

SCOTTISH HYDRO ELECTRIC POWER DISTRIBUTION PLC

Offshore Construction Environmental Management Plan

Jura to Islay Distribution Cable Replacement



P2635_R6192_Rev2 | 30 October 2023

DOCUMENT RELEASE FORM

Scottish Hydro Electric Power Distribution plc

P2635_R6192_Rev2

Offshore Construction Environmental Management Plan

Jura to Islay Distribution Cable Replacement

Authors

Aodhfin Coyle, Rosie Wilson

Project Manager

<Redacted>

Patricia Elder

Authoriser

<Redacted>

Lesley Harris

Rev No	Date	Reason	Author	Checker	Authoriser
Rev 0	31/08/2023	Draft for client review and comment	AC	PE	JEH
Rev 1	19/10/2023	Final Issue	RW	PE	JEH
Rev 2	30/10/2023	Minor client comment addressed	AC	PE	LHA

Intertek Energy & Water Consultancy Services is the trading name of Metoc Ltd, a member of the Intertek group of companies.

CONTENTS

	DOCUMENT RELEASE FORM	I
	GLOSSARY	V
1.	INTRODUCTION	1
1.1	Background	1
1.2	Objectives of this document	2
1.3	Offshore CEMP document management	3
1.4	Linkage with other documents	3
2.	ENVIRONMENTAL MANAGEMENT MEASURES	4
2.1	Overview	4
3.	ENVIRONMENTAL MANAGEMENT FRAMEWORK	15
3.1	Introduction	15
3.2	Offshore CEMP roles and responsibilities and chain of command	15
3.3	Contractor staff competence, training and awareness	19
3.4	Project inductions	19
3.5	Toolbox talks	19
3.6	Vessel notice boards/awareness materials	19
3.7	Offshore CEMP communications and reporting	20
3.8	External communications	20
4.	MARINE MAMMAL PROTECTION PLAN	23
4.1	Overview	23
4.2	Marine Mammal Protection Plan (MMPP)	23
5.	MARINE ARCHAEOLOGY MANAGEMENT PLAN	24
5.1	Overview	24
5.2	Archaeology and Cultural Heritage Management Plan	24
6.	INVASIVE NON-NATIVE MARINE SPECIES PLAN	25
6.1	Overview	25
6.2	Regulatory requirements	25
6.3	Invasive Non-Native Marine Species Management Plan	25

7.	WASTE MANAGEMENT PLAN	27
7.1	Overview	27
7.2	Waste Management Plan	27
8.	POLLUTION PREVENTION, SPILL RESPONSE AND CONTINGENCY PLAN	30
8.1	Overview	30
8.2	Emergency Spill Response	30
8.3	Monitoring and Record Keeping	30
8.4	Pollution Prevention Measures Onshore (at Cable Landfall)	31
9.	MONITORING AND REPORTING PLAN	32
9.1	Introduction	32
9.2	Monitoring During cable installation	32
9.3	Reporting during/ after cable installation	34
9.4	Incident response and reporting	34
	REFERENCES	35
APPENDIX A	Correspondence and Commitments Register	A-1

LIST OF TABLES AND FIGURES

Tables

Table 1-1	Supporting documents	3
Table 2-1	Environmental management measures	5
Table 3-1	Roles and responsibilities	16
Table 3-2	Required returns and notifications	20
Table 9-1	Vessel audit – environmental compliance checklist	32
Table A-1	Correspondence and Commitments Register	A-2

Figures

Figure 1-1	Jura to Islay Cable Installation Application Corridor (P2635-LOC-006)	1
------------	---	---

GLOSSARY

AIS

Automatic Identification Systems

BWM

Ballast Water Management

BWMP

Ballast Water Management Plan

CFLO

Companies Fisheries Liaison Officer

CEMP

Construction Environment Management Plan

COSHH

Control Of Substances Hazardous to Health

CPP

Construction Phase Plan

DDV

Drop Down Video

DPR

Daily Project Report

EPS

European Protected Species

EPS RA

European Protected Species Risk Assessment

EU

European Union

FIR

Fishing Industry Representative

FLMAP

Fisheries Liaison Mitigation Action Plan

ID

Identification

IMO

International Maritime Organisation

INNMS

Invasive Non-Native Marine Species

JNCC

Joint Nature Conservation Committee

MARPOL

International Convention for the Prevention of
Pollution from Ships / Maritime Pollution

MCS

Marine Conservation Society

MGO

Marine Gas Oil

MHWS

Mean High Water Spring

MMO

Marine Mammal Observer

MMPP

Marine Mammal Protection Plan

MSDS

Material Safety Data Sheets

MS-LOT

Marine Scotland - Licensing Operations Team

Nm

Nautical mile

NRA

Navigational Risk Assessment

PAD

Protocol for Archaeological Discoveries

PAM

Passive Acoustic Monitoring

pUXO

Potential Unexploded Ordnance

ROV

Remotely Operated Vehicle

RQHSE

Risk, Quality, Health, Safety and Environment

SEPA

Scottish Environmental Protection Agency

SHE

Safety, Health and Environment

SHEPD

Scottish Hydro Electric Power Distribution plc

SOP

Standard Operating Procedures

SOPEP

Shipboard Oil Pollution Emergency Plan

SPA

Special Protection Area

SSEN

Scottish and Southern Electricity Networks

SWCN

Special Waste Consignment Note

UK

United Kingdom

WTN

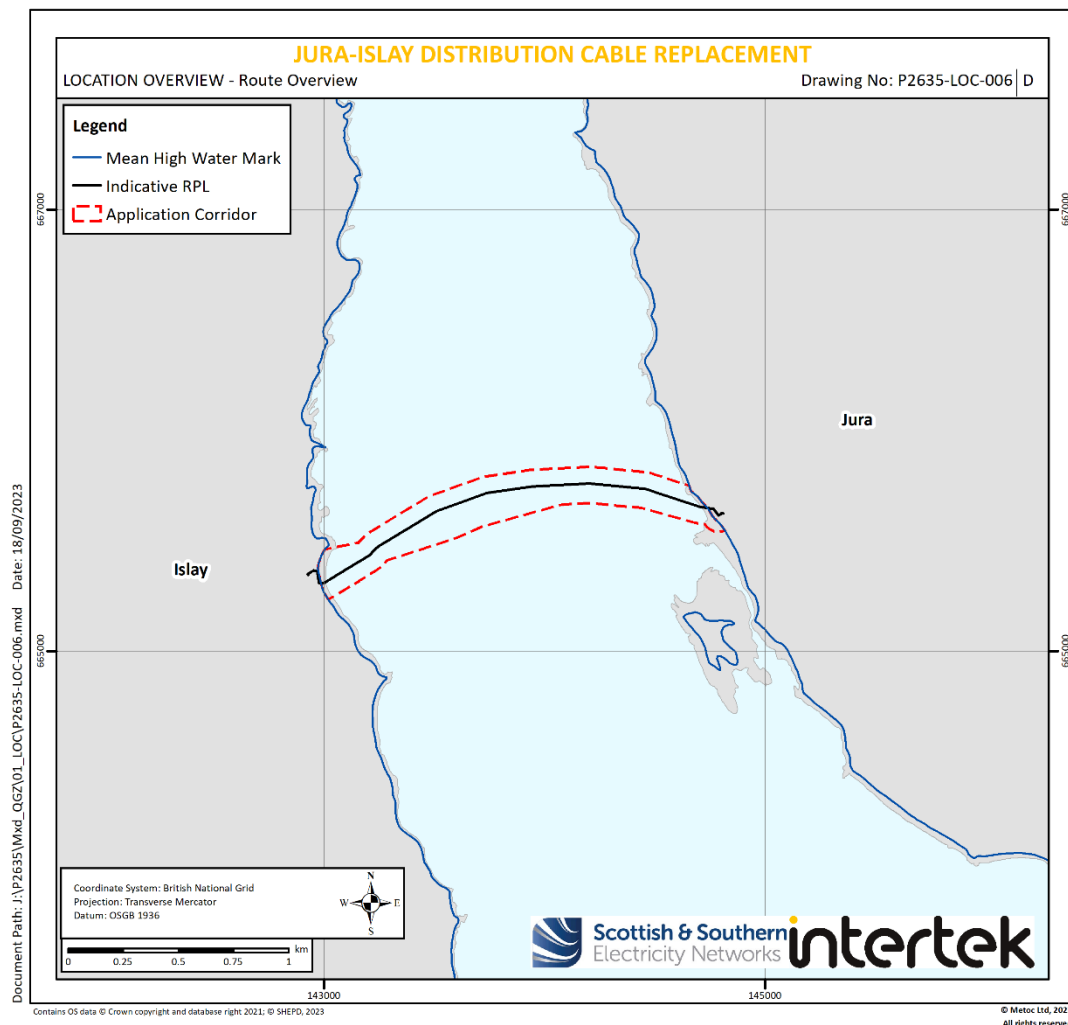
Waste Transfer Note

1. INTRODUCTION

1.1 Background

This offshore Construction Environment Management Plan (CEMP) is for the installation phase of Jura to Islay 33kV submarine electricity cable between the beach north of Glas Eilean and Traigh Ban (the Project). The installation operations will be undertaken by Briggs Marine (known as the *Contractor*) and will take place within an Application Corridor covering a total area of 0.3km² (Figure 1-1; Drawing reference: P2635-LOC-006).

