Iarnród Éireann
Irish Rail

Rosslare ORE Hub

EIAR Concluding Chapters

Chapter 25:

Interactions

venterra | GDG GAVIN & DOHERTY GEOSOLUTIONS | NICHOLAS O'DWYER an RSK company

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LIST OF ABBREVIATIONS

DMAP	Designated Maritime Area Plan
EIAR	Environmental Impact Assessment Report
EPA	Environmental Protection Agency
MW	Megawatt(s)
OWF	Offshore Wind Farm
PINS	UK Planning Inspectorate
UNECE	United Nations Economic Commission for Europe
ZoI	Zone of Influence

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25 INTERACTIONS

25.1 INTRODUCTION

This chapter of the Environmental Impact Assessment Report (EIAR) presents the assessment of the likely significant cumulative effects and the potential for interactions of environmental effects of the Proposed Development. This has been prepared in accordance with the Environmental Protection Agency (EPA) 'Guidelines on the information to be contained in Environmental Impact Assessment Reports', (2022).

Interactions, described in Section 6.12 of the '*Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment*' (Government of Ireland, 2018), can arise from:

- The interaction between the various impacts within a single project
- The interactions / cumulative effects between all of the different existing and / or approved projects in the same areas as the Proposed Development.

Other existing developments within and adjacent to Rosslare Europort that are already constructed and operating are described as part of baseline conditions described within the main assessments in Chapters 7 to 24 of this EIAR. This chapter therefore considers cumulative effects which may arise from impacts from the Proposed Development acting in combination with impacts from other proposed projects and effects from interactions of impacts arising from the Proposed Development. The effects of interactions between individual environmental topics considered in the EIAR, arising from the Proposed Development are described in Section 25.4. The potential cumulative effects arising from interactions with the other projects / developments in the same areas as the Proposed Development are described in Section 25.5.

The United Nations Economic Commission for Europe (UNECE) Convention on Environmental Impact Assessment in a Transboundary Context (referred to as the 'Espoo Convention') adopted in 1991, documents the requirement to consider transboundary impacts. The Espoo Convention requires that assessments are extended across borders between Parties of the Convention when a planned activity may cause significant adverse transboundary impacts. A summary of potential transboundary effects between the Proposed Development and receptors outside the boundary of Irish waters is also presented. Accordingly, the potential interaction between significant effects arising from the Proposed Development and the environment outside the boundary of Irish waters has also been considered in Section 25.6.

This chapter comprises the following sections:

- Summary of relevant policy and guidance
- Environmental interactions within topics considered in the EIAR for the Proposed Development
    - Interaction matrix and assessment
- Cumulative Effects assessment

- Methodology followed in assessing the impacts of the Proposed Development (such as information on the Study Area and the approach taken in assessing the potential impacts)
- Data sources used and review of baseline conditions
- Assessment of likely cumulative effects arising from the construction of the Proposed Development
- Identification of further mitigation measures and/or monitoring requirements (if any) in respect of any significant effects (following the 'mitigation hierarchy' of avoidance, minimisation, restoration and offsets in consecutive order)

- Transboundary Effects assessment
- Summary of residual impact assessment determinations in the case of any additional mitigation measures identified during this process.

25.2 STATEMENT OF COMPETENCE

This chapter has been prepared by Charlotte Manwaring (BSc (Hons) Geological Sciences, MSc Geochemistry, BA Archaeology) and informed by the topic-specific expertise of the authors of the individual topic chapters of the EIAR (Chapters 7 to 24), as outlined in those chapters.

Charlotte Manwaring is a Senior Environmental Scientist at GDG with 25 years of experience and an IEMA Practitioner. She has worked across the environmental, compliance, planning and monitoring public and private sector. She has experience in EIAR for port expansion, onshore windfarms and energy from waste projects and marine licencing.

This chapter was reviewed by Joey O'Connor. Joey is an Environmental Impact Assessment practitioner and Marine Scientist with coastal engineering expertise. Joey has had a role in this project as EIAR coordinator.

25.3 RELEVANT LEGISLATION, GUIDELINES AND PLANS

The assessment of likely significant environmental effects arising from the construction and operation stages of the Proposed Development has been undertaken following the 'Guidelines on the Information to be contained in Environmental Impact Assessment Reports' (EPA, 2022).

25.3.1 LEGISLATION

The requirement for cumulative, combined and transboundary impact assessments is stated in the relevant European Directive legislation:

- European Directive 2014/52/EU on the assessments of effects of certain public and private projects on the environment
- S.I. No. 296/2018 - European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018
- United Nations Economic Commission for Europe (UNECE) Convention on Environmental Impact Assessment in a Transboundary Context (the 'Espoo Convention') 1991

25.3.2 GUIDANCE

The following guidance was referred to throughout the cumulative impact assessment.

- Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment, 2018.
- Guidelines on the Information to be contained in Environmental Impact Assessment Reports (EPA, 2022).
- Good Practice Guidance on Cumulative Effects Assessment in Strategic Environmental Assessment. Environmental Protection Agency (2020)
- Guidelines for the Assessment of Indirect and Cumulative Impacts as well as Impact Interactions. European Commission (1999)
- UK Planning Inspectorate (PINS) Advice Note 17: Cumulative effects assessment relevant to national significant infrastructure projects. Version 2, 2024

25.3.3 PLANS

The following plans were considered.

- Wexford County Development Plan 2022-2028
- Wexford Town Local Plan 2024-2030 (in preparation)
- Rosslare Europort Infrastructure Masterplan (2020)

25.4 ENVIRONMENTAL INTERACTIONS WITHIN THE PROPOSED DEVELOPMENT

25.4.1 INTRODUCTION

The potential interaction between environmental effects, arising from within the Proposed Development, have been considered throughout this EIAR, to ensure that the combination of effects has been examined and any required mitigation measures included.

Each technical chapter of the EIAR details individual environmental baseline information and identifies the significant potential and residual construction and operational effects/impacts of the Proposed Development.

25.4.2 INTERACTION MATRIX

The assessment of interactive effects has considered likely significant effects arising from impact interactions that may occur during the construction phase and operational phase of the Proposed Development.

A matrix approach has been used to show the interactions between environmental effects identified. Table 25.1 shows the matrix of potential interactions between each environmental topic of the EIAR with a description of each interaction presented in Table 25.2.

Table 25.1: Environmental Interactions Matrix

Interactions	Soils, Geology, Hydrogeology and Contamination		Coastal Processes		Water Quality and Flood Risk		Terrestrial Ecology		Benthic Ecology		Fish, Shellfish and Turtle Ecology		Marine Mammals		Ornithology		Commercial Fisheries and Aquaculture		Cultural Heritage		Traffic and Road Transport		Air Quality		Noise and Vibration		Shipping and Navigation		Population and Human Health		Material Assets		Seascape, Landscape and Visual		Climate	
	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con	Op	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con	Op
Soils, Geology, Hydrogeology and Contamination			✓	✓	✓	✓			✓														✓													
Coastal Processes					✓	✓			✓		✓																									
Water Quality and Flood Risk							✓		✓		✓		✓		✓																					✓
Terrestrial Ecology																													✓	✓						
Benthic Ecology															✓		✓																			
Fish, Shellfish and Turtle Ecology															✓		✓																			
Marine Mammals																													✓	✓						
Ornithology																									✓											
Commercial Fisheries and Aquaculture																														✓	✓					
Cultural Heritage																																				
Traffic and Road Transport																					✓	✓	✓	✓					✓	✓					
Air Quality																					✓	✓			✓	✓	✓	✓	✓	✓						
Noise and Vibration																					✓	✓					✓	✓								
Shipping and Navigation																																				
Population and Human Health																																	✓	✓		
Material Assets																																				
Seascape, Landscape and Visual																																				
Climate																																				

Table 25.2: Summary of Interactions between Factors

Chapter	Interaction
Chapter 7: Soils, Geology, Hydrogeology and Contamination	The factors with which Soils, Geology, Hydrogeology & Contamination interacts are stated below, categorised by whether the interactions apply to the construction-stage, operation-stage or both. **Both construction and operational interactions**: <u>Coastal Processes</u> An interaction with Coastal Processes exists, particularly with the superficial soil/sediment resource. Operational stage effects to sediment transport resulting in seabed level change are considered to be of minor significance. <u>Water Quality & Flood Risk</u> An interaction exists with Water Quality & Flood Risk Assessment for water quality, in relation to mobilisation of sediment during dredging operations resulting in the potential for localised deterioration of Water Quality due to an increase in suspended sediments in the water column. The implementation of proposed tertiary mitigation measures will ensure effects are of imperceptible significance. **Construction interactions**: <u>Benthic Ecology</u> An interaction with Benthic Ecology exists for loss of seabed/habitat structure. Seabed loss from the reclamation activities is permanent and the residual effect is of moderate significance. <u>Air Quality</u> There is some interaction between Air Quality due to the effects of dust mobilisation during construction activities by tracking machinery. When the dust mitigation measures are implemented, fugitive emissions of dust from the site will be insignificant and pose no nuisance at nearby receptors.

