



## **APPENDIX 5-4**

### **EMERGENCY RESPONSE CO- OPERATION PLAN**

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## GLOSSARY

## ACRONYMS AND ABBREVIATIONS

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## GLOSSARY

Term	Definition
Sceirde Rocks Offshore Wind Farm ('The Project')	<p>Sceirde Rocks Offshore Wind Farm (The Project) is comprised of an Offshore Site and an Onshore Site. The transition between the Offshore and Onshore Sites (referred to as the Landfall) is the location at which the offshore export cable and communication cables emerge from the trenchless landfall duct and enter the transition joint bay (TJB). The Offshore Site refers to the Offshore Array Area (OAA) and Offshore Export Cable Corridor (OECC) and the infrastructure within the OAA and the OECC.</p> <p>The OAA infrastructure will include 30 wind turbine generators (WTG), an offshore substation (OSS), 31 Gravity Base Structure (GBS) foundations which support the WTGs and OSS, and Inter-array Cables (IACs) and cable protection. The OECC infrastructure will include Offshore Export Cable (OEC) and cable protection</p>
The Applicant	Fuinneamh Sceirde Teoranta (FST).
Primary Contact	Designated person to assist with the emergency response and to set up communications to share information relevant to the incident as necessary.
An Garda Siochána	National police and security service of Ireland.
Offshore Export Cable Corridor	The OECC is approximately 62 kilometres (km) in length, approximately 1 km wide along the majority of its length and has a total area of approximately 73 km <sup>2</sup> .
Landfall	The transition between the Offshore and Onshore Developments (referred to as the Landfall) is the location at which the offshore export cable and communication cables emerge from the trenchless landfall duct.
Environmental Impact Assessment (EIA)	EIA is a process used to evaluate the potential environmental effects of a proposed project ensures that environmental considerations are integrated into the planning and decision-making stages, helping to minimize negative impacts on the environment and promote sustainable development.

## ACRONYMS AND ABBREVIATIONS

Acronym	Definition
AGS	An Garda Síochána
AIS	Automatic Identification System
AMP	Archaeological Management Plan
CCTV	closed circuit television
CIL	Commissioner of Irish Lights
CIS	cast-iron shell
COLREG	International Regulations for the Prevention of Collision at Sea
CTV	Crew Transfer Vessels
DED	District Electoral Divisions
DSC	Digital selective calling
EIA	Environmental Impact Assessment
EIAR	Environmental Impact Assessment Report
ERCoP	Emergency Response Co-operation Plan
FMMS	Fisheries Management and Mitigation Strategy
FST	Fuinneamh Sceirde Teoranta
GBS	Gravity Base Structure
HAT	Highest Astronomical Tide
HLV	Heavy Lift Vessel
HMR	Helicopter Main Route

HNS	Hazardous Noxious Substance
HR	Human Resources
HVAC	High Voltage Alternating Current
IAA	Irish Aviation Authority
IAC	Inter-array Cables
IAMSAR	Aeronautical and Maritime Search and Rescue
ILO	Incident Liaison Officer
IRCG	Irish Coast Guard
ITM	Irish Transverse Mercator
km	Kilometre
LAT	Lowest Astronomical Tide
LMP	Lighting and Marking Plan
m	Metre
MARA	Maritime Area Regulatory Authority
MARPOL	International Convention for the Prevention of Pollution from Ships
MCA	Maritime and Coastguard Agency
MF	Maritime and Coastguard Agency
MINNSMP	Marine Invasive Non-Native Species Management Plan
MMMP	Marine Mammal Mitigation Protocol
MPCP	Marine Pollution Contingency Plan
MRCC	Maritime Rescue Coordination Centre
MVAC	Medium Voltage Alternating Current

NIS	Natura Impact Statement
NM	nautical mile
NPWS	National Parks & Wildlife Service
OAA	Offshore Array Area
OEC	Offshore Export Cable
OECC	Offshore Export Cable Corridor
OEMP	Offshore Environmental Management Plan
OSC	On-Scene Coordinator
OSS	offshore substation
PAD	Protocol of Archaeological Discovery
POB	Person on Board
RNLI	Royal National Lifeboat Institution
RWMP	Resource Waste Management Plan
SAR	Search and Rescue
SITREPS	Situation reports
SMC	SAR Mission Coordinator
SOLAS	Safety of Life at Sea
SOV	Service Operations Vessel
SRU	Search and Rescue Unit
TJB	transition joint bay
UXO	unexploded ordnance
VHF	very high frequency

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VMP	Vessel Management Plan
WTG	wind turbine generator
WTIV	Wind Turbine Installation Vessel

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# 1. INTRODUCTION

## 1.1 Background

This Emergency Response Co-operation Plan (ERCoP) forms part of the Offshore Environmental Management Plan (OEMP) and has been prepared by Xodus on behalf of Fuinneamh Sceirde Teoranta (FST) (hereafter referred to as the Applicant), for the construction, operation and maintenance, and decommissioning of the Sceirde Rocks Offshore Wind Farm ('the Project'), and all its offshore component parts within the Offshore Site. The Offshore Site refers to the Offshore Array Area (OAA) and Offshore Export Cable Corridor (OECC) and the infrastructure within the OAA and the OECC.

The ERCoP has been prepared in conjunction with the Environmental Impact Assessment Report (EIAR) and the Natura Impact Statement (NIS) which will accompany the application for development permission for the Project to be submitted to An Bord Pleanála.

Should the Project secure planning permission, the ERCoP will be updated, in line with all conditions and obligations which apply to any grant of permission. The ERCoP should be read in conjunction with the EIAR and the planning drawings. The ERCoP will also require updating by the appointed contractor in order to identify, assess and satisfy the contract performance criteria as set out by the various stakeholders. The ERCoP, due to its structure and nature, will require constant updating and revision throughout the various phases of the project from construction to operation and maintenance and decommissioning.

The appointed contractor will be required to implement all of the requirements set out in this ERCoP. The ERCoP may be updated and revised throughout the construction, operation and maintenance, and decommissioning phases, but all future iterations must meet or exceed the standards and requirements set out in this document and the Applicant must be satisfied that all requirements set out in this document can and will be implemented in full by the appointed contractor.

## 1.2 Project Description

The Project is comprised of an Offshore Site and an Onshore Site. The transition between the Offshore and Onshore Sites (referred to as the Landfall) is the location at which the offshore export cable and communication cables emerge from the trenchless landfall duct and enter the transition joint bay (TJB). This ERCoP only considers the Offshore Site.

The Project EIAR Chapter 5: Project Description describes the design details of the Offshore Site and all its component parts, situated off the West coast of Ireland, close to Connemara, Co. Galway.

The Offshore Site comprises the OAA and OECC infrastructure. The OAA infrastructure includes 30 wind turbine generators (WTGs), an offshore substation (OSS), 31 gravity base structure (GBS) foundations which support the WTGs and OSS, and inter-array cables (IACs) and cable protection. The OECC infrastructure includes the offshore export cable (OEC) and cable protection.

Figure 1-1 shows the layout of the Offshore Site.

