

Navigational Safety Plan



Codling Wind Park Navigational Safety Plan

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Abbreviations table

Abbreviation	Definition	
AIS	Automatic Identification System	
ALARP	As Low as Reasonably Practicable	
AtoN	Aid to Navigation	
COLREGS	Convention on the International Regulations for Preventing Collisions at Sea (1972)	
СШР	Codling Wind Park	
EIAR	Environmental Impact Assessment Report	
IALA	International Association of Marine Aids to Navigation and Lighthouse Authorities	
ІНО	International Hydrographic Organization	
ΙΜΟ	International Maritime Organization	
IRCG	Irish Coastguard	
JUV	Jackup Vessel	
LMP	Lighting and Marking Plan	
мсс	Marine Coordination Centre	
МСІВ	Marine Casualty Investigation Board	
MSDA	Marine Safety Demarcation Area	
MSO	Marine Survey Office	
nm	Nautical Mile	
NRA	Navigational Risk Assessment	
NSP	Navigational Safety Plan	
NtM	Notice to Mariners	
0&M	Operations and maintenance	
OECC	Offshore Export Cable Corridor	
ОМВ	Operations and Maintenance Base	
OOS	Out of Service	
RAM	Restricted in their ability to manoeuvre	
SOLAS	International Regulations for the Safety of Life at Sea	
sov	Service Operation Vessel	
SPS	Significant Peripheral Structure	

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Abbreviation	Definition
ТР	Transition Piece
TSHD	Trailing Suction Hopper Dredger
υк	United Kingdom
ИКНО	United Kingdom Hydrographic Office
VHF	Very High Frequency
WTG	Wind turbine generator



1 Introduction

Codling Wind Park Ltd (hereafter 'the Developer') is the developer of the CWP Project, a planned offshore wind farm located in Irish waters whose array (hereafter the 'array site') is located approximately 7 nautical miles (nm) from the coast of County Wicklow. The offshore export cables will carry the energy generated by the CWP Project from the array site to shore, making landfall at Poolbeg within Dublin Bay.

It is noted that the CWP Project includes works immediately adjacent to and within the River Liffey, however the Developer proposes not to use vessels for the associated works, and any works during the reclamation at Pigeon Park for the onshore substation will be coordinated with Dublin Port Company.

As detailed in Volume 3, **Chapter 16 Shipping and Navigation** and based on the Navigational Risk Assessment (NRA) process, it has been identified that maintaining documented vessel management procedures is a necessary mitigation to ensure that navigational safety risks, including to third-party vessels, are within As Low as Reasonably Practicable (ALARP) parameters for the CWP Project.

On this basis, this Navigational Safety Plan (NSP) has been produced to document the associated measures that will be in place. The document covers the following:

- Specific navigational safety measures to be implemented during the construction phase;
- Specific navigational safety measures to be implemented during the operations and maintenance (O&M) phase;
- How information relating to the CWP Project will be promulgated;
- Approach to indicative transit corridors from relevant ports to the array site; and
- Consideration for areas where anchoring may occur and where it will not occur.

It is likely that the decommissioning phase will represent a similar scenario to the construction phase (see **Section 2**) in terms of increased vessel activity and sensitive operations, and therefore it is anticipated that similar procedures will be applied. This is referenced where appropriate in this document, noting that the NSP will be reviewed in advance of the decommissioning phase.

This is considered an outline plan at this stage, to be subject to Condition and for which the details will be confirmed following consultation. Consultation will be undertaken including with the Marine Survey Office (MSO) to inform the final document, which will be finalised prior to commencement of construction.



2 Navigational safety measures during construction

2.1 Marine coordination

The Developer will establish a Marine Coordination Centre (MCC), which will be used during the construction phase. This will represent a central control base with overarching responsibility for project vessels, and ensuring impacts from project vessels to third--party traffic are minimised. The location is as yet undetermined, and could be from a number of sites in Ireland, however for the purposes of assessment it has been assumed as Wicklow Harbour as this provides a suitable representative scenario for the purposes of the assessment. The implementation of an MCC is in line with standard industry practice in the United Kingdom (UK).

