EMEC
THE EUROPEAN MARINE ENERGY CENTRE LTD

Fisheries Mitigation, Monitoring and Communication Plan

November 2025




Document History

Revision	Date	Description	Originated by	Reviewed by	Approved by
V01	26/11/25	First Draft	[Redacted]	EMEC	EMEC
V02	01/12/25	Final Draft		EMEC	EMEC

Disclaimer

This report is for the exclusive use of the persons to whom it is addressed and their advisers and must not be copied, reproduced or distributed (in whole or in part) or disclosed by recipients to any other person.

We, The European Marine Energy Centre Limited together with our officers, employees, consultants, associates and agents (together hereinafter referred to as "**we**", "**us**", "**our**"), shall not be responsible or liable to you or any other person for any loss, liability or damage, whether in contract, delict and tort (including negligence), breach of statutory duty or otherwise, even if foreseeable, arising under or in connection with the use of or reliance on this report or any part thereof. All and any such responsibility and liability is expressly disclaimed to the extent permitted by law. In particular (but without limiting the foregoing) we shall not be liable for loss of profits, sales, business or revenue, business interruption, loss of anticipated savings, loss of business opportunity, goodwill or reputation, or any indirect or consequential loss or damage.

We give no assurances, representations, undertakings, statements or warranties (express or implied) regarding the adequacy, accuracy, currency, completeness, fairness or applicability of any of the content, information and opinions in the report or of any other information (whether written or oral), notice or document, whether or not in relation to specific situations or particular circumstances. The recipient acknowledges and agrees that no person has, nor is held out as having, any authority to give any assurance, representation, undertaking, statement or warranty (express or implied) for on behalf any of us in connection with the report.

Contents

List of Figures

List of Tables

Acronyms

Term	Definition
CFLO	Company Fisheries Liaison Officer
COLREGs	International Regulations for the Prevention of Collisions at Sea
COWRIE	Collaborative Offshore Wind Research into the Environment
EIA	Environmental Impact Assessment
EMEC	European Marine Energy Centre
ERM	Environmental Resources Management
ES	Environmental Statement
FIR	Fishing Industry Representative
FLOWW	Fishing Liaison with Offshore Wind and Wet Renewables Group
FMMCP	Fisheries Mitigation Monitoring and Communication Plan
kV	Kilovolt
MD-LOT	Marine Directorate – Licensing Operations Team
MW	Megawatts
NSVMP	Navigational Safety and Vessel Management Plan
NtM	Notice to Mariners
OFA	Orkney Fisheries Association
OFLO	Offshore Fisheries Liaison Officer
OFS	Orkney Fisheries Society
SOLAS	Safety of Life at Sea
UKAS	United Kingdom Accreditation Service
VHF	Very High Frequency

1 Introduction

1.1 Purpose

The following Fisheries Mitigation, Monitoring and Communication Plan (FMMCP) document has been produced by Environmental Resources Management (ERM) for the European Marine Energy Centre (EMEC) (hereafter referred to as 'the Applicant') in support of proposed changes to the Fall of Warness tidal energy test site. The proposed Project (i.e. the "Project") for which Section 36 consent is being sought, includes increasing the current generating capacity from 10 Megawatts (MW) up to 50 MW, allowing for up to 60 tidal devices, comprising 40 small devices and 20 large devices, and a Project duration to 2053 (in line with existing funding).

The purpose of this document is to:

- Describe the Applicant's proposed approach to engagement with the fishing industry for the Project, and;
- Provide a description of the main measures which have been proposed to enable co-existence with commercial fishing, as well as to minimise any potential impacts throughout the device deployment, operation and maintenance, and decommissioning phases of the Project.

The importance of minimising disturbance to existing fishing activities is well defined within Fishing Liaison with Offshore Wind and Wet Renewables Group (FLOWW) Best Practice Guidance for Offshore Renewables Developments. Recommendations for Fisheries Liaison, 2014':

> *"The overall objective is for developers to use best endeavours to progress their projects with as little disturbance as possible to fishing activities, whilst keeping fishermen as informed as possible. In turn, the fishing community should provide accurate information to developers on the nature of fishing activity operating in the area".*

The FMMCP guidance was recently updated in January 2025, replacing the earlier "Guidance on Preparing a Fisheries Management and Mitigation Strategy, originally issued by Marine Directorate (previously Marine Scotland) in 2020. This FMCCP has been prepared in line with the updated guidance – see Section 1.3.