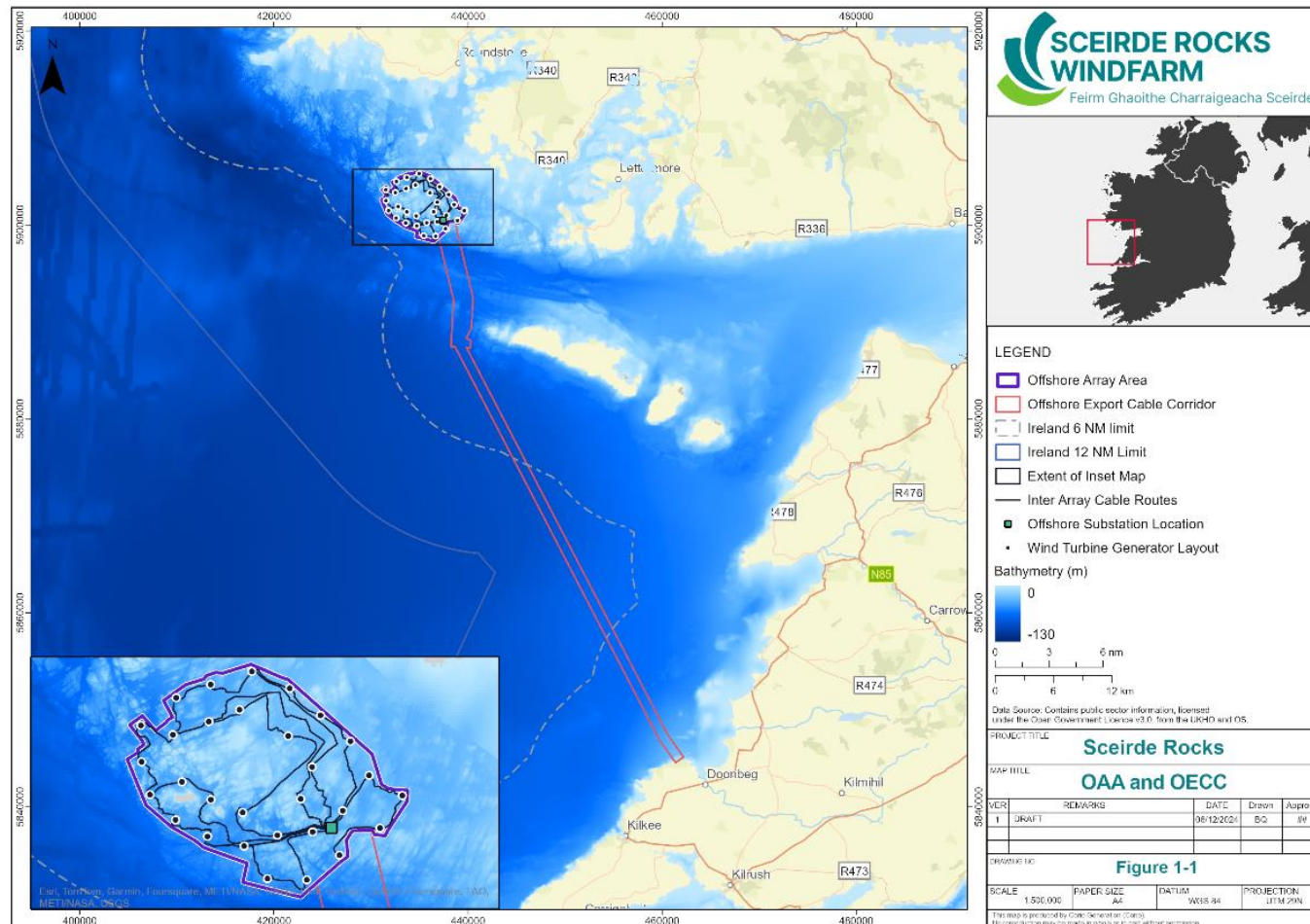


Figure 1-1 Sceirde Rocks Offshore Wind Farm Offshore Site

### 1.3 Purpose of Document

The ERCoP outlines the Emergency Response Co-operation to be followed in the event of an emergency. The ERCoP follows best practice guidelines from the Maritime and Coastguard Agency (MCA) ERCoP: Template for Construction, Operation, and Decommissioning Phase (MCA, 2022), the Marine Guidance Note 654 (MCA, 2021), and Guidance from the MCA on the operational considerations for Search and Rescue (SAR) and emergency response (MCA, 2024). This ERCoP will be updated where necessary following the publication of the guidance to ensure compliance, and to support the construction programme following consultation with the Irish Coast Guard (IRCG).

### 1.4 OEMP Management Plans

The ERCoP is part of the overarching Project OEMP (Appendix 5-2). Table 1-1 below sets out the other appendices that feed into the OEMP.

Table 1-1 Other appendices to the OEMP

Consents Management Plan	Linkage with the ERCoP
Marine Pollution Contingency Plan (MPCP) – Appendix 5-3	The MPCP sets out pollution prevention measures such as: a) storage of chemicals in secure designated areas in line with appropriate regulations and guidelines, b) adherence to vessel regulations such as The International Convention for the Prevention of Pollution from Ships (MARPOL) to reduce potential for vessel pollution, c) disposal of waste e.g. sewage, oil or litter at an authorised disposal facility.
Resource Waste Management Plan (RWMP) – Appendix 5-5	The RWMP sets out the provisions for waste management for Offshore Site components in line with the waste management hierarchy.
Vessel Management Plan (VMP) – Appendix 5-10	The VMP sets out how all vessels associated with the Offshore Site will comply with the provisions of the International Regulations for the Prevention of Collision at Sea (COLREGs) and the International Regulations for the Safety of Life at Sea (SOLAS).
Fisheries Management and Mitigation Strategy (FMMS) – Appendix 5-7	The FMMS sets out the activities designed to manage and mitigate the impacts of various projects on local fisheries.
Marine Mammal Mitigation Protocol (MMMP) – Appendix 5-6	The MMMP sets out the mitigation measures to avoid injury and disturbance to marine mammals will be developed. This will be developed with full regard to the National Parks & Wildlife Service (NPWS) Guidelines and industry good practice from other jurisdictions and could include the use of acoustic deterrent devices to temporarily displace animals away from the highest risk (injury) zones, and marine mammal visual and acoustic observers to ensure that there are no marine mammals in close proximity (1,000 metres (m)) of the unexploded ordnance being cleared.

Consents Management Plan	Linkage with the ERCoP
Marine Invasive Non-Native Species Management Plan (MINNSMP) – Appendix 5-8	The MINNSMP sets out the approach to invasive species management and mitigation in respect of the Offshore Site providing an outline of the proposed measures to be implemented to facilitate biosecurity control and to minimise potential impacts on the local and wider offshore environment.
Lighting and Marking Plan (LMP) – Appendix 5-9	The LMP sets out the marine lighting and marking requirements and procedures for the Offshore Site during the construction and operation and maintenance stages. Lighting and marking of the array will be in compliance with IALA O-139 and G1162 (IALA, 2021) and agreed with Irish Lights.
Archaeological Management Plan (AMP)- Appendix 5-11	The AMP sets out the procedures to be followed on discovering any marine archaeological assets during the construction and operation and maintenance stages of the Project.

## 1.5 Summary of Measures, Mitigation and Monitoring Included in the EIAR

The embedded mitigation and monitoring measures detailed within the EIAR and relevant to this ERCoP are presented in Table 1-2.

