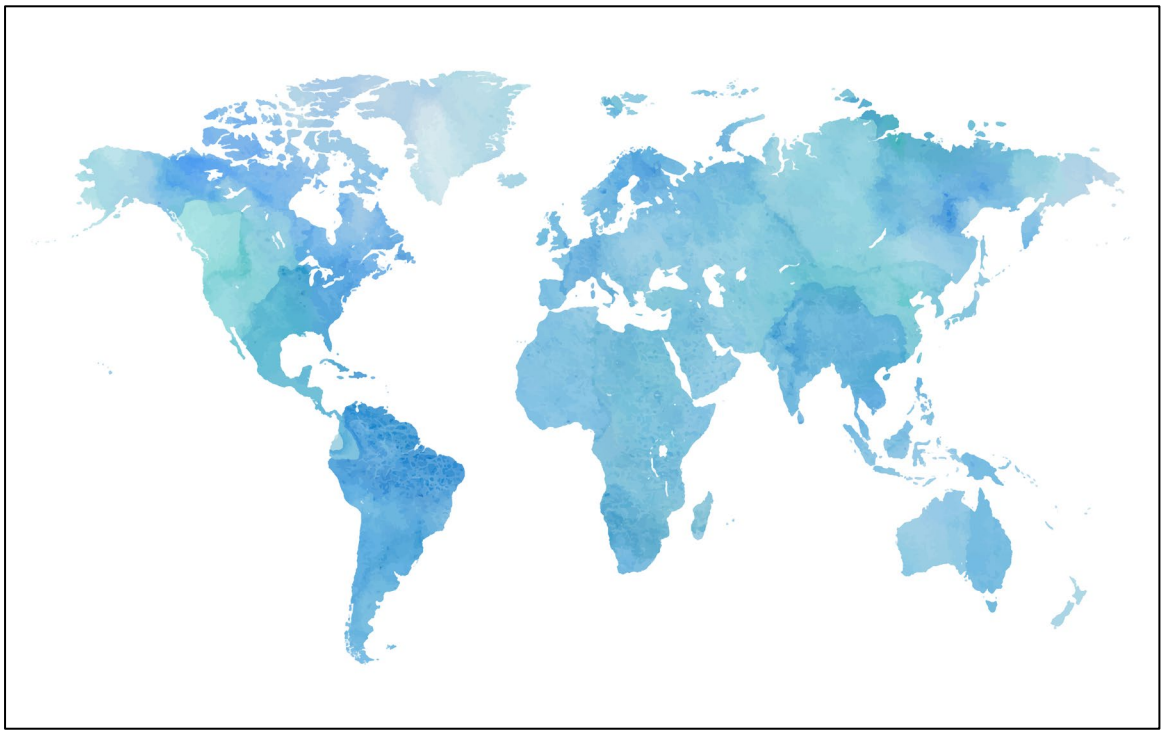

Chart 1. [Chart details]

C.4 Safety Zones

C.4.1 Implementation of safety zones

The Energy Act 2004 sets out the basic requirements for applying for a safety zone. Section 95 and schedule 16 of the Energy Act 2004 set out the requirements for applying for a safety zone to be placed around or adjacent to an ORE installation. The UK Statutory Instrument (2007 No. 1948) 'Electricity (Offshore Generating Stations) (Safety Zones) (Application Procedures and Control of Access) Regulations 2007' clarifies the requirements for application, publication, advertising, consultation and control of safety zones. The regulatory authority for granting such safety zones will depend on which waters the ORE infrastructure is located (i.e. English, Scottish, Welsh or Northern Irish waters). Please refer to the relevant government website for further information.

MGN 372 Amendment 1 (M+F) Safety of Navigation: Guidance to Mariners Operating in the Vicinity of UK Offshore Renewable Energy Installations also provides useful guidance on safety zones at sea.