1.2 Project Description

Established in 2003, EMEC is the first and only centre of its kind in the world, providing developers of both wave and tidal energy systems with purpose-built, United Kingdom Accreditation Service (UKAS) accredited open-sea testing facilities.

EMEC's grid-connected tidal energy test site is located at the Fall of Warness, just west of the island of Eday in Orkney. The site sits in a narrow channel between the Westray Firth and Stronsay Firth where tidal flow accelerates as water flows through the inter-island constriction on its way from the North Atlantic Ocean to the North Sea. The Fall of Warness site was chosen for its high velocity marine currents which can reach almost 4 m/s (7.8 knots) at spring tides. The location of the EMEC tidal energy test site is shown in Figure 1-1.

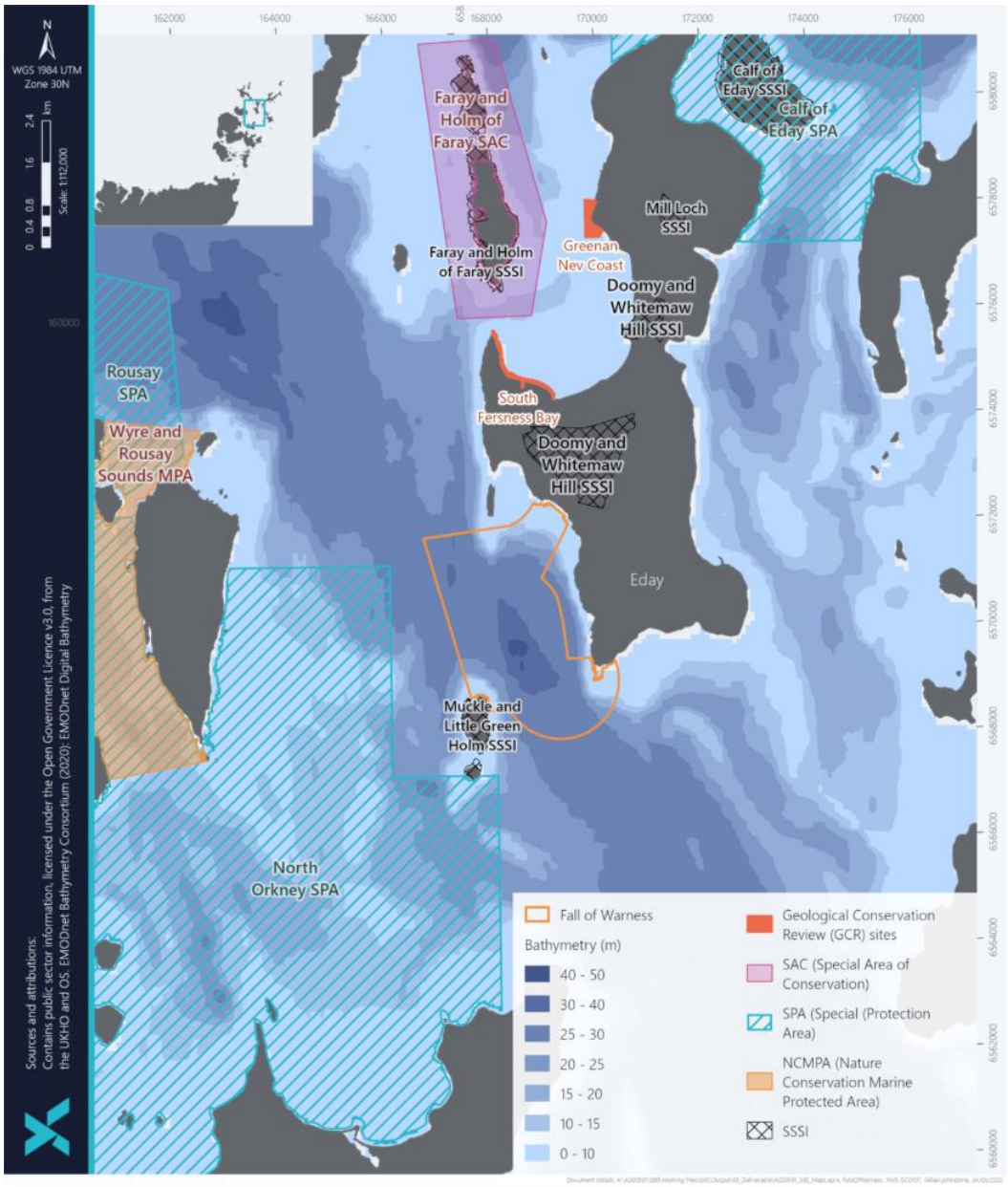

Figure 1-1: Project Location

The EMEC Fall of Warness site was first established in 2005, with consent achieved for establishing the test site infrastructure. Although EMEC was granted the licences/consents necessary for the site infrastructure, individual developers wishing to test devices at the site were required to apply for and obtain individual and respective licences/consents necessary to install and operate their devices. In 2016, following submission of the second Environmental Statement (ES) for the application in December 2014, EMEC was awarded a Section 36 consent for the Fall of Warness site, for a generation capacity of up to 10 MW, comprising up to 12 tidal energy devices across nine berths for a period of seven-years from the date of consent. Following a Section 36 extension request in 2023, the EMEC Fall of Warness Section 36 consent was extended for operations up to the end of May 2028 for the same 10 MW capacity.

The Fall of Warness site currently provides eight tidal test berths. Each of the eight berths occupies a circular area of approximately 200 m radius from the cable end, within which clients can install their device(s) and undertake testing activities. The berths can accommodate single

devices or small arrays as well as individual components or mooring structures. Each test berth is individually connected to EMEC's shore-based substation at Caldale in Eday via an 11 kV armoured subsea cable, allowing onward transmission of the energy generated by the devices to the National Grid.

At present, Section 36 consent is being sought to increase current generating capacity from 10 Megawatts (MW) up to 50 MW, allowing for up to 60 tidal devices, comprising 40 small devices and 20 large devices, and a Project duration to 2053. This increase in capacity does not reflect a change to the boundaries and/or spatial extent of the Project site, which will remain the same as shown in Figure 1-1.