Measures in place on this basis to be managed from the MCC will include as a minimum:

- Permission for construction vessels to enter the construction area established within the array site, for example using a Permit to Work system (noting third-party vessels will not require permission);
- Liaison with vessels with regards to agreed routeing destinations / berth / anchorage (where applicable, and noting that compliance with the Convention on the International Regulations for Preventing Collisions at Sea (COLREGS) (International Maritime Organization (IMO), 1972/77) will remain the navigational priority at all times, i.e., the MCC will provide project vessels with relevant information as opposed to direct instruction on routeing);
- Monitor vessels and personnel via communication with vessels and Automatic Identification System (AIS) for any potential vessel access conflicts;
- Defining of appropriate advisory safe passing distances (see Section 2.4);
- Obtain and provide localised weather information for project vessels to plan the work being undertaken;
- Being the central internal contact point for contractors or other relevant parties in case of an emergency; and
- Issuing of Notice to Mariners (NtM) (see Section 4.1).

It is expected that a similar central MCC will be established for decommissioning.

2.2 Temporary lighting and marking

Based on consultation to date (including with Irish Lights), it is proposed that during the construction phase, all structures will be marked via temporary lighting, and temporary buoyage will be used to mark the overall array site. CWP Project have introduced a Marine Safety Demarcation Area (MSDA), within which the only permitted structures will be temporary buoyage. These measures are in line with standard industry practice in the UK, and

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will minimise allision¹ risk, and alert passing mariners of the presence of the structures and works within the array site.

The process by which the temporary lights will be removed relative to the activation of the operational lighting and marking will be agreed with Irish Lights as part of the Lighting and Marking Plan (LMP) process. The LMP has been designed to ensure that lighting and marking is compliant with the International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA) Guidance on the Marking of Offshore Man-Made Structures G1162 (IALA, 2022), and in line with stakeholder requirements.

Lighting and marking to be implemented during decommissioning will be agreed with the relevant Regulator, which is assumed to be Irish Lights, at the point of decommissioning, however it is anticipated to likely be similar to that used during the construction phase, in particular in terms of use of buoyage to demarcate the area within which activities are being undertaken.

2.3 Guard vessels

Guard vessels are not mandatory for the purposes of project mitigation, however their use may be required at the CWP Project at particular times during all phases, for example when other project vessels are particularly vulnerable due to partially completed works or a particular construction activity. During these periods, the construction area will be monitored by guard vessel(s) to further protect the area and project vessels, and to provide additional information to third-party vessels (and therefore reducing risk to both project vessels and third-party vessels).

The decision(s) on when to use a guard vessel will be informed by a dynamic risk assessment process for the activities required to construct the CWP Project.

2.4 Advisory safe passing distances

The Developer may utilise advisory safe passing distances around project infrastructure or works associated with the construction. The need for advisory safe passing distances will be dynamically risk assessed via the MCC as per **Section 2.1**.

These advisory safe passing distances will be promulgated via the means set out in **Section 4** and will alert passing mariners to potential hazards.

It is likely that a similar approach will be applied during decommissioning.

2.5 Cable laying and other RAM operations

Restricted in their ability to manoeuvre (RAM) vessels will likely be utilised, including during the cable installation works and heavy lifting operations. RAM vessels are those restricted in their ability to manoeuvre as a result of the nature of the work they are undertaking and

¹ Contact between a vessel and a fixed structure.

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therefore are restricted in avoiding an approaching vessel(s). All RAM vessels involved in the construction of the CWP Project will comply with the COLREGS (IMO, 1972/77). All vessels, regardless of their nationality, are required to comply with this convention to ensure that they do not interact with vessels that are restricted in their navigational ability.

RAM vessels will display lights and shapes to indicate their restrictions. They will transmit safety warnings on Very High Frequency (VHF) to inform other vessels of their actions using the 'Securité' message if the messages contain important information relating to navigation. Communications between RAM vessels and the MCC will be ongoing throughout the operations.

RAM vessels will comply with vessel-type regulation information transmitted through AIS and show current navigational status at all times to ensure other vessels equipped with AIS can identify that they are RAM (noting, as above, lights and shapes to indicate their restrictions will also be displayed, meaning non-AIS vessels will also be aware).

Cable-laying activities will also be promulgated through the notification procedure and, if necessary, following internal risk assessment, guard vessels (see **Section 2.3**) or advisory safe passing distances (see **Section 2.4**) may be employed during the cable-laying period.

Decommissioning will likely require similar types of activities involving RAM vessels, and therefore it is anticipated that similar measures will apply.