Table 1-2 Relevant embedded mitigation and monitoring measures detailed in the EIAR

Measures	Justification
Pollution planning	An MPCP has been developed outlining procedures to protect personnel working and safeguard the environment should a pollution event occur.
Marine Pollution Contingency Plan (MPCP)	An MPCP has been created for the Offshore Site with consideration of the National Maritime Oil/Hazardous Noxious Substance (HNS) Spill Contingency Plan.
Lighting and marking of the WTGs and OSS	Approval and implementation of an LMP, which outlines the specific requirements of aviation lighting to be installed on wind turbines, which has taken into consideration United Kingdom guidance under CAP 764, Policy and Guidelines on Wind Turbines (Version 6, 2016).
Minimum blade clearance	There will be a minimum blade clearance of 27.5 m above highest astronomical tide (HAT), which is suitable for navigational safety.
implementation of a Protocol of Archaeological Discovery (PAD)	The implementation of a PAD facilitating dialogue between on-site offshore development contractors, the developer, the archaeological curators, and the retained archaeologist mitigating the impact on unexpected archaeological discoveries.

Reporting of structures at the Offshore Site	<p>All structures of greater than 91.4 m in height will be charted on aeronautical charts and reported to relevant databases at least ten weeks prior to construction.</p> <p>Any temporary obstacles associated with wind farms of greater than 91.4 m in height (e.g., construction infrastructure such as cranes) are to be alerted to aircrews.</p> <p>Re-routing or amendments to helicopter operations may be required is if a wind turbine is installed within 2 nautical miles (NM) of a Helicopter Main Route (HMR).</p> <p>Irish Aviation Authority (IAA) will be informed of the locations, heights and status of lighting on wind turbines, including the estimated construction timelines and the maximum heights of any construction equipment's to be use</p>
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## 2. ORGANISATIONAL INFORMATION

### 2.1.1 Roles and Responsibilities of the Applicant in an Emergency

In the event of an emergency involving the Offshore Site assets, personnel, and/ or vessels, the Applicant is responsible for providing immediate rescue and first aid medical response to a level appropriate to the location and circumstances of the Offshore Site. The Applicant is also responsible for immediately alerting the IRCG of an emergency and for liaising and cooperating with the appropriate Maritime Rescue Coordination Centre (MRCC) to ensure an appropriate response to the emergency.

The Applicant is obliged under international maritime agreements and practices, e.g. Safety of Life at Sea (SOLAS) convention, to provide assistance, where possible to do so, to other persons or vessels in danger at sea nearby or within the Offshore Site and/ or when requested to assist by the IRCG.

The Applicant may also need to provide its own vessel(s) and other assets to respond or react to other maritime emergencies, for example a drifting vessel that has lost power or a pollution event which presents a possible or actual threat to the safety of life or property in the vicinity or within the Offshore Site.

### 2.1.2 Contact Information

The key Project personnel of relevance to the ERCoP will be summarised in Table 2-1 in a future plan iteration

Table 2-1 Contact details of key personnel

Name	Position	Telephone	Email	
TBC				

## 2.2 Liaison Arrangements Between the Applicant and IRCG

The Applicant will contact the IRCG in the event of an emergency to establish initial lines of communication and coordinate a response. The Applicant will make their Marine Coordinator, or duty substitute, available to the IRCG as a Primary Contact to assist with the emergency response and to set up communications to share information relevant to the incident as necessary. The Primary Contact will be available to provide information by phone or by radio to provide any pertinent information, which includes full details of the situation, details of persons involved, and construction or operation or decommissioning work information.

The Applicant will provide a liaison officer to a MRCC to assist with the emergency response, should this be deemed necessary by the MRCC, and provide access to supporting documentation concerning the Applicant and the Offshore Site. This liaison officer would be a Manager that is locally available to arrive within a few hours. Should support be required from a technical or directorial representative, this can be arranged by air or train, or remotely at immediate notice.

In certain circumstances and where appropriate, the MRCC may elect to send a local IRCG officer to the relevant duty holder coordination centre to act as a liaison representative.

2.3

## **Liaison Arrangements Between the Applicant and An Garda Síochána**

The Applicant will work with An Garda Síochána (AGS), the national police and security service of Ireland, in the event of an incident to set up agreed communications and provide any relevant information available. The Primary Contact will have access to all necessary information in relation to the incident that would be shared with AGS as required by telephone or by email.

In certain circumstances, AGS may elect to send an AGS Incident Liaison Officer to the relevant duty holder coordination centre to act as a liaison representative and set up agreed communications.

### 3. **SEARCH AND RESCUE INFORMATION**

The National Search And Rescue (SAR) Plan (Government of Ireland, 2019) sets out the framework to develop, coordinate, and improve SAR services to promote a planned and nationally coordinated SAR response for all incidents occurring in the maritime domain. The SAR plan adheres to the SOLAS convention (1974) and the International Convention on Maritime Search and Rescue 1979, which impose an obligation to ensure that necessary plans are in place for distress communication, coordination, and rescue of persons in distress.

#### 3.1 **IRCG**

##### 3.1.1 **Role and Responsibilities**

The IRCG is responsible for the coordination of maritime SAR operations in Ireland by implementing the national SAR plan for all incidents occurring in the maritime domain, or if otherwise requested by aviation or inland SAR authorities to respond. The IRCG is nominated as one of the Irish State's Principal Emergency Services under the Framework for Major Emergency Management, along with AGS, the Fire Service and Ambulance Service. For maritime SAR management and coordination, the IRCG operates three MRCCs around Irish waters: Malin Head, Valentia, and Dublin. The closest MRCC to the project is the Valentia Marine Rescue Sub-Centre.

Core activities of the IRCG relevant to the SAR Plan are to:

- Coordinate maritime SAR;
- Provide a marine radio distress listening service and broadcast marine safety information;
- Provide the national Marine Assistant Service and respond to ship casualties;
- Provide support to statutory bodies in emergency responses;
- Coordinate telemedical services.

The IRCG may also assist other emergency services or principal response agencies, including SAR on rivers, lakes and in flooded areas, local emergencies, or rescue from inaccessible or remote land areas. AGS, who is responsible for coordinating and undertaking land-based SAR in Ireland, and may request the IRCG MRCC to act as a primary coordinator on land and/or to provide secondary support.

In addition to SAR, the IRCG has a role in responding to maritime casualty and pollution response to prevent or minimise damage from pollution where casualties pose a threat of harm to the Irish coastline under the Sea Pollution Act 1991. Under the European Communities (Vessel Traffic Monitoring and Information System) Regulations 2010, the IRCG can act in relation to vessels requesting Places of Refuge and monitor shipping, and also provides a Maritime Assistance Service to vessels in need of assistance.

##### 3.1.2 **Communicating with the IRCG**

The IRCG uses very high frequency (VHF) and marine frequency (MF) radio as the main sources of communication. VHF Radio is the primary means of distress communication, making it possible to broadcast to, and receive from, all vessels and coast stations up to 30 nautical miles (NM) offshore. The primary means of distress alerting on VHF is by Digital Selective Calling (DSC) Channel 70. VHF Channel 16 can also be used for as a means of distress alerting. The 999/112 telephone emergency system is also under 24-hour monitoring and can be used to reach the IRCG.