EMEC submitted a scoping report in May 2022 in support of the current Section 36 consent application. After the Scoping Opinion was extended until March 2024, EMEC updated the Project design envelope, and submitted these changes to MD-LOT in March 2024 and August 2024. These intermediate submissions informed of the revised Project design envelope and the Environmental Impact Assessment (EIA) approach in light of the Project changes.

A summary of the consent history and the documents produced for the Project to date are as follows:

- 2005 ES – original consent for tidal test centre;
- 2014 ES – to increase quantity of tidal energy devices (EMEC, 2014);
- 2022 Scoping Report – to increase generation capacity and Project duration (EMEC, 2022);
- March and August 2024 – slide deck issued to regulators to inform of revised Project design envelope and EIA assessment;
- June 2025 Environmental Reassessment – demonstrate how the Scoping Opinion remains appropriate to the impacts, pathways and receptors in light of the relevant Project design envelope changes (EMEC, 2025) and;
- December 2025 – EIA submission for current Section 36 consent, which this FMMCP is being submitted in support of.

1.3 Guidance and Drivers

This FMMCP has been created with reference to the following key guidance:

- Marine Licensing and Consenting: Offshore Renewable Energy Projects: Mitigation and Monitoring Plans, Marine Directorate 2025;
- Guidance on preparing a Fisheries Management and Mitigation Strategy – Draft, Marine Scotland 2020;
- Best Practice Guidance for Fisheries Liaison with Offshore Renewables Developments, FLOWW 2025;
- Best Practice Guidance for Offshore Renewables Developments. Recommendations for Fisheries Liaison, FLOWW 2014;
- Collaborative Offshore Wind Research into the Environment (COWRIE) Options and Opportunities for Marine Fisheries Mitigation Associated with Windfarms, COWRIE 2010;
- Good Practice Guidance for assessing fisheries displacement by other licensed marine activities, Marine Scotland 2022; and
- Scotland's National Marine Plan, 2015.

The FMMCP will be issued for consultation and discussions with relevant organisations, statutory bodies and fishers within the area surrounding the Project. Where necessary, this document will be updated to reflect any potential changes to guidance, legislation and/or consent conditions.

1.4 Consultation

Input from local fishermen was sought for the second ES that was produced for the site in 2014 (EMEC, 2014) through Orkney Fisheries Association (OFA) and Orkney Fishermen's Society (OFS). As a result of this consultation, the Project boundary with the west coast of Eday was amended to follow the 30 m water depth contour line, so fishing could continue in the shallower waters outwith this Project area.