2.6 Emergency response cooperation planning

The Developer will work with the Irish Coastguard (IRCG) to develop a document that bridges the CWP Project's emergency response plans and those of the IRCG. This document will detail the procedures by which the Developer will cooperate with IRCG in the event of an emergency incident. There is a general understanding that a template for such a plan will be included as an appendix to the upcoming guidance setting out navigational safety and Search and Rescue requirements. At the time of writing (January 2024), this guidance is still in draft form with the final version pending, however the agreed and final template will be utilised if available for the purposes of the emergency response planning documentation.

The plan will be reviewed in advance of decommissioning and in liaison with the IRCG.

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3 Navigational safety measures during operation and maintenance

3.1 Marine coordination

An MCC will be in place during the Operation and Maintenance phase, likely based at the Operations and Maintenance Base (OMB). The location of the OMB is as yet undetermined, and could be from a number of sites in Ireland, however for the purposes of assessment it has been assumed as Wicklow Harbour as this provides a suitable representative scenario for the purposes of the assessment. It is also the Developer's preferred location for the OMB.

The overarching responsibilities of the MCC will remain the same as during construction (see **Section 2.1**). On this basis, responsibilities will include as a minimum:

- Permission for project vessels to enter the array site (noting third-party vessels will not require permission), for example using a Permit to Work system;
- Liaison with vessels with regards to agreed routeing destinations / berth / anchorage (where applicable, and noting that compliance with the COLREGS (IMO, 1972/77) will remain the navigational priority at all times, i.e., the MCC will provide project vessels with relevant information as opposed to direct instruction on routeing);
- Monitor vessels and personnel via communication with vessels and AIS for any potential vessel access conflicts;
- Defining of appropriate advisory safe passing distances (see Section 3.4);
- Obtain and provide localised weather information for project vessels to plan the work being undertaken;
- Being the central internal contact point for contractors or other relevant parties in case of an emergency; and
- Issuing of Notice to Mariners (NtM) (see Section 4.1).

3.2 Operational lighting and marking

Irish Lights will expect the Developer to comply with the IALA G1162 Guidance on the Marking of Offshore Man-Made Structures (IALA, 2022). Precise marine lighting and marking to be implemented during the operation and maintenance phase will be agreed with Irish Lights via the LMP process. In line with IALA G1162, this will include use of Significant Peripheral Structure (SPS) lighting, with other types of Aids to Navigation (AtoN) used as required by Irish Lights.

3.3 Guard vessels

As for the construction phase (see **Section 2.3**), guard vessels may be required at the CWP Project at particular times, for example when other project vessels are particularly vulnerable during major maintenance activity. During these periods, the works will be monitored by guard vessel(s) to further protect the area and to provide additional information to third--party vessels.

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The decision(s) on when to use a guard vessel will be informed by a dynamic risk assessment process for the activities required to maintain the CWP Project.

3.4 Advisory safe passing distances

The Developer may utilise advisory safe passing distances around project infrastructure or maintenance works. These advisory safe passing distances will be promulgated via the means set out in **Section 4**, and will serve to alert passing mariners to potential hazards.

The need for advisory safe passing distances will be dynamically risk assessed via the MCC as per **Section 3.1**.

3.5 Emergency response cooperation planning

As noted in **Section 2.6**, the Developer will work with the IRCG to develop a document that bridges the CWP Project's emergency response plans and those of the IRCG. This document will detail the procedures by which the Developer will cooperate with IRCG in the event of an emergency incident, and will be updated in advance of the operational phase with any relevant details (e.g., as built locations of structures).

There is a general understanding that a template for such a plan will be included as an appendix to the upcoming guidance setting out navigational safety and Search and Rescue requirements. At the time of writing (January 2024) this guidance is pending, however the template will be utilised if available for the purposes of the emergency response planning documentation.



4 **Promulgation of information**

This section provides information on the proposed approach to the distribution and issuing of NtM, and other appropriate notifications to the relevant stakeholders and other marine users.

4.1 Notice to mariners

NtM will be issued in advance of any activity associated with the CWP Project which may impact upon navigational safety. The Developer will liaise with the Department of Transport who may issue the NtM via their website as Marine Notices, as detailed in **Section 4.2**. The MCC will then issue the NtM to a list of relevant and national stakeholders. This marine stakeholder list will be regularly updated to ensure contact details remain up to date and all relevant parties are included.