Safety zones can be established around surface-piercing wind farm structures (including wind turbines and offshore substation platforms) at any phase of an ORE project; the type and size of which will depend on the activity taking place and are temporary in nature (except in exceptional circumstances). With regards to offshore wind farms (OWFs), there are two principal types of safety zone:

- Safety zones with a radius of 500 m measured from the outer edge at sea level of the proposed or existing renewable energy installation during its ongoing construction, extension or decommissioning, and major maintenance works in respect of such an installation. These are typically applied whilst work is underway at the structure, as indicated by the presence of construction, maintenance or decommissioning vessels.
- Safety zones with a radius of 50 m measured from the outer edge at sea level of the proposed or existing renewable energy installation during proposed or ongoing operation. 50 m safety zones are also typically applied during the construction phase around any partially completed or constructed wind turbine or offshore substation prior to final commissioning. This is separate to the advised safe working distances during the operational phase.

Safety zones associated with the wave energy and tidal stream projects (and potentially floating offshore wind projects) are likely to vary from those for fixed OWF infrastructure, and be more restrictive. Even with fixed OWFs, under certain circumstances, the size of statutory zone may differ from the standard (maximum) 500 m radial distance.

Developers can apply for statutory safety zones of 50 m around operational ORE infrastructure (e.g. for activities not classed as major maintenance). These should not be confused with advised 'safe working distances' (also known as 'awareness zones'). It is not mandatory to have statutory safety zones in place around ORE installations for the specified activities, however, a Local Notification may be issued by the ORE developer advising a non-statutory minimum safe working distance e.g., 50m from an ORE installation (e.g. a wind turbine).

To assist in mitigating the effects on fishing activities, some ORE developers have applied for a specific number of 500 m statutory safety zones (e.g. up to 10 zones), which may be used on a 'rolling' basis throughout the ORE project lifecycle (for the relevant activities, e.g. construction or major maintenance activities).

ORE developers may want to consider employing local fishing vessels (including skippers and crew) to carry out guard vessel duties associated with the monitoring of safety zones.

C.4.2 Monitoring of safety zones

Whenever an active safety zone is in place, an on-site vessel should be assigned guard duties, which includes monitoring the safety zone (and the surrounding area) via Radar, AIS, VHF and visual observations. The safety zones supplement more general regulations that are applicable to all sea users including The Merchant Shipping (Distress Signals and Prevention of Collisions) Regulations 1996 which implement COLREGS (IMO, 1972). These general regulations remain in force and require vessels to take appropriate action when encountering vessels that are in the presence of safety zones.

The vessel undertaking guard duties may be a dedicated guard vessel or another on-site vessel. ORE developers may want to consider employing local fishing vessels (including skippers and crew) to carry out guard vessel duties. Use of local fishing vessels can be advantageous due to their local knowledge and expertise. It may also support the relationship between ORE developers and local fishing communities. Under some circumstances, it may also contribute to fisheries mitigation measures.

When a fishing vessel is observed to enter or come into proximity of an active safety zone, the designated on-site 'guard' vessel will make contact to inform the fishing vessel it has infringed, or is close to, infringing an active safety zone. The fishing vessel will be warned to increase their passing distance and instructed against entering in the future.

Any infringements of the safety zone deemed as representing dangerous behaviour, unsafe navigational acts (as required under the relevant regulations implementing international conventions), or repeated entry will be reported to the relevant authorities. It is also acknowledged that assistance measures under Regulation 33 of Safety of Life at Sea (SOLAS) (IMO, 1974) remain valid, and a third-party vessel is obliged to render assistance to another vessel in trouble even if it is necessary to entry into a safety zone to do so.

C.5 Kingfisher Bulletin and KIS-ORCA

C.5.1 Kingfisher Bulletin

The Kingfisher Bulletin allows NtMs and Local Notifications to be submitted to it, and has an automated process that will publish the notice or notification on several other websites i.e. KIS-ORCA, NFFO, X, Facebook, etc.

KIS-ORCA ensures that spatial data (coordinates of subsea cables, turbines, etc.) are included on maps to aid safe fishing and improve awareness. KIS-ORCA is the only service that maps subsea cables and renewable energy infrastructure locations for fishers (www.kis-orca.org/map).