Figure 1-1 Jura to Islay Cable Installation Application Corridor (P2635-LOC-006)



This offshore CEMP sets out the proposed environmental management framework and procedures that will be followed by the *Contractor* during the installation of the cable. It covers all potential effects associated with installation of the cable and all works at the landfall occurring below Mean High Water Springs (MHWS). Given that the cable will be installed across the shore, management of potential impacts on the shore have also been considered or have been referenced to the separate onshore CEMPs. The mitigation measures that are incorporated in the design of the cable to prevent or reduce adverse environmental effects as much as possible are discussed separately as part of the Marine Environmental Appraisal (MEA) report (Document reference P2635 _R6196).

1.2 Objectives of this document

The purpose of this offshore CEMP is to provide the over-arching framework for environmental management during the installation of the replacement subsea cable. It sets out the principles that will be applied by the *Contractor* in implementing their environmental management plans. The works will be undertaken considering the following:

- Relevant legislation as outlined in supporting MEA report;
- Relevant policies in the Scottish Marine Plan and Argyll Marine Spatial Plan and Clyde Marine Spatial Plan;
- Findings of the assessments undertaken to support the Marine Licence application;
- Any conditions established through the Marine Licence and other relevant licences including the European Protected Species (EPS) Licence and Basking Shark Licence;
- SHEPD policies and procedures:
 - Sustainability Policy (PO-COR-033);
 - Environment and Climate Change Policy (PO-COR-054);
 - Safety Health and Environmental Organisation Standard (MS-SHE-001);
 - Business Unit SHEPD Requirements (SP-PS-LT-901);
 - Safety, Health & Environment (SHE) Requirements;
 - Specification for Contracts (SP-SHE-009-001 SSE);
 - Responsible Procurement Charter (REF-PRS-004);
 - Incident Reporting Management and Investigation Standard (MS-SHE-010); and
 - SHEPD Communication, Reporting of SHE Incidents (REF-PS-SHE-COM-015).
- Group Sustainability Policy (PO-GRP-016)
- Group Climate Change Policy (PO-GRP-001)
- Group Safety and Health Policy (PO-GRP-015)
- Group Safety and Health Policy Summary (PO-SHE-001)
- Group Environment Policy (PO-GRP-007)
- Otter Species Protection Plan (TG-NET-ENV-503.pdf)
- Bird Species Protection Plan (TG-NET-ENV-505.pdf)
- General Environmental Management Plan- Working in or Near Watercourses (TG-NET-ENV-512.pdf)
- General Environmental Management Plan- Soil Management (TG-NET-ENV-511.pdf)
- General Environmental Management Plan- Dust Management (TG-NET-ENV-520.pdf)
- General Environmental Management Plan- Waste Management (TG-NET-ENV-516.pdf)
- General Environmental Management Plan- Working in Sensitive Habitats (TG-NET-ENV-513.pdf)
- General Environmental Management Plan- Bad Weather (TG-NET-ENV-523.pdf)
- General Environmental Management Plan- Oil Storage and Refuelling (TG-NET-ENV-510.pdf)

- General Environmental Management Plan- Working with Concrete (TG-NET-ENV-514.pdf)

1.3 Offshore CEMP document management

The offshore CEMP will be a controlled document and will be formally issued to the *Contractor's* cable installation team. Live copies of the CEMP will be held at the following locations:

- *Contractor's* project office;
- At the premises of any agent of the *Contractor* acting on behalf of the *Contractor*;
- All site offices dealing with marine operations;
- Onboard all principal construction vessels involved in offshore activities;
- With the *Contractor's* Marine Consents Manager.

The *Contractor* will provide the *Employer* with the most up to date copy of the offshore CEMP and is responsible for maintaining the register of document versions and issue dates.

1.4 Linkage with other documents

This offshore CEMP document sets out the proposed overarching environmental management framework to be applied during the Project and forms part of a suite of approved documents that were prepared to inform the Marine Licence application and inform the framework for environmental management of the Project.

Table 1-1 Supporting documents

Document	Document Reference
Project Description	Intertek Document Reference "P2635_R6193" MEA Appendix A
Marine Environmental Appraisal (MEA) Report	Intertek Document Reference "P2635_R6196"
Fishing Liaison and Mitigation Action Plan (FLMAP)	SHEPD Document Reference "Fishing Liaison Mitigation Action Plan (covering all sea users) Argyll" MEA Appendix B
European Protected Species (EPS) Risk and Protected Sites and Species Assessment	SHEPD Document Reference "EPS and Protected Sits and Species Risk Assessment – Argyll" MEA Appendix C
Onshore CEMP	In preparation at the time of writing, filename will be inserted when available
Marine Licence	To be added once licence is granted
EPS Licence	To be added once licence is granted
Basking Shark Licence	To be added once licence is granted

2. ENVIRONMENTAL MANAGEMENT MEASURES

2.1 Overview

The environmental management measures to be implemented for the offshore installation phase of the Jura to Islay subsea cable replacement (offshore CEMP requirements) are outlined in Table 2-1. The measures listed have been combined in a single location to allow the *Contractor* to check and record compliance against the various management measures, mitigation measures and consent conditions (including best practice requirements) as outlined in the supporting FLMAP, MEA Report, Marine Licence (when received), EPS licence (when received) and Basking Shark Licence (when received).

Prior to the start of installation activities these measures will be reviewed, and as appropriate additional detail will be provided on their implementation.

This Section should be read in conjunction with the Monitoring and Reporting Plan provided in Section 9 of this offshore CEMP which describes the monitoring (including auditing) and reporting activities that need to be performed during the execution of the Project.

Table 2-1 Environmental management measures

Environmental Aspects	Ref	CEMP Requirement	Project Phase (Pre-lay survey, Installation, Post-lay survey)	Responsibility	Date completed/ reviewed or checked [HOLD: to be completed through works]	Relevant Reference/ Evidence [HOLD: to be completed through works]	Comment/ Ongoing actions required [HOLD: to be completed through works]
Seabed, Benthic and Intertidal Ecology							
Benthic and Intertidal Ecology	EM1 MEA "P2635_R6196" Section 8	Geophysical surveys and visual inspection will be conducted to confirm the locations of potentially sensitive features and micro-routing will be used to avoid sensitive species/habitats where possible. Rock bags, split pipe, Uraduct, grout bags and concrete mattress deployment as well as the deployment of anchor chains will be minimised in areas identified as potential Annex I reef habitat and the footprint of the deposits will be the minimum required to ensure cable safety and stability.	Installation	Contractor Environmental Manager and Offshore Manager			
Marine Mammals							
Scottish Marine Wildlife Watching Code	EM2 CEMP Appendix C	All vessels operating on the project (within and outwith the licence corridor) will adhere to the Scottish Marine Wildlife Watching Code.	All phases of works	Contractor Environmental Manager			
Marine Mammal Protection Plan	EM3 CEMP Section 4	All works will be undertaken in accordance with the Marine Mammal Protection Plan.	All phases of works	Contractor Environmental Manager			
Basking shark							
Scottish Marine Wildlife Watching Code	EM2 CEMP Appendix C	All vessels operating on the project (within and outwith the licence corridor) will	All phases of works	Contractor Environmental Manager			

Environmental Aspects	Ref	CEMP Requirement	Project Phase (Pre-lay survey, Installation, Post-lay survey)	Responsibility	Date completed/ reviewed or checked [HOLD: to be completed through works]	Relevant Reference/ Evidence [HOLD: to be completed through works]	Comment/ Ongoing actions required [HOLD: to be completed through works]
		adhere to the Scottish Marine Wildlife Watching Code.					
Slow moving installation vessel	EM4 EPSRA Section 3.4.2.1.2	The installation vessel will be moving at a maximum speed of 4 knots to allow any basking sharks time to move away from the vessel. Should a basking shark be found to be in the direct way of a vessel, the vessel will slow down further or, if possible, alter course to avoid collision.	Installation	Offshore Manager			
Toolbox talks	EM5 EPSRA Section 5	Installation vessel crew will be made aware of all protected species within the marine environment through the following guidance; the Marine Conservation Society (MCS) Basking Shark Code of Conduct and good practice measures for boat control near basking sharks and the Scottish Marine Wildlife Watching Code and Guide to Best Practice for Watching Marine Wildlife.	All phases of works	Contractor Environmental Manager			
Otter							
Otter survey	EM6 EPSRA Section 5.4	Otter surveys have indicated that there are no qualifying features within 200m of the works that would require a licence to be in place. A pre-construction survey will be carried out prior to the works. Mitigation measures will be detailed in the onshore CEMP, and SPP plans and adhered to.	Pre-lay survey	Contractor Environmental Manager (to liaise with the Onshore ECoW)			
Seabirds							