The NtM will be concise, detailing navigational safety information and will include the information set out in **Table 4.1**, which is per the Department of Transport guidance on the Required Information for the Issue of Marine Notices (Department for Transport, 2023).

Type of activity	Type of activity being undertaken, e.g. subsea survey, deployment of buoy, etc.	
Duration of activity	Starting date and approximate finishing date for operations. Marine Notices will usually state that dates given are weather dependant.	
Location Coordinates that follow the conventional me maritime positions, using World Geodetic Syste (WGS84), where latitude is given before longitu		
Vessels involved	Name of vessel, type of vessel and call sign of vessel.	
Safety precautions taken (i.e. VHF channel).		
If buoys are used	Information on the type / colour of buoy and the colour and flashing sequence of any lights attached must be included.	
Diagrams and/or maps	Will also be included. Will show extract(s) from an up- to-date admiralty chart.	

Table 4.1Content of NtM / Marine Notice

Issuance of a Marine Notice does not grant permission for works or operations to commence. The required permissions / licences / certificates will be obtained in advance from the relevant authorities. Any vessels used in operations will be appropriately licensed and have the requisite certificates, e.g. Irish Load Line Cert, in place beforehand.



4.1.1 NtM issued prior to the commencement of construction

The Developer will, as soon as practicable prior to the commencement of any construction activities, ensure that the stakeholders on the marine stakeholder distribution list are made fully aware of such works through NtM (or any other appropriate means).

This will include the United Kingdom Hydrographic Office (UKHO) (who produce Ireland's Admiralty Charts) for nautical charting purposes.

4.1.2 NtM upon commissioning and during O&M

The Developer will ensure all parties on the marine stakeholder distribution list are made fully aware of the completion of the construction works and commissioning of the CWP Project.

The Developer will ensure that relevant stakeholders are informed via NtM of any planned and unplanned maintenance activities that are outside the day-to-day maintenance activities associated with the CWP Project.

4.1.3 Post-commissioning

The Developer will, upon the commissioning of the CWP Project, provide the 'as built' positions and maximum heights of all wind turbine generators (WTGs), substations, and any subsea infrastructure to the UKHO (who produce Ireland's Admiralty Charts) for nautical charting purposes. WTGs will be charted by the UKHO using the WTG tower chart symbol or within the development area chart symbol (as presented in Symbols and Abbreviations used on ADMIRALTY Paper Charts NP5011 (UKHO, 2020)) on charts deemed appropriate in terms of scale.

The same information will be provided to the Marine Survey Office (MSO).

4.1.4 Decommissioning

The Developer will, as soon as practicable prior to the commencement of any decommissioning activities, ensure that the stakeholders on the marine stakeholder distribution list are made fully aware of such works through NtM and other appropriate means such as newsletters and harbour notices. Stakeholders will also be made aware following completion of decommissioning.

4.2 Marine Notices

Marine Notices are issued by the Department for Transport, and are intended to publicise important safety, regulatory and other information relating to the maritime sector in Ireland. The Department for Transport will be included on the marine stakeholder distribution list (see **Section 4.1**) and will therefore be provided with NtM issued by the Developer. The Department for Transport may choose to publish the information provided in the NtM as Marine Notices.

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4.3 Fishing vessels

Details of communication and liaison procedures with the fishing industry are provided in the Fisheries Management and Mitigation Strategy (Doc. No. CWP-CWP-CON-08-05-REP-0001).

4.4 Radio navigational warnings

Radio navigational warnings may be issued if an activity or incident poses a danger to other marine users. Examples of when radio navigational warnings could be issued are:

- Failures to light signals, fog signals, buoys, or other aid to navigation (AtoN);
- Establishing new AtoN;
- Cable-laying activities, where a risk is posed to passing traffic;
- Other underwater operations that may constitute potential dangers in or near shipping lanes; and / or
- Vessels not under command or undertaking significant RAM operations.

In the context of radio navigational warnings, the UKHO act as the Navigation Area (NAVAREA) 1 (NEW Atlantic) Coordinator of the IMO and International Hydrographic Organization (IHO) Worldwide Navigational Warning Service. However, IRCG are the body responsible for broadcasting the warnings.