The Kingfisher Bulletin can be used to update fishers of activities before and when they are occurring (through web/app/email/alerts). Data for inclusion on maps and navigation system for infrastructure locations can be provided as 'proposed' (before installation) or 'active' once installed. Operators should include both to improve awareness.

C.5.2 KIS-ORCA

KIS-ORCA (www.kis-orca.org) is a joint initiative between ESCA and Kingfisher Information Services of Seafish. It provides positional data and information for fishers (and mariners) on 'assets' of subsea cables and renewable energy industries (i.e. telecoms cables, power interconnectors, and offshore wind farms and export cables) in UK and European waters.

KIS-ORCA outputs include electronic charts, news and data on the KIS-ORCA website (such as interactive maps and downloadable charts), and quarterly updates to relevant authorities.

It is recommended that ORE developers, asset owners and operators submit positional data on any man-made structure, including:

- cable routes including repair information;
- offshore wind turbines;
- offshore wind farm boundaries;
- wave and tidal structures;
- met masts, substations and buoys;
- subsea cable mattresses or other protection structures;
- dropped objects (e.g. debris, anchors);
- cable clump weights; and
- miscellaneous structures.

Data can be submitted throughout the year and should be updated throughout the life of an 'asset'. Data for inclusion on charts should be submitted as both 'proposed' (pre-installation) and/or 'active' (post-installation).

Types of data to be submitted include:

- information ahead installation;
- repairs or new positional information; and
- removal or decommissioning.

All data submissions should be provided in one of following three formats:

- file geodatabase;
- shapefile; or
- Excel File.

For ease of data submission, data templates are available. Please contact Kingfisher information Services of Seafish (kingfisherdata@seafish.co.uk) or ESCA (secretary@escaeu.org) for copies of the templates and submission guidelines.

For information on data submission charges, please contact: secretary@escaeu.org

For further information, please refer to the ESCA Fishing Liaison Best Practices – Linear Subsea Cables (Telecommunications and Power).

Note: With regards to cables, it is not necessary to list each segment of a cable as a separate item (unless it has different attributes). For charting purposes, it is helpful to submit the data as one cable "line".

D Supplementary Information for Chapter 6 (Subsea Cables)

This Supplementary Information supports Chapter 6 of the Best Practice Guidance, relevant to subsea cables. It is recommended that the Supplementary Information document is used for reference, and in conjunction with the FLOWW BPG document, as required.

Specifically, this provides more information on:

- Fishing in the vicinity of subsea cables;
- Industry position statements on fishing near subsea cables; and
- Recommended content of a notification for cable exposures.

D.1 Fishing in the vicinity of subsea cables

It is not illegal to fish over cables, however, according to the following legislations, it is an offence in UK to damage a subsea cable either wilfully or through culpable negligence. The following legislation is relevant:

- United Nations Convention of the Law of the Sea 1982 (UNCLOS);
- The Submarine Telegraph Act (STA) 1885; and
- Section 8 of the Continental Shelf Act 1964.

Owners of vessels that can prove that they have sacrificed equipment (such as fishing gear) to avoid injuring a submarine cable shall receive compensation from the cable owner (STA, 1885). The compensation regime covers all cables and pipelines in the territorial sea and UK Continental Shelf.

For a general understanding of the risks associated with fishing near subsea cables, fishers should ensure understanding and awareness of the following legislation and advice:

- The United Nations Convention on the Law of the Sea (UNCLOS) 1982;
- The Submarine Telegraph Act (STA) 1885;
- Section 8 of the Continental Shelf Act 1964;
- MGN 372 Amendment 1 (M+F) - Guidance to mariners operating in vicinity of UK ORE installations;
- MGN 661 (M+F) - Navigation - safe and responsible anchoring and fishing practices;
- Advice contained in Admiralty's Mariners' Handbook (NP100);
- Safety information found on the KIS-ORCA website (e.g. The Risks of Fishing near Cables & Renewable Energy Structures).