Environmental Aspects	Ref	CEMP Requirement	Project Phase (Pre-lay survey, Installation, Post-lay survey)	Responsibility	Date completed/ reviewed or checked [HOLD: to be completed through works]	Relevant Reference/ Evidence [HOLD: to be completed through works]	Comment/ Ongoing actions required [HOLD: to be completed through works]
Scottish Marine Wildlife Watching Code	EM2 CEMP Appendix C	All vessels operating on the project (within and outwith the licence corridor) will adhere to the Scottish Marine Wildlife Watching Code.	All phases of works	Contractor Environmental Manager			
Rafting seabirds	EM4 EPSRA Section 5.5.1	The vessels will be moving at slow speeds to allow any rafting seabirds time to move away from the vessel should they be disturbed by the vessel presence.	All phases of works	Contractor Environmental Manager			
Breeding birds	EM7 EPSRA Section 5.5.3	When within an SPA which has been designated for breeding birds that may nest or feed in close proximity to the Application Corridor or the landfall, further consultation will be undertaken with NatureScot on the requirement for any seasonal restriction to be implemented for cable installation in order to avoid disturbance to qualifying species.	All phases of works	Contractor Environmental Manager			
Nesting birds	EM7 EPSRA Section 5.5.2	For any nesting populations within/in the vicinity of the Application Corridor, further consultation will be undertaken with NatureScot on the requirement for any seasonal restriction to be implemented for cable installation in order to avoid disturbance to qualifying species during the most sensitive time of the year.	All phases of works	Contractor Environmental Manager			
Golden Eagles	EM8 MEA "P2635_R6196" Section 9	All vessels operating on the project (within and outwith the licence corridor) will have copies of the Golden Eagle disturbance licence will need to be present onboard the	All phases of works	Contractor Environmental Manager			

Environmental Aspects	Ref	CEMP Requirement	Project Phase (Pre-lay survey, Installation, Post-lay survey)	Responsibility	Date completed/ reviewed or checked [HOLD: to be completed through works]	Relevant Reference/ Evidence [HOLD: to be completed through works]	Comment/ Ongoing actions required [HOLD: to be completed through works]
		Project vessels as well as copies provided to the onshore contractors- with all conditions to be adhered to.					
Visual disturbance (from light)	EM9 EPSRA Section 5.5.4	When within an SPA and where there is potential for 24-hour working, lighting on-board the cable installation vessel(s) will be kept to the minimum level required to ensure safe operations and lights will be directed or shielded to prevent upward illumination and minimise disturbance.	All phases of works	Contractor Environmental Manager			
Other Marine Users							
Stakeholder engagement	EM10 FLMAP Section 2.1	Continuing effective positive liaison with all interested parties through the pre-construction, construction and operational phases of the cable replacement.	All phases of works	CFLO			
Communication with sea users	EM11 FLMAP Section 4.1 MEA "P2635_R6196" Section 4	Informing sea users of construction areas and planned activities through the Notice to Mariners (NTMs) and update emails from the developer and their subcontractors.	All phases of works	CFLO			
Notice	EM11 MEA "P2635_R6196" Section 4	Notice to Mariners will be published to inform sea users via Notices to Mariners, Kingfisher Bulletins and Maritime and Coastguard Agency (MCA) and UK Hydrographic Office (UKHO). Vessels will be requested to remain at least 500 m away from cable vessels during installation operations.	Installation	Project Manager			

Environmental Aspects	Ref	CEMP Requirement	Project Phase (Pre-lay survey, Installation, Post-lay survey)	Responsibility	Date completed/ reviewed or checked [HOLD: to be completed through works]	Relevant Reference/ Evidence [HOLD: to be completed through works]	Comment/ Ongoing actions required [HOLD: to be completed through works]
Construction Phase Plan (CPP)	EM12 FLMAP Section 9.6	Construction Phase Plan (CPP) - Provision of details of the schedule for cable lay activities to local ports, ship operators, fishermen and recreational sailing organisations.	Installation	CFLO			
Automatic Identification Systems (AIS) Tracking	EM13 MEA "P2635_R6196" Section 13	The cable installation vessel will have AIS as a legal requirement.	Installation	Master			
Safety zone	EM14 FLMAP Section 9.1	Implementation of safety zones (of up to 500m) around the cable lay vessel will reduce the risk of collision between the cable laying vessel and other vessels transiting the area.	Installation	Master			
Fishing Industry Representatives (FIR) and Standard operating procedures (SOP)	EM15 FLMAP Section 8.4	Should a FIR not be present on a vessel, the Fishing Gear Interaction Standard Operating Procedure (SOP) will be followed as provided in Appendix A of the FLMAP.	Installation	CFLO/FIR			
Stakeholder arrangements	EM16 MEA "P2635_R6196" Section 13	During the Marine Survey campaign for this project arrangements were made with CalMac Ferries to ensure survey vessel activities and ferry operations coexisted in harmony. The arrangement was very successful and is being continued into the installation phase of operations.	All phases of work	CFLO			
Early consultation	EM17 MEA "P2635_R6196" Section 11	Early consultation with relevant contacts to provide notification of impending activity.	Before operations commence	Project Manager			

Environmental Aspects	Ref	CEMP Requirement	Project Phase (Pre-lay survey, Installation, Post-lay survey)	Responsibility	Date completed/ reviewed or checked [HOLD: to be completed through works]	Relevant Reference/ Evidence [HOLD: to be completed through works]	Comment/ Ongoing actions required [HOLD: to be completed through works]
Preventing collisions	EM18 MEA "P2635_R6196" Section 4	Project vessels will comply with the International Regulations for Preventing Collisions at Sea, 1972 (COLREGs) – as amended, particularly with respect to the display of lights, shapes and signals.	All phases of work	Master			
Reduced visibility	EM18 MEA "P2635_R6196" Section 4	Where weather reduces visibility then vessel masters shall adhere to MGN guidelines and COLREGS to prevent collisions at sea.	All phases of work	Master			
Cable route circulation	EM19 MEA "P2635_R6196" Section 4	'As-laid' co-ordinates of the cable route will be recorded and circulated to the UK Hydrographic Office (UKHO), KIS-ORCA service and any other relevant authorities. Cables will be marked on Admiralty Charts and KIS-ORCA charts (paper and electronic format). An update will be distributed to stakeholders following the completion of installation.	Installation, Post-Installation	Project Manager			
Guard vessel (if required)	EM20 MEA "P2635_R6196" Section 11	A guard vessel may be contracted in the in the event of its presence being required for the safety of the vessel, its crew and the cable.	Installation	Offshore Manager			
Cable protection	EM21 MEA "P2635_R6196" Section 11	Cast Iron Shells/split pipe, Rock Bags and Concrete Mattresses to be installed as applicable along the cable route	Post-installation	Offshore Manager			
FLO	EM22	An onshore Fishing Liaison Officer (FLO) will be provided for the project. The FLO will follow the Fishing Liaison Mitigation Action	All phases of work	CFLO			

Environmental Aspects	Ref	CEMP Requirement	Project Phase (Pre-lay survey, Installation, Post-lay survey)	Responsibility	Date completed/ reviewed or checked [HOLD: to be completed through works]	Relevant Reference/ Evidence [HOLD: to be completed through works]	Comment/ Ongoing actions required [HOLD: to be completed through works]
	MEA "P2635_R6196" Section 4	Plan (FLMAP) and ensure the entire corridor is kept clear of fishing gear until all operation have been completed.					
Broadcast activities	EM23 MEA "P2635_R6196" Section 11	The UKHO will be informed of installation activities in order to issue Maritime Safety Information (MSI) broadcasts as appropriate.	Installation	Project Manager			
Avoidance over the cable	EM24 MEA "P2635_R6196" Section 4	Guidance provided by the UKHO and International Convention for the Safety of Life at Sea (SOLAS) recommend that fishing vessels should avoid trawling over installed seabed infrastructure (UKHO 2020). Vessels are advised in the Mariners Handbook not to anchor or fish (trawl) within 500 m of the cable.	Post-installation	Other			
Notification of buoys	EM25 MEA "P2635_R6196" Section 11	If cables are buoyed off whilst the vessel departs the area, buoy positions will be notified to the Notice to Mariners (NTM) distribution list including Kingfisher and 500 m clearance will be requested.	Installation	Offshore Manager			
Potential Unexploded Ordnance (pUXO)	EM26 MEA "P2635_R6196" Section 12	If pUXO items are discovered during any phase of the project, the location of the item will be recorded and immediate advice sought from relevant authorities. Munitions awareness briefings will be given to all relevant personnel.	All phases of works	Offshore manager			