Chapter	Interaction
Chapter 8: Coastal Processes	Coastal Processes interacts with Soils, Geology, Hydrogeology & Contamination, as described above. The other factors with which coastal processes interacts are stated below, categorised by whether the interactions apply to the construction-stage, operation-stage or both. **Both construction and operational interactions**: <u>Water Quality and Flood Risk</u> An interaction exists with water quality, in relation to mobilisation of sediment from coastal processes resulting in the potential for localised deterioration of water quality due to an increase in suspended sediments in the water column. Chapter 8 determines that overall residual effects upon water quality arising from the Proposed Development are considered to be not significant in EIA terms. **Construction interactions**: <u>Benthic Ecology</u> An interaction with Benthic Ecology exists as coastal processes may change the seabed/habitat structure. Chapter 11 concluded that these potential effects are not significant. <u>Fish Ecology</u> There is some interaction between Fish Ecology, particularly indirect effects from changes in benthic habitat and prey availability. Chapter 12: Fish, Shellfish and Turtle Ecology concluded effects of loss of habitat and associated indirect effect for prey availability will not be significant.
Chapter 9: Water Quality and Flood Risk	Water Quality & Flood Risk interacts with Soils, Geology, Hydrogeology & Contamination and Coastal Processes, as described above. The other factors with which Water Quality & Flood Risk interacts are stated below, all of which apply to the **construction-stage only**. <u>Benthic Ecology, Fish Ecology and Marine Mammals</u>

Chapter	Interaction
	As described above for Coastal Processes, an interaction exists from the mobilisation of sediment resulting in an increase in suspended sediments in the water column. The increased suspended sediment, changes in water quality could potentially affect loss of benthic habitat and effects for fish ecology and marine mammals. Chapters 11, 12 and 13 concluded that these potential effects are not significant. <u>Terrestrial Ecology, Ornithology and Climate</u> Some interaction between water quality and otter, marine mammals and diving seabirds due to changes in water quality that can lead to degraded benthic habitat and reduction in prey availability. Chapters 10, 13 and 14 assessed potential changes in water quality during construction and concluded the effects on these receptors are not significant. Chapter 9 concluded effects of climate in relation to flooding are not significant.
Chapter 10: Terrestrial Ecology	Terrestrial Ecology interacts with Water Quality and Flood Risk, as described above. The only factor for which interactions with Terrestrial Ecology were noted is Shipping and Navigation, which has **both construction and operational interactions**: <u>Shipping and Navigation</u> There are some effects in relation to Terrestrial Ecology for otter arising from vessel activity that interact with Shipping and Navigation. With slow moving construction and operation vessels and otter in the area are already exposed to regular vessel activity, the effect on this receptor is not significant.
Chapter 11: Benthic Ecology	Benthic Ecology interacts with Soils, Geology, Hydrogeology & Contamination, Coastal Processes, Water Quality and Flood Risk, as described above. The other factors with which Benthic Ecology interacts are stated below. These interactions apply to the **construction-stage only**. <u>Ornithology</u>

Chapter	Interaction
	There is some interaction between Ornithology, particularly indirect effects from changes in benthic habitat and prey availability. Chapter 14 concluded that these potential effects are not significant. Commercial Fishing There is some interaction in relation to Commercial Fishing as potential effects on fisheries, spawning grounds from habitat loss and disturbance may lead to socio-economic effects on the local commercial fishing fleet. The overall significance of these effects was assessed to be slight and not significant.
Chapter 12: Fish, Shellfish and Turtle Ecology	Fish, Shellfish and Turtle Ecology interacts with Coastal Processes and Water Quality as described above. The other factors with which Fish, Shellfish and Turtle Ecology interacts are stated below. These interactions apply to the **construction-stage only**. Ornithology There is some interaction between Ornithology, particularly indirect effects from changes in prey availability. The indirect effects on these receptors are not significant. Commercial Fishing. The interaction exists as potential effects on spawning grounds could impact fisheries. Chapter 15: Commercial Fisheries and Aquaculture considers this effect from a socio-economic perspective for the local commercial fishing fleet and concludes the area of seabed directly impacted is small and there are proportionally moderate to high levels of alternative fishing grounds available. Although the reclamation of seabed is a permanent effect the overall significance was assessed to be slight and not significant.
Chapter 13: Marine Mammals	Marine Mammals interact with Water Quality as described above. The only factor for which interactions with Marine Mammals were noted is Shipping and Navigation. These interactions apply to **both the construction and operational stages**: Shipping and Navigation

Chapter	Interaction
	Some interaction exists in relation to Shipping and Navigation in relation to collision. Chapter 13: Marine Mammals assesses collision risk; given that slow moving construction and operation vessels and marine mammals in the area are already exposed to regular vessel activity, the effects on these receptors are not significant.
Chapter 14: Ornithology	Ornithology interacts with Water Quality, Benthic Ecology and Fish Ecology, as described above. The only factor for which interactions with Ornithology are noted is Noise and Vibration. These interactions apply to the **construction stage only**: <u>Noise and Vibration</u> There may be disturbance to breeding birds a result of Airborne Noise from construction activities. Seabirds in the area are already habituated to regular ferry traffic leading to some tolerance. The effects on these receptors are not significant.
Chapter 15: Commercial Fisheries and Aquaculture	Commercial Fishing interacts with Fish Ecology and Benthic Ecology as described above. The other factors with which Commercial Fishing interacts are stated below, categorised by whether the interactions apply to the construction-stage or operation-stage. **Operational interactions**: <u>Navigation and Shipping</u> There is limited interaction with Commercial Fishing and Aquaculture and Navigation and Shipping from increased shipping to and from the Proposed Development. However, these effects are not significant. **Construction interactions**: <u>Population and Human Health</u>

Chapter	Interaction
	There is limited interaction with Fisheries and Population and Human Health regarding effect to employment considered within the Commercial Fisheries chapter. Chapter 21 concluded that the potential effects on Population and Human Health are not significant.
Chapter 16: Cultural Heritage	No interaction between Cultural Heritage receptors and other topics were identified.
Chapter 17: Traffic and Road Transport	The factors with which Traffic and Transportation interacts are stated below. These interactions apply to **both the construction and operational stage**. <u>Air Quality</u> The interaction exists due to potential effects on air quality from changes in traffic and transportation. Chapter 18: Air Quality assessed the potential for traffic emissions to impact air quality following TII Air quality guidance. The construction and operation changes in traffic does not exceed the guidance scoping criteria and as such potential effects were assessed as not significant. <u>Noise and Vibration</u> The interaction exists due to potential effects on changes in noise levels from changes in traffic and transport. Chapter 19: Noise and Vibration concluded that the predicted changes in construction and operational traffic flow would not be significant. <u>Population and Human Health</u> The interaction exists due to potential effects on population and human health from changes in traffic and transport including Pedestrian Severance, Delay, Amenity, Fear and Intimidation and Accidents and Safety and driver delay. Chapter 21: Population and Human Health concluded that the predicted changes in construction and operational traffic flow would not be significant

Chapter	Interaction
Chapter 18: Air Quality	Air Quality interacts with Soils, Geology, Hydrogeology and Contamination, as well as Traffic and Transport as described above. The other factors with which Air Quality interacts are stated below. These interactions apply to **both the construction and operational stage**. <u>Population and Human Health</u> The interaction exists due to changes in air quality. Chapter 21: Population and Human Health concluded that effects due to changes in air quality would not be significant <u>Navigation and Shipping</u> The interaction exists due to changes in air quality due to increased emissions from shipping. Chapter 18: Air Quality concluded that air quality effects due to increased emissions from shipping would not be significant
Chapter 19: Noise and Vibration	Noise and Vibration interacts with Ornithology and Traffic and Transportation as described above. The other factor with which Noise and Vibration interacts is stated below. These interactions apply to **both the construction and operational stage**. <u>Population and Human Health</u> The interaction exists due to changes in noise levels. Chapter 21: Population and Human Health concluded that effects due to increased noise levels would not be significant
Chapter 20: Shipping and Navigation	Navigation and Shipping interacts with Terrestrial Ecology, Marine Mammals, Commercial Fisheries and Aquaculture and Air Quality, as described above.
Chapter 21: Population and Human Health	Population and Human Health interacts with Commercial Fisheries and Aquaculture, Traffic and Transport, Air Quality, Noise and Vibration as described above.

Chapter	Interaction
	The other factor with which Population and Human Health interacts is stated below. These interactions apply to **both the construction and operational stage**. <u>Seascape, Landscape and Visual Impact</u> Chapter 23: Seascape, Landscape and Visual Impact Assessment highlights the potential landscape and visual effects during construction will vary depending largely on the proximity to the Proposed Development. The effects on visual amenity in close proximity to the Proposed Development site (<250 m) are considered significant and beyond this the effect is not significant.
Chapter 22: Material Assets	No interaction between Material Assets receptors and other topics were identified.
Chapter 23: Seascape, Landscape and Visual	Seascape, Landscape and Visual Impact interacts with Population and Human health, as described above.
Chapter 24: Climate	Climate interacts with Water Quality and Flood Risk, as described above.

25.5 CUMULATIVE ASSESSMENT (INTER-PROJECT)

25.5.1 ASSESSMENT METHODOLOGY

Cumulative effects can occur at different temporal and spatial scales. The spatial scale largely depends on the potential impact and can be local, regional or global. For example, potential noise effects from additional traffic may be local and/ or regional and underwater noise effects have the potential to have a wider spatial reach. Each topic specific chapter has spatially defined the Zone of Influence (ZoI) relevant to the receptors considered in that chapter. These ZoIs have been used to inform the spatial scope of this chapter. The temporal scope of the chapter has been defined by considering future effects of other developments that are under construction, planning applications and identified plans or programmes where development is reasonably likely to come forward.

25.5.1.1 TOPIC-SPECIFIC CONSULTATION

An extensive programme of consultation has been undertaken in relation to the Proposed Development, as outlined in Chapter 4: Scoping and Consultation.

Consultation was undertaken with key topic specific stakeholders as described in EIAR Chapter 4: Scoping and Consultation. An Bord Pleanála, the National Parks and Wildlife Service and Wexford County Council commented specifically on cumulative effects relevant to the Proposed Development.