Fishing vessel operators should not tow demersal gear over sections of cable that have been notified as exposed or shallow buried, and should consider following the cable corridors where feasible, to avoid crossing cables and minimise the risk of interaction with cables.

When bottom-contacting mobile fishing gear is in operation near subsea cables, the vessel operator should:

- be aware of the requirements in SOLAS - International Convention for the Safety of Life at Sea;
- be aware of subsea cable locations and closely monitor their ground speed, fish plotter display and any gear monitoring cameras that the vessel carries, for sign of possible cable contact;

- avoid tight turns or any other manoeuvre that would tend to lay a trawl door down or cause gear to penetrate deeper into the seabed;
- not tow gear over sections of subsea cables that have been notified as exposed or shallow buried;
- keep electronic plotters or navigation systems, which are compatible with Kingfisher data files, up-to-date with the latest information for the areas they fish;
- be aware of notifications issued by the relevant OREI and/or export cable owner for the areas they fish; and
- utilise cable awareness charts published by KIS-ORCA.

Note: Appropriate separation distances (such as minimum safe working distances) should be maintained by all sea users (including fishers) when navigating, operating, or deploying fishing gear in the vicinity of vessels engaged in cable installation works.

Fishers should adhere to the safe operating distances when navigating or deploying/operating fishing gear in the vicinity of vessels engaged in cable remedial works (according to COLREGs – preventing collisions at sea).

D.2 Industry position statements on fishing near subsea cables

D.2.1 NFFO

NFFO's position statement in relation to fishing near subsea cables:

The NFFO recommend that all sub-sea cables are buried to a depth that is sufficient to remove residual risk of snagging of fishing gear and that cable integrity and burial should be subject to routine monitoring and remediation where necessary. This will allow for co-existence between the two industries post installation, and remove risk to both parties, whilst allowing continued free access to seabed resources.

D.2.2 ESCA

ESCA's position statement on vessels operating in the vicinity of subsea cables is provided overleaf:

European Subsea Cables Association (ESCA)
Position Statement on Vessels Operating in the Vicinity of Subsea Cables

Introduction

Subsea cables, buried or otherwise, can present a potential hazard or entanglement risk to fishermen. Subsea cables are Critical National and International Infrastructure and fishing in close proximity to cables presents a hazard to those cables which may cause damage, resulting in loss of communications and/or power. ESCA strongly advises against any type of fishing, where there is a known and charted cable.

Cable Charting

Cable owners ensure that positions of subsea cables are well known so that they can be avoided for the purpose of safety and protection of subsea infrastructure. The locations of cables are marked on navigational Admiralty Charts.

Information on subsea cables around the UK and Northern Europe can be downloaded free of charge at https://kis-orca.org/. ESCA strongly advises that all fishermen ensure that up-to-date cable data is installed on their fishing plotters. We also urge all regulators and marine authorities to advise the same.

Safety bulletins are also issued by Kingfisher to inform other sea users of ongoing cable installation or repair activities or known seabed hazards https://kingfisherbulletin.org/.

International Hydrographic Office (IHO) S4 Part B-443 specifies that "*submarine cables, including disused cables, should be charted to indicate their presence to vessels engaged in anchoring, trawling or seabed activities in order to:*

- *Warn mariners of the potential hazard to their vessel, including electric shock to any vessel fouling or breaking the cable, possible capsize of small vessel if its fishing gear or anchor is trapped under the cable, or loss of gear (trawls or anchor cables).*
- *Prevent damage to the cable and avoid disrupting the service the cable may be providing."*

It is against UK and International law to wilfully or negligently damage a subsea cable (Submarine Telegraph Act 1885, United Nations Convention on the Law of the Sea (UNCLOS)[1].

1 UNCLOS Article 113 Breaking or injury of a submarine cable or pipeline

Contact: secretary@escaeu.org
https://www.escaeu.org/

Cable Burial

Great effort is made to bury and protect subsea cables. In most cases subsea cables are buried, however, it is possible that sections of charted subsea cables may become exposed over time.