Subsequent consultation was undertaken with OFA in March 2022, in order to inform the Scoping Report for the Section 36 extension request in 2023. This consultation concluded that it is highly unlikely that any vessel would fish within the Fall of Warness site itself, although the wider area may be used to transit through. As no fishing occurs within the Project area, the topic of commercial fisheries has been scoped out of the EIA for the current Section 36 application (EMEC, 2022).

2 Overview of Fisheries Activity

2.1 Previous Environmental Statement (2014) Findings

The 2014 ES for the Fall of Warness (EMEC, 2014) identified that creel fishing activity was concentrated along the south-west coast of Eday within the wider Fall of Warness area. At that time, approximately 12 vessels from Mainland Orkney and two from Westray were reported to fish regularly in this location, with catches contributing up to 30% of overall landings for the fleet, and in some cases up to 50% for individual vessels. Scallop diving was also recorded, although its extent was limited by safety concerns associated with strong tidal flows.

Engagement with local fishermen through the OFA and OFS informed the 2014 ES (EMEC, 2014), resulting in an adjustment of the western boundary to follow the 30-metre depth contour, allowing fishing to continue in shallower waters outside the site.

2.2 Current Position

Further consultation undertaken with OFA in March 2022 to inform the Scoping Report indicated that fishing activity within the Fall of Warness site itself is now considered highly unlikely. The scoping report therefore concluded that there will not be an impact requiring further assessment as part of the Environmental Impact Assessment (EIA) process, and the commercial fishing industry would therefore not be considered further.

3 Fisheries Liaison and Mitigation Measures

This section describes the Applicant's proposed approach to fisheries liaison, and mitigation measures to be utilised in order to minimise any impacts on fishing activities and, where possible, enable co-existence between the Project and commercial fishing activity.

3.1 Communication and Information Transfer

Key to successful fisheries liaison will be the use of a robust, suitable communication and information transfer strategy between the Applicant and commercial fishing stakeholders. This

is highly important as it will contribute positively towards enabling effective co-existence with the fishing industry.

3.2 Fisheries Liaison Roles and Responsibilities

3.2.1 The Applicant

Due to the absence of fishing within the Project area and surroundings, and the scale of the Project, the Applicant considers that there is no need for a Company Fisheries Liaison Officer (CFLO), Fishing Industry Representative (FIR), and Offshore Fisheries Liaison Officer (OFLO).

Instead, the Applicant is fully responsible for undertaking any commercial fisheries engagement pertaining to the Project. EMEC have an appointed Stakeholder Manager ('EMEC Stakeholder Manager') who is responsible for all fisheries engagement and is the point of contact for the fishing industry on all matters concerning the Project.

Contact details for the EMEC Stakeholder Manager are as follows:

info@emec.org.uk

In some cases, a project-specific Commercial Fisheries Working Group can be a useful and convenient way of arranging regular meetings with fisheries stakeholders and offers a forum for dissemination of useful information. However, given the scale of the Project and the absence of fishing interests in the area, this is not required in this instance. Similarly, a Marine Coordination Centre can act as a centralised point for monitoring vessel activities in relation to a project and can serve as a point of contact for fishing vessels in the area. Given the small scale of the Project, this is not required.

3.3 Communications and Information Transfer and Distribution

Timely sharing of appropriate and reliable information with all relevant parties, and maintaining efficient channels of communication regarding the Project, is crucial for enabling a continuous and beneficial collaboration with fisheries stakeholders.

Suitable means of communication with fisheries stakeholders will be created, to ensure they remain updated on offshore operations during the deployment, operation and maintenance, and decommissioning stages of the Project.

The Applicant will endeavour to distribute information in accordance with the timescales identified in **Table 3-1**.

Table 3-1 Timescales for distribution of information to Commercial Fisheries Stakeholders

Activity Information to be Disseminated	Timescale for Distribution
Site surveys	Notices (via Notice to Mariners (NtM)) not less than 14 days prior to survey mobilisation (where feasible).
Deployment activities	Notices (via NtM) as soon as reasonably practicable prior to commencement of offshore construction activities. For individual deployment vessels, the Applicant will aim to provide notice and information no less than 14 days prior to mobilisation (where feasible).

3.4 Safety Zones

Safety Zones under Section 95 of the Energy Act 2004 and associated regulations are commonly used on offshore projects to establish controlled areas within the Project site where construction or major maintenance may occur. This is to help reduce navigational risks and interactions with fishing vessels or other sea users.