25.5.1.2 DATA SOURCES

The evaluation of existing and/or proposed development was carried out after their identification through field research work and the review of web portals:

- Ireland's National Planning Application Map and Zoning Map Viewer https://www.myplan.ie/
- https://myplan.ie/ WCC's Development Plans and Local Area Plans https://www.wexfordcoco.ie/planning/development-plans-and-local-area-plans
- Wexford County Council Planning Application Database https://www.wexfordcoco.ie/planning/search-planning-applications
- Project Ireland: 2040 Prospects Ireland's Pipeline of Major Infrastructure Projects https://assets.gov.ie/45625/07afe3b5b99e4afbb4d43da1e121fdcd.pdf
- MARA Maritime Usage Licence Applications https://www.maritimeregulator.ie/applications
- DHLGH Foreshore Licensing Application Database https://www.gov.ie/en/collection/f2196-foreshore-applications-and-determinations/
- Department of Housing EIA Https://housinggovie.maps.arcgis.com/apps/webappviewer/index.html?id=d7d5a3d48f104ecbb206e7e5f84b71f1

- EPA Dumping at Sea Database https://www.epa.ie/our-services/licensing/freshwater--marine/dumping-at-sea-das.
- OPW Office for Public Works https://www.gov.ie/en/organisation/office-of-public-works/
- Rosslare Coastal Erosion and Flood Relief Scheme https://www.floodinfo.ie/frs/en/rosslare/home/

25.5.1.3 CUMULATIVE EFFECTS PROCESS

The assessment methodology follows the guidance set out in the previous section, particularly the *Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment'* (Government of Ireland, 2018). These guidelines, however, do not provide a prescriptive methodology for the assessment of (inter-project) cumulative effects. For this reason, the methodology used in this assessment of cumulative effects (inter-project) utilises the staged approach outlined in the UK Planning Inspectorate (PINS) Advice Note Cumulative effects assessment relevant to national significant infrastructure projects. Version 2, 2024. This staged approach to the assessment of cumulative effects (inter-project) is as follows:

- Stage 1: Establishing the long list
- Stage 2: Establishing the short list
- Stage 3: Information gathering
- Stage 4: Assessment

The stages 1 & 2 are recorded following a standard template as presented in Annex 1 of the UK PINS Advice Note (2024) and stages 3 & 4 are recorded following the standard template presented in Annex 2.

Stage 1: Longlisting

For the long listing initial desk study, the sources described above were reviewed based on the Zone Of Influence established for each environmental aspect considered within the technical chapters of this EIAR (i.e. Chapters 7 to 24 inclusive) to identify existing and proposed projects that have the potential to interact with the Proposed Development.

This established the "long list" of projects.

The long-listed projects were then assigned a "Tier 1" or "Tier 2" rating, where Tier 1 projects are those projects currently under construction; planning permission granted or planning permission submitted but not yet decided. Tier 2 projects are those with less available details and include projects / plans identified in relevant Development Plans and other projects /plans where that set out a framework for future development where the development is reasonably likely to come forward.

Stage 2: Shortlisting

The shortlist of relevant project and plans was established by applying the following criteria to determine whether to projects and plans included on the longlist could be excluded on the basis of their potential to give rise to cumulative effects:

- Temporal scope –temporal overlap between the long-listed projects or plans due to overlapping construction, operation and decommissioning programmes.
- Scale and nature of the long-listed projects and plans.
- Nature and/or capacity of the receiving environment that would make significant cumulative effects with long listed projects or plans more or less likely.
- Source-pathway-receptor connection

Stage 3: Information Gathering

The following information was gathered regarding the shortlisted projects and plans:

- Proposed design and location.
- Proposed programme of construction, operation and decommissioning (where available).
- Environmental assessments (where available) (i.e. EIARs, Appropriate Assessment and planning reports).

Stage 4: Assessment

The assessment undertaken considered:

- The type and duration of the cumulative impacts - whether they will be temporary or permanent
- The value and resilience of affected receptors and
- Mitigation measures that will be employed and the likelihood of their success.

25.5.1.4 LIMITATIONS OF ASSESSMENT

Limitations of the assessment include:

- Limited availability of planning data on the local planning authority website
- Limited information availability on potential future projects that have not yet been submitted to the planning authority

The period up to 19th September 2025 was considered for the purposes of identifying relevant projects.

25.5.2 STAGE 1 & 2 IDENTIFICATION AND SHORTLISTING OF EXISTING AND/OR APPROVED PROJECTS

Establishing the long list of existing and / or approved projects included reviewing the data sources described in Section 25.5.1.2 and defining the temporal scope. The period from May 2020 to 20th October 2025 was considered, as a granted planning permission is typically valid for

five years in Ireland. With exception of Planning Permissions within Rosslare Europort, the granted planning permissions within the adjacent residential and commercial area are “small” in scale and therefore were not included in the long list.

The spatial scope or geographical search area for the cumulative effects assessment has been informed by the topic specific study areas/Zones of Influence. Each EIAR topic chapter has used topic specific approaches to define their Study Area and/or Zone of Influence (ZoI) to define spatial scope relevant for cumulative effects assessment for that topic.

To generate the long list of potential projects with cumulative effects, the largest spatial scope across the chapters was used to define an onshore search area adjacent to the Proposed Development with a coastal extension of 5km to the North applied to take interactions with coastal schemes, effects from which may interact hydrologically with the Proposed Development, into consideration. An offshore study area of 50km from the Proposed Development Boundary was used, with Phase One Projects and South Coast DMAP auction areas also included.

25.5.3 ASSESSMENT OF CUMULATIVE EFFECTS

25.5.3.1 STAGE 1 LONG LIST

Figure 25.1 to Figure 25.4 indicate the location of the long list of projects that were considered.

Table 25.3 includes additional information and assessment for those projects that have progressed to Stage 2.

25.5.3.2 STAGE 2 IDENTIFICATION AND SHORT LISTING

The identification and short list selection is included in Table 25.3 for planning projects. The table follows format suggested in Annex 1 of UK Planning Inspectorate (PINS) Advice Note (2024).