### 3.1.3 IRCG MRCC Contact Information

Please see Section 7.12 for specific contact details for the Valentia MRCC.

### 3.1.4 Reporting Incident Position/Location

The reporting of the position of the incident is a vital part of the incident response process and should be reported as part of initial incident details. For example if the incident is on a WTG, the precise coordinates (in latitude and longitude) should be passed to IRCG so that any responding rescue unit may use the position for precision navigation purposes.

## 3.2 SAR Facilities and their Response Capability

National SAR resources are available in the event of an incident if it cannot be dealt with by Offshore Site vessels or other assets, or involves persons and/ or vessels not connected to the Offshore Site. An asset is a SAR facility that maintains a level of availability, competence and safety assurance and is required to operate in accordance with the National SAR. SAR facilities can be tasked by the National SAR organisation to respond to an incident, and SAR assets and support are available to the IRCG on request. Therefore, the request for assistance should be made via the IRCG and not directly to the SAR resource.

National SAR resources (including lifeboats and rescue helicopters) are available if the incident exceeds the capability of Offshore Site resources, it is the opinion of the work supervisor or other person that urgent and immediate assistance is required, or if an event occurs with persons or vessels not connected with the Offshore Site.

The Royal National Lifeboat Institution (RNLI) and other volunteer organisations with lifeboat and rescue boat services can provide crafts to rescue persons in danger at sea, with their role limited to rescuing or assisting persons from the water or accessible areas of the Offshore Site, or providing support to vessels in the area. Their personnel are not trained to climb WTGs or enter a windfarm and should not be requested to do so. The RNLI operate a 24-hour SAR service from lifeboat stations. Information on the RNLI stations within the vicinity of the Project is provided in Table 3-1.

Table 3-1 RNLI stations in the vicinity of the Offshore Site

Station	Lifeboat	Distance (nautical miles)
Aran Islands	Severn Class	12
Galway	B Class	31
Clifden	Shannon Class	12
	B Class	
Kilrush	B class inshore lifeboat	40

### 3.2.1 Airborne Rescue Resources

The provision of SAR helicopters is undertaken by the IRCG Service and Rescue Aviation Service. Four medium-lift Sikorsky S-92 helicopters are available (six further aircrafts will be fully operational from 2025) from four bases in Sligo, Shannon, Waterford, and Dublin Weston Airport. These aircraft are designated wheels up from initial notification in 15 minutes during daylight hours and 45 minutes at night. Fixed wing aircraft capability is also available on a 24/7 basis to support the delivery of services.

Additionally, two King Air fixed-wing aircraft based at Shannon Airport provide support to the IRCG for SAR operations and environmental monitoring. Should SAR helicopters be required to enter the Offshore Site, the marine coordinator will be required to implement specific requirements from the MRCC or the SAR helicopter crew. This can include:

- WTGs to be shut down (individual turbines, a row or rows of turbines or part or whole field);
- The rotation of a nacelle to a specific 'nose cone heading';
- In the case of a SAR aircraft approaching a WTG, the rotation of the blades to the desired orientation.

### 3.3 Medical Advice/Assistance

This section details the specific procedures to be followed by the Applicant if medical advice or assistance is required. Medical advice is available from the IRCG. The Applicant will use its own telemedicine capability and resources in the first instance. Evacuation of injured or ill persons will be conducted via the IRCG if the Applicant resources are considered inappropriate or the situation is urgent. If in doubt, the IRCG will be contacted.

### 3.4 Exercises

It is recognised as good practice for an initial table-top exercise to be held shortly after commencement of operations. This serves as a 'get to know you' and educational process for all the duty holder's staff and the emergency services who might be expected to respond to any emergency in or around the Offshore Site. All exercises involving the IRCG will be agreed in advance through consultation.

### 3.5 Unexploded Ordnance and Wreck Materials

During construction or other seabed operations it is possible that unexploded ordnance (UXO) or materials from uncharted wrecks could be located, exposed, disturbed, or inadvertently lifted from the seabed. UXOs are a maritime safety issue and fall under the remit of the IRCG. In all cases of identification of UXO, the IRCG must be informed.

Based on pre-construction surveys and a UXO risk assessment conducted by the Applicant for the Offshore Site, the requirement for UXO clearance is very unlikely. Commercial contractor options for UXO clearance have not been confirmed. If contractors are not available to proceed with any required clearance, the IRCG will be consulted immediately, and they will alert the Maritime Area Regulatory Authority (MARA) by contacting AGS. The object will not be moved (or removed if it is lodged), and all personnel will be evacuated as far as practicable away from the UXO.

Uncharted wrecks (aircraft or vessels) or materials from wrecks may be located, disturbed, or inadvertently lifted from the seabed during subsea operations. All such finds, no matter how small, in waters up to the 12 NM limit or outside of Ireland and brought within Irish territorial waters, must be reported by law to a Receiver of Wreck. These can include portholes, bells, plates, fixture and fittings, bundles of wood, or historical and archaeological material. Boats which have come off their moorings and buoys other than those which form part of fishing equipment, are not classified as wreck.

The Receiver of Wreck for the relevant counties are provided in Table 3-2.

Table 3-2 Receiver of Wreck contact details

Address	Name	Contact details
	James Duffy	061 775921

Clare - Where the District Electoral Divisions (DED) of Kinvara & Abbey meet in Galway Bay to Youghal Bridge, Co. Cork.		086 3323795
	Flannan Quinlivan	061 775930
Galway - Lough Foyle, where Donegal and Derry meet – Where DED's of Kinvara and Abbey meet in Galway Bay	Gerard Buggy George Guilfoyle	087 1768091

The MPCP provides the pollution response arrangements for the Offshore Site during the construction, operational and maintenance, and decommissioning phases of the Project. The MPCP will be included as an appendix to the OEMP. The MPCP details pollution prevention measures such as:

- a) storage of chemicals in secure designated areas in line with appropriate regulations and guidelines;
- b) adherence to vessel regulations such as MARPOL to reduce potential for vessel pollution; and
- c) disposal of waste e.g. sewage, oil or litter at an authorised disposal facility.

## 4. SUPPORT ARRANGEMENTS

### 4.1 Criminal Actions and Accidents to Persons

Criminal activity, suspected or otherwise, should be reported to AGS and the IRCG. AGS must be informed of any deaths and serious injuries associated with the Offshore Site so that early consideration can be given to the investigation, travel to the location, training and health and safety requirements.

### 4.2 HR Arrangements

Following any incident, the Applicant will ensure that information is passed to the next of kin in consultation with the relevant manager and following Human Resources (HR) procedure. Additionally, HR will support during in incident with interactions between AGS, family liaison, contractor liaison, and hospital liaison. If the persons involved in the incident are employed by a contractor, the contractor's HR arrangements will be used.

### 4.3 Media Relations

Should a media response following an incident be required, this should be agreed jointly between the Applicant, AGS, IRCG, and any other involved parties. The Applicant will coordinate media relations to provide a joint media response, which can include circulating press releases and where appropriate, any pre-approved holding statement. The contact details of the relevant person is provided in Table 4-1.