4.5 Incident reporting

As required under the Merchant Shipping (Investigation of Marine Casualties) Act, 2000, as amended, any marine incidents / casualties must be reported to the MSO as soon as is practicable following the occurrence. Following the initial report, as far as is practicable, any relevant details of the incident requested by the Marine Casualty Investigation Board (MCIB) will be provided.



5 Vessel movements

Vessels to be used during the construction, operation and maintenance, and decommissioning of the CWP Project cannot be precisely determined at this stage. However, this section provides indicative details of the vessel types that could be used during the construction phase and O&M phase, and how many vessel movements could be expected for each of those types. As per **Section 5.3**, vessel movements per year during the decommissioning phase will likely closely resemble those during construction in terms of vessel type and numbers.

5.1 Construction phase

Table 5.1 presents the estimated number of round trips and peak vessel numbers for each construction activity. These numbers have been defined for assessment purposes within the EIAR; further detail is provided in **Volume 2, Chapter 4 Project Description**.

Vessel type	Peak vessels within offshore development area	Round trips from Port to offshore development area
Foundations		
Seabed preparation vessels (including surveys, unexploded ordnance investigation and boulder clearance)	4	20
WTG and OSS monopile installation vessels (includes installation vessel, feeder vessel and anchor handlers)	6	43
Transition Piece (TP) installation vessels	7	43
Scour protection installation vessels (including filter layer and seabed preparation)	7	107
WTGs and OSSs		
WTG installation vessels (includes installation vessel, feeder vessel and anchor handlers)	4	50
OSS topside installation vessels	4	20

 Table 5.1
 Maximum vessel numbers per construction activity

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Vessel type	Peak vessels within offshore development area	Round trips from Port to offshore development area
Cable installation vessels		
Seabed preparation vessels (including Trailing Suction Hopper Dredger (TSHD) for sand wave clearance and disposal off site, Pre-Lay Grapnel Run (PLGR), Out of Service (OOS) removal, boulder clearance, pre- crossing protection and survey vessel)	7	548
Array cable and interconnector installation vessels (includes support, cable protection and anchor handling vessels)	6	39
Export cable installation vessels (including at landfall) (includes support, cable protection and anchor handling vessels)	5	43
Nearshore export cable installation vessels (including at landfall) (includes barges, tugs and small work boats)	17	118
Commissioning vessels		
Commissioning vessels	2	48
Support vessels		
General support vessels (including guard vessel, project Service Operation Vessel (SOV) and work boats)	4	506
Crew transfer vessels	2	824
Total construction vessels		
Maximum total construction vessels	75	2,409
Indicative peak vessels on site simultaneously	38	N/A



5.2 Operational phase

As per **Volume 2, Chapter 4 Project Description**, the vessel types which may be used as part of O&M activities are shown in **Table 5.2**, in addition to estimated numbers of annual movements and peak vessel numbers. It is noted that actual maintenance vessel requirements will need to be determined as and when the need arises.

Table 5.2Maximum vessel numbers per operation and maintenance activity

Operation and maintenance activity	Peak vessel numbers	Annual round trips
Jackup Vessels (JUVs)	2	3
SOV	1	26
Operation support vessel	6	1,152
Cable maintenance vessel	2	1
Auxiliary vessel*	3	27
Total	14	1,209

* Includes survey vessels, ROVs, AUVs, tug operations, cargo vessels, passenger vessels and scour replacement vessels

5.3 Decommissioning phase

Vessel movements per year during the decommissioning phase will closely resemble those during construction in terms of vessel type and numbers (see **Section 5.1**).



6 Project vessel routeing

Requirements for project vessels to comply with COLREGS (IMO, 1972) shall remain the key navigational priority at all times. All vessels shall passage plan as per the International Regulations for the Safety of Life at Sea (SOLAS) (IMO, 1974).

While there may be 'typical' routes that project vessels use to and from site, and the typical routes will be noted as 'preferred' for reasons such as ecological sensitivities (Ecological Vessel Management Plan), vessels are likely to deviate from such routes for a variety of reasons at the discretion of the vessel's Master, and navigational safety will remain the key factor at all time. Overall factors include:

- Compliance with COLREGS (IMO, 1972) or SOLAS (IMO, 1974);
- Prevailing weather, tidal or sea state conditions;
- Navigational hazards as indicated on charts or notified through NtM or other such sources;
- Due to the vessel originating from or being bound for a destination not indicated by the transit routes;
- Advice from the MCC or other responsible persons in charge of coordinating and managing construction vessel traffic; and
- Such other reasons as the Master of a vessel may deem relevant for the purposes of ensuring the safety of his vessel or another vessel.