Marine Archaeology

Environmental Aspects	Ref	CEMP Requirement	Project Phase (Pre-lay survey, Installation, Post-lay survey)	Responsibility	Date completed/ reviewed or checked [HOLD: to be completed through works]	Relevant Reference/ Evidence [HOLD: to be completed through works]	Comment/ Ongoing actions required [HOLD: to be completed through works]
Marine Archaeology Management Plan	EM27 CEMP Section 5	All works will be undertaken in accordance with the Marine Archaeology Management Plan.	All phases of works	Contractor Environmental Manager (Communicating with Offshore Manager)			
Mitigation during installation	EM28 CEMP Section 5.2.2	If required by licence condition, a Protocol for Archaeological Discoveries (PAD) based on the Crown Estate's PAD reporting protocol (2014) may be implemented. The use of vessels with DP positioning systems rather than anchors will further prevent accidental impact.	All phases of works	Contractor Environmental Manager (Communicating with Offshore Manager)			
Invasive Non-Native Marine Species							
Invasive Non-Native Marine Species (INNMS) Plan	EM29 CEMP Section 6	All works will be undertaken in accordance with the INNMS Plan.	All phases of works	Offshore Manager			
Waste management							
Waste management	EM30 CEMP Section 7	All works will be undertaken in accordance with the Waste Management Plan.	All phases of works	Offshore Manager			
Pollution Prevention, Spill Response and Contingency Planning							
Pollution Prevention, Spill Response and Contingency Planning	EM31 CEMP Section 8	All works will be undertaken in accordance with the Pollution Prevention, Spill Response and Contingency Plan.	All phases of works	Project Manager			
Environmental Monitoring and Reporting							

Environmental Aspects	Ref	CEMP Requirement	Project Phase (Pre-lay survey, Installation, Post-lay survey)	Responsibility	Date completed/ reviewed or checked [HOLD: to be completed through works]	Relevant Reference/ Evidence [HOLD: to be completed through works]	Comment/ Ongoing actions required [HOLD: to be completed through works]
Monitoring and Reporting Plan	EM32 CEMP Section 9	To ensure works are carried out as per legislation, consent and licence conditions and in line with the <i>Employer</i> requirements monitoring and reporting of activities is to be undertaken in accordance with Monitoring and Reporting Plan, including completion of the Vessel Audit – Environmental Compliance Checklist.	All phases of works	Project Manager			
Equipment Checks							
Pre installation checks	EM33	All equipment will be checked and recorded prior to the commencement of installation activities to ensure that following completion of the cable installation all equipment has been recovered. The list of checks is to be determined during the Hazard Identification and Risk Assessment (HIRA) process prior to commencement of the works.	Pre-installation	Offshore Manager			
Post installation checks	EM34	Upon completion of the cable installation operation, post installation equipment checks will be completed to confirm that all equipment has been recovered in its entirety and no unlicensed deposits in the marine environment result from the project operations. The list of checks is to be determined during the Hazard Identification and Risk Assessment (HIRA) process prior to commencement of the works.	Post-installation	Offshore Manager			

Environmental Aspects	Ref	CEMP Requirement	Project Phase (Pre-lay survey, Installation, Post-lay survey)	Responsibility	Date completed/ reviewed or checked [HOLD: to be completed through works]	Relevant Reference/ Evidence [HOLD: to be completed through works]	Comment/ Ongoing actions required [HOLD: to be completed through works]
Marine Licence Conditions							
Marine Licence (Insert) reference number when received)	ML #	[Marine Licence Conditions to be listed below when marine licence is received.]		Contractor Environmental Manager (Communicating with Offshore Manager)			
	ML #						
European Protected Species (EPS) Licence and Basking Shark Licence Conditions							
EPS Licence Reference* Basking Shark Licence*	EPSL # BSL #	EPS and BS Licence Conditions to be listed below when marine licence is received.]	All phases of works	Contractor Environmental Manager (Communicating with Offshore Manager)			
	EPSL # BSL #		All phases of works	Contractor Environmental Manager			

3. ENVIRONMENTAL MANAGEMENT FRAMEWORK

3.1 Introduction

This section sets out the environmental management framework for the Project, under the following areas:

- Offshore CEMP – roles and responsibilities;
- Offshore CEMP – staff competency and training; and
- Offshore CEMP – communications and reporting.

3.2 Offshore CEMP roles and responsibilities and chain of command

This section sets out the roles and responsibilities of all relevant Project personnel in relation to the delivery of this offshore CEMP.

All Project personnel have a responsibility to comply with the requirements of the offshore CEMP, however, the key roles relevant to the delivery and implementation of the offshore CEMP are outlined in Table 3-1.

Table 3-1 Roles and responsibilities

Role	Responsibilities	Name and Contact Details
Project Manager (<i>Contractor</i>)	Responsible for ensuring that the project is in compliance with any Consent, licence or associated information and identifies any breach or potential breach to the <i>Employer</i> Marine Consents Manager. Specific responsibilities, include: <ul style="list-style-type: none"> ▪ Facilitate dissemination of environmental requirements to the Project Team; ▪ Ensure and be responsible for compliance with all permits, licences and consents, and to report any deviations or breaches; ▪ Oversee the implementation and review of environmental procedures throughout the Project; ▪ Monitor the environmental performance of the Project through maintaining an overview of incidents, inspections and audits; ▪ Ensure that environmental considerations form an integral part of Design and Implementation of the Works and include environmental reviews as part of regular Project meetings; ▪ Review environmental matters with the Contractor Environmental Manager on a regular basis and as per project requirements; ▪ Liaise with the Contractor Environmental Manager on all environmental issues as appropriate; ▪ Ensure that all environmental incidents are reported to the Contractor Environmental Manager according to agreed procedures; and ▪ Nominate individual Project Team members to support the <i>Employer</i> in public relations and community liaison activities, including local community meetings. 	
Project Manager (<i>Employer</i>)	Amongst others is responsible for ensuring that the project is in compliance with any Consent, licence or associated information and identifying and breach or potential breach to the Marine Consents Manager and/or SHE Advisor.	
Offshore Manager (<i>Contractor</i>)	The Offshore Manager will be responsible for overseeing the monitoring of environmental and licence compliance during works. The Contractor Site Manager is experienced in ensuring site operations function in a manner that is environmentally compliant. Specific, responsibilities include: <ul style="list-style-type: none"> ▪ Understanding and implementing all environmental procedures ensuring that site operations function in compliance; ▪ Reporting environmental incidents at the earliest possible time and advising the Contractor's Environmental Manager & Project Manager; ▪ Ensuring toolbox talks are carried out as necessary to highlight responsibilities of the project under the offshore CEMP. 	
RQHSE Business Partner (<i>Contractor</i>)	The RQHSE Business Partner shall ensure that:	

Role	Responsibilities	Name and Contact Details
	<ul style="list-style-type: none"> ▪ Incidents are thoroughly investigated and reported throughout the Company; ▪ Assistance is provided, when appropriate, during investigations; ▪ Investigation levels are appropriate to the actual or potential severity of the incident; and ▪ Incidents are reported in compliance with statutory requirements. ▪ Develop risk assessments where appropriate 	
SHE Advisor (<i>Employer</i>)	<p>The Group SHE Manager shall ensure that:</p> <ul style="list-style-type: none"> ▪ Incidents are thoroughly investigated and reported throughout the Company; ▪ Assistance is provided, when appropriate, during investigations; ▪ Investigation levels are appropriate to the actual or potential severity of the incident; and ▪ Incidents are reported in compliance with statutory requirements. 	
Offshore Client Representative (<i>Employer</i>)	<p>The <i>Employer</i> Offshore Client Representative shall be responsible for ensuring that the <i>Employers</i> requirement under the contract with the Contractor are met. They shall be responsible for identifying and raising any defects or breaches against the contract, licences or supporting information. These defects and breaches shall be detailed in the Daily Project Report (DPR). In the case that an incident occurs, the SSEN Offshore Client Representative will be informed within 30 minutes of the incident occurring and is then in charge of informing the <i>Employer's</i> Marine Consents Manager and the <i>Employer's</i> Project Manager.</p>	
Marine Consents Manager (<i>Employer</i>)	<p>The Employer Marine Consents Manager shall be responsible for:</p> <ul style="list-style-type: none"> ▪ Obtaining, Marine Licences, Marine Works Licences and Marine EPS Licences (as appropriate) for the works; ▪ Review and acceptance of Contractor documentation; ▪ pre works briefings where they relate to licence conditions or Consent compliance and ▪ Working alongside with the external stakeholder engagement team in developing relationships, including Marine Scotland and The Crown Estate Scotland, to ensure that the project information is communicated as and when appropriate, in order to build consensus around project decision making. <p>They shall be in direct communication with the <i>Employer</i> Project Manager and <i>Employer</i> Offshore Client Representative.</p>	
Company Fisheries Liaison Officer (CFLO)	<p>The primary responsibilities of the CFLO are to establish and maintain effective communications between <i>Employer</i>, the Contractor and legitimate sea users during surveys and construction and ensure compliance with best practice guidelines whilst doing so. The primary responsibilities of the CFLO are described in detail in the FLMAP.</p>	