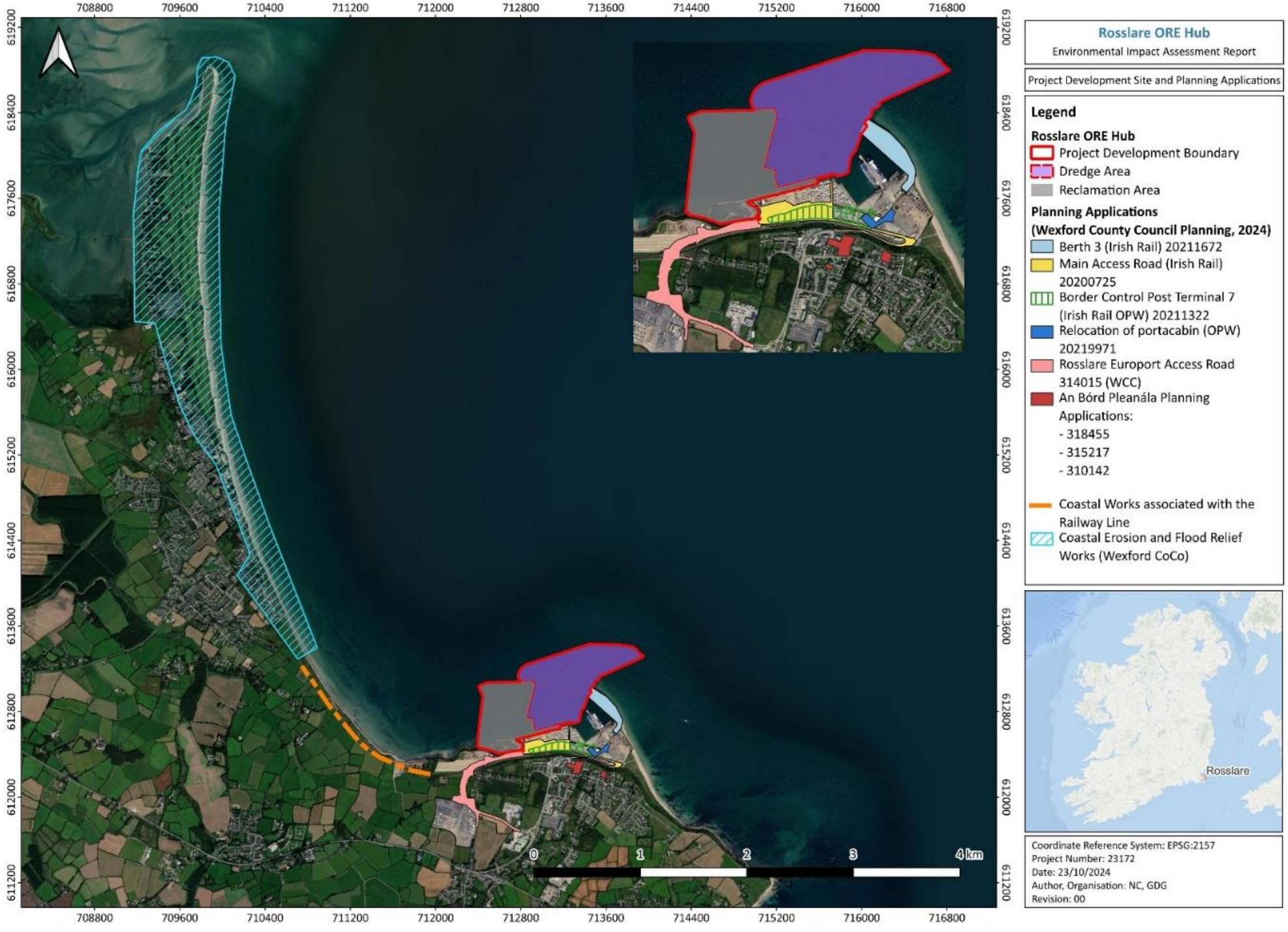

Figure 25.1: Proposed Development and nearby Planning Applications

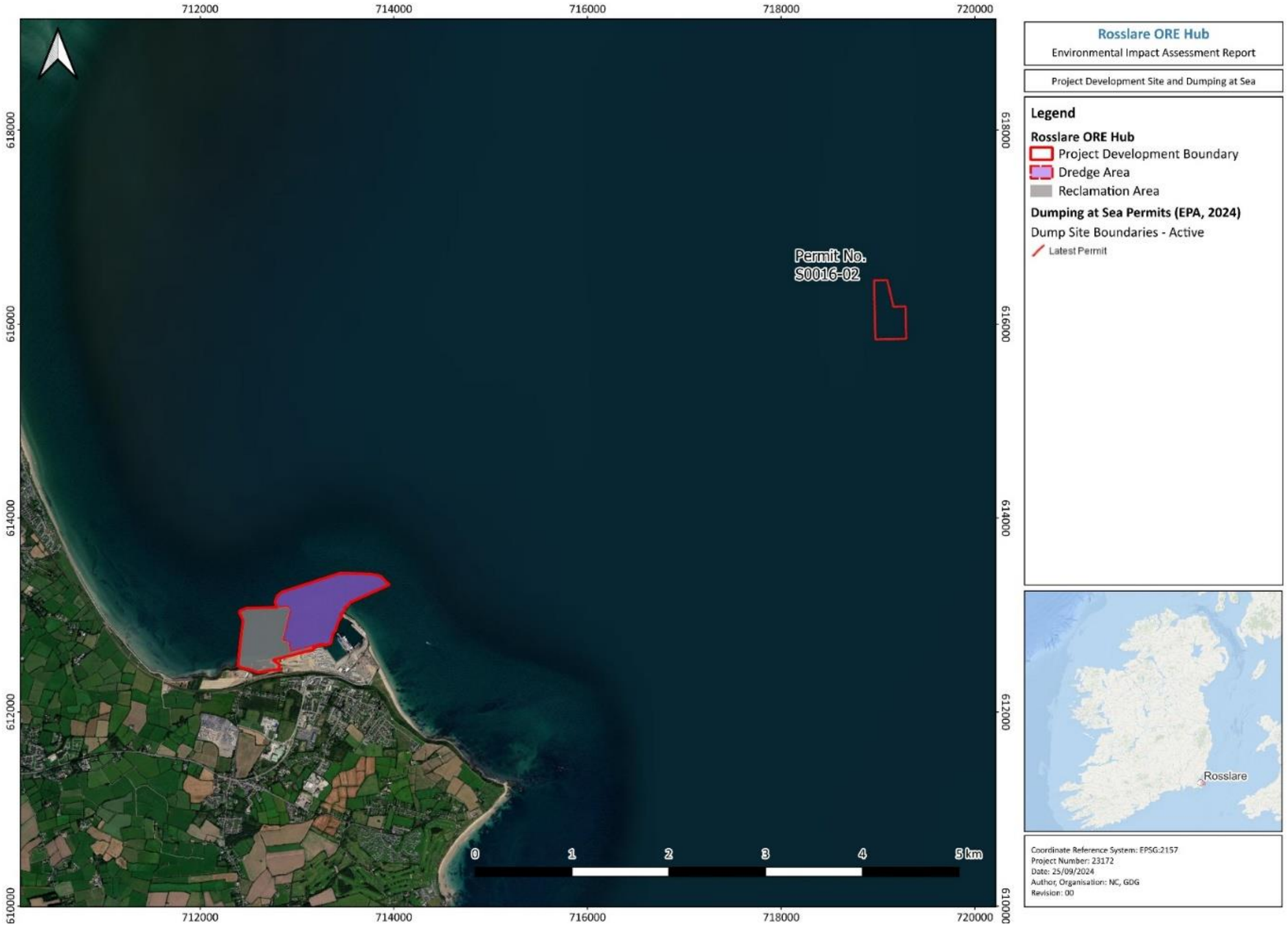

Figure 25.2: Proposed Development and Dumping at Sea Permits

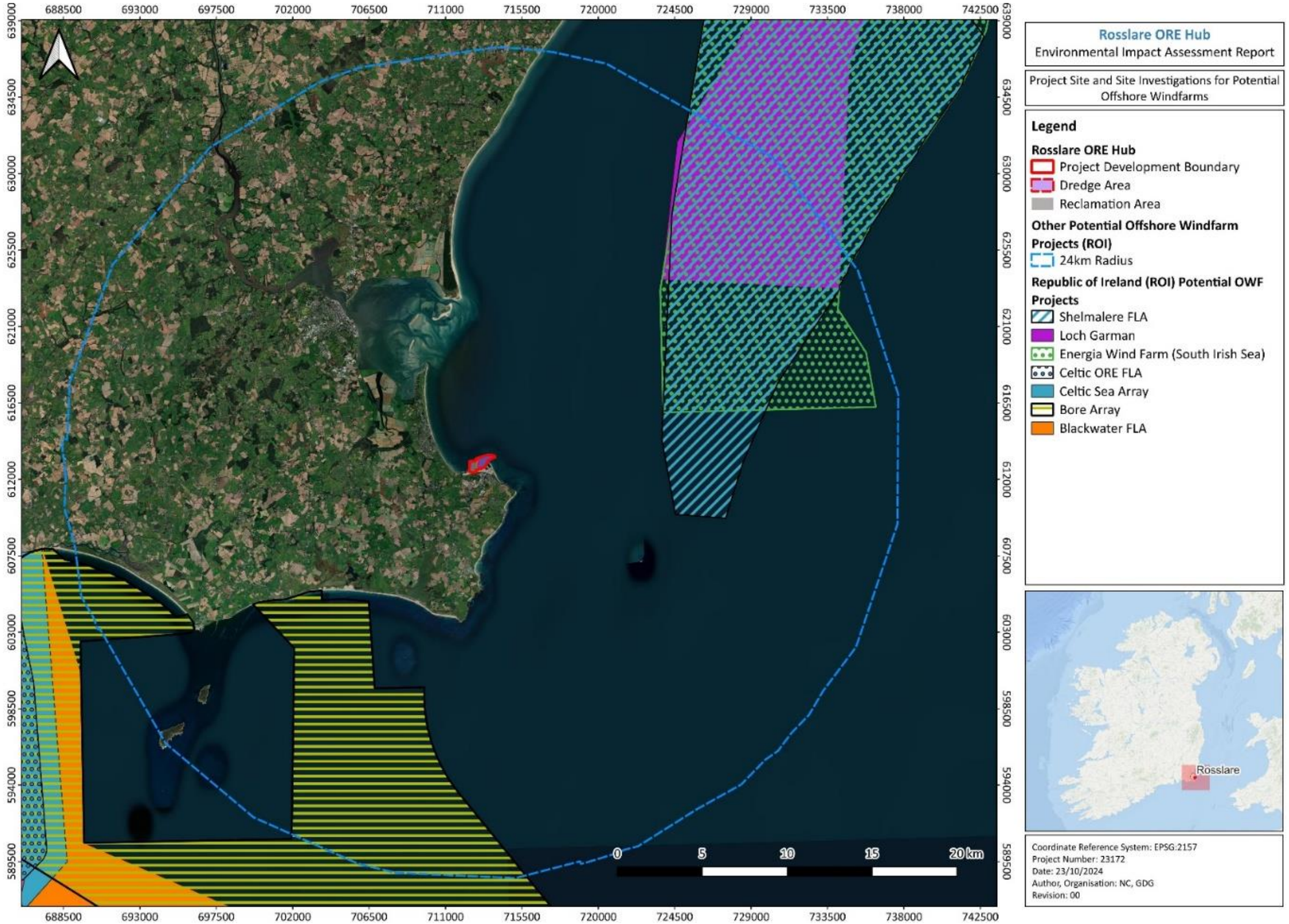

Figure 25.3: Proposed Development and live Foreshore Licence Applications for Potential Offshore Windfarms

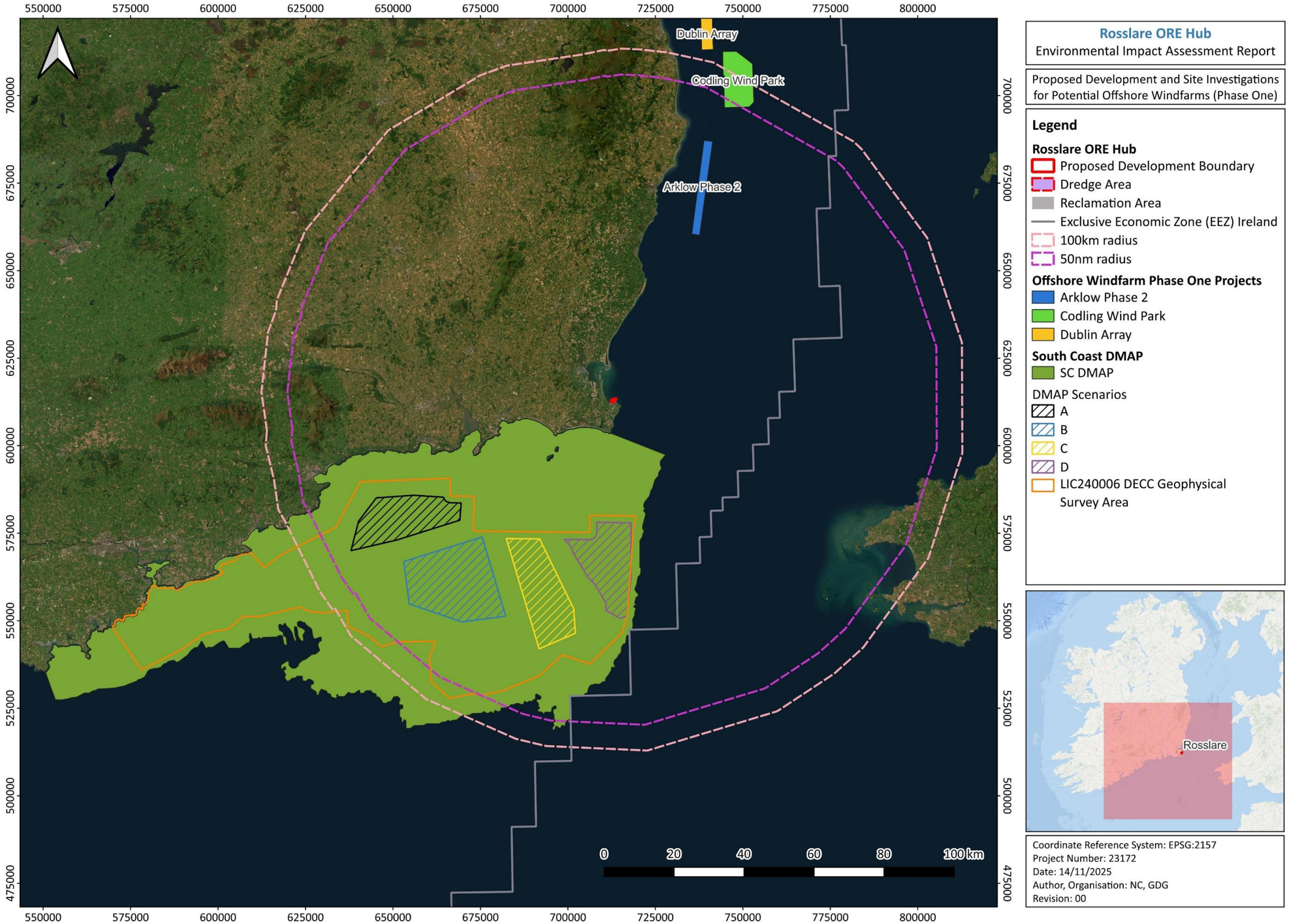

Figure 25.4: Proposed Development and planned Offshore Windfarms (Phase One Projects and South Coast DMAP auction areas)