Table 4-1 Media relations contact detail

Name	Contact details
TBC	

### 4.4 Shore Reception Arrangements

Survivors may need to be delivered to a location other than the normal embarkation/ disembarkation point depending on:

- > The location of the Offshore Site;
- > The origin point of the rescue units;
- > The weather and/ or incident conditions and situation;
- > The scale of the incident and its consequences; and
- > If any of the survivors have injuries.

There are multiple possible scenarios however, it is only likely that AGS will attend a reception centre where an incident involves death, missing people and/or casualties.

5.

## ADDITIONAL INFORMATION

The information contained in this section describes the duties and functions of various participants in SAR, explains areas or information requirements of particular importance to SAR and other emergency responses within the Project, and details the support which may be provided by AGS.

5.1

### SAR Mission Coordinator (SMC)

Each SAR operation is carried out under the direction of a SAR Mission Co-ordinator (SMC) at the MRCC. This function exists only for the duration of a specific SAR incident.

The responsibility of the SMC will vary depending on the nature and severity of the incident. The SMC is essentially in overall charge of coordinating and directing the response to an incident until the incident is successfully concluded, or a decision has been agreed to terminate operations.

5.2

### On-Scene Coordinator (OSC)

The SMC may, according to the severity of an incident, wish to appoint an Offshore Site work/ safety boat as on-scene coordinator (OSC). The information provided below is for the guidance of the person(s) in charge of such boats.

According to the Aeronautical and Maritime Search and Rescue (IAMSAR) (IMO, 2016), when two or more SAR facilities are working together on the same mission, it is sometimes advantageous if one person or vessel is assigned to co-ordinate the activities of all the participating units.

The SMC at the MRCC designates the OSC, who may be in charge of a Search and Rescue Unit (SRU), ship or aircraft participating in a search, or someone at another nearby facility able to handle OSC duties.

The OSC should be the most capable person or vessel available, and the following considerations should be taken into account when selecting:

- The amount of SAR training and experience the person may have had;
- Communications capabilities; and
- The length of time that the facility (work/safety boat) on which the OSC is aboard can stay in the search area.

Duties which the SMC may assign to the OSC, depending on needs and qualification include any of the following:

- Assume operational co-ordination of all SAR facilities on scene;
- Receive and implement the search action plan from the SMC;
- Modify the search action plan based on prevailing environmental conditions, SRUs / SAR facilities availability and capability, new target information and new developments on scene, keeping the SMC advised of any changes to the plan;
- Establish and maintain communications with all SRUs using the designated on-scene channels;
- Provide relevant information to the other SAR facilities;
- Monitor the performance of other units participating in the search. Co-ordinate and divert surface units or helicopters to evaluate sightings;
- Develop and implement the rescue plan (when needed);
- Co-ordinate safety of flight issues for SAR a/c (where no Aircraft Co-ordinator is appointed); and
- Make consolidated situation reports (SITREPS) back to the SMC.

- Information that the SMC needs from the OSC includes:
- On-scene weather, wind, and sea conditions when significant changes occur, and at least every four hours if the SMC has not stipulated a shorter time interval;
- SRU on scene arrival and departure information, including actual and estimated time;
- Pertinent new developments or sightings;
- Major modifications made to the SMC's SAR action plans, either already taken or recommended;
- Requests for additional assistance;
- Summary of search areas;
- Completed with an assessment of the search effectiveness; and
- Obtain results of search as each facility departs the scene.

### 5.3 Search Planning

In the event that persons or craft are in danger and drifting on or in the sea, and they are unable to provide locating signals or a precise position, SAR units will have to be deployed to physically look for them. This requires that search area calculations are made based on the movements of the tide, local currents and wind (leeway) as they might act on the object drifting e.g. life raft, life boat, drifting vessel, person in the water, etc. Any information related to the Offshore Site such as records on tide and wind speed and direction could be helpful in the accurate calculation of search areas. Such useful information could be:

- Information about tides and water currents;
- Availability of any wind data from Offshore Site resources e.g. anemometer information and how the MRCC can obtain this; and
- Explanation of the procedures to be carried out by the MRCC, and any information or actions required from the Offshore Site operator, in the event of search planning action being required.

### 5.4 Suspension/Termination of SAR Action

The SMC is responsible for deciding when to terminate attempts to rescue and/ or search operations for incidents but will do so in conjunction with:

- SAR resources;
- OSC;
- Offshore Site operators, personnel or contractors;
- Third parties;
- Other emergency services; and
- Any other relevant party engaged in the incident.

### 5.5 An Garda Síochána

During offshore renewables incidents which require a SAR response, AGS has a critical role and can provide significant support and guidance, therefore early notification of the incident to the appropriate AGS force by IRCG and by the Applicant is essential.

IRCG are responsible for the at-sea coordination while AGS will concentrate upon the coordination of the onshore response. The Applicant will give early consideration to the preservation of an area where an incident has occurred to assist investigation into the cause.

Upon completion of the SAR response, i.e. when everyone has been accounted for or when there is no longer any reasonable expectation of finding further survivors, a clear transition will be ensured from the SAR phase to the recovery and investigation phase.

When contacting AGS, the following information should be provided to ensure a suitable initial briefing:

- What is the name/ nature of the asset?
- Where is it located?
- What has actually happened? (Collision/ fire/ helicopter incident, etc.)
- Which duty holder has primacy for the Emergency Response and where is it being managed from? (e.g. locally, internationally, remotely)
- What is the POB (person on board)
- What is your name and contact number?

Where possible, AGS may elect to send a police Incident Liaison Officer (ILO) to the duty holder coordination centre, and/or an alternative location as required. The role of the ILO is to provide an effective interface between police and the emergency response room of companies when responding to an offshore emergency.

It is acknowledged that this might not always be possible face-to-face due to the remote location of an emergency response room, therefore the Applicant will offer alternative solutions should they be required. An ILO or other designated police officer will require a briefing from a duty manager whether in person or virtually.

## 5.6 Emergency Service Liaison

It is recognised as good practice that Offshore Site operators and the emergency services, including AGS, should build relationships during the planning and construction phases of any project in order to maximise joint understanding and situational awareness. Once operational, regular visits should be undertaken to operations/control rooms/centres, in order to test and exercise agreed protocols and maintain understanding between all parties.

## 6. PROJECT SPECIFIC INFORMATION

### 6.1.1 Construction Activities

The anticipated construction activities are outlined in Table 6-1. The Applicant will provide weekly updates on construction operations to IRCG (by email and/ or verbal update report).