Role	Responsibilities	Name and Contact Details
Fisheries Industry Representative (FIR)	The FIR reports to the CFLO and works in conjunction with <i>Employer</i> . The primary responsibilities of the FIR are also described in the FLMAP.	
Marine Mammal Observer (MMO) and PAM operator	<p>Where required, the Marine Mammal Observer (MMO) and Passive Acoustic Monitor (PAM) operator shall be trained or experienced in UK waters and shall implement the requirements set out in any applicable EPS Licence, Marine Mammal Protection Plan (MMPP) or EPS Risk Assessment, along with compliance with any other applicable legislation or guidance such as the JNCC guidance. They shall be employed by the Contractor and shall be dedicated to the role on a full-time basis. A minimum of two MMO/PAM operators will be provided for 24-hour works.</p> <p>The Operators shall be responsible for the provision of any reports as required and within the timescales set out in any applicable licence(s)..</p>	
Environmental Manager (<i>Contractor</i>)	<p>The Contractor Environmental Manager will be based at the Contractors head office and be in close contact with the Project Manager. The Contractor Environmental Manager shall be responsible for:</p> <ul style="list-style-type: none"> ▪ Preparation, implementation and undertaking reviews of environmental plans in accordance with <i>Employer</i> and Contractor requirements and procedures and current legislation; ▪ Providing the necessary updates and reports to Project Team and <i>Employer</i>; ▪ Interfacing with site staff and subcontracted companies on environmental issues; ▪ Ensuring the Project specific offshore CEMP is implemented, ensuring compliance with procedures and legislation; ▪ In conjunction with the <i>Employer</i>, liaising with government departments, local authorities and other statutory authorities on environmental matters, as per project needs; and ▪ Reviewing Method Statements against environmental issues. 	
Other project staff	<p>All other project staff, are responsible for ensuring that they adhere to the following:</p> <ul style="list-style-type: none"> ▪ Understand and implement procedures relevant to their role as laid out in the offshore CEMP and the associated documentation including FLMAP and MMPP; ▪ Raise any environmental concerns with their supervisor or the Contractor Environmental Manager; and ▪ Report all environmental incidents to their supervisor or the RQHSE Business Partner as soon as possible. ▪ Compliance with offshore CEMP. 	

3.3 Contractor staff competence, training and awareness

Contractor will require that all personnel engaged in the Project have adequate experience to perform the activities executed under their responsibility or in their scope in a safe manner for themselves and others and are adequately supported at all levels. This will be confirmed by the *Contractor* Environmental Manager.

Contractor will ensure that a Project organogram is in place and that the roles and responsibilities of all named personnel are clear and that clear project management procedures are in place for all aspects of the Project, including those related to environmental management measures.

Contractor has a documented process in place to manage the selection and ongoing performance of any subcontractors to ensure that the SHE risks associated with the *Contractors'* activities are managed effectively.

Contractor will require that any subcontractors have appropriate environmental management procedures in place.

Contractor (or their appointed representative) will undertake audit and inspection of *Contractor's* work to check compliance with SHE requirements.

Contractor will undertake hazard identification and risk assessment (HIRA).

Contractor will require that all Project personnel attend required inductions including, but not necessarily limited to, matters related to *Employer's* environmental rules and policies, Site Rules, Health and Safety requirements, arrangements for First Aid and Emergency Response (including environmental pollution and emergency spills), Environmental Management, including Consent compliance requirements and Incident Management.

Training and awareness specific to this offshore CEMP will be delivered using the following tools:

- Vessel inductions;
- Toolbox talks; and
- Vessel notice boards / awareness material.

3.4 Project inductions

Project inductions shall cover the offshore CEMP, highlighting the key environmental sensitivities and considerations. This is to ensure that every Project Team member is aware of their duty and the work related specific hazards. Vessel Inductions are used to raise awareness for personnel regarding site/vessel rules, emergency response procedures and environmental protection arrangements.

3.5 Toolbox talks

A toolbox talk will be held for the all-vessel crew as part of the daily briefing to be held before starting the operation. In addition, a toolbox talk will be held for any significant abnormal task or change in operation. These meetings are to address the exact nature of the task and HSE issues specific to the task being performed during a new working day/shift or task change. A list of attendees will be recorded at each toolbox talk meeting. Toolbox talks are a combination of briefing followed by a consultation with the workforce to check understanding and invite opinion.

3.6 Vessel notice boards/awareness materials

In addition to induction and talks, the *Contractor* Environmental Manager will be responsible for managing the preparation of a series of awareness materials, which may include training packs,

posters, signs and newsletters. For example, posters on specific procedures can be on display on notice boards on the cable installation vessel.

3.7 Offshore CEMP communications and reporting

Internal communications

The following summarises the lines of communication between the key roles in relation to the implementation of the CEMP:

- The *Contractor* Environmental Manager plays a key role in the delivery of the offshore CEMP, alongside the *Contractor* Offshore Manager and the *Employer* Marine Consents Manager and the *Employer* Offshore Client Representative. In fulfilling this role, the *Employer* Marine Consents Manager and *Employer* Offshore Client Representative can establish direct contact with the *Employer* Project Manager;
- The *Employer* Marine Consents Manager will report directly to MS-LOT on compliance with the offshore CEMP and will liaise with MS-LOT and other stakeholders on environmental matters; and
- The *Employer* Marine Consents Manager and *Employer* Offshore Client Representative will maintain direct contact with and report on the offshore CEMP compliance and environmental management issues to the *Employer* Project Manager.

During the works, daily (or as required) meetings / calls will take place involving the *Employer* Project Manager, the *Contractor* representatives, the *Employer* Marine Consents Manager and the *Employer* Offshore Client Representative. Consents and licence compliance and environmental management will be discussed as necessary. Any issues or points to note will be recorded in the Daily Project Report (DPR).

The *Contractor* will be required to provide regular written reports to the *Employer* on installation activity. *Contractor* reporting will include information on environmental management such as details of environmental incidents (if any), environmental statistics and records of environmental inspections / audits undertaken and any such other information as may be required for the *Contractor* Environmental Manager to complete their reporting responsibilities. This information will inform the external reporting to MS-LOT (see below).

All Project personnel will be required to report any environmental concerns or issues to the *Contractor* Environmental Manager and/or *Contractor* Offshore Manager and the *Employer* Offshore Client Representative immediately.

3.8 External communications

Table 3-2 summarises the offshore CEMP external reporting requirements, mechanisms and frequencies.

The relevant returns and notifications as required by the Marine Licence (and set out in Table 3-2) will be collated from information supplied by the *Contractor* and the *Employer* Project Team where necessary. Table A1 in Appendix A also details the commitments and correspondences made with stakeholders during this project.

Table 3-2 Required returns and notifications

Communication Type	Responsible Party	Proposed Frequency	Relevant Stakeholders
Pre-installation reporting requirements			
Proposed date of commencement of installation	<i>Employer</i> Marine Consents Manager	No later than 4 weeks prior to commencement of cable installation	MS-LOT

Communication Type	Responsible Party	Proposed Frequency	Relevant Stakeholders
Details of the proposed nature and timescale of the cable installation works	CFLO via Notice to Mariners (NTM)	No later than 10 days prior to commencement of cable installation	All appropriate maritime users; Kingfisher Fortnightly Bulletin; Fishermen, their representatives and other relevant marine stakeholders
Registration of any noisy activities in the JNCC Marine Noise Register	Contractor Environmental Manager	Prior to submission of the Marine Licence and EPS Licence applications.	JNCC
During installation			
Details of the proposed nature and timescale of the cable installation works	CFLO via NTM	During cable installation (as / if required)	Fishermen, their representatives and other relevant marine stakeholders
Change to any of the information on which the Marine Licence is based	The <i>Employer</i> Marine Consents Manager	As soon as reasonably practical	MS-LOT
Details of any part of the licenced works that has become a danger to navigation or protection of legitimate users of the sea	<i>Contractor</i> Marine Consents Manager	As soon as reasonably practical	Maritime and Coastguard Agency (MCA), Northern Lighthouse Board (NLB) and Kingfisher Information Service Offshore Renewables and Cable Awareness (KIS-ORCA)
Environmental or pollution incidents	Responsible parties remain as The <i>Contractor</i> Marine Consents Manager and <i>Contractor</i> Supervisor for Offshore Works	Should one occur within 24 hrs for minor incidents within 30 mins for major incidents	MS-LOT, MCA
Archaeological discovery	<i>Employer</i> Marine Consents Manager	Following an archaeological discovery	Historic Environment Scotland (HES) and MS-LOT
Post-installation reporting requirements			
Notification of completion of operations	<i>Employer</i> Marine Consents Manager	Within one week of completion of cable installation	MS-LOT
Nature and quantity of all substances and articles deposited below Mean High Water Springs (MHWS)	<i>Employer</i> Marine Consents Manager	Within four weeks of completion of cable installation	MS-LOT
Copy of Marine Licence and 'As Laid Plan'	<i>Employer</i> Marine Consents Manager	Following completion of cable installation	The Hydrographic Office And notify MS-LOT of the notification at the time it is made