As such, cables are potentially subsea hazards. The Admiralty Mariner's Handbook (NP100)[2] advises that:

> *"In view of the serious consequences resulting from damage to submarine cables, vessel operators should take special care when anchoring, fishing, mining, dredging, or engaging in underwater operations near areas where these cables may exist or have been reported to exist. In order to minimize the risk of such damage as much as possible, vessels should avoid any such activity at a minimum distance of 0.25 nautical mile, on either side of submarine cables."* A similar warning is repeated on admiralty charts.

The Admiralty Mariner's Handbook (NP100) does not differentiate between subsea cable type or function and as such applies to all subsea cables for telecommunications, power or other functions.

Sea Users Safety Responsibilities

In accordance with SOLAS[3], vessel operators and the Master of any vessel have obligations to ensure the safety of vessel and crew and take into account navigational hazards when planning each voyage. As such, fishing over subsea cables should be avoided in all circumstances in accordance with safety advice from the maritime bodies responsible for safety offshore.

In the UK the Maritime and Coastguard Agency (MCA) has issued Marine Guidance Note (MGN) 661[4] to highlight 'Safe and Responsible Anchoring and Fishing Practices' which clearly explains the risks and responsibilities of other sea users.

It is a legal requirement for vessels over 15m to have AIS operational at all times. This assists cable owners, where appropriate, in being able to make notifications to the relevant sea user(s) to inform them they are, or shortly will be, approaching or operating in a way that poses a risk to a subsea cable and their own safety.

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[2] https://www.admiralty.co.uk/publications/publications-and-reference-guides/admiralty-mariners-handbook

[3] The international Convention for the Safety of Life at Sea (**SOLAS**) in an international maritime treaty implemented by the International Maritime Organization (IMO), requiring Signatory flag states to ensure that ships flagged by them comply with minimum safety standards in construction, equipment and operation

[4] https://www.gov.uk/government/publications/mgn-661-mf-navigation-safe-and-responsible-anchoring-and-fishing-practices/mgn-661-mf-navigation-safe-and-responsible-anchoring-and-fishing-practices

Vessels Operating in the Vicinity of Subsea Cables
Some general principles relating to submarine cables apply as follows:

- Never assume that cables are completely buried.
- Anchoring or fishing near to a subsea cable poses risks both to the cable and to vessels and crew.
- The appropriate maritime safety advice should be followed at all times.

Protection of Critical Infrastructure
The Admiralty Mariner's Handbook (NP100) sets out the clear safety message that demersal fishing should not take place within 0.25nm of any subsea cable. MGN 661 clearly states that this guidance should be particularly referred to regarding anchor operations and fishing activities.

Whilst subsea cables vary in physical characteristics, and sectors that deploy subsea cables have different requirements, there is no distinction in law or in terms of safety advice between cables for Telecommunications, Interconnectors, Distribution Cables, or cables connecting Offshore Renewable Infrastructure.

ESCA recommends that vessels operating in the vicinity of subsea cables do so in a safe and responsible manner in accordance with current maritime safety guidance in order to protect safety of life and to provide protection to critical infrastructure.

About ESCA
European Subsea Cables Association's (ESCA) primary goals are the promotion of marine safety, protection of the marine environment and the safeguarding of subsea cables from man-made and natural hazards.

For further information please visit: https://www.escaeu.org/

ESCA February 2022

Contact: secretary@escaeu.org
https://www.escaeu.org/

D.3 Recommended content of a notification for cable exposures

A notification addressing a subsea cable hazard (including exposures and spans) should include the following information:

- number of subsea cable exposures/spans;
- location of exposures/spans using geographic coordinates (i.e., WGS 84 datum - Degrees and Decimal Minutes (DD° MM.MMM) to three decimal places e.g., 53°45.786'N 000° 07.292'E), and the compass direction of the hazard;
- map of subsea cable exposures/spans;
- length of the subsea cable exposure or span including the start and end locations;
- maximum height above seabed of any subsea cable span;
- recommend safe working distances in the form "mariners are requested to remain a specified distance away from/reference location/activity/vessel, give safety reason and end date etc"; and
- relevant contact details.