Table 6-1 Planned construction activities at the Offshore Site

Activity	Description
Pre-construction surveys and site investigations	Additional pre-construction surveys may be undertaken, including geophysical, geotechnical, benthic, unexploded ordnance (UXO) and metocean investigations. Other surveys, e.g. for birds, may also be undertaken as required.
Site preparation	Seabed preparations will be required prior to the installation of GBS foundations and offshore cable infrastructure. This may include dredging, boulder clearance and UXO clearance. Site preparation works also include placement of rock to form a stonebed for GBS foundations and for WTIV operations.
GBS foundation and sub-structure installation	Prior to installation at the OAA, the GBS foundations are proposed to be temporarily anchored, at a temporary anchor facility which is subject to a separate licence and assessment process. Foundations will be towed to site and installed ahead of the WTG and OSS topside structure.
OSS installation/ commissioning	OSS topside structure is installed once the GBS foundation is in place. Following installation of the OSS and connection to the inter-array and export cabling, a process of testing and commissioning will be undertaken
Offshore Export Cable (OEC) – landfall and offshore installation	<p>Following the completion of the necessary onshore works (including the necessary landfall preparations) and the offshore site preparations, the OEC will be laid from the landfall out to the OSS, with the potential for pre-trenching works to be undertaken ahead of cable installation.</p> <p>The export cable will be buried wherever possible and may be installed using a variety of techniques detailed further in Chapter 5: Project Description. Following cable lay and burial (which may occur simultaneously or sequentially) external cable protection will be installed, as necessary. Further details on cable protection are provided in the Chapter 5 Project Description of the EIAR.</p>
Inter-array cable installation	The inter-array cables will be installed between the WTGs and connecting the WTGs to the OSS. The installation techniques for the inter-array cables will be similar to that of the OEC.
WTG installation/commissioning	The WTGs will be fabricated onshore and transported to the OAA for installation. Following the integration of the WTG

	components and connection of the fully integrated WTG to the inter-array cabling, a process of testing and commissioning will be undertaken.
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## 6.1.2 Infrastructure Information

### 6.1.2.1 Turbines

The layout of the Offshore Site is shown in Figure 1-1, and the coordinates for each WTG are presented in Table 6-2.

Table 6-2 WTG Coordinates

WTG	Easting Irish Transverse Mercator (ITM)	Northing ITM	Latitude (WGS84)	Longitude (WGS84)
1	434951	5905283	53° 17' 33.96" N	009° 58' 33.27" W
2	433679	5904881	53° 17' 20.37" N	009° 59' 41.65" W
3	433626	5903731	53° 16' 43.13" N	009° 59' 43.68" W
4	432513	5903326	53° 16' 29.54" N	010° 00' 43.44" W
5	431546	5902488	53° 16' 01.97" N	010° 01' 34.99" W
6	432793	5901870	53° 15' 42.57" N	010° 00' 27.19" W
7	431803	5901472	53° 15' 29.21" N	010° 01' 20.19" W
8	432596	5900692	53° 15' 04.33" N	010° 00' 36.94" W
9	433688	5901319	53° 15' 25.14" N	009° 59' 38.53" W
10	434668	5900922	53° 15' 12.71" N	009° 58' 45.32" W
11	434715	5899881	53° 14' 39.06" N	009° 58' 42.03" W
12	435741	5900217	53° 14' 50.38" N	009° 57' 46.93" W
13	436815	5902325	53° 15' 59.06" N	009° 56' 50.49" W
14	436650	5898836	53° 14' 06.10" N	009° 56' 56.92" W
15	436831	5900319	53° 14' 54.15" N	009° 56' 48.19" W
16	436462	5901339	53° 15' 27.01" N	009° 57' 08.87" W
17	437765	5900975	53° 15' 15.77" N	009° 55' 58.26" W
18	438577	5902070	53° 15' 51.56" N	009° 55' 15.22" W
19	437998	5903119	53° 16' 25.26" N	009° 55' 47.19" W

WTG	Easting Irish Transverse Mercator (ITM)	Northing ITM	Latitude (WGS84)	Longitude (WGS84)
20	433582	5900182	53° 14' 48.29" N	009° 59' 43.40" W
21	437077	5903926	53° 16' 50.96" N	009° 56' 37.51" W
22	434573	5904099	53° 16' 55.48" N	009° 58' 52.79" W
23	436123	5904761	53° 17' 17.57" N	009° 57' 29.63" W
24	436076	5903290	53° 16' 29.94" N	009° 57' 31.09" W
25	431522	5903614	53° 16' 38.38" N	010° 01' 37.14" W
26	437664	5899600	53° 14' 31.24" N	009° 56' 02.76" W
27	435433	5898874	53° 14' 06.80" N	009° 58' 02.58" W
28	432615	5904469	53° 17' 06.55" N	010° 00' 38.78" W
29	438915	5900441	53° 14' 58.97" N	009° 54' 55.88" W
30	439603	5901447	53° 15' 31.80" N	009° 54' 19.46" W

Each WTG will consist of a tower supported by a GBS foundation, a nacelle on top of the tower which contains the mechanical and electrical generating components, and three rotating blades. There will be a minimum blade clearance of 32.90 m above LAT (i.e. distance between the rotor blade tip and sea surface).

The design parameters for the WTGs are provided in Table 6-3.

Table 6-3 Design parameters of the WTGs taken from EIAR Project Description

Design Parameters	Value
Number of WTGs	30
Minimum WTG Spacing Distance (m)	1,017
Hub Height above Lowest Astronomical Tide (LAT) (m)	178.9
Rotor Diameter (m)	292.0
Upper Blade Tip Height above LAT (m)	324.9
Lower Blade Tip Height above LAT (m)	32.9
Lower Blade Tip Height above HAT (m)	27.5
Swept Area per WTG (m <sup>2</sup> )	66,966
Swept Area for whole Wind Farm (m <sup>2</sup> )	2,008,986

Turbine Type	3 blade horizontal axis
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### 6.1.2.2 Operational Lighting and Marking

The WTGs will be designed to meet the standards stated in the Irish Aviation Authority's (IAA) guidance for lighting, marking and radar enhancement determined by the Commissioner of Irish Lights (CIL) and lighting and marking requirements may differ between aviation and marine traffic (IAA, 2015). At least three months prior to commencement of construction the following information will be supplied to the IAA:

- Estimated position of each WTG and other structures in the Geodetic System of 1984 (WGS84). Co-ordinates will be in degrees, minutes and seconds;
- Proposed details of lighting and marking of offshore structures (including WTGs);
- Estimated maximum elevation of each structure (in feet and metres) and the estimated minimum and maximum distance between structures;
- Confirmation of whether Marine Radar Automatic Identification System (AIS), radar enhancer or transponder technology will be fitted;
- Planned earliest date of erection of WTGs; and
- Additional information relevant for air navigation.

All structures of greater than 91.4 m in height will be charted on aeronautical charts and reported to relevant databases at least ten weeks prior to construction.

At least three months in advance of commencement of construction, the above information will also be submitted to the CIL in an Application of Statutory Sanction (required under the Merchant Shipping Acts). The IAA and CIL must be regularly updated on construction progress and relevant lighting and marking details. The Applicant will be responsible for providing any updated information thereafter. Re-routing or amendments to helicopter operations may be required if a WTGs are installed within 2 NM of a Helicopter Main Route.

Selected WTGs and any other structures located on the periphery of offshore wind farms are deemed Significant Peripheral Structures. As per the Guidance material on offshore wind farms (IALA G1162 (IALA, 2021)), selected peripheral WTGs will be fitted with yellow lights at appropriate points on the structures located not less than 6 m and not more than 30 m above HAT. The lights will provide visibility of at least 5 NM range at 360°.

As per the Guidance on offshore wind farms (IAA, 2015), lighting and marking requirements for air navigation safety should be the same as for marine navigation detailed above. Where appropriate, Significant Peripheral Structures should be fitted with Type A lights of at least 2,000 candela (cd) when background luminance is below 50 cd/m<sup>2</sup> and up to 200,000 cd when background luminance is above 500 cd/m<sup>2</sup>, at the highest possible point at the top of the nacelle. The lights should be white with a flash rate of 40-60 flashes per minute and be visible from 360°. All lights across the Offshore Array Area should flash in synchronisation and reductions in light intensity should occur simultaneously if practicable. The lighting requirements must be in accordance with the International Civil Aviation Organisation Annex 14 Standards, on a 24h basis (continuous day and night service) for Type A Lighting. SAR lighting should be visible from 360° and should be a solid red light.