This aligns with consultation input with the MSO (call on the 19 December 2023). MSO indicated preference that the NSP would not include defined routes for project vessels, with COLREGS being the primary and key consideration.

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7 Anchoring

7.1 Anchorage areas

7.1.1 Project vessel anchoring

Anchoring is at the discretion of the vessel's Master but can be in conjunction with the information provided by the MCC or port authorities² where relevant. However, standard marine practice requires that when a vessel proceeds to anchor, consideration is given to:

- Water depth;
- Seabed type and charted hazards including cables / pipelines;
- Weather and tidal information including current and predicted weather;
- Avoidance of prohibited anchorage areas;
- Consideration of other anchored vessels;
- Avoidance of known areas of other marine activity such as fishing or recreational boating; and
- Avoidance of main commercial routes, pilot boarding areas or other navigational features such as spoil grounds or subsea cables.

All vessels associated with the CWP Project will take the above into consideration prior to anchoring as per standard marine practice. Project vessels requiring anchorage within the array site will request permission to do so from the MCC, noting it is considered likely that areas used for shelter will be within the array site.

7.1.2 Summary of NRA findings

The NRA includes assessment of designated anchorage areas and preferred anchorage locations. There is a single designated anchorage location in the vicinity of the CWP Project, associated with Dublin Port within Dublin Bay, approximately 600 metres northeast of the Offshore Export Cable Corridor (OECC). There are also preferred anchorage locations nearby; one at Scotsman's Bay (to the east of Dun Laoghaire) and one at Sorrento Point (approximately 1 nm inshore of the OECC). These locations are shown in **Figure 7.1**.

² When within port limits, the relevant Port Authority have authority over where vessels anchor.



Figure 7.1 Anchorage locations

Assessment of AIS data undertaken in the NRA shows that anchoring activity also occurs in vicinity to Bray Harbour (approximately 5 nm south of Sorrento Point).

It is noted that these are not necessarily areas that project vessels will use for anchoring, and the factors listed in **Section 7.1.1** will be considered by every project vessel prior to planned anchoring.

7.1.3 Areas to avoid when anchoring

There is no charted information to indicate that anchoring is prohibited in any areas within the direct vicinity of the array site. The closest such area identified is at the entrance to Dun Laoghaire Harbour, in excess of 13 nm to the northwest, noting the OECC intersects this area, as presented in **Figure 7.2**.

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Ts Ts 07 04 03	$\frac{2}{2}$ $\frac{1}{2}$ $\frac{1}$	10y 12y 10y 10y 12y 10y 12y 10y 12y 10y 12y 10y 12y 11y 11y 11y 11y 11y 11y 11

Figure 7.2 Dun Laoghaire harbour limit and OECC

DUN LAOGHAIRE

1 nm

0.5

0

The next nearest area identified as being prohibited for anchoring is at Rosslare Europort (in excess of 47 nm to the south). Project vessels will not use any such area for anchoring, noting that the factors listed in **Section 7.1.1** will also all be considered.

Figure Title: Dun Laoghaire Harbour Limit

Bul

Date: 18/03/2024 Drawn: JaC Checked: AF

Coordinate System: WGS 84 / World Mercator

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8 Summary

This Navigational Safety Plan (NSP) has been produced to document the associated navigational safety measures that will be in place for the CWP Project during the construction, O&M, and decommissioning phases. This includes marine coordination, lighting and marking, use of guard vessels, advisory safe passing distance, emergency response planning, promulgation of information and project vessel anchoring.

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9 References

Department for Transport (2023) Required Information for the Issue of Marine Notices. Dublin: Maritime Safety Policy Division.

IALA (2022) IALA Guideline G1162 The Marking of Offshore Man-made Structures. Edition 1.1. Saint Germain en Laye, France.

IMO (1972) Convention on International Regulations for the Prevention of Collisions at Sea. London: IMO.

IMO (1974) International Convention for the Safety of Life at Sea. London: IMO.

UKHO (2020) Admiralty Symbols and Abbreviations used on Paper Charts NP5011. 8 Edition. Taunton: UKHO.