Table 25.3: Stage 1 & 2 Identification & Short listing

ONSHORE PROJECTS WITHIN ROSSLARE EUROPORT / MASTERPLAN & SURROUNDING AREA										
						Stage 1		**Stage 2 ***		
ID	**Application Reference**	**Brief Description**	**Distance from project**	**Status**	**Tier**	**Within ZoI of Proposed Development**	**Progress to Stage 2**	**Overlap in Temporal Scope**	**Scale and Nature of Development likely to have a significant effect**	**Progress to Stage 3/4?**
1	20211672	**Extension of Berth 3** Permission for an extension to the existing Berth 3, the replacement of the existing linkspan at Berth 3 with a new linkspan and support structures, and the demolition and removal of the existing Berth 4 linkspan within Rosslare Europort. Construction anticipated to start Q3 2026 for 24 months and as such be completed before the construction of the Proposed Development.	Adjacent within Rosslare Europort	Granted 10/12/21	Tier 1	Falls within geology, water quality, all biodiversity, air quality, noise & vibration, navigation & shipping, landscape & visual.	Yes	Construction overlap anticipated. Operational overlap will continue as described within the receiving environment Assessed in topic chapters.	Berth 3 extension is small in scale and largely a refurbishment. Cumulative assessment is included due to the proximity to the Proposed Development	Yes
2	20211971	Permission for A) the **relocation of the existing pet-check portacabin**, B) the erection of new directional signage, C) the creation of a new lay-by, pedestrian path and additional parking spaces, together with all associated site works.	0.26km	Granted 28/01/22	Tier 1	Falls within geology, water quality, terrestrial biodiversity, traffic and transportation, air quality, noise & vibration, landscape & visual	Yes	Operational overlap	No, it is small-scale in the context of the overall Rosslare Europort.	No
3	20200725	Permission for a new main access road, roundabout, internal road and freight entrance plaza. The development will consist of demolition of existing sheds and construction of access road including roundabouts and kiosk buildings.	Adjacent	Granted 28/08/20	Tier 1	Falls within geology, water quality, terrestrial & ornithology biodiversity, traffic and transportation, air quality, noise & vibration, landscape & visual	Yes	Construction completed. Operational overlap will continue as described within the receiving environment Assessed in topic chapters.	No, it is small-scale in the context of the overall Rosslare Europort.	No
4	20211322	**Permission for the construction of Rosslare Europort Terminal 7, a new Border Control Post at Rosslare Europort.** The Office of Public Works is undertaking the construction of a new Border Control Post – known as Terminal 7 which will provide the necessary permanent infrastructure at Rosslare Europort to comply with Customs, sanitary and phytosanitary and official food controls as a consequence of Brexit. Rosslare Europort will be undergoing significant infrastructure upgrades until September 2025. These works will ensure the Port continues to play a critical economic role for the area and region.	0.04km	Granted 09/11/21	Tier 1	Falls within geology, water quality, terrestrial & ornithology, traffic and transportation, air quality, noise & vibration, landscape & visual	Yes	Under construction at time of writing, no construction overlaps with the proposed development predicted. Operational overlap.	Due to the scale & nature of this development, there is the potential for operational cumulative effects with the Proposed Development.	Yes
5	318709 315217 310142	Various planning permissions along road south of the proposed area. Includes redevelopment of a hotel to apartments, demolition of garage and repurpose of accommodation.	0.43-0.75km (south)	Pending and Granted 2022-2024	Tier 1	Falls within, geology, water quality, terrestrial biodiversity, cultural heritage, traffic and transportation, air quality, noise & vibration, landscape & visual	Yes	Potential construction & operational overlap	Due to the smaller scale of these developments, there is unlikely to be any cumulative effects.	No
6	314015	Wexford County Council proposes to develop the N25 Rosslare Europort Access Road.	South of Proposed Development	Granted 3 August 2023	Tier 1	Falls within geology, water quality, Biodiversity: terrestrial	Yes	Potential for cumulative effect during construction and operation.	Due to the scale & nature of this development, there is	Yes

ONSHORE PROJECTS WITHIN ROSSLARE EUROPORT / MASTERPLAN & SURROUNDING AREA										
						Stage 1		Stage 2 *		
ID	**Application Reference**	**Brief Description**	**Distance from project**	**Status**	**Tier**	**Within ZoI of Proposed Development**	**Progress to Stage 2**	**Overlap in Temporal Scope**	**Scale and Nature of Development likely to have a significant effect**	**Progress to Stage 3/4?**
		The proposed road scheme will improve the existing L3068 Ballygerry Link Road to the standards required for a national primary road and to meet the forecast future demand for port traffic. A new section of road then extends from the western end of the existing L3068 Ballygerry Link Road at its junction with the existing L7021 Churchtown Road. The new section of road then turns to the north, crossing over the existing Dublin to Rosslare Harbour rail line before continuing east to connect into Rosslare Europort, via a new roundabout proposed as part of the Masterplan Phase 1 development of Rosslare Europort. **Additional information** http://rosslareeuroportaccessroad.ie/latest-news/ Construction is anticipated to take 18 to 24 months (N25 Rosslare Europort Access Road Planning and Environmental Considerations Report June 2022 Mott MacDonald).				& ornithology, traffic and transportation, air quality, noise & vibration, landscape & visual, population and human health			the potential for interaction with the Proposed Development. This may result in cumulative effects when considered in combination with particularly transportation, noise & vibration, air quality, landscape & visual.	
7	n/a	Coastal works associated with the railway line	~0.5km at the closest	n/a	Tier 2	Falls within geology, coastal processes, water quality, terrestrial & ornithology biodiversity, transportation, air quality, noise & vibration.	Yes	Coastal railway works are currently under construction & likely to be completed for the construction of the proposed development. It is unlikely that the proposed development will generate operational cumulative effects.	n/a	No
8	-	Coastal Erosion and Flood Relief Works (Wexford Co Co), preliminary design to detailed design and construction of proposed flood relief and coastal erosion measures for the northern section of Rosslare Point to protect the Strand at Rosslare.	1.56km	n/a	Tier 2	Falls within geology, coastal processes, water quality, terrestrial biodiversity, transportation, air quality, noise & vibration, landscape & visual	Yes	Rosslare Coastal Erosion and Flood Relief Scheme. The scheme is currently in Stage 1 Options Assessment, Scheme Development and Preliminary Design. Stage 4 Construction is anticipated Q4 2027 to Q1 2029 (https://www.floodinfo.ie/frs/en/rosslare/home/	Due to the scale & nature of this development, there is the potential for interaction with the Proposed Development. This may result in cumulative effects when considered in combination with particularly coastal processes, water quality and biodiversity.	Yes

OFFSHORE PROJECTS										
						Stage 1		**Stage 2 ***		
ID	**Application Reference**	**Brief Description**	**Distance from project**	**Status**	**Tier**	**Within ZoI of Rosslare OWE**	**Progress to Stage 2**	**Overlap in Temporal Scope**	**Scale and Nature of Development likely to have a significant effect**	**Progress to Stage 3/4?**
9	**S0016-02**	This permit is for the loading and dumping at sea of dredged material, arising from maintenance dredging at Rosslare Europort and Ballygeary Harbour, Co. Wexford. The proposed activities involve the loading and dumping of 478,500 tonnes (wet weight) of dredged material from 2023 to 2027. Dredged material will be loaded by a trailing suction hopper dredger and/or by a backhoe dredger and dumped at an established dumping site located approximately 6 km northeast of the port. The permit holder is required to manage the permitted activities to ensure the protection of the marine environment and to submit reports on the loading and dumping activities and monitoring results to the Agency	6km NE	Granted	Tier 1	Falls within geology, coastal processes, water quality, biodiversity (benthic, fish, marine mammals & ornithology), commercial fishing, navigation & shipping.	Yes	Potential for cumulative effect during construction, S0016-02 permit is valid until 2027 & similar to the construction start date. The construction of the Proposed Development also requires dredging & the material is to be reused as infill.	Due to the scale & nature of this development, there is the potential for interaction with the Proposed Development. This may result in cumulative effects when considered in combination with particularly soil, geology, hydrogeology and contamination, coastal processes, water quality, biodiversity (benthic, fish, marine & ornithology), navigation & shipping.	Yes
10	**S0027-01**	The accretion of sand around the bases of the Arklow Bank Wind Park is restricting access for maintenance vessels. Seabed levelling undertaken by plough dredging is therefore proposed in an area of the east of the turbines to redistribute this sediment.	~50km	Granted All dumping activities shall be completed by 31st May 2025	Tier 1	Falls within, water quality, biodiversity (benthic, fish, marine mammals & ornithology), commercial fishing, navigation & shipping.	Yes	No temporal overlap, completed by 2025	n/a	No
11	**FS007135**	ESB Wind Development Ltd. **Site Investigations** at Loch Garman Offshore Wind off coast of county Wexford. This foreshore application relates to the Site Investigation works only. These activities are required to inform: the overall project feasibility; the conditions at site and along the cable route; the various assessments required to progress the project; and the development of the project	14.3km	Withdrawn	Tier 2	Falls within coastal processes, biodiversity (benthic, fish, marine mammals & ornithology), commercial fishing, navigation & shipping.	No	Potential overlap with SI activities and construction/operation under proposed timelines.	Application is withdrawn	No
12	**FS007464**	Bore Array Ltd, **Site Investigation** for Bore Array Offshore Wind Farm, off Co. Wexford	15.6km	Closed	Tier 2	Falls within coastal processes, biodiversity (benthic, fish, marine mammals & ornithology), commercial fishing, navigation & shipping.	Yes	Potential overlap with SI activities and construction/operation.	Foreshore Licence Application is closed. Not currently within a Designated Maritime Area Plan (DMAP) zone. Circular: MP 01/2024 issued by the Department of the Environment, Climate and Communications states that that "as a consequence of the move to a fully plan-led approach to offshore energy development, no new applications for developer-led offshore renewable energy (ORE) activity should be accepted by consenting bodies. In addition, the	No