Statutory Safety Zones or voluntary Exclusion Zones are not anticipated to be required for the Project. This is because no commercial fishing activity has been identified within the Project area, and Project activities are not expected to create navigational or operational risks. Should conditions change in future, the Applicant would review the need for Safety and/or Exclusion Zones in line with the relevant legislation.

Any relevant updates or operational notices will continue to be communicated via NtMs and the Seafish “Kingfisher” system.

3.5 Guard Vessels

Guard vessels are typically used to provide a physical presence on site, monitor vessel activity, and notify passing vessels of accidental encroachment onto the Project site. It is highly unlikely that the Project will require a guard vessel, since no commercial fishing activity has been identified within the Project site, and the risk of gear interaction, snagging, anchor conflict or similar effects is extremely low.

However, should the Project’s circumstances change in future, the need for vessel-based observation or additional notification measures can be reviewed, and if deemed necessary, the guard vessel details will be distributed via NtMs and the Seafish “Kingfisher” system.

3.6 Reporting of Dropped Objects

If an object related to the Project is unintentionally dropped at sea, a dropped objects at sea procedure will be followed to maintain safety and reduce the risks to fishing vessels. Procedures to be followed are as identified in Marine Scotland - Guidance on preparing a Fisheries Management and Mitigation Strategy, 2020 (Section 5.5.5 and Appendix 1).

The Applicant will also notify Marine Directorate Licensing Operations Team (MD-LOT) as soon as possible after becoming aware of the incident. If this object is considered to be a risk to navigation, a NtM will be issued when the object’s location is identified. Additionally, a ‘dropped objects’ form will be submitted to MD-LOT, and any other relevant stakeholders, as soon as possible. Furthermore, any additional actions deemed to be required, after consultation with MD-LOT, will be communicated via an NtM.

Details of the dropped objects with the potential to impact negatively on fishing gear will be distributed via NtMs and the Seafish “Kingfisher” system.

3.7 Code of Good Practice for All Vessels

Any vessels contracted by the Applicant to conduct device deployment and survey work will be defined according to their manoeuvrability as per Rule 3g of the International Regulations for the Prevention of Collisions at Sea (COLREGs) (as implemented in the UK by The Merchant Shipping (Distress Signals and Prevention of Collisions) Regulations 1996, also rule 3g). Contractors will also need to adhere to a code of good practice, to enable effective co-

existence between the Project and the fishing industry, which will likely include the following requirements:

- Fishing liaison/interaction manuals will be present onboard all vessels contracted by the Applicant;
- Any debris related to the device deployment, and/or operation and maintenance must be removed, as long as it is safe and practicable to do;
- All vessels contracted to the Project must adhere to the requirements of the COLREGs and Safety of Life at Sea (SOLAS);
- All vessels contracted to the Project must maintain professional, polite and useful communications with other sea users, particularly fishing vessels during offshore operations;
- All vessels contracted to the Project must monitor the appropriate Very High Frequency (VHF) radio channels at all times to ensure communications from fishing vessels are received directly; and
- Appropriate risk assessments regarding potential interactions with commercial fishing vessels and their gears must be undertaken for all contracted vessels.

3.8 Procedures in Relation to Gear Fastening or Loss

Fishermen need to be extremely careful when fishing in the vicinity of offshore renewable energy structures and must ensure that they are using the latest information in respect of location of infrastructure and maintaining a suitable separation distance.

The primary aim in the event of fouling of fishing gear is to avoid danger to the vessel, those on board, and any infrastructure that the fishing gear may have fouled. To this end:

- Excessive winch, line, net hauler loads, or engine power should not be used to retrieve stuck equipment, if it is not easily retrieved;
- If the vessel is in close proximity to cable or renewable energy device infrastructure, careful thought must be given to releasing the equipment, marking its location, and documenting the incident;
- Grappling in an attempt to retrieve lost fishing gear close to the export cabling must not be carried out; and
- If it is not possible to safely free and retrieve the fouled gear, it should be marked with suitable buoys, the location noted, and the gear released.

As soon as possible, the vessel skipper is to inform the EMEC Stakeholder Manager (contact details in Section 3.2.1). The local Marine Scotland Fishery Office should also be informed. This is likely to be the Kirkwall office:

Kirkwall Fisheries Office
5 Ferry Terminal Building
The Pier
KIRKWALL
KW15 1HU
Tel: 0300 244 6699
E-mail: FOKirkwall2@gov.scot

Reporting forms, as per Appendix 2 of 'Marine Scotland - Guidance on preparing a Fisheries Management and Mitigation Strategy, 2020' are to be completed as soon after the incident as practical.