Full details of lighting and marking for marine and air navigation safety are described in Appendix 5-9: Lighting and Marking Plan.

### 6.1.2.3 Nacelle

Each WTG will consist of a tower supported by a GBS foundation with a nacelle on top of the tower which contains the mechanical and electrical generating components, and three rotating blades.

#### 6.1.2.4 GBS Foundations

Following careful consideration of site-specific parameters, it was determined that the most suitable WTG foundation for this Offshore Site is a concrete self-buoyant GBS. The GBS foundation comprises a disc shaped foundation platform and a concrete shaft that it is temporarily self-buoyant during the installation stage.

Upon arrival at the installation location, the GBS foundations will require ballasting to obtain negative buoyancy for seabed installation. Ballast could be water, sand, gravel, or an alternative high-density aggregate.

#### 6.1.2.5 Offshore Substation

A single OSS will be installed in the OAA, located to the eastern landward side of the OAA. The exact co-ordinates the OSS are provided below. The OSS topside contains electrical equipment and components required to transform the voltage of the electricity generated at the WTGs to a higher voltage suitable to export to the onshore grid network. The OSS will export High Voltage Alternating Current (HVAC) electricity with a system voltage of 220 kV on the primary side, with one export cable and two main transformers. The OSS secondary side will provide a system voltage of up to 132 kV. The OSS houses the relevant ancillary components (e.g., service crane, antennas, helideck) and electrical equipment (i.e., switchgear). The total height of the OSS is 45 m above LAT (excluding the crane) and 55 m above LAT (including the crane). Specific details of the OSS can be found below in Table 6-4.

Table 6-4 OSS topside design parameters from Chapter 5 Project Description EIAR

Design Parameters	Value
Centroid of OSS Location (relative to WGS 84 UTM 29N)	Easting 437,427; Northing 5,900,450
Max. Quantity of Foundations	1
System voltage HVAC (primary side) (kV)	220
System voltage MVAC (secondary side) (kV)	up to 132
Max. topside length (m)	58.5
Max. topside width (m)	42.5
Max. topside area (m <sup>2</sup> )	2,486.25
Max. topside height (m) (excluding crane and mast)	45 (above LAT)
Max. topside height (m) (including crane and communications antennas)	55 (above LAT)
Topside weight (tonnes)	2,600

## 6.1.3 Offshore cables

### 6.1.3.1 Inter-Array Cables

The IACs collect the power from the WTGs and connect to the OSS. The IACs will transport HVAC electricity in one three-phase circuit, with each phase having a separate metallic conductor (e.g. aluminium or copper) within an armoured trefoil cable. IACs will either be buried to a target depth of lowering of 1.0 metres (m) or will be surface-laid and protected with either a cast-iron shell (CIS), rock placement, concrete mattresses or rock/ grout bags. The IAC have a maximum external cable diameter of 240 millimetres and a maximum length of 73 kilometres (km).

### 6.1.3.2 Offshore Export Cable

The OEC will connect the OSS to the landfall at Killard near Doonbeg, Co. Clare via a 220 kilovolt HVAC cable. The OEC has a maximum length of 63.5 km and has a diameter of 300 millimetres. The OEC will either be buried to a target depth of lowering of 1.0 m or will be surface-laid and protected with either a CIS, rock placement, concrete mattresses or rock/ grout bags.

## 6.2 Maintenance Activities

Planned maintenance routinely follows scheduled servicing and includes general inspection and servicing, oil sampling/ change, cleaning of equipment, investigation of faults, minor fault rectification and replacement of consumables. These types of maintenance activities will generally take place during the summer months.

Unplanned maintenance covers fault rectification, unexpected minor repairs and major component replacements/ repairs. As unplanned maintenance cannot be foreseen, unplanned maintenance may take place at any time of the year across the Offshore Development's life cycle and may require urgent intervention to rectify any critical issues as quickly as possible.

Operation and maintenance activities will be conducted in accordance with offshore windfarm industry best practices with the intention of adhering to:

- Original equipment manufacturer guidance;
- Laws and regulations; and
- Maintaining safety and optimizing yield and availability.

## 7. EMERGENCY RESPONSE

### 7.1 Available Equipment

This section will outline the emergency and lifesaving equipment available on the WTGs, OSS, and associated vessels. The installation contractor will confirm vessels post-consent. As a minimum, the equipment outlined in Table 7-1 will be made available, as well as information on descender capability (primarily for rescue and evacuation, to allow controlled descent from a height), numbers of personnel required to operate equipment, and restrictions (e.g. wind direction, lowering to vessel/ sea).

Table 7-1 Emergency equipment

Equipment	Location	Quantity
Lifejackets	TBC	TBC
Survival suits		
Survival kits		
Personal locator beacons		
Personal handheld distress flairs		
Tagline kit		
Life buoy and line		
Life buoy and light		
Life buoy and smoke signal		
Defibrillator		
Eyewash kit		
First aid kit		
Foam fire extinguisher		
Carbon dioxide extinguisher		
Dry powder extinguisher		
Fire blanket		
Spill response kits		
Thermal protective aids		

### 7.2 Emergency Communications

Communications equipment, both routine and emergency, will be available on each WTG, the OSS, all vessels, and for individual personnel.

As a minimum, each vessel will be equipped with a digital VHF radio system to communicate with Offshore Site vessels and non-Offshore Site vessels, primarily for emergency response purposes. The procedure for communicating emergency notifications to the IRCG and the Applicant will be provided.

## 7.3 Emergency Shutdown Procedure

This section details the procedures and processes carried out by the Operations Control Centre to shut down the Offshore Site either as a whole, or individual WTGs or the OSS. The Operations Control Centre may initiate an emergency shut down to protect personnel, equipment, and/or the environment from a potential incident, which could include equipment failure, fire, or other emergencies.

Full details of emergency shutdown procedures will be detailed in a future iteration of the plan.

## 7.4 Vessels

### 7.4.1 Construction Vessels on Site

This section will provide information on each of the construction vessels (Chapter 5: Project Description, EIAR), including any rescue boats. The construction vessel to be utilised will be determined by the installation contractor post-consent, this will depend on vessel availability. It is anticipated that a range of vessels will be used in the construction stage, including:

- Cable laying vessels;
- Trenching support vessels;
- Wind turbine installation vessel (WTIV) – a type of jack-up vessel;
- Tug boats (main tug, assist tugs, infield tug);
- Fallpipe vessel;
- Heavy lift vessel (HLV);
- Crew transfer vessels (CTVs);
- Rock laying vessel;
- Trailing suction hopper dredger;
- Dynamic position vessel;
- Service operations vessel (SOV);
- Survey vessel; and
- Multi-cat landfall construction support vessel

The immediate rescue and emergency response capability for Offshore Site personnel or other contractors working on or in the Offshore Site are the work and safety boats provided by the Applicant.