OFFSHORE PROJECTS										
						Stage 1		**Stage 2 ***		
ID	**Application Reference**	**Brief Description**	**Distance from project**	**Status**	**Tier**	**Within ZoI of Rosslare OWE**	**Progress to Stage 2**	**Overlap in Temporal Scope**	**Scale and Nature of Development likely to have a significant effect**	**Progress to Stage 3/4?**
									assessment and determination of existing consent applications relating to prospective ORE site investigation activity should be paused until the ORE Designated Areas, which will be designated according to legislative provisions for Designated DMAPs in the MAP Act have statutory effect." Therefore, the existing application cannot currently be progressed and a new application to MARA cannot currently be lodged.	
13	**FS007261**	Shelmalere Offshore Wind Farm - **Site Investigations** off Counties Wexford and Wicklow.	9.8km	Closed	Tier 2	Falls within coastal processes, biodiversity (benthic, fish, marine mammals & ornithology), commercial fishing, navigation & shipping.	Yes	Potential overlap with SI activities and construction/operation.	Foreshore Licence Application is closed. As above, the existing application cannot currently be progressed and a new application to MARA cannot currently be lodged.	No
14	**FS007048**	Energia **Site Investigation** off Wexford Coast Marine Site investigations off Wexford Coast, SI activities Licence expires 04/07/2026 The licence pre-dates the policy statements for the South Coast DMAP. However as it is outside the DMAP the developer is unlikely to undertake any further SI before expiry of the licence.	10.2km	Determined	Tier 2	Falls within, coastal processes, biodiversity (benthic, fish, marine mammals & ornithology), commercial fishing, navigation & shipping.	Yes	No temporal overlap, licence expires in July 2026.	n/a	No
Phase One Projects										
15	**Arklow Phase 2,**	Arklow Bank Wind Park 2 is a proposed offshore windfarm situated on and around Arklow Bank (approx. 6 to 15km east of Arklow) consisting of 56 or 47 turbines (EIAR Non-Technical Summary[1])	52km	Planning stage	Tier 1	Biodiversity, commercial fishing. Population & human health	Yes	overlap with operation	Construction and operation of this Phase 1 OWF projects will temporally overlap while the Proposed Development will be in operation. If Rosslare is used as a marshalling and assembly and/or operations and maintenance port for this proposed offshore windfarm, there is the potential for cumulative effects	Yes
	Codling Wind Park	Codling Wind Park Project, is a proposed offshore wind farm (OWF) located in the Irish Sea approximately 13– 22 km off the east coast of Ireland, at County Wicklow. 2. The CWP Project has an expected generating capacity of 1,300 megawatts (MW).	89km	Planning stage	Tier 1	Biodiversity, commercial fishing, population & human health		overlap with operation	Construction and operation of this Phase 1 OWF projects will temporally overlap while the Proposed Development will be in operation. If Rosslare is used as a marshalling and assembly and/or operations and maintenance port for this proposed offshore windfarm, there is the potential for cumulative effects	Yes

[1] https://www.arklowbank2offshoreplanning.ie/eiar/

OFFSHORE PROJECTS										
						Stage 1		**Stage 2 ***		
ID	**Application Reference**	**Brief Description**	**Distance from project**	**Status**	**Tier**	**Within ZoI of Rosslare OWE**	**Progress to Stage 2**	**Overlap in Temporal Scope**	**Scale and Nature of Development likely to have a significant effect**	**Progress to Stage 3/4?**
	Dublin Array	Dublin Array is located approximately 10km off the coast of Dublin and Wicklow counties in the Irish Sea. The project will have an installed capacity of up to 834 megawatts (MW)	100km	Planning stage	Tier 1	Biodiversity, commercial fishing, population and human health	Yes	overlap with operation	Construction and operation of this Phase 1 OWF projects will temporally overlap while the Proposed Development will be in operation. If Rosslare is used as a marshalling and assembly and/or operations and maintenance port for this proposed offshore windfarm, there is the potential for cumulative effects	Yes
16	**South Coast DMAP**	In May 2024, the South Coast Designated Maritime Area Plan (DMAP) was outlined. This is a spatial plan for renewable energy at sea. The plan identifies four maritime areas off the South Coast where development of ORE is proposed to take place over the next decade	Within 50km	n/a	Tier 2	Biodiversity, commercial fishing, population & human health	Yes	overlap with operation	Construction and operation of these future projects will temporally overlap while the Proposed Development will be in operation. If Rosslare is used as a marshalling and assembly and/or operations and maintenance port for this proposed offshore windfarm, there is the potential for cumulative effects	Yes

*Note for Stage 2 there are no “other factors” to consider and therefore the column was not included

25.5.3.3 STAGE 3 INFORMATION GATHERING

Stage 3 involved gathering information for the projects identified as relevant in Stage 2.

25.5.3.4 STAGE 4 ASSESSMENT

The assessment of cumulative effects was undertaken in Stage 4. Table 25.4 summarises the information gathered and describes the cumulative effects assessment undertaken for the Proposed Development and identified projects.

Table 25.4: Potential Cumulative Effects Assessment

Project Details	Project Description	Potential Cumulative Effects Assessment	Proposed Mitigation and or Monitoring Measures
Extension of Berth 3 **No. 20211672** **Applicant:** Iarnrod Eireann – Irish Rail	Planning permission was granted for Irish Rail Permission for an extension to the existing Berth 3, the replacement of the existing linkspan at Berth 3 with a new linkspan and support structures, and the demolition and removal of the existing Berth 4 linkspan within Rosslare Europort. The upgrade works will facilitate the continuing service of ro-ro vessels and new generation vessels. Construction anticipated to start Q3 2026 for 24 months and as such is anticipated to overlap with construction of the Proposed Development. In addition, the works are likely to include only the extension of Berth 3 and repairs to the current linkspan.	**Potential construction and operational overlap.** <u>Soils, Geology, Hydrogeology & Contamination</u> The Proposed Development EIAR Chapter 7 has determined that the potential cumulative effect on soils, geology, hydrogeology & contamination when combined with other existing and/or planned projects where the zones of influence overlap, of which Berth 3 has been listed and considered, are not significant. This was determined when considering potential impacts on geology due to the low sensitivity of the superficial and solid geology resource. Moreover, there is no evidence of site contamination and the proposed primary mitigation measures will further ensure no contamination impacts. Minor cumulative effects on the groundwater due to excavations and hardstanding cover were identified, however, these are considered not significant at catchment level. <u>Water quality</u> With regards to coastal waterbodies, potential adverse effects on water quality through release of highly alkaline contaminants from concrete and cement during construction of the quayside wall and berth at the Proposed Development in conjunction with an extension to the existing Berth 3 and the demolition and removal of the existing Berth 4 linkspan within the wider Rosslare Europort were identified. This potential cumulative effect is judged to be a localised, short-term construction impact which is unlikely to have a measurable adverse effect following implementation of appropriate mitigation measures outlined in Chapter 9: Water Quality and Flood Risk. Dispersal of potential alkaline contaminants within the water column is unlikely to result in prolonged adverse cumulative effects on marine water quality across both developments. <u>Biodiversity</u> In terms of marine mammals, Chapter 13 notes that Iarnród Éireann – Irish Rail will schedule works such that piling activities for the Berth 3 extension do not occur simultaneously with the piling required for the Proposed Development in order to avoid cumulative effects from associated elevated levels of underwater noise being introduced into the marine environment.	Iarnród Éireann – Irish Rail to schedule works such that piling activities for the Berth 3 extension do not occur simultaneously with the piling required for the Proposed Development

Project Details	Project Description	Potential Cumulative Effects Assessment	Proposed Mitigation and or Monitoring Measures
		Air quality With mitigation measures in place, there are no significant cumulative impacts to air quality predicted for the construction phase. Impacts will be short-term, localised, negative (adverse), imperceptible and non-significant. Noise & vibration (in-air) EIAR Chapter 19 has determined that the potential cumulative effect on noise and vibration is not significant. Seascape, Landscape & visual The Proposed Development will generate some localised significant visual effects. However, the Proposed Development and its operational phase activities, in terms of their character and physical composition, will not appear incongruous in terms of the surrounding busy, working Port setting it is contained adjacent to. Berth 3 is also located within a well-established land port setting. Further, it is stated in EIAR Chapter 23 that, beyond the immediate coastline and immediate context of the port facility, it is not considered that the Proposed Development will result in significant cumulative landscape and visual effects. **Operational cumulative effects with the Proposed Development and the Extension of Berth 3, with appropriate mitigation in place, are considered unlikely.**	
Rosslare Europort Terminal 7, a new Border Control Post (BCP) at Rosslare Europort. **Applicant:** Iarnrod Eireann – Irish Rail	The Border Control Post and Customs Control Facility is made up of 28 new buildings with an overall floor area of 9360m² on a site with an area of 19.5 Hectares. Planning was granted at the end of 2021. The Border Control Post includes a surface water drainage system, SUDS, permeable paving, green roofs on larger buildings and petrol interceptors and concludes no likely significant effects (Environmental Screening Report AWN 2021). The Environmental Screening Report (AWN 2021) and AA Screening which concluded Appropriate Assessment was not required.	**Construction overlap is not anticipated – no potential cumulative effects during construction.** **Operational overlap:** Soils, Geology, Hydrogeology & Contamination The Proposed Development EIAR Chapter 7 has determined that the potential cumulative effect on soils, geology, hydrogeology & contamination are not significant. Water Quality The Proposed Development EIAR Chapter 9: Water Quality has determined that the potential effect on water quality is not significant. Biodiversity	None required