Communication Type	Responsible Party	Proposed Frequency	Relevant Stakeholders
Cable route and a 500 m zone either side of it as a hazardous area for anchoring	<i>Employer</i> Marine Consents Manager	Following completion of cable installation	Maritime and Coastguard Agency (MCA), UK Hydrographic Office (UKHO), Northern Lighthouse Board (NLB), the Kingfisher Information Service Offshore Renewables and Cable Awareness (KIS-ORCA) and the UK International Cable Protection Committees And notify MS-LOT of the notification at the time it is made
Assessment of any risks posed by final subsea cable route, burial depths and un-trenched areas where protection measures were used (to ensure that the safety of navigation and other legitimate users of the sea is not compromised)	Contractor Environmental Manager	Within eight weeks of completion of cable installation	MS-LOT
Marine mammal sightings	<i>Contractor</i> to prepare MMO reports for issue to MS-LOT by the licence holder	Within 4 weeks of completion	MS-LOT, JNCC and NatureScot

4. MARINE MAMMAL PROTECTION PLAN

4.1 Overview

The *Contractor* will ensure legal compliance and implement measures in line with the relevant regulatory and policy framework regarding marine mammals. To reduce the collision risk and disturbance to marine mammals a Marine Mammal Protection Plan (MMPP) has been prepared (Section 4.2). The mitigation measures in the MMPP are informed through a separate European Protected Species (EPS) Risk and Protected Sites and Species Assessment undertaken for the Project (Document Reference A-303128-S04-A-REPT-002 A02). There are three are known around Jura and Islay, located 7.3km, 13.6km and 16.6km from the Jura landfall area and 9.7km, 13.9km and 14.1km from the Islay, these are outlined in Section 7 of the MEA (P2635_R6196).

4.2 Marine Mammal Protection Plan (MMPP)

The following measures have been identified to reduce the risk of disturbance to marine mammals (cetaceans and seals) present in the vicinity of the Project through the preparation of a MMPP. The potential for disturbance to marine mammals arises primarily from the noise generated by the proposed cable replacement activities.

- Installation vessel will be travelling at a slow speed (maximum of 4 knots) during the installation works.
- The *Contractor* will provide all project personnel with marine mammal awareness and good practise training.
- Posters and signs of identifying risks and good practise will be provided.
- Pictures of species of concern will be provided.

5. MARINE ARCHAEOLOGY MANAGEMENT PLAN

5.1 Overview

The *Contractor* is required to protect archaeological assets in the Project area. More detail on the regulatory and policy framework regarding archaeology can be found in Section 10 of the MEA Report (Intertek Document Reference P2635_R6196). There are no known wrecks within the Application corridor, however there are 8 known wrecks within the vicinity of the Application Corridor, with the closest wreck located around 2km away from the Application corridor. Potential impacts on unknown heritage will be managed through the implementation of an archaeology and cultural heritage plan management plan (Section 5.2).

5.2 Archaeology and Cultural Heritage Management Plan

5.2.1 Mitigation by design:

- The potential for significant impacts on marine cultural heritage has been reduced to negligible-low during the development and design of the Project by conducting a desk-based assessment, geophysical and Drop Down Video (DDV) surveys to identify any marine historic environment assets;
- A pre installation survey will be conducted to inform final cable routing and vessel anchoring areas which will seek to avoid any anthropogenic seabed features; and
- Rock bags, split pipe, and/or concrete mattresses will be used to hold the cable in position. This will significantly reduce any cable movement and potential scour or disturbance of unknown archaeological remains over the lifetime of the Project.

5.2.2 Mitigation during installation:

- The *Contractor's* Offshore Manager will be the initial point of contact regarding archaeological interests.
- All wrecks or features of archaeological significance will be avoided by a buffer of $\geq 50\text{m}$ during detailed route design.
- The locations of wrecks and features of archaeological significance will be identified on electronic charts onboard the installation vessel and will be utilised to guide installation operations.
- The locations of any wrecks or features of archaeological significance will be provided to Historic Environment Scotland and the UK Hydrographic Office (UKHO).
- If required by licence, the Crown Estate's 'Protocol for Archaeological Discoveries' (PAD) (The Crown Estate, 2014) will be implemented during installation works.

6. INVASIVE NON-NATIVE MARINE SPECIES PLAN

6.1 Overview

It is common practice for offshore construction projects around the UK to manage the risk of introduction of non-native marine species. As such all vessels involved in cable installation activities will be required to meet relevant legislative requirements and best standard practices with regards to ballasting activities and vessel biofouling management.

6.2 Regulatory requirements

To prevent the risk of spread of non-native species through discharging of ballast water, all works will be carried out in accordance with The International Convention for the Control and Management of Ships' Ballast Water and Sediments (BWM).

The International Maritime Organisation (IMO) also aims to control and manage ships' biofouling through the implementation of the Guidelines for the control and management of ships' biofouling to minimise the transfer of invasive aquatic species (Biofouling Guidelines IMO 2023) (resolution MEPC.207 (62)). The Biofouling Guidelines state that a ship should implement biofouling management practices, including the use of anti-fouling systems and other operational management practices to reduce the development of biofouling. The intent of such practices is to keep the ship's submerged surfaces, and internal seawater cooling systems as free of biofouling as practical.

In addition, in 2014 NatureScot commissioned the production of guidance for producing site and operation-based plans for preventing the introduction of non-native species (Payne *et al.* 2014).

The mitigation and management measures to be adopted to prevent the introduction of invasive non-native species are set out below:

6.3 Invasive Non-Native Marine Species Management Plan

In adopting management measures to prevent the introduction of INNMS, The Contractor will:

- Ballast water management
 - Ensure all vessels contracted to undertake works will be contractually obliged to adhere to relevant BWM measures as outlined above, where relevant and be surveyed and issued with an International Ballast Water Management Certificate.
 - Ballast Water Management Plans (BWMP) will be provided by contracted vessels in accordance with Regulation B-1 of the Convention, alongside Ballast Water Record Books as described by BWM Regulation B-2.
- Biofouling / antifouling

The *Contractor* will ensure that all vessels consider the requirements of Resolution MEPC.207(62) Guidelines for the Control and Management of Ships Biofouling to minimise the Transfer of Invasive Aquatic Species, including for example the implementation of a biofouling management plan, and records of biofouling management practices kept in a biofouling record book.
- Ensure all vessels (as appropriate) have an International Anti-Fouling System Certificate.

- All vessels will be required to undertake pre use and post use checks, including the presence for marine growth. All equipment (ploughs, ROVs etc.) will be required to be free from marine growth prior to mobilisation.

7. WASTE MANAGEMENT PLAN

7.1 Overview

The principal wastes generated from the works will include packaging, general waste, and wastewater. Hazardous wastes are possible in the form of used oils and chemicals. Under the Duty of Care as a waste producer, the failure to manage wastes generated from the Project, such as failure to segregate recyclables, also results in breaches of waste management legislation in addition to potential environmental impact.

In accordance with MARPOL (73/78) Annex V (as amended) every ship (certified to carry 15 persons or more), and vessel (of 400 gross tonnage and above) involved in the Project will have a Waste Management Plan. The purpose of the vessel Waste Management Plan is to provide guidance to the Master and crew on board the ship on the procedures for collecting, storing, processing, and disposing of waste, including the use of the equipment on board. Vessel Waste Management Plans will detail the specific ship's equipment and arrangements, and the location of equipment operating manuals. The *Contractor* will be responsible for ensuring all measures of the waste management plan are adhered to during all phases of the installation works.

7.2 Waste Management Plan

7.2.1 General

- The only materials to be deposited to the seabed will be those detailed in the Marine Licence.
- All vessels engaged in the works will be equipped with waste storage facilities according to IMO International Convention for the Prevention of Pollution from Ships (MARPOL) standard vessels certified to carry 15 persons or more or of 400 GRT and above will have the following in place:
 - Waste management plan; and
 - Waste record book.
- No waste will be disposed of over the side of the vessel and all produced waste will be stored on board.
- All waste products and rubbish will be removed from the vessel and disposed of by a registered waste disposal company.
- Any debris or waste materials arising during the works will be removed from the vessel and disposed of by a registered waste disposal company.