4 Mitigation and Monitoring

The Applicant is committed to both co-existence and co-location of both industries within the Project boundary. Given that no fishing activity has been identified within the Project site, no Project-specific mitigation or monitoring measures are currently deemed necessary. However, the Project will continue to follow best practice principles as outlined in the sections above.

As part of this approach, the Applicant will maintain open, transparent and proactive communication with the commercial fishing community. This will include sharing key Project information, giving appropriate notice ahead of any deployment or maintenance activities, and providing clear contact channels to the EMEC Stakeholder Manager for enquiries or concerns. Maintaining this ongoing dialogue will help ensure that any issues can be identified and resolved quickly, thereby supporting continued positive relationships with the fishing industry, and minimising the potential for unforeseen impacts on commercial fisheries.

5 References

Blyth-Skyrme, R. (2010). Options and Opportunities for Marine Fisheries Mitigation Associated with Windfarms (Report No. FISHMITIG09). Report by Ichthys Marine Ecological Consulting. Report for Collaborative Offshore Wind Research into the Environment (COWRIE). Available online at: https://tethys.pnnl.gov/publications/options-opportunities-marine-fisheries-mitigation-associated-windfarms

EMEC, 2014. Fall of Warness Tidal Test Site: Environmental Statement. Document reference: REP460-01 20141219. Available at: https://marine.gov.scot/sites/default/files/environmental_statement_1.pdf [Accessed 25/11/2025].

EMEC, 2022. Fall of Warness Scoping Report. European Marine Energy Centre. Available at: https://marine.gov.scot/sites/default/files/emec_fall_of_warness_scoping_report.pdf [Accessed 25/11/2025].

EMEC, 2025. EMEC Fall of Warness EIAR and HRA Delivery Fall of Warness Environmental Impact Reassessment. Document Number: A-200591-S02-A-REPT-001.

Fishing Liaison Offshore Wind Wet Renewables Group (FLOWW), 2014. Best Practice Guidance for Offshore Renewable Developments: Recommendations for Fisheries Liaison. Available online at: https://maritime-spatial-planning.ec.europa.eu/sites/default/files/floww-best-practice-guidance-for-offshore-renewables-developments-jan-2014_1.pdf [Accessed 19/11/2025].

Marine Directorate, 2020. Guidance on preparing a Fisheries Management and Mitigation Strategy – Draft. Available online at https://marine.gov.scot/information/fisheries-management-and-mitigation-strategy-FMMCP-consultation [Accessed 19/11/2025].

Marine Directorate, 2022. Good Practice Guidance for assessing fisheries displacement by other licensed marine activities. Available online at: https://www.gov.scot/binaries/content/documents/govscot/publications/research-and-analysis/2022/06/good-practice-guidance-assessing-fisheries-displacement-licensed-marine-activities/documents/good-practice-guidance-assessing-fisheries-displacement-licensed-marine-activities/good-practice-guidance-assessing-fisheries-displacement-licensed-marine-activities/govscot%3Adocument/good-practice-guidance-assessing-fisheries-displacement-licensed-marine-activities.pdf [Accessed 19/11/2025].

Marine Directorate, 2025. Marine Licensing and Consenting: Offshore Renewable Energy Projects: Mitigation and Monitoring Plans. Available online at: https://www.gov.scot/publications/marine-licensing-and-consenting-offshore-renewable-energy-projects/pages/mitigation-and-monitoring-plans/

Scotland's National Marine Plan 2015. Available online at: https://www.gov.scot/publications/scotlands-national-marine-plan/ [Accessed 19/11/2025].

The Merchant Shipping (Distress Signals and Prevention of Collisions) Regulations, 1996. Available online at - https://assets.publishing.service.gov.uk/media/5a7ca25340f0b65b3de0a2bc/msn1781.pdf [Accessed 19/11/2025].

The European Marine Energy Centre Ltd., The Charles Clouston Building, ORIC, Back Road, Stromness, ORKNEY KW16 3AW
Email: info@emec.org.uk **Web:** www.emec.org.uk **Tel:** 01856 852060
Registered in Scotland, registered number: SC249331 **VAT Registration Number:** GB 828 8550 90