Project Details	Project Description	Potential Cumulative Effects Assessment	Proposed Mitigation and or Monitoring Measures
	The larger BCP buildings have been considered for incorporating green roofs that will potentially reduce the visual effect.[2]	The Proposed Development EIAR Chapters 10 and 14 have determined that the potential effect on biodiversity is not significant. Traffic and Transportation, The effects of operational traffic, taking into account the BCP, was considered not significant. Air quality, During operation, potential air quality impacts are considered to be localised and not significant. Noise & vibration (in-air), During operation, potential in-air noise impacts are considered to be localised and not significant. Seascape, Landscape & visual The BCP and the Proposed Development are located within a well-established land port setting. Overall, whilst the Proposed Development will generate some localised significant visual effects, the Proposed Development and its operational phase activities, in terms of their character and physical composition, will not appear incongruous in terms of the surrounding busy, working Port setting it is contained adjacent to. Further, it is stated in EIAR Chapter 23 that, beyond the immediate coastline and immediate context of the port facility, it is not considered that the Proposed Development will result in significant cumulative landscape and visual effects. **No significant operational cumulative effects are likely from the Proposed Development and Rosslare Europort Terminal 7 Border Control Post.**	
Rosslare Europort Access Road (REAR). Provision of a new access road	http://rosslareeuroportaccessroad.ie/latest-news/ The Project Team is currently progressing the project through Phase 5 and development of the tender documentation is ongoing. On completion of Phase 5, and subject to receiving the necessary approvals	**Potential construction and operational overlap:** Soils, Geology, Hydrogeology & Contamination The Proposed Development EIAR Chapter 7 has determined that the potential cumulative effects on soils, geology, hydrogeology & contamination are not significant.	None required

[2] https://www.gov.ie/en/organisation-information/5618d-rosslare-europort-terminal-7-and-enabling-works/

Project Details	Project Description	Potential Cumulative Effects Assessment	Proposed Mitigation and or Monitoring Measures
to Rosslare Europort	and the availability of funding, the project will progress to Phase 6 (Construction and Implementation). Construction is anticipated to take 18 to 24 months (N25 Rosslare Europort Access Road Planning and Environmental Considerations Report June 2022 Mott MacDonald). The Proposed N25 REAR Planning and Environmental Considerations Report (Mott MacDonald 2022) described the construction effects such as impact to surface water quality from sediment runoff, spillages etc and operational effects accidental fuel leaks and spills and routine road run off. The receiving environment is described as Low sensitivity. Mitigation measures for construction such as Environmental Clerk of Works, following good construction practice and operational mitigation which are embedded in the drainage design conclude that the proposed road is unlikely to give rise to effects on surface water that are significant. The proposed REAR Planning Report described construction effects including direct loss of habitat, surface water run-off (see previous paragraph), dust, noise and visual disturbance. Operational effects include noise, visual disturbance and lighting. Mitigation measures such as preconstruction surveys, compensation and retention of habitat through a landscape planting design and design mitigation for lighting and noise / visual mitigation for mammals and birds. Following the implementation of mitigation measures, the overall cumulative effect on biodiversity, including all potentially sensitive receptors, is assessed as a not significant.	<u>Water quality</u> The Proposed Development EIAR Chapter 9 has determined that the potential effect on water quality is not significant. <u>Biodiversity</u> The Proposed Development EIAR Chapters 10 & 14 have determined that the potential effects on ecological receptors is not significant. <u>Traffic and Transportation</u> The Proposed Development EIAR Chapter 17 included a cumulative traffic assessment assuming the REAR project and Proposed Development overlap for construction. An increase in construction traffic which is a temporary but moderate effect that is not significant in EIA terms, was predicted. Operational effects on the highway network are considered to have a slight effect that is not significant. <u>Air quality</u> The Proposed Development EIAR Chapter 18 has determined that the temporary cumulative effect during construction is imperceptible and not significant. During operation potential air quality impacts are considered to be localised and not significant. <u>Noise & vibration (in-air)</u> The predictions in Chapter 19 indicate that total construction noise levels will be below the construction noise threshold at sensitive receptors and states that the predictions of construction noise from the Access Road are also within the construction noise threshold. Therefore, it is considered unlikely that cumulative construction noise would cause a significant impact. <u>Seascape, Landscape & visual</u> The Proposed Development includes land reclamation and storage of ORE components, these large-scale operational features and incoming vessels will have a notable effect on the surrounding coastal landscape environs as well as visual effects on sensitive receptors (refer to Chapter 23). However, as stated in Chapter 23, beyond the	

Project Details	Project Description	Potential Cumulative Effects Assessment	Proposed Mitigation and or Monitoring Measures
	The proposed REAR Planning Report described an increase in traffic (4.3%) during peak construction and impacts will be negligible and temporary in nature and will cease on completion of the works.	immediate coastline and immediate context of the port facility, it is considered that the Proposed Development will not result in significant cumulative landscape and visual effects. Population and Human Health Chapter 21 identifies that should the construction phase of the Proposed Development run concurrently this project; there is a potential for a cumulative significant effect. **No significant operational cumulative effects are likely from the Proposed Development and REAR project.**	
Coastal Erosion and Flood Relief Works	Coastal Erosion and Flood Relief Works (Wexford Co Co), preliminary design to detailed design and construction of proposed flood relief and coastal erosion measures for the northern section of Rosslare Point to protect the Strand at Rosslare.	**Potential construction and operational overlap** Soils, Geology, Hydrogeology & Contamination The Proposed Development EIAR Chapter 7 has determined that the potential cumulative effects on soils, geology, hydrogeology & contamination are not significant. Coastal processes There is no pathway identified between the coastal processes for the Proposed Development and proposed Coastal Erosion and Flood Relief Works as described in Chapter 8: Coastal Processes. The Proposed Development EIAR Chapter 8 has determined that the potential cumulative effects on coastal processes are not significant. Water quality, The Proposed Development EIAR Chapter 9 has determined that the potential effect on water quality is not significant. Due to all construction and operational activities predicted as having an imperceptible effect on surface watercourses and transitional waterbodies, these receptors are judged to have no potential for cumulative effects when considered in conjunction with this development. Biodiversity: Terrestrial The Proposed Development EIAR Chapter 10: Terrestrial Ecology has determined that the potential effect on terrestrial biodiversity is not significant.	None required

Project Details	Project Description	Potential Cumulative Effects Assessment	Proposed Mitigation and or Monitoring Measures
		Air quality As described in EIAR Chapter 18, according to the Institute of Air Quality Management guidance (2024), should the construction phase of the Proposed Development coincide with the construction phase of any other developments within 500 m, then, there is the potential for cumulative construction dust related impacts to nearby sensitive receptors. This project was screened in for consideration in this regard. Provided the mitigation measures outlined in Chapter 18, are implemented throughout the construction phase of the Proposed Development significant cumulative dust impacts are not predicted. Noise & vibration (in-air) As described in Chapter 19, given that the distance between this project and the Proposed Development is approximately 2km, no significant cumulative construction impacts are expected with respect to noise and vibration. Seascape, Landscape & visual The Proposed Development includes land reclamation and storage of ORE components, these large-scale operational features and incoming vessels will have a notable effect on the surrounding coastal landscape environs as well as visual effects on sensitive receptors (refer to Chapter 23). However, as stated in Chapter 23, beyond the immediate coastline and immediate context of the port facility, it is considered that the Proposed Development will not result in significant cumulative landscape and visual effects. **No significant cumulative effects are likely from the Proposed Development and Coastal Erosion and Flood Relief works**	
S0016-02 Maintenance dredging at Rosslare Europort	This permit is for the loading and dumping at sea of dredged material, arising from maintenance dredging at Rosslare Europort and Ballygeary Harbour, Co. Wexford. The proposed activities involve the loading and dumping of 478,500 tonnes (wet weight) of dredged material from 2023 to 2027. Dredged material will be loaded by a trailing suction hopper dredger and/or by a backhoe dredger and dumped at an established dumping site located approximately 6	**Potential construction and operational overlap:** Coastal processes Coastal modelling results as described in Chapter 8 suggest that the presence of the Proposed Development will result in lower maintenance dredging requirements for the Rosslare Port area. The Proposed Development EIAR Chapter 8 has determined that the potential cumulative effect on coastal processes is not significant. Water quality,	Iarnród Éireann – Irish Rail to schedule works such that maintenance dredging does not occur simultaneously with the capital

Project Details	Project Description	Potential Cumulative Effects Assessment	Proposed Mitigation and or Monitoring Measures
	km northeast of the port. The permit holder is required to manage the permitted activities to ensure the protection of the marine environment and to submit reports on the loading and dumping activities and monitoring results to the Agency	Potential adverse effects on water quality through increased suspended sediment levels from sediment plumes generated during future maintenance dredging of the Proposed Development in conjunction with ongoing dredging schemes within Rosslare Harbour/Europort and Ballygeary Harbour, Co. Wexford. This potential cumulative effect is determined to be of low cumulative risk to water quality following implementation of appropriate mitigation measures outlined within Chapter 9. This will serve to ameliorate any potential increase in turbidity or sedimentation of the water column which could give rise to adverse cumulative effects. <u>Biodiversity & Commercial Fishing</u> Potential cumulative impacts were considered likely for otter. To minimise cumulative impacts, Iarnród Éireann will ensure maintenance dredging activities do not occur simultaneously with the capital dredging required for the Proposed Development. With these measures in place, no cumulative effects on terrestrial ecology receptors are anticipated in the construction phase. There may be cumulative effects on terrestrial ecology in the operational phase, however, Chapter 10 determines that with mitigation in place these will not be significant. No significant cumulative effects were noted on benthic ecology. To minimise cumulative impacts in the marine environment, Iarnród Éireann will ensure maintenance dredging activities do not occur simultaneously with the capital dredging required for the Proposed Development. This approach will avoid cumulative effects from separate dredging operations being undertaken in close proximity to each other and at the same time, avoiding potential environmental impacts from associated elevated levels of turbidity and underwater noise being introduced into the marine environment. <u>Navigation & shipping</u> The Proposed Development EIAR Chapter 20 has determined that with appropriate mitigation measures during construction the potential effect on shipping is not significant. **No significant cumulative effects are likely from the Proposed Development and maintenance dredging, on the basis that they will be conducted at different times.**	dredging required for the Proposed Development