7.2.2 Waste Reduction

The waste hierarchy of Prevention, Re-use, Recycle and Disposal will be adopted on the Project. The following measures will align the Project waste management with the hierarchy and reduce the amount of waste produced during construction:

- The appropriate volume of materials will be ordered;
- Excess materials will be returned to the supplier if possible;
- Re-usable materials will be identified on site and removed for storage and re-sale;
- Recyclable materials will be removed from site for processing in licenced facilities;
- There will be clearly located and defined storage areas for materials; and

- General information on waste will be provided in site inductions and toolbox talks with feedback welcomed.

7.2.3 Storage of waste

The following methods have been identified in relation to storage of waste:

- Storage will be provided at suitable points for all waste streams including hazardous waste, liquid wastes and discarded smoking materials;
- Waste will be segregated as far as practically possible;
- Waste will be stored in secure covered containers which will be clearly labelled with the waste they hold e.g. wood, metal, plastics etc.;
- Liquid wastes will be stored in appropriately (portable or permanent) bunded facilities that hold the capacity of the container;
- Any hazardous waste will be stored in separate containers (further details on hazardous waste are provided below);
- Any odorous wastes will be temporarily stored in suitable containers and where possible, at a distance from any nearby sensitive receptors;
- All places of work will be kept clean and tidy. Waste will not be allowed to accumulate. All surplus material and waste are to be removed in a timely manner;
- Storage areas / containers will be monitored, and action taken if waste is piled too high; and
- Burning of waste is prohibited.

7.2.4 Hazardous (Special) waste

“Hazardous waste” –any waste which contains properties that might make it harmful to human health or the environment. In Scotland, hazardous waste is referred to as Special Waste.

Special Waste could arise from the following sources:

- Maintenance of plant and machinery;
- Oily water waste;
- Oil filters;
- Oily rags;
- Oil absorbent pads etc.;
- Contaminated Marine Gas Oil (MGO);
- Biological Marine Material
- Hydraulic oil; and
- Environmental spill recovery (small amounts only; larger volumes taken away directly for disposal).

All Special Waste will be segregated by type and from other waste streams.

All Special Waste oil will be stored in a bunded facility until such times that it is collected.

Used filters, rags and absorbents will be stowed in the special waste container in drums or waste oil bags.

7.2.5 Transporting waste

There is a duty of care on the waste producer to make sure that waste is appropriately disposed of. The following measures have been identified to comply with the duty of care:

- All waste leaving the Project will be accompanied by a Waste Transfer Note (WTN) for non-hazardous waste or a Special Waste Consignment Note (SWCN) for hazardous waste. A copy of which will be retained for 2 (WTN) or 3 years (SWCN); and
- Waste contractors will be checked ahead of the works to ensure they have valid licences.

8. POLLUTION PREVENTION, SPILL RESPONSE AND CONTINGENCY PLAN

8.1 Overview

The *Contractor* will be responsible for ensuring all measures set out in the six technical Annexes of the International Convention for the Prevention of Pollution from Ships (MARPOL) are adhered to and appropriate management plans relating to each of the items above are produced and adhered to throughout the works. There are legislative requirements (Section 9.3) that stipulate specific requirements with regards to every ship (certified to carry 15 persons or more), and vessel (of 400 GRT and above). Not all vessels involved in the proposed works will be over 400 GRT. Vessels under 400 GRT, are not subject to the legislative requirements around ship waste. However, these vessels will be operated by a responsible competent contractor.

8.2 Emergency Spill Response

All vessels 450 GRT and above require an approved SOPEP i.e. procedures and descriptions of actions to be taken in the event of an oil pollution incident. The SOPEP shall contain all information and operational instructions as required by the “Guidelines for the development of the Shipboard Oil Pollution Emergency Plan” as developed by the Organization (IMO). The appendices contain names, telephone, etc., of all contacts referenced in the SOPEP, as well as other reference material.

The following measures have been identified regarding emergency spills:

- Work will stop immediately, and the source of the spill will be addressed where possible;
- Follow vessel SOPEP procedure and emergency spill response;
- Isolate the source of the spill / leak if safe to do so;
- Sources of ignition will be eliminated – in case of spilled substance being flammable;
- The spill will be contained as far as practicable using appropriate spill equipment;
- All spills will be reported to the appropriate authorities where applicable;
- The Project Team will be provided with emergency spill response training;
- Spill kits will be made available at fuel storage and refuelling locations and in individual plant vehicles and vessels; and
- Spill kits will be replaced after use.

The collected contaminant from a spill will be treated as hazardous (Special) waste and will be disposed of appropriately.

8.3 Monitoring and Record Keeping

The Control of Substances Hazardous to Health Regulations (COSHH) record for any chemicals stored on the Project will be kept and updated by the *Contractor* along with the data sheet for any COSHH Material, chemical or substance. Operating instructions must be prepared (under the use of current Material Safety Data Sheets (MSDS)). For all used hazardous substances a register must be maintained.

Records will be kept of all visual fuel and oil checks of plant and fuel and oil storage containers by the *Contractor*.

Records will be kept by the *Contractor* of all spills and actions taken will be noted. Lessons learned will be communicated as appropriate (see also Section 12).

8.4 Pollution Prevention Measures Onshore (at Cable Landfall)

The pollution measures for the onshore activities are documented in the onshore CEMP (in preparation at the time of writing, filename will be inserted when available).

9. MONITORING AND REPORTING PLAN

9.1 Introduction

Monitoring and reporting of activities during the Project is required to ensure works are carried out as per legislation, consent and licence conditions and in line with the *Employer* requirements. This Section describes the monitoring (including auditing) and reporting activities that will be performed during the execution of the Project. These requirements are additional to the external communications requirements detailed in Section 3.

9.2 Monitoring During cable installation

All vessels used on the Project shall be fully compliant with the ISM Code and flag state requirements. Where ISM Code does not apply to a vessel used due to vessel size, the vessel operator shall ensure that the vessel has a suitably integrated Safety Management System in use on board the vessel.

Table 9-1 outlines a number of environmental documents / certificates the vessels will be expected to provide in order to comply with the environmental aspects of the initial vessel audit and / or ongoing audits throughout the Project work. Documentation will be required to be provided to the *Contractor* (where specified) ahead of operations and prior to HAZID in order that any necessary amendments can be made in advance of works commencing. Pre works vessel checks will be undertaken by the *Contractor*, to ensure all appropriate documentation is on board the vessel.

Table 9-1 Vessel audit – environmental compliance checklist

Aspect	Document	Action	Responsibility for Provision	Date completed/ reviewed or checked [HOLD: to be completed through works]
Marine Licence and related documentation	Marine Licence	Copy of Marine Licence to be on board vessel throughout works	Vessel	
	EPS Licence	Copy of EPS Licence to be on board vessel throughout works	Vessel	
	Basking Shark Licence	Copy of BS Licence to be on board vessel throughout works	Vessel	
	Offshore CEMP (incorporating the MMPP)	Copy of Offshore CEMP to be on board vessel throughout works	Vessel	
	FLMAP	Copy of FLMAP to be on board vessel throughout works	Vessel	
	MMO Records	Evidence required at vessel audit	Vessel	
Water Protection	Shipboard Marine Pollution	Plan to be presented prior to the HAZID, and on	Vessel	

Aspect	Document	Action	Responsibility for Provision	Date completed/ reviewed or checked [HOLD: to be completed through works]
	Emergency Plan (SOPEP)	board vessel throughout works		
	Ensure that materials are secured on deck	Evidence required at vessel audit	Vessel	
	Wastes are required to be contained on board vessels for appropriate disposal on return to port	Evidence required at vessel audit	Vessel	
Oily Discharges	Oil Pollution Prevention Certificate	Certificate to be presented prior to the HAZID, and on board vessel throughout works	Vessel	
	Oil Record Book	Record book to be on board vessel throughout works	Vessel	
Ballast Water Management (if applicable)	International Ballast Water Management Certificate	Certificate to be presented prior to the HAZID, and on board vessel throughout works	Vessel	
	Ballast Water Management Plan	Plan to be presented prior to the HAZID, and on board vessel throughout works	Vessel	
	Ballast Water Record Book	Record book to be on board vessel throughout works	Vessel	
Biofouling Management	International Anti-Fouling System Certificate	Certificate to be presented prior to the HAZID, and on board vessel throughout works	Vessel	
	Biofouling Management Plan	Plan to be presented prior to the HAZID, and on board vessel throughout works	Vessel	
	Biofouling Record Book	Record book to be on board vessel throughout works	Vessel	
Waste Management	Waste Management Plan	Plan to be presented prior to the HAZID, and on board vessel throughout works	Vessel	

Aspect	Document	Action	Responsibility for Provision	Date completed/ reviewed or checked [HOLD: to be completed through works]
	Waste Record Book	Record book to be on board vessel throughout works	Vessel	
	Controlled Waste Transfer Note / Special Waste Consignment Note	Notes to be on board vessel at vessel audit and throughout works	Vessel	

9.3 Reporting during/ after cable installation

End of installation reporting

Reporting requirements for close out of licence to be added when Marine Licence received.

9.4 Incident response and reporting

Incident response and reporting are not part of this CEMP; however, all incidents negatively impacting the environment are to be reported within 30 minutes to the SSEN Offshore Client Representative. The SSEN Offshore Client Representative will inform the *Employer's* Marine Consents Manager and the *Employer's* Project Manager. The SSEN 30 minute reporting hotline is 0800 107 3207.

REFERENCES

1 IMO (2023) Guidelines for the control and management of ship's biofouling to minimize the transfer of invasive aquatic species. Available at: <https://wwwcdn.imo.org/localresources/en/KnowledgeCentre/IndexofIMOResolutions/MEPCDocuments/MEPC.378%2880%29.pdf> [Accessed October 2023]

2 Payne, R.D., Cook, E.J. & MacLeod, A., 2014. Marine biosecurity planning: guidance for producing site and operation-based plans for preventing the introduction of non-native species., pp.1-39. Available at: <https://www.clydemarineplan.scot/wp-content/uploads/2016/05/Guidance-Biosecurity-Planning.pdf>. [Accessed October 2023]

3 The Crown Estate (2014) Protocol for Archaeological Discoveries: Offshore Renewables Projects. Available at: https://www.wessexarch.co.uk/sites/default/files/field_file/2_Protocol%20For%20Archaeological%20Discoveries.pdf [Accessed October 2023]

4 UKHO (2020) The Mariners Handbook (NP100), The comprehensive guide to seamanship and key aspects of navigation

APPENDIX A

Correspondence and Commitments Register

Table A-1 Correspondence and Commitments Register

Stakeholder	Correspondence/Commitment	Compliance
Company Fishing Liaison Officer (CFLO) and Fishing Industry Representative (FIR)	Contractors shall provide details of all vessel movements, works and co-ordinates as well as regular updates on the proposed timings of operations to the CFLO and the FIR. All Notices to Mariners will be provided to the CFLO ready for issuing through KIS-ORCA	
Fishers	Liaisons will take place between the FIR and fishers in the area, particularly in relation to the requirement to remove creels to allow the works to be carried out.	
Recreational users	Liaisons between the CFLO and other users will take place to provide other users a minimum of 24 hours' notice of a vessel with restricted mobility being in the area	
Marine Scotland (MS)	Specific contact with MS will be made <ul style="list-style-type: none"> ▪ Prior to commencement of the works: <ul style="list-style-type: none"> ▪ Marine Scotland is responsible for the integrated management of Scotland's seas. This includes consultation on the proposed FLMAP and delivery plan; and inclusion of compliance with it as a licence condition. ▪ During the works: <ul style="list-style-type: none"> ▪ to allow access for an authorised Enforcement Officer to inspect the works ▪ to notify any changes to the works that may affect the validity of the licence ▪ to submit and seek approval of plans to mitigate navigational dangers or risks, where required ▪ On completion of the works: <ul style="list-style-type: none"> ▪ to notify the completion of the works ▪ to submit an assessment of any risks posed by the installed cable 	
NatureScot	SHEPD will engage on matters related to the project as required.	
Maritime and Coastguard Agency (MCA)	SHEPD will engage on matters related to the project as required.	
Northern Lighthouse Board (NLB)	SHEPD will engage on matters related to the project as required.	
Scottish Environmental Protection Agency (SEPA)	SHEPD will engage on matters related to the project as required.	
Royal Society for the Protection of Birds (RSPB)	SHEPD will engage on matters related to the project as required.	
Scottish Fishermen's Federation (SFF)	Contact will be made with the SFF to keep them apprised of the installation as it proceeds, specifically in relation to the presence of vessels	

Stakeholder	Correspondence/Commitment	Compliance
West Coast Regional Inshore Fisheries Group (WCRIFG)	Regular dialogue between the CFLO and the WCRIFG will be maintained prior to and during the cable installation work	
Scottish Creel Fishermen's Federation (SCFF)	Specific contact will be made with the SCFF. Regular dialogue between the CFLO and the SCFF will be maintained prior to and during any installation work	
Crown Estate Scotland (CES)	SHEPD will engage on matters related to the project as required.	
United Kingdom Hydrographic Office (UKHO)	SHEPD will maintain contact with the UKHO to provide regular updates on progress of the works provide a copy of the marine licence and provide asbuilt details upon completion.	
Kingfisher Information Service Offshore Renewables and Cable Awareness (KIS-ORCA)	SHEPD will maintain contact with KIS-ORCA to provide regular updates on progress of the works and provide as-built details upon completion.	
Ministry of Defence (MoD)	SHEPD and CFLO will engage on matters related to the project as required.	
Royal Yacht Association (RYA)	Regular dialogue between the CFLO and the RYA will be maintained prior to and during the installation work that may affect recreational activities in the area.	
Argyll and Bute Council	SHEPD will engage on matters related to the project as required.	
NAFC Marine Centre	SHEPD will engage on matters related to the project as required.	
Scottish Federation of Sea Anglers	CFLO will engage on matters related to the project as required.	
Scottish Coastal Forum	CFLO will engage on matters related to the project as required.	
Scottish Environment LINK	CFLO will engage on matters related to the project as required.	
Clyde Fishermen's Association	Regular dialogue between the CFLO, Offshore Fisheries Liaison Officer (OFLO) will be maintained prior to and during the cable works	
Clyde Cruising Club	CFLO will engage on matters related to the project as required.	
Caledonian MacBrayne	CFLO will engage on matters related to the project as required.	
Peel Ports	CFLO will engage on matters related to the project as required and will notify with the Notice to Mariners as cables may be in locations where vessels transit on route to the port	
HM Naval Base Clyde	CFLO will engage on matters related to the project as required.	
Kildalloig Farm (Shellfish aquaculture development)	CFLO will ensure that they are informed of matters related to the project as required.	
Scottish Canoe Association	CFLO will engage on matters related to the project as required.	
Helensburgh Canoe Club	CFLO will engage on matters related to the project as required.	

Stakeholder	Correspondence/Commitment	Compliance
Royal West of Scotland Amateur Boat Club	CFLO will engage on matters related to the project as required.	
Western Isles Fishermen Association	Specific contact will be made with the WIFA. Regular dialogue between the CFLO and the WIFA will be maintained prior to and during the installation.	
West of Scotland Fish Producer Organisation Ltd	Specific contact will be made with the WSFPO. Regular dialogue between the CFLO and the WSFPO will be maintained prior to and during the installation.	
Isle of Mull Scallops	CFLO will engage on matters related to the project as required.	
The Ethical Shellfish Company	CFLO will engage on matters related to the project as required.	
Tobermory Mussel Farm	CFLO will engage on matters related to the project as required.	
R.B & S.L Barlow	CFLO will engage on matters related to the project as required.	
Isle of Mull Oysters	CFLO will engage on matters related to the project as required.	
Craignure pier - Harbour office	CFLO will engage on matters related to the project as required.	
Oban North Pier - Harbour office	CFLO will engage on matters related to the project as required.	
Oban Marina	CFLO will engage on matters related to the project as required.	
Puffin Dive Centre	CFLO will engage on matters related to the project as required.	
Saint Hilda Sea Adventures	CFLO will engage on matters related to the project as required.	
Turus Mara	CFLO will engage on matters related to the project as required.	
Blackhouse Watersport	CFLO will engage on matters related to the project as required.	
Kerrera Development Trust	CFLO will engage on matters related to the project as required.	
Mull and Iona Community Trust	CFLO will engage on matters related to the project as required.	
Oban Sailing Club	CFLO will engage on matters related to the project as required	
Kayak Wild Islay	CFLO will engage on matters related to the project as required.	
Islay Sea Adventures	CFLO will engage on matters related to the project as required.	
Fyne Pioneer	CFLO will engage on matters related to the project as required.	
The Majestic Line – West Coast Cruises	CFLO will engage on matters related to the project as required.	
Hebridean Island Cruises	CFLO will engage on matters related to the project as required.	

Stakeholder	Correspondence/Commitment	Compliance
Linnhe Marina	CFLO will engage on matters related to the project as required.	
SeaXplorer	CFLO will engage on matters related to the project as required.	
Lochaber Yacht Club	CFLO will engage on matters related to the project as required.	
Ferguson Transport and Shipping	CFLO will engage on matters related to the project as required.	
Lochaline Dive Centre	CFLO will engage on matters related to the project as required.	
Dive Oban and Argyll	CFLO will engage on matters related to the project as required.	
Isle of Man Fishermen	CFLO will engage on matters related to the project as required.	
Toward Sailing club	CFLO will engage on matters related to the project as required.	
Mallaig and North West Fishermen's Association	CFLO will engage on matters related to the project as required.	
Isle of Mull Fishermen's Association	CFLO will engage on matters related to the project as required.	
Contractors	Contractors will comply with relevant Code of Good Practise, follow procedures in relation to gear fastening or loss, respect safety zones around in-water activity areas and enact Standard Operating Procedures.	