For an example Local Notification, see Supplementary Information C.3.

E Supplementary Information for Chapter 7 (Disruption Settlements, Protocols for Lost/Damaged Gear, and Fisheries Community Funds)

This Supplementary Information supports Chapter 7 of the Best Practice Guidance, relevant to disruption settlements, protocols for lost/damaged gear, and Fisheries Community Funds. It is recommended that the Supplementary Information document is used for reference, and in conjunction with the FLOWW BPG document, as required.

Specifically, this provides more information on:

- Example for calculation of disruption settlement values; and
- Worked example.

E.1 Example for calculation of disruption settlement values

The following is provided as an example of how disruption payments may be calculated. It is not intended to be prescriptive, but has been successfully implemented in a number of ORE projects. Any agreement should be reached by mutual agreement between the ORE developer and the fishing industry, based on evidence and taking into consideration the specific characteristics of the fishing industry and the anticipated disruption in each case.

The value of disruption payments is calculated on an individual basis for affected fishers, using the following steps.

1. The **average daily income from fishing** for the affected vessel is calculated based on the fishing income for the vessel for agreed reference years, divided by the average number of days fishing in the year or fishing season as appropriate.

2. This average daily income is then used to calculate an individual's **day rate**, accounting for the proportion of the individual's fishing grounds that are affected by the ORE development.

3. The day rate may be further adjusted for a **daily disruption payment** to reflect:

    - The availability of alternative grounds where the individual might be able to move to during the disruption period, or for other costs that will not be incurred when not fishing to be accounted for (e.g. fuel, bait);
    - The implementation of rolling exclusion areas, so that fishing is not excluded from the whole area (e.g. survey area) for the total duration of the survey. This is based on the area of exclusion divided by the total survey area.

4. Calculation of the **total disruption payment**, taking into account periods when the full day rate or the daily disruption payment might be applicable.

E.2 Worked example

This worked example of a disruption payment calculation, and any figures presented below, are for illustrative purposes only.

Mr Jennings usually works 20 strings of pots/creels. A planned survey will require static gear to be removed from the survey area for 40 days. This affects half of Mr Jennings' strings of pots/creels, demonstrated by historic fishing records. A payment has been calculated using information from weekly sales notes and the proportion of gear affected. There are suitable alternative fishing grounds where the gear can be used during the planned survey, however these are less productive and only 50% of current landings are expected. Other gear will be moved to alternative locations or put ashore. Most of Mr Jennings' earnings are made over July and August, with the survey planned during this period.

1. **Average daily income from fishing:** Average gross income from fishing during the core fishing season (62 days, within which the survey falls) calculated as the summed total of sales notes across the survey period in previous years (£62,000), divided by the number of fishing days (62 days).

   £62,000/62 = £1,000

2. **Day rate:** To adjust for the proportion of the individual's fishing grounds that are affected. 10 out of 20 strings of pots /creels are affected by the full survey area = 50%.

   £1,000 x 50% = £500

3. **Daily disruption payment:** To reflect the earnings from the area that will be lost, and not recoverable from elsewhere) = 50%. Additionally, the survey will be implemented on a rolling basis, with half of the area closed at any one time, and half of the area open for fishing = 50%.

   £500 x 50% x 50% = £125

4. **Value of disruption payment** due to the 40-day survey: For the first and the last week of survey Mr Jennings is paid the full day rate as he is moving his gear. During the rest of the survey he is paid the daily disruption payment to reflect the fact that he may be fishing in another area, still generating income from the 10 displaced strings of fishing gear, but acknowledging that the productivity of alternative grounds to which the gear has been relocated may be less than the area from which he has moved.

   14 days at £500 + 26 days at £125 = £10,250.