Project Details	Project Description	Potential Cumulative Effects Assessment	Proposed Mitigation and or Monitoring Measures
Arklow Bank Wind Park 2	Arklow Bank Wind Park 2 is a proposed offshore windfarm situated on and around Arklow Bank (approx. 6 to 15km east of Arklow) consisting of 56 or 47 turbines (SSE Renewables EIAR Non-Technical Summary 2024). Potential cumulative environmental impacts, mitigation and monitoring for offshore ornithology for Arklow Bank Wind Park 2 include Environmental Vessel Management Plan, Best practice vessel and marine machinery operation and a lower blade tip. Residual effects were therefore concluded to be not significant (SSE Renewables EIAR, Chapter 24 summary of cumulative effects 2024)	**Construction overlap is not anticipated – no potential construction cumulative effects** **Potential operational overlap:** <u>Marine Mammals and Ornithology</u> This proposed offshore windfarm is situated on and around Arklow Bank, approximately 6 to 15 km east of Arklow, and comprises of 56 or 47 turbines (SSE Renewables EIAR NTS 2024). The Proposed Development is situated approximately 52 km from Arklow Bank Wind Park 2. Given this separation distance and the limited zone of impact (outlined in Chapter 13: Marine Mammals) associated with the operational and construction phases of the Proposed Development, no cumulative impacts on marine mammal receptors are anticipated. The Proposed Development is coastal with no predicted significant effects on offshore ornithology from the operational phase. The key impacts from offshore wind farm (OWF) projects are predicted to be collisions with turbines and displacement effects (e,g., RPS, 2024, NISA, 2024, SSE Renewables, 2024). There are no collision impacts predicted for the Proposed Development, therefore, there will be no additional cumulative collision impacts arising from the Proposed Development and the Phase One OWF projects. Based on the distance between the Proposed Development and the Phase One OWF projects (minimum of 52 km), plus the low number of individuals of these sensitive species recorded within the Ornithology Study Area, it is considered that there will be no significant cumulative displacement effects between the Proposed Development and the Phase One OWF projects. <u>Population and human health</u> The Proposed Development is needed for the development of future offshore Phase 1 projects. Future employment opportunities for construction and operation are considered positive and significant for population employment effects that are likely to be significant in EIA terms. No projects with the potential to lead to cumulative effects in combination with the Proposed Development impacting Human Health receptors have been identified. **No significant operational cumulative effects are likely from the Proposed Development**	None required

Project Details	Project Description	Potential Cumulative Effects Assessment	Proposed Mitigation and or Monitoring Measures
Codling Wind Park **&** **Dublin Array**	Codling Wind Park Project, is a proposed offshore wind farm (OWF) located in the Irish Sea approximately 13–22 km off the east coast of Ireland, at County Wicklow. The CWP Project has an expected generating capacity of 1,300 megawatts (MW). Dublin Array is located approximately 10km off the coast of Dublin and Wicklow counties in the Irish Sea. The project will have an installed capacity of up to 834 MW.	**Construction overlap is not anticipated – no potential construction cumulative effects** **Potential operational overlap:** <u>Marine Mammals and Ornithology</u> This project is a proposed offshore windfarm located in the Irish Sea approximately 13–22 km off the east coast of Ireland, at County Wicklow. The Proposed Development is situated approximately 89 km from Arklow Bank Wind Park 2. Given this separation distance and the limited zone of impact associated with the operational and construction phases of the Proposed Development, no cumulative impacts on marine mammal receptors are anticipated. The Proposed Development is coastal with no predicted significant effects on offshore ornithology from the operational phase. The key impacts from offshore wind farm (OWF) projects are predicted to be collisions with turbines and displacement effects (e,g., RPS, 2024, NISA, 2024, SSE Renewables, 2024). There are no collision impacts predicted for the Proposed Development, therefore, there will be no additional cumulative collision impacts arising from the Proposed Development and the Phase One OWF projects. Based on the distance between the Proposed Development and the Phase One OWF projects (minimum of 52 km), plus the low number of individuals of these sensitive species recorded within the Ornithology Study Area, it is considered that there will be no significant cumulative displacement effects between the Proposed Development and the Phase One OWF projects. <u>Population and human health</u> The Proposed Development is needed for the development of future offshore Phase 1 projects. Future employment opportunities for construction and operation are considered positive and significant for population employment effects that are likely to be significant in EIA terms. No plans or projects with the potential to lead to cumulative effects in combination with the Proposed Development impacting Human Health receptors have been identified. **No significant operational cumulative effects are likely from the Proposed Development**	None required

Project Details	Project Description	Potential Cumulative Effects Assessment	Proposed Mitigation and or Monitoring Measures
South coast DMAP	Lastly the South coast DMAP identifies four maritime areas within a wider geographical area, which is the subject of the draft Plan, and within which proposed future deployments of ORE may proceed for further project level assessment, in accordance with the plan-led approach envisaged by the EU Maritime Spatial Planning Directive and required by the draft Plan. An objective of the plan has been to avoid potential adverse impacts on biodiversity EU protected sites, and future national protected site designations. In addition to the identification of the four Maritime Areas and policy objectives of the draft SC-DMAP, this is reflected in a suite of policy objectives and associated measures, which will inform the scale, precise location, and timing of future ORE developments within the SC-DMAP area. (Government of Ireland, Department of Environment Climate and Communications. Draft south coast designated maritime area plan for offshore renewable energy 2024)	**Construction overlap is not anticipated– no potential construction cumulative effects** **Potential operational overlap:** <u>Marine Mammals and Ornithology</u> <u>Commercial Fishing</u> An objective of the SC-DMAP is to avoid potential adverse impacts on biodiversity, including EU-protected sites and future national protected site designations. In addition to identifying the four maritime areas, the draft SC-DMAP includes a suite of policy objectives and associated measures designed to inform the scale, precise location, and timing of future ORE developments within the SC-DMAP area. At present, no specific ORE projects are planned within these maritime areas, and therefore a cumulative assessment of effects cannot be conducted. Potential for cumulative effects on marine mammal receptors may arise during the operational phase of the Proposed Development. However, as the Proposed Development is a coastal project with limited impacts during its operational phase, the potential for cumulative effects with future ORE projects within the SC-DMAP is not predicted to be significant. It will be the responsibility of future ORE developers to undertake a cumulative effects assessment at the appropriate stage, taking into account operational activities at Rosslare where relevant. <u>Population and human health</u> The Proposed Development is needed for the development of future offshore Phase 1 projects. Future employment opportunities for construction and operation are considered positive and significant for population employment effects that are likely to be significant in EIA terms. No plans or projects with the potential to lead to cumulative effects in combination with the Proposed Development impacting Human Health receptors have been identified. **No significant operational cumulative effects are likely from the Proposed Development**	None required

With respect to the requirement for a cumulative assessment on climate, Transport Infrastructure Ireland guidance titled 'Climate Guidance for National Roads, Light Rail, and Rural Cycleways (Offline & Greenways) - Overarching Technical DocumentPE-ENV-01104' states "as the identified receptor for GHG Assessment is the global climate and impacts on the receptor from a project are not geographically constrained, the normal approach for cumulative assessment in EIA is not considered applicable". However, by presenting the GHG impact of a project in the context of its alignment to Ireland's trajectory of net zero and any sectoral carbon budgets, the cumulative climate assessment demonstrates the potential for the ORE Hub to affect Ireland's ability to meet its national carbon reduction target. Therefore, the assessment approach is considered to be inherently cumulative. The Proposed Development is necessary to assist with the development of offshore renewable energy in Ireland. Offshore renewable energy (specifically wind energy) is recognised as a key component of the National Climate goal of achieving net zero by 2050 detailed within the 2021 Climate Act. Therefore, the Proposed Development is considered cumulatively beneficial.

25.6 TRANSBOUNDARY ASSESSMENT

The nature and location of the Proposed Development - within Rosslare Europort, a sheltered coastal environment - limit the potential for transboundary effects.

While some mobile marine species may range across national waters (e.g., pelagic fish, marine mammals, seabirds), the physical and acoustic impacts of construction (e.g., noise, turbidity) are predicted to be localised and do not extend beyond Irish waters. Sediment dispersion and noise modelling confirm that the spatial extent of pressure propagation remains within the Irish Economic Zone and does not approach the European Economic Zone boundary.

Where there is no pathway for transboundary effects on the environment of another country, there will be no transboundary effects on the environment of another country.

25.7 SUMMARY

25.7.1 INTERACTIONS

The assessment of interactive effects has considered likely significant effects arising from impact interactions that may occur during the construction and operational phase of the Proposed Development. The approach aligns with EPA 2022 guidance, and a matrix approach shows the potential interactions between each environmental topic chapter within the EIAR.

Where potential interactions between environmental topics were identified, the mitigation measures described within the individual chapters were considered. It is concluded that the mitigation measures included minimise the potential for significant additional effects for the impact interactions. Therefore, no additional mitigation measures or monitoring are considered necessary.

25.7.2 CUMULATIVE ASSESSMENT

The cumulative assessment methodology follows the UK Planning Inspectorate (PINS) Advice Note 2024. Relevant projects were identified and considered for detailed assessment.

There is the potential for cumulative effects should maintenance dredging (licence S0016-02) and capital dredging as part of the Proposed Development construction occur simultaneously. To minimise cumulative impacts, Iarnród Éireann will ensure maintenance dredging activities do not occur simultaneously with the capital dredging required for the Proposed Development.

There is the potential for cumulative effects should Berth 3 piling works and the piling works associated with the Proposed Development occur simultaneously. To minimise cumulative impacts, Iarnród Éireann will ensure Berth 3 piling activities do not occur simultaneously with the piling activities required for the Proposed Development.

No further significant cumulative effects were identified.

25.7.3 TRANSBOUNDARY ASSESSMENT

No transboundary effects were identified. No additional mitigation measures or monitoring are required.

25.8 REFERENCES

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