Table 7-2 Anticipated vessels during construction period.

Installation method/infrastructure	Anticipated Vessel No.	Considered Vessel Type
Seabed preparation for rock placement	2	Fallpipe rock placement Trailing Suction Hopper dredger
OSS Topside	3	HLV Tug Barge

		Option for a WTIV
IACs	4	Cable lay vessel Trenching support vessels Service operation vessel Rock placement vessel
OEC	6	Cable lay vessel Trenching support vessels Service operation vessel Rock placement vessel Multi-cat construction support vessel
GBS Foundations	4	Main tug x 1 Assist tugs x 2 Infield tug x 1
WTGs	3	WTIV SOV CTV
Construction and major maintenance operations	1	Guard vessel

Full details of construction vessels will be detailed in a future iteration of the plan.

## 7.4.2 Operation and Maintenance Vessels

The O&M vessel requirements will be determined by the installation contractor post-consent, and this will depend on vessel availability. Once the contractor has been appointed, this section will provide information on each of the vessels, including any rescue boats. However, it is anticipated that a range of vessels will be used for maintenance, which are outlined in Table 7-3.

Table 7-3 Operations parameters and timescales.

Property	Description
O&M Base Locationv(assumed)	Rossaveel
Logistics Strategy	CTV, SOV, Helicopter
No. of CTV's	up to 2 vessels per day
No. of SOV's	1 vessel per day

No. of Helicopters	1 per day
No. of daily return vessel movements	Up to 4 (CTVs)
No. of annual jack up interventions	Up to 2 campaigns (may cover more than 2 locations)
Repair platform (blades)	Up to 1 campaign per year
Drones	Up to one campaign per year
Cable repair vessels	Expected to be less than 5 unscheduled interventions over life
Cable survey vessels	Annually for first 5-10 years, less frequently thereafter if conditions are stable

### 7.4.3 Guard Vessels

Two guard vessels will be present during construction and major maintenance operations. Once a vessel contractor has been appointed, the following information will be made available:

- Period of operation – construction/ operations/ decommissioning;
- Any limitations – weather/ operating area;
- Hours of operation;
- Range restrictions i.e. How far it can operate from the windfarm if requested by IRCG; and
- Duty holder details supplying the guard vessel.

### 7.4.4 Rescue Boat Capabilities

Once a vessel contractor has been appointed, information on rescue boat capabilities, either dedicated or if the guard vessel is fulfilling this role, will be available, in addition to the information in Section 7.4.3:

- If the vessel is shore based or offshore based and what their response times are;
- If it is offshore based, the endurance of the vessel and whether it is permanently in the water or located on another vessel or installation;
- How the vessel is mobilised (telephone, radio, control centre, etc.); and
- Operating times/ limitations.

## 7.5 Airborne Activities

This section details any airborne activities, including helicopters, which may be employed during the construction, operation and maintenance, and decommissioning phases of the Offshore Site. One helicopter is anticipated to be operated per day during the operation and maintenance phase. Detail of planned activities will be provided in a future iteration of this plan following consultation with the IRCG and the Irish Aviation Authority. This is expected to include:

- Type of aircraft;
- Operating base (or departure point/ crew pickup) and facilities;
- Speed and endurance, transit times to site;

- Normal crew numbers and passenger capacity;
- Weather and other limitations;
- Communications, radio frequencies/ channels operated;
- Helistop facilities available at the Offshore Site;
- Aviation lighting (if not covered above);
- Details of any aircraft coordination training provided to aircrew; and
- Capability of carrying any injured personnel.

## 7.6 Emergency Location Aids for Personnel

The types, locating frequencies and procedures for locating/ homing to the personal locator beacons used by personnel will be included in a future iteration of the plan, and is expected to include:

- Type(s) of beacon/ devices used;
- Frequencies/ channels that devices operate on;
- Procedures for homing to/locating the devices when transmitting;
- Outline procedures briefed to personnel for use of the devices; and
- How the beacons are registered and any relevant emergency contact arrangements.

## 7.7 Electronic Surveillance and Monitoring

This section will include details on the provision of AIS, radar, and closed-circuit television (CCTV) locations around the Offshore Site. Information will include the systems used, locations, the time periods of monitoring, and the contact details of the relevant monitoring centre responsible.

## 7.8 Radio Communication Aerials

The Applicant is required to indicate the location of radio communications aerials to enable relay and retransmission of radio communications from the shore control centre, the type of radio communications system(s), the frequencies used, the contact number(s) for the control room/ vessel using these systems, and the time period(s) when the system is monitored and/ or staffed.

These details should also include if any live feeds have been made available to the IRCG.

## 7.9 Diving Operations

In the event that a dive team is required further information will be provided in a future iteration of this plan.

## 7.10 Firefighting, Chemical hazards, Trapped Persons, etc

General instructions to Project personnel are that should a fire break out, the Offshore Site is to be evacuated and no direct firefighting response is to be attempted. This will be the standard response to such situations.

Assistance available for rescue will be provided in a future iteration of this plan.

## 7.11 **Dropped Objects**

All dropped objects will be recorded and reported to the competent authority using a Dropped Object Procedure Form. The format of dropped object form to be agreed prior to commencement of construction activities

## 7.12 **IRCG MRCC Contact Information**

Contact information for relevant MRCC will be added to this plan following liaison with IRCG.

## 7.13 **AGS Contact Information**

Contact information and associated communication procedures with AGS will be added to this plan following liaison with IRCG.

8.

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9.

## EMERGENCY ACTION CARD

Emergency Contact (One of the following or a combination of both, must be 24/7)		Project Summary	
Duty Holder name	Fuinneamh Sceirde Teoranta	Phase	Construction/ Operation
Marine Coordinator (primary number)	TBC	Range & Bearing from land	TBC
Secondary number	TBC	Number of WTG	30
Media relations	TBC	Location of primary ER facility	
Coastguard	TBC	HOLD	

WTG Specific information					
Heights (above LAT, in m)		Lights Incl. flash, IR, colour, etc.		Helicopter Winch	
Total height to blade tip	324.9	Aviation lights	TBC	Suitable for winching?	TBC
Height of Hub	178.9	SAR lights	TBC		

Communications		
VHF	Aviation	Additional comms
TBC- What channels are used? If aerial on site, approx. range	TBC aviation specific frequencies	TBC Any additional information such as TETRA or satellite communications

<b>Electronic Monitoring</b> (include details if feeds are provided to the IRCG)		
AIS	Radar	CCTV
TBC Location of receiver and range of reception	TBC - Location and range of scanners	TBC Location of cameras and range of coverage

<p>Site Rescue Teams</p> <p>TBC Include brief details of mobilisation time and response capabilities and equipment carried.</p>	<p>Shutdown procedure</p> <p>TBC - Outline what procedure is required for turbines to be shut down if required for SAR activity. Also detail any situation where this would not be possible.</p>
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Personal SAR Locating Device Make & Model				
Functions: yes/no	COSPAS-SARSAT	AIS	DSC	121.5MHz

Mass Evacuation Places of Safety To indicate if mass evacuation is required where persons could be taken to, whether it be accommodation vessel, landfall or near Offshore Installation for temporary relief.		
Place Name	Range and bearing from centre of windfarm	Location in Latitude and longitude

<p>Key points of note